

**COLLABORATION BETWEEN THE FORMAL AND
INFORMAL CONSTRUCTION SECTORS:
TOWARDS A NEW NATIONAL POLICY FOR TANZANIA**

By

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ABSTRACT

The informal construction sector plays an important role in the construction industries of developing countries, particularly in providing employment and cheap shelter for the people. However, it has generally been neglected in the development programmes of construction industries of many countries. This thesis analyses the informal construction sector in Tanzania: its characteristics; its importance to the economy; and its linkages and benefits thereof, with the formal construction sector. It particularly examines the impact of policies on the growth of the informal construction sector, and on the nature of linkages that exist between the formal and informal construction sectors.

The research, which is deductive, used archival and opinion research strategies to collect qualitative and quantitative data on formal and informal contractors in Tanzania. The surveys on the Tanzanian informal sector conducted by the government of Tanzania in 1991 and 1995, together with the formal and informal contractors' surveys carried out by the author in 1999/2000 provided the necessary data for the research.

It was established that the informal contractors are highly involved in the construction of residential structures in Tanzania, and that labour only subcontracting was predominant amongst large and small formal contractors, and between formal and informal contractors. The research also found that despite this high involvement of the informal construction sector in the construction industry in Tanzania, some of the existing government policies were not in favour of it, while others were not supportive of the sector.

The thesis concludes that existing policies in Tanzania are inappropriate for the development of the informal construction sector, and provides three recommendations of what should be done to improve the situation. Firstly, it recommends the review of registration and licensing procedures, particularly the introduction of a registration category for labour only contractors. A framework for implementation of this recommendation is provided. Secondly, it recommends the mobilisation of informal contractors into associations. And lastly, it recommends a review of policies of the informal sector at the national level, and of the informal construction sector at the industrial level. A framework for the review at both levels is also provided.

DECLARATION

This is to certify that I am responsible for the work submitted in this thesis, that the original work is my own except as specified in acknowledgements and that neither the thesis nor the original work contained therein has been submitted in support of an application for another degree or qualification at this or any other university or other institution of learning.

Signed by candidate

Signature Removed

..... 30/11/2001 (Date)

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LIST OF ABBREVIATIONS

AAT	Architectural Association of Tanzania.
ACET	Association of Consulting Engineers Tanzania.
ARI	Average Ranking Index.
CDE	Centre for Development and Enterprise.
CIB	The International Council for Building Research and Innovation.
CIDTF	Construction Industry Development Trust Fund.
CIP	Construction Industry Policy.
CRB	Contractors Registration Board.
DISS	Dar-es-Salaam Informal Sector Survey.
EAP	Economically Active Population.
FI	Frequency Index.
GCF	Gross Capital Formation.
GFCF	Gross Fixed Capital Formation.
GDP	Gross Domestic Product.
GNP	Gross National Product.
GOT	Government of Tanzania.
IC	Informal Contractor.
ICE	Informal Construction Enterprise.
ICOHS	International Conference on Occupational Health and Safety.
ICS	Informal Contractors Study.
II	Importance Index.
ILO	International Labour Organisation.
ISIC	International Standard Industrial Classification.
IMF	International Monetary Fund.
LCIS	Local Construction Industry Study.
MLHSD	Ministry of Land, Housing and Settlement Development.
MLYD	Ministry of Labour and Youth Development.
MOW	Ministry of Works.
NBAQSBC	National Board of Architects, Quantity Surveyors and Building Contractors.
NCC	National Construction Council.
NCIDS	National Construction Industry Development Strategy.
NEP	National Employment Policy.
NGO	Non Governmental Organisation.
NHSDP	National Human Settlement Development Policy.
NISS	National Informal Sector Survey.

NIGP	National Income Generation Programme.
PREALC	Programa Regional del Empleo para America Latina y el Caribe (ILO employment wing in Latin America).
PSRC	Parastatal Sector Reform Commission.
RSA	Republic of South Africa.
SIDP	Sustainable Industry Development Policy.
SMEs	Small and Medium Enterprises.
SMEP	Small and Medium Enterprises Policy.
TABCA	Tanzania Building Contractors Association.
TACECA	Tanzania Civil Engineering Contractors Association.
TCSB	Tanzania Central Statistics Bureau.
TG 29	Task Group 29.
THB	Tanzania Housing Bank.
TIA	Tanzania Institute of Arbitrators.
TIQS	Tanzania Institute of Quantity Surveyors.
TRA	Tanzania Road Association.
Tshs.	Tanzanian Shillings.
U.K.	United Kingdom.
UN	United Nations
UNCHS	United Nations Centre for Human Settlements.
U.S.A	United States of America.
US\$	United States of America Dollar = 800 Tshs (in year 2000)

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTORY BACKGROUND

The importance of the informal sector in the development of the economies of developing countries has been recognised since the 1970's (ILO, 1972; Hart, 1973; Sethuraman, 1976; Souza and Tokman, 1976). Of particular interest is its ability to create employment and to provide goods and services to the urban and the rural poor at affordable prices (ILO, 1972; Dewar and Watson, 1991; Franks, 1994; Marten, 1996).

However, the recognition of the sector's importance has not been without criticism. The major criticism is that the informal sector, at times referred to as petty commodity production, represents the most severely exploited group within capitalism. It was argued that it supports capitalism by producing cheap goods and services enabling capitalists to keep wages low. It has also acted as a source of cheap labour in the face of restrictive labour laws (William and Mutebile, 1978; Moser, 1978; Bromley and Gerry, 1979). Others argued that the presence of the informal sector deprives governments of revenue due to its ability to evade tax (Franks, 1994; Marten, 1996).

According to Mutagwaba (1996:1), in most developing countries, the informal sector has not been given the adequate attention it deserved due to the belief that "it was a transient phenomenon which would gradually disappear over time as the modern (formal) sector grew and absorbed more labour". It was also believed that this sector produced and provided inferior goods and services respectively. In contrast, for example in Tanzania, the informal sector has been growing rapidly due to the country's serious problem of unemployment caused primarily by poor performance of the economy, over-dependence on the formal sector and restructuring of the public sector (Tripp, 1990; Mutagwaba, 1996; Tripp, 1997). The trend is the same in other developing countries (Sethuraman, 1997; Bangasser, 2000). Moreover, conditions imposed on people operating in the formal sector, like taxation and the licensing system, have made it unattractive for some people to operate formally (Malyamkono and Bagachwa, 1990; Tripp 1990; Mutagwaba, 1996).

The informal sector concept is not particularly linked with unemployment. In Tanzania and many other developing countries employed people engage in the informal sector activities (Tripp, 1990; Thomas, 1995). According to Tripp (1990:49), a decline in real wages due to economic hardships have made Tanzanian employees resort to “side-line income generating activities” to bridge the income gap. Nevertheless, many unemployed people depend more on the informal sector for employment (GOT, 1991a; Sethuraman, 1997). It is argued that it is easier for the unemployed to create employment by establishing a business in the informal sector, which is unregulated and requires less capital, compared to that of the formal sector (GOT, 1991a; Thomas, 1995; Ministry of Foreign Affairs, 1997).

At the same time, the informal sector is not linked with poverty per se. Data on income distribution for a number of countries suggests that not all the people operating in the informal sector are poor (Thomas, 1995). There is evidence to suggest that even relatively wealthy people engage in the informal sector activities, which according to Tripp (1990) can sometimes bring in ten to fifteen times the income of formal sector activities. However, for the majority of the urban poor, the informal sector is the provider of employment and income. Sethuraman (1997) suggested two options of income for the urban poor; which are either wage employment in the formal public and private sector and/or self-employment in the informal sector. Thus with the increasing failure of the formal sector to generate adequate jobs, many of the urban poor are increasingly becoming dependent on the informal sector for employment. Similarly, because of declining real wages, workers employed in the formal sector also resort to activities in the informal sector to supplement their income. The informal sector therefore caters for the needs of the poor who are unemployed and supplements inadequate incomes of the employed.

1.2 THE INFORMAL CONSTRUCTION SECTOR

The National Informal Sector Survey (NISS) which was carried out in Tanzania in 1991 (GOT, 1991a:5) adapted the ILO (1972) definition of the informal sector and defined the sector to:

“Constitute of urban and rural, non-farm, small scale, and self-employed activities, with or without hired labour. Typically operating with low level of organization, low capital, low technology, and often from temporary premises. They are usually not supported by formal financing institutions, and are not usually measured in official government statistics”.

Marten (1996), using the GOT (1991a) definition of the informal sector, described the informal construction sector as consisting of all persons and enterprises fitting the above definition, and involved in the process of planning, designing, constructing, altering, maintaining, repairing, and demolishing of buildings and civil engineering structures. Examples of persons in the informal construction sector are builders, roof makers, plumbers, painters, steel fixers, concrete gangs, etc.

According to the UNCHS (1981), the informal construction sector comprises people or groups of people involved in direct construction, preparation of building designs, extraction of construction raw materials and manufacture of building materials and components. In contrast to operators in the formal industry, they are usually not licensed and/or registered with any government organisation, and therefore their activities and output escape the government statistics. This leads to the overall underestimation of the magnitude and contribution of the construction industry to the national economy.

According to Wells (1998), the group involved in direct construction, herein referred to as informal contractors, undertakes the construction and repair of low cost private houses. Some carry out maintenance and the repair of middle and high cost houses, while others build complete houses for middle and high-income groups. Although most informal contractors are labour contractors, there are a few engaged as general contractors who supply labour as well as materials (Cattell, 1994). This group also offers their services as labour subcontractors to the more established formal contractors. It consists of individuals with varied academic backgrounds, but many are skilled

construction trades men (ILO, 1987; Cattell, 1994). This thesis concentrates mainly on this group.

The design group consists of architects, draughtsmen, engineers and other individuals with adequate academic or practical background in construction, and they usually supply building plans for the clients who can afford them. This group is small because of the possession of good academic qualifications, and therefore a high chance of employment in the public and private sectors (UNCHS, 1981; ILO, 1987).

The building material group is involved in the production of various building materials, ranging from aggregates, pre-cast concrete and concrete products, burnt bricks, timber and timber products. The group is usually large because of the simple technology involved in the production process, and therefore easily accessible to people with low education and skills (GOT, 1991a; GOT, 1995; Mpembe, 1999).

The above discussion examined the actors in the informal construction sector. The sector can also be analyzed in terms of activities, in which informal activities are those that are unregulated. Based on activities, the informal construction sector can therefore be taken to include building or housing activities which take place without proper planning or building permits, or constructions which take place without formal contracts (Wells, 1998).

In many developing countries, the informal sector is often confused with illegal black market activities. According to the ILO (1993) and the United Nations (1996), this confusion has often led to contradictory, ambiguous and repressive public policies. This thesis has focussed only on the legal informal sector activities i.e. activities which are accepted in society and for which permission to execute them could be granted by the government.

Just like other sectors of the economy, the informal sector plays an important role in the construction industries of developing countries. According to the UN (1997) the investment in the construction industry constitutes about 50 per cent of all investment in capital goods in many countries. In most Sub-Saharan countries, the construction

industry constitutes less than 5 per cent of GDP. The corresponding average for developed countries is 7 per cent.

The Tanzanian construction industry's share of GDP between 1992 and 1996 was 4.5 per cent, in which the informal construction sector contributed 0.9 per cent (GOT, 1996a). Rural own construction¹, which is regarded as an integral part of the informal construction sector, between 1987 and 1998, contributed an average of 14 and 18 per cent of the Gross Capital Formation (GCF) and the GDP of the Tanzanian construction industry respectively (GOT, 1999a). The NISS (GOT, 1991a) established that in 1991, the informal sector employed 22 per cent of the labour force in Tanzania, of which 7 per cent was contributed by the informal construction sector. It was suggested that employment generated in the informal construction sector is higher than reported if informal material producers and food sellers on construction sites are included (Mpembe, 1999).

In addition to the informal construction sector contribution to employment, the GDP and the GCF as discussed above, the sector is increasingly relied upon to provide shelter to the urban poor (ILO & UNCHS, 1995). Moavenzadeh (1987) and Nyembe (1994) suggested that mobilizing the resources available in the informal sector to supplement those available in the formal sector would enable governments to meet construction challenges facing developing countries. For example, estimates in Tanzania indicated that urban cities/towns demanded more than 2,200,000² housing units up to year 2000 (GOT, 2000a). To meet the challenge of providing shelter to its citizens, the Tanzanian government needs to appreciate the capacity available within the informal construction sector (Bjorklof *et al.*, 1992).

The UNCHS (1981) suggested the existence of a symbiotic relationship between the formal and informal construction sectors. The informal construction sector supplied

¹ Rural own construction is part of construction carried out in the rural area on self-help basis. In countries like Tanzania, construction on self-help basis is not limited to rural areas only.

² The figure given for housing demand in urban cities is very high compared with urban population in Tanzania of about 9.5 million (Appendix 5.1) in year 2000. Based on this estimate, it means that on average 4 people occupy a dwelling unit, and that for the time being no dwelling units exist in urban areas, which is not correct.

local construction materials and the much-needed unskilled labour in the formal sector through sub-contracting arrangements. At the same time the formal sector acted as an outlet of the outputs and services of the informal sector thereby providing income to the informal sector operators³.

Construction markets range from very small and relatively simple jobs requiring only simple technology and tools to very large and complex projects, which require complicated technologies and machinery (Hindle, 1997a). This varied nature of construction markets calls for equally varied sizes and categories of contractors. The informal contractors could play an important role in the lower markets, which are in many cases unattractive to the established contractors (ILO, 1987; UNCHS, 1996; Hindle, 1997a). Also, because of the fluctuating nature of workload in the construction industry, established contractors are reluctant to employ a labour force on a permanent basis (Cattell, 1994; Lee, 1997). The informal contractors therefore act as a pool of labour force, which could be used by the established contractors in periods of labour demand (UNCHS, 1991; UNCHS, 1996). Similarly, the established contractors are an important source for jobs and income. The informal contractors also acquire technical and managerial skills through their association with established contractors (UNCHS, 1996).

In this thesis, it is argued that the proper interaction between the formal and informal construction sectors, and therefore proper development programmes for the construction industry, could be established if the policy makers and the participants in the formal industry acknowledge and appreciate the symbiotic relationship between the sectors. However, available literature does not show whether efforts have been taken in Tanzania to strengthen links between them (GOT, 1991a; GOT, 1991b; GOT, 1995; Laswai, 1998; Msita, 1998). While efforts have been made to strengthen the formal construction sector (GOT, 1991b), no similar efforts have been taken to develop the informal construction sector. Even the most recent Contractor's Registration Act that

³ This kind of collaboration has always depended on the mutual benefits derived by both parties. In many parts of the world the governments did not play any role in the process. In the construction industry, even in developing countries, the contractors in their bid to cut down construction costs, have given rise to an increased level of self-employment (Winch, 1998), which is a characteristic of the informal construction sector.

established the Contractor's Registration Board (GOT, 1997) is not supportive of this sector. According to Mlinga (1999), the Act, on the one hand, because of the minimum entry conditions imposed, makes it difficult for prospective small contractors to register their companies, and therefore leaves them with no other alternative but to operate informally. On the other hand, the Act imposes heavy fines on contractors found to operate without registering. This situation becomes unfavourable in a situation where no mechanisms are in place to accommodate the informal contractors.

Although the government of Tanzania has acknowledged the potential of the informal sector for the development of the economy (GOT, 1991a; GOT, 1995; GOT, 1996b; GOT, 1999b; GOT, 2000a), there are no co-ordinated efforts to develop the informal construction sector to play this role. Many of the programmes to develop the construction industry focus only on the formal sector (Msita, 1998; Laswai, 1998; Materu, 1999; Materu, 2000)

1.3 PROBLEM STATEMENT

From the foregoing discussions, it has been argued that collaboration between the formal and informal construction sectors is necessary and is important for the development of a healthy construction industry. However, in Tanzania, the policies and actions taken by the government do not appear to address this. Since 1991, after the conduct of the NISS (GOT, 1991a), there have been efforts to develop the informal sector, particularly in the trade and manufacturing industries (GOT, 1996b; GOT, 1999b). There is no evidence to suggest that similar efforts have taken place in the construction industry.

Some strategies contained in the National Construction Industry Development Strategy (NCIDS) appear to support the development of the informal construction sector (GOT, 1991b). However, since its publication ten years ago, several programmes to develop formal contractors have been implemented, but very little has taken place to develop the informal construction sector. Even the recent Contractors Registration Act (GOT, 1997) aimed at regulating the construction industry in Tanzania, and established at a time

when the informal sector was receiving support in other industries like trade and manufacturing, is not supportive of the informal construction sector.

Generally, while the Tanzanian government recognises the need and is willing to promote the informal sector (GOT, 1991a; GOT, 1991b; GOT, 1995; GOT, 1996b), the newly instituted legislation aimed at regulating the construction industry, like the CRB Act discussed above, is not supportive of the informal construction sector. This lack of support could be attributed to the absence of clear policies on the informal sector, which leaves room for every organisation to make own interpretation on the status of the sector. This apparently existing situation, of willingness to support the informal sector on the one hand, and lack of support to the informal construction sector on the other, constitutes the main research problem. Thus, the main problem addressed in this thesis is: *Does the absence of appropriate policies on the informal sector affect the realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania?*

To address the main research problem, it was found necessary to first address the following sub-problems:

Sub-problem one

Does Tanzania lack appropriate policies on the informal sector?

Sub-problem two

Is the interaction between the formal and informal construction sectors beneficial?

It is important to point out here that government policy is not the only factor that can enhance collaboration between formal and informal construction sectors. Other factors like level of competition in the industry, the need for flexibility on the part of contractors, increased complexity and specialisation in construction works, increased labour costs and increased efficiency and reliability of the informal construction sector could also contribute to an increased collaboration (Winch, 1998).

The decision to concentrate on government policies, as far as Tanzania is concerned, is based on the premise that currently there are policy efforts geared towards development of the informal sector particularly in the food, trade and manufacturing industry. These efforts could be beneficial if extended to the construction industry.

1.4 RESEARCH HYPOTHESES

A hypothesis can be defined as a “statement positing possible relationships or association among the phenomena being studied” (Sirkin, 1999:5).

In line with the problem statement and the sub-problems, three hypotheses have been identified.

Hypothesis one:

There are no appropriate policies on the informal sector activities in Tanzania.

Hypothesis two:

There are potential benefits of interaction between the formal and informal construction sectors.

Hypothesis three:

Lack of appropriate policies on the informal sector has resulted in the non-realization of potential benefits of interaction between the formal and informal construction sectors in Tanzania.

1.5 RESEARCH OBJECTIVES

In line with the problem statement and research hypotheses, the principal objectives of this research project are to establish:

- a) Importance of the informal construction sector to the economy of developing countries; Tanzania being a case study;
- b) Causes of informality in the construction industry;

- c) Role of government policies towards developing the informal construction sector; and
- d) Nature of linkages between the formal and informal construction sectors.

In order to achieve the stated objectives, this research will investigate the following aspects:

- a) Existing policies and how they apply to the construction industry;
- b) How the informal sector operates in comparison to the formal sector;
- c) The nature of work executed by the informal sector in comparison to the formal sector;
- d) The effect of the growing informal sector on the formal sector; and
- e) Steps taken to by the government of Tanzania to streamline the operations of both sectors.

1.6 JUSTIFICATION FOR THE RESEARCH

Two issues are addressed to justify this research

- Significance of the research with respect to other research in this area; and
- the likely benefits of the outcome of the research

This research focuses mainly on the collaboration between the formal and informal construction sector in Tanzania. In general, the informal sector is a widely researched area; however, there exists little research focussing on the informal construction sector (Wells, 1999). Many general studies on the informal sector tended to put different industries together without any regard to their special characteristics. This resulted in prescribing development measures that were ineffective to a particular industry, like construction.

The informal construction sector shares the major characteristics of both the informal sector and the construction industry. Therefore, any efforts to develop the informal construction sector call for a need to understand what is happening within the sectors or industries to which it belongs. However, little is known of the informal construction

sector in Tanzania. It is on this premise that this research is carried out to provide a better understanding of the Tanzanian informal construction sector and its interaction with the formal construction sector.

The outcome of this work will be in the form of policy proposals on how to develop the informal construction sector and to facilitate its collaboration with the formal sector. Thus this outcome could be used by government officials to formulate policies and programmes to develop the informal and formal construction sectors and to foster collaboration amongst them.

1.7 RESEARCH METHODOLOGY

To meet the objectives of the research set out in section 1.5, the following methodology was adopted:

- The initial stages of the research involved a comprehensive literature review. The literature review was important to establish previous work done with respect to the informal construction sector. The review aimed to establish the definition of terms and concepts relating to the sector, its importance and its relationships with the formal construction sector. In addition it aimed to analyse existing policies and legislation that affect the informal construction sector and experiences from other countries with regard to this sector.
- From the literature review, it was possible to prepare questionnaires that were used for the informal and formal contractors' surveys. The former was important to establish the characteristics of the informal contractors and the extent of collaboration with the formal contractors, while the latter was important to establish the extent of collaboration between the formal contractors with the informal contractors, material and equipment suppliers.
- Government officials were interviewed to solicit information on existing government policies and legislation for the construction industry and the informal sector. The interviews were important to establish different government policies

and/or regulations that affect both the construction industry and the informal sector.

- Scheduled structured interviews were conducted with informal and formal contractors in Arusha, Dar-es-Salaam, Dodoma and Mwanza cities. The interviews aimed to establish the characteristics of contractors as well as the problems and areas of collaboration with other contractors.

The methodology will be discussed in detail later in this work.

1.8 SCOPE AND LIMITATIONS OF THE STUDY

This research focuses on the building construction industry in Tanzania because of the documented potential of the informal construction sector in the provision of housing (Bjorklof *et al.* 1992; Alder, 1998; Tripple and Korboe, 1998; GOT, 2000a). The research was carried out in four urban centres namely Dar-es-Salaam, Arusha, Mwanza and Dodoma. This does not in any way underestimate the importance of the informal construction sector in the rural areas. Actually, the informal construction sector plays a predominant role of delivering rural housing (GOT, 1991b; GOT, 2000a). However, the research concentrated in urban centres for two reasons. Firstly, the research aimed to establish the characteristics of the informal construction sector as well as its collaboration with the formal sector, and therefore it focussed on urban areas since the formal sector enterprises are concentrated in urban rather than in rural areas. Secondly, the urban informal sector is relatively more important than the rural informal sector. The NISS revealed that the urban informal sector constitutes 11 per cent of the total Tanzanian informal sector, but contributed 60 per cent of the informal sector's value added (GOT, 1991a).

The research however has the following limitations:

- It only covers informal contractors that carry out construction work for payment. Self-help labour, although part of the informal sector (Thomas, 1995) is not dealt with in this study because of limited self-help construction activities in the urban areas, which is the focus of the study.

- It covers “licit” informal activities (Tripp, 1997:23), i.e. activities that although carried out informally, could obtain a business licence. They are distinguished from illicit informal activities, which are illegal and morally not accepted in a given society, and therefore a business licence would not be issued to trade in such activities.
- It covers the informal construction sector composed of enterprises and contract labour, as opposed to: informality in terms of planning and regulation; informality in relationships between clients, designers and contractors; and informality in construction contracts (Wells, 1999).
- It covers mainly the interaction between formal and informal contractors. Where other parties to the construction process are discussed, it is mainly in relation to their actions that impact on the development of contractors.

These limitations will be enumerated further in the thesis.

1.9 OUTLINE OF THE THESIS

Several references were consulted with the objective of obtaining an outline that is suitable for this thesis. References consulted include PCU (1993), Bless and Smith (1995), Perry (1996), Leedy (1997) and Holt (1998). It was decided to have a nine-chapter thesis based on a five-section thesis structure proposed by Perry (1996). This structure offers a unified and a focussed thesis, is used in many universities and is followed by many writers of articles in quality academic journals. The structure is also useful for preparing research proposals for the application for research grants (Krathwohl, 1977; Poole, 1993).

The layout of the report is presented in Figure 1.1. It was necessary to break down the literature review into three chapters shown in the figure to allow proper coverage of different concepts contained in these chapters. For the same reason, the section on analysis of data was broken down into three chapters.

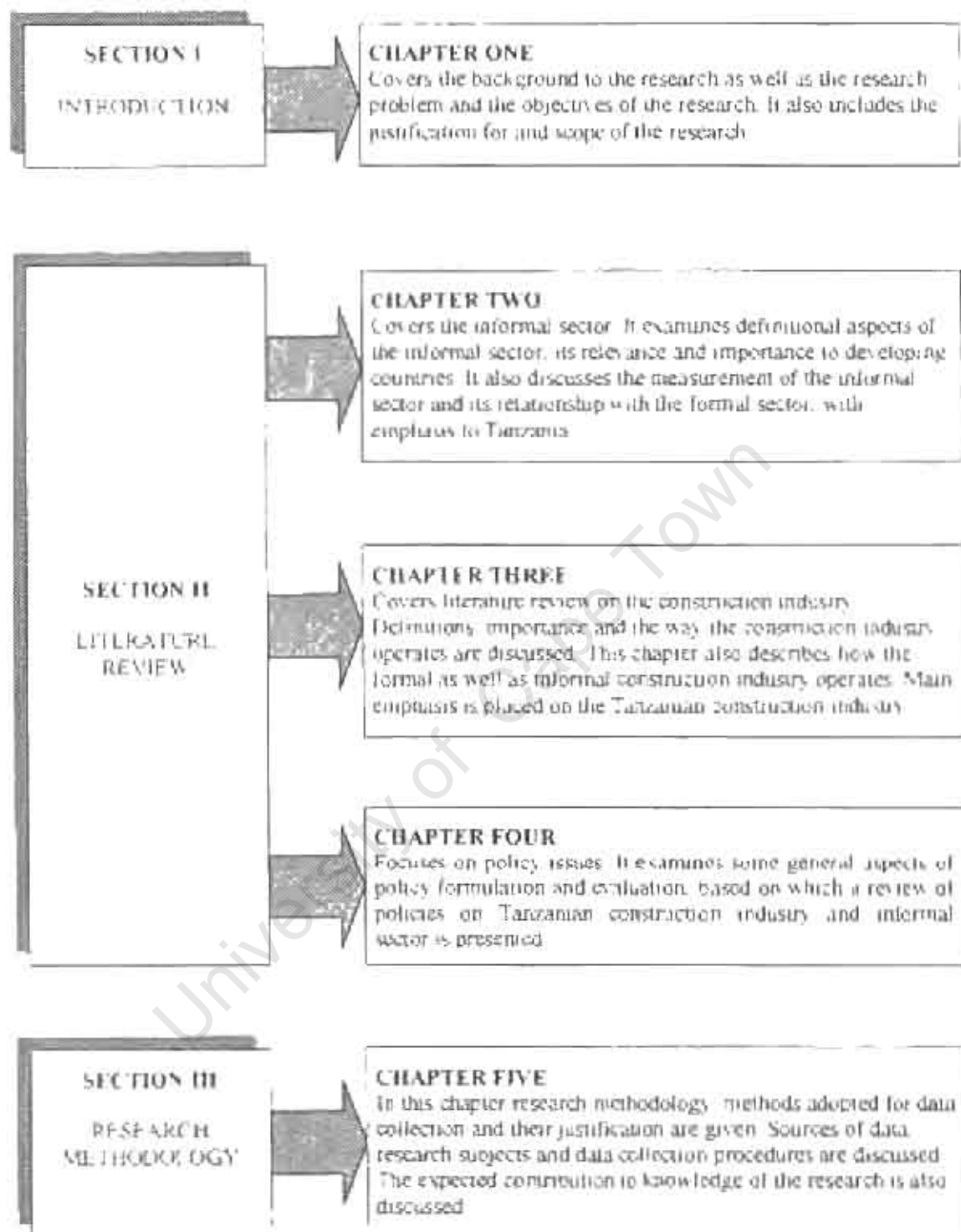
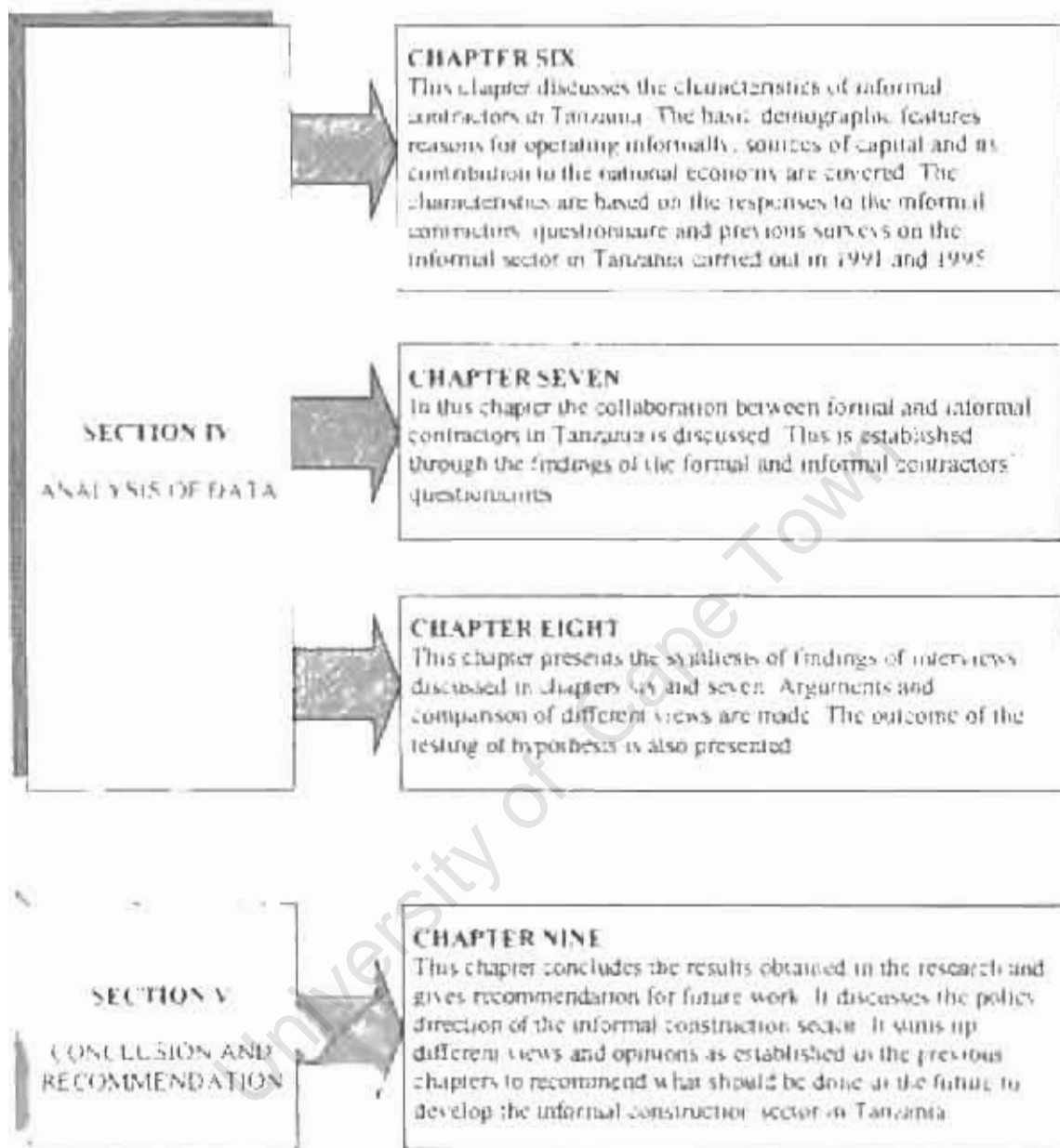


Figure 1.1 Layout of the thesis

Figure 1.1 continued



1.10 SUMMARY

This chapter has outlined the background to this research including the problem statement, the research hypotheses and the objectives of the research. The justification and the scope of the research and a brief coverage on the methodology adopted, together with the outline of the thesis have been covered.

Chapter Two, Three and Four will cover literature review, which will reinforce the research problem and provide an understanding of different concepts relating to the informal sector, the construction industry and policies respectively.

University of Cape Town

CHAPTER TWO

THE INFORMAL SECTOR

2.1 INTRODUCTION

Chapter One gave a background to the research, research problem, research hypotheses as well as the objectives, the scope and justification for the research. This chapter will focus on the informal sector concepts.

The informal construction sector focussed in this research represents only a segment of a wider informal sector. The objective of this chapter is to show the characteristics of the informal sector and its advocated importance to the economy of developing countries.

The informal sector has been interpreted differently by many researchers. To avoid the confusion caused by the differing descriptions given to this sector, the chapter starts to zero in on the interpretations applicable to this research. In addition, it covers the relationship between the state and the informal sector, particularly the state's role in the emergence of this sector.

The relationship between the informal and formal sectors and the benefit of the former to the national economy are also discussed, as they will have an effect on the policy proposals to be presented later in this work.

The chapter also discusses the size of the informal sector in different countries, and the methods that can be used to determine this size. To complete the picture, a brief discussion of the Tanzanian informal sector is included to show the context within which the Tanzanian informal construction sector operates.

2.2 WHAT CONSTITUTES THE INFORMAL SECTOR

The study of the informal sector is a complicated phenomenon, partially because there is no consensus on its definition. According to Lubell (1991:19) “an informal sector enterprise is like a giraffe, it’s hard to describe but you know one when you see one”.

Over a long period, scholars have been debating and arguing over the definition of the informal sector and the concepts it represents (Sanyal, 1988; Thomas, 1995, Bangasser, 2000). Three views emerged from the debates and arguments. Firstly, it was seen as a remnant of traditional survival activities and methods of production of developing countries, and was expected to disappear in the process of increased “industrialisation and modernisation” (Thomas, 1995:11). Secondly, it was viewed as a pool of “potential entrepreneurial talent” (*ibid.*) which needed to be promoted. Lastly, it was viewed as a representation of the “international post-colonial capitalist system” (*ibid.*), and a dumping ground for the unemployed (Anon, 2000). Its growth had gone unhindered because it benefited the capitalist system by supplying cheap goods and services, and therefore helped to keep down the cost of labour.

Despite the difficulties in defining the sector and agreeing to its concepts; researchers and policy makers continued to use the informal sector concept and its popularity grew every day, partially because it served the interests and expectation of different groups. According to Peatie (1987), different groups including economic planners, politicians, and researchers defined it to meet their own agenda and collected data in line with those definitions. Chandavarkar (1988), Khundker (1988), Thomas (1995) and Tripp (1997) supported the approach of defining it to meet the purpose of the intended data, but insisted on the need to give adequate background information to the data presented.

However, it is now generally accepted that the informal sector offers a solution to the urban unemployment problems and at the same time it may provide scope for the emergence of local entrepreneurial talent (Gugler, 1994; Terblance, 1995; Kershoff, 1996). De Soto (1989), Malyamkono and Bagachwa (1990), ILO (1991), Thomas (1995), Sethuraman (1997) and Tripp (1997) also shared this view.

Some writers associated the informal sector with criminal activities (Hart, 1973; Roberts, 1990). It must be clear from the outset that a useful definition and understanding of the sector should exclude all criminal activities; because differing concepts of the term would result in differing reactions and policies on the part of both governments and other authorities (Thomas, 1995).

The structure of the informal sector activities given by Thomas (1995), which is shown in Table 2.1, helps to develop a proper framework of grouping the criminal and informal sector activities.

Table 2.1 The structure of Informal Economic Activities

Sector	Market transaction	Output	Production/Distribution
Household	No	Legal	Legal
Informal	Yes	Legal	Quasi-legal
Irregular	Yes	Legal	Illegal
Criminal	Yes	Illegal	Illegal

Source: Thomas (1995:12, Table 1.5)

According to the divisions of the informal economic activities given by Thomas (1995), the household sector comprises what Feige (1989) and Malyamkono and Bagachwa (1990) referred to as a non-market income. It includes the housework and the goods and services generated in subsistence production. In this sector, non-market transactions are involved since these goods and services are produced, distributed and consumed within the household. The output of the activities in the household sector as well as production and distribution is legal. This distinguishes it from the irregular sector, also known as the black, underground, subterranean or shadow economy; in which the goods and services produced are legal but break the law in either the production and/or the distribution of the products (Feige, 1989; Malyamkono and Bagachwa, 1990; Thomas, 1995).

Some of the common laws/regulations broken in the irregular sector include:

- infringement of laws regarding industrial safety;
- non-payment of minimum wages or workers' contribution for pension or social security;
- tax evasion; and
- non-adherence to product specifications.

According to Feige (1989) and Thomas (1995), the irregular sector particularly linked to tax evasion, was a big problem and was a subject of much interest to politicians of developed countries. For example, the sector was estimated to range from 5 to 35 per cent in U.K and U.S.A economies in 1989 (Feige, 1989). Governments all over the world strive to catch the culprits of the irregular sector, who apparently could meet the costs of adhering to the law but ignore doing so (Thomas, 1995).

Bagachwa and Naho (1994) suggested that irregular sector activities usually develop in response to excessive government intervention and restriction, which creates excess demand and supply. For example, in a situation where taxation is high, people tend to evade tax or corrupt tax collection officials. People will evade tax to reduce the price of their goods if they perceive that the risks are not prohibitive. Similarly, parallel labour markets can develop where governments impose minimum wages and employee benefits.

The criminal sector differs from all other sectors shown in Table 2.1. Although it is involved in market transactions, the goods and services produced are illegal and therefore, their production and distribution is also illegal. The sector includes activities like drug dealing, robbery, prostitution, extortion etc. (Thomas, 1995). On the upper scale, activities like drug dealing can generate considerable profits. On the lower scale, robbery and prostitution for both sexes can easily be accessed by many people as an alternative source of income (*ibid.*); hence fitting into the criteria of easy entry, which is one of the characteristics of the informal sector given by the ILO (1972).

The informal sector is involved in market transactions. Its output consists of legal goods and services, while the production and/or distribution escapes some of the government regulations. According to Thomas (1995:14), there is no entirely satisfactory definition to distinguish the “quasi-legality” of the informal sector and the illegality of the irregular sector. The distinction rests on the attitude of the authorities and the degree of law enforcement. The main distinguishing factor is that, on the one hand, people operating in the irregular sector are able to meet the costs of obeying the laws and their income is large enough to attract taxes. On the other hand, the operators in the informal sector are unable to meet the costs of obeying the laws and their earnings are not large enough to attract taxes. For that reason, most governments tolerate the activities of the informal sector, which is seen to present survival strategies rather than deliberate acts of breaking the laws.

Tripp (1997:23) in discussing the informal economy in Tanzania distinguished between “licit” and “illicit” informal activities. Licit informal activities have their counterparts in the formal business. These activities although carried out informally, could obtain a business license. In contrast, illicit informal activities are illegal and morally not accepted in a given society, and therefore a business license can not be issued for such activities. Activities carried out under the household, the informal sector and the irregular sector as shown in Table 2.1 are licit while those in the criminal sector are illicit.

The subject of this research is therefore the informal sector and licit informal activities as described above.

2.3 DEFINITION OF THE INFORMAL SECTOR

2.3.1 General

According to Roberts (1990), many researchers have found the concept of the informal sector to be unambiguous and confusing. Some attacked the sector as an exploitation of the poor, while others regarded it as a source of economic empowerment.

In acknowledging the difficulty in defining the informal sector, Fluitman (1989) wrote:

“It has admittedly proven difficult, if not impossible, to move from a general notion to a precise and widely accepted definition of the informal sector; a definition which applies to all countries, all sorts of economic activities and all stages of development; a definition which draws a clear line between the formal and informal sector. Fortunately, there is no urgent need for a universal definition. The term ‘informal sector’ just like the term ‘rural sector’ derives its usefulness from specifications according to circumstances and purposes which differ from place and place and time.”

Fluitman (1989) further contended that despite the similarities; the informal sector in Africa was very different from that of Asia or Latin America. Differences also occurred within the region i.e., between West and East Africa; or even within the country depending on the different levels of income, traditions in economic activities and the enabling environment.

Politicians often perceive the informal sector in terms of licensing, tax and criminal law. According to Natrass (1990) to the politicians “the most basic definition is that the informal sector operates outside the official rules and regulations” (cited by Kirsten 1991:149). This fact impacts on how data on this sector is collected and in interpreting governments’ attitudes towards it. When the informal sector operators are perceived to operate outside the official rules and regulation, they would tend to hide information regarding their economic activities. This would have a negative effect on the quantity and quality of data collected on the sector. Similarly, governments that regard the informal sector as illegal would tend to institute laws and/or policies to discourage its existence.

The informal sector differs from the formal sector, as it is not normally taken into account in the compilation of national statistics. The sector’s income therefore often

escapes official records. "In quantitative terms, therefore, the informal sector is indeed a hidden or shadow economy" (Kirsten, 1991:149). This fact serves as a caution in interpreting statistical data of national statistics. Because of its hidden nature, most of the statistical data on the sector are an approximation of what is actually happening.

Recent years have found many developing countries increasingly facing economic crises, high levels of unemployment, population growth and rural-urban migration. According to the Economic Research Forum (1996), governments could not prevent these unwanted changes, and the informal sector cushioned their adverse effects. Ghersi (1997) suggested that the informal sector activities benefit those directly involved and the society more if the law is violated than if it is followed. It could be due to its perceived benefits to the society that many developing countries accept its growth (Tripp, 1997).

2.3.2 Definitional debate

The definitional debate of the informal sector concept could be traced back to the 1970's, following the introduction of the terms 'formal' and "informal' by the ILO (1972) and Hart (1973). The basis of Hart's (1973) definition of the sector was the individual. He regarded wage earners and the self-employed as comprising the formal and the informal sectors respectively. He classified activities into those that gave formal income opportunities like the public sector and private sectors wages and transfer payments (pensions and unemployment benefits) and those that gave informal income opportunities. The second group included legitimate and illegitimate activities like receiving stolen goods, bribery, political corruption, protection rackets, petty theft, burglary, armed robbery etc. (Hart, 1973; Thomas, 1995). The inclusion of illegitimate (criminal) activities was the basic difference between Hart's (1973) and the ILO's (1972) definition, which excluded criminal activities. As discussed previously, in keeping with the ILO (1972), it is important to exclude criminal activities in the definition of the informal sector.

The ILO (1972) approached the issue of the informal sector in terms of the problems of job creation in the developing countries. It concluded that the central problem underlying poverty in the urban economies was not due to unemployment but rather to

the type of employment available to much of the population. According to the ILO (1972), the sector's economic activities contributed to growth of the urban economy and sustained the growing urban population. However, the problem was the very low income generated by such activities. From the ILO's perspective, the informal sector activities made a useful contribution to the urban economy through employment. They argued that, because of the low capital to labour ratios involved, this sector could make a significant and cost effective contribution to absorb the rapidly growing urban labour forces.

The ILO (1972), unlike Hart (1973), concentrated on activity and produced a list of contrasting characteristics for the formal and informal sectors. To the ILO (1972), the informal sector was characterised by: ease of entry, reliance on indigenous resources, family ownership of enterprises, small scale of operation, labour-intensive and adapted technology, skills acquired outside the formal school system, and unregulated and competitive markets. The formal sector occupied the other end of the spectrum in which there was: difficult entry, frequent reliance on overseas resources; corporate ownership; large scale production; capital-intensive and often imported technology; formally acquired skills, often expatriate; and protected markets through tariffs, quotas and trade licences.

Thomas (1995) argued that although the ILO (1972) informal sector's characteristics related to activities, within an economic context they actually related more to the enterprises and the markets. Sethuraman (1976) rectified the ILO's (1972) approach by concentrating on the enterprises rather than activities. He identified activities in which the informal enterprises were likely to be found and the conditions that made an enterprise informal. The key criterion used to label an enterprise informal was to operate on an illegal basis contrary to the government regulations, and employ a maximum of ten persons.

Thomas (1995:22) argued that the classification by Sethuraman (1976) was "not derived from any conceptual model, and the list was designed to act as a set of fences to steer small enterprises into the corral labelled urban informal sector". In addition, he argued that the ILO's (1972) concentration on enterprises made it difficult to see the

kinds of economic activities likely to be found in the informal sector. He conceded, however, that this lack of specificity could not be avoided due to differences existing in different countries and their cities.

The association of the informal sector with enterprises makes it difficult to distinguish an enterprise in the formal and informal sector. It was suggested that one distinguishing factor could be illegality in the operations of an enterprise. In addition, according to Sethuraman (1981) as quoted by Dewar and Watson (1991:182), employment could also be used to distinguish between enterprises. He suggested that the informal sector unit is motivated primarily by employment creation whereas, the formal sector enterprise is concerned with profit maximisation. Hence, his definition that the informal sector “consists of small-scale units engaged in the production and distribution of goods and services with the primary objective of generating employment and incomes to their participants notwithstanding the constraints on capital, both physical and human, and know-how”.

Another important group to study the informal sector was made up of PREALC researchers. Their approach focussed on the labour market. They argued that “the existence of urban informal sector resulted from a combination of high levels of rural to urban migration and a slow expansion of productive employment, causing an excess supply of labour for the formal sector” (Thomas, 1995:23). According to Souza and Tokman (1976), in the absence of employment in the formal sector, the unemployed urban population was forced to create jobs of low productivity. This was particularly important due to the absence of social security benefits for the unemployed.

PREALC’s standard definition has been to include in the informal sector the self employed, unpaid family workers, domestic servants and enterprises of less than five persons. Their alternative definition identified informality with low productivity and low income, and included individuals with incomes below a certain minimum level, usually the legal minimum wage (Souza and Tokman, 1976).

However, the identification of the informal sector with the poor and the unemployed has been challenged. According to Thomas (1995), data on income distribution for a

number of countries suggest that not all those in this sector are poor. Similarly, not all live in slums or squatter areas (Sethuraman, 1976) and are unemployed (Tripp, 1997). For example, Rogerson and Whyte (1991), Economics Research Forum (1996) and Tripp (1997) reported on “moonlighting”, a phenomenon whereby people employed in the formal sector also engage in the informal sector’s activities.

According to Sethuraman (1997), several reasons, regardless of ones’ condition could lead people to participate in the informal sector. These are listed below:

- Inability to gain employment in the formal sector. This is the main motive and is usually taken by most of the urban poor.
- Flexibility in participation, in terms of working hours, place of work and activities. This is particular suited to those who have to combine household and income earning responsibilities. It is also suited to “moonlighters” who have to keep up with challenges and time requirements of their jobs.
- To exploit market opportunities that are difficult to be penetrated by large enterprises.
- To avoid compliance with regulations. In this particular case, the individuals can afford to comply with regulations but decide to remain small, unregistered and unlicensed in order to save costs associated with registration and licensing and not to attract tax authorities.

The above reasons for joining the informal sector clearly suggest that it comprises the poor as well as the non-poor. In 1989, Castells and Portes challenged the linking of informality with individual’s condition, and instead they referred to the informal economy as “a process of income generation which is unregulated by the institutions of the society, in a legal and social environment in which similar activities are regulated”. (Cited in Rogerson and Whyte, 1991).

Dewar and Watson (1991:184) gave dangers of depending on the informal sector to solve problems of poverty and unemployment. They cautioned that this sector was not a cure for poverty. They wrote:

“The informal sector offers no universal panacea to problems of poverty and material deprivation. It is vital to generate maximum job creation and remuneration in the formal sector, and if policies aimed at the informal sector divert attention away from this, or create a sense that the problem is ‘under control’, they may in fact be dangerous. Nevertheless, informal sector-activities comprise, for many of the urban poor, a vital, supplementary source of income, and are critical for their survival”.

The above view of not relying on the informal sector to solve problems of unemployment and poverty is strongly supported in this thesis. It is argued that the sector’s employment should be seen as supplementary to government’s efforts of creating employment and well being of its people. This sector, in the long term, should form a stepping stone towards a more stable, efficient and organised formal economy.

2.3.3 Definition of the informal sector adopted in this work

The preceding discussion gave a general picture of what constitutes the informal sector and the people involved in it. According to Sethuraman (1981) as cited in Dewar and Watson (1991), the ILO (1993) and from the discussion, this sector broadly consists of units engaged in the production of goods and services with the primary objectives of generating employment and incomes to the people concerned. The units may consist of rural or urban individuals or groups of individuals within the same or different households. Furthermore, the units typically operate at a low level of organisation, with little division between labour and capital as factors of production and on a small scale (ILO, 1993). In addition, Castells and Portes (1989) asserted that activities of the informal sector, although legal, are unlicensed and unregistered, and therefore unregulated by the institutions of the society (cited by Rogerson and Whyte, 1991).

In the Tanzanian situation, the definition of the informal sector used in the NISS (GOT, 1991a:3-7) which is reproduced below, covers and fits the above aspects of the informal sector and is therefore adopted for this work.

“The informal sector is constituted of urban and rural, non-farm, small scale, self employed activities. Typically they operate with low levels of organisation, low capital, low technology and often on temporary premises. They are usually not supported by formal financing institutions, and are not usually measured in official government statistics”.

One aspect not obvious in the above definition, and which is emphasised here, is that all activities carried out in the informal sector are legal in the sense that a business license from relevant government authorities could be obtained to execute them. All criminal activities are excluded in the informal sector.

2.4 STATE AND THE INFORMAL SECTOR

The state has been identified as an important factor towards the emergence of the informal sector. In 1981 Sethuraman linked the emergence of the informal sector as a major force in employment and income generation to failure of governments to create employment in the formal private and government sectors (cited in Dewar and Watson, 1991). Policy makers ought to realise that the sector acts as a safety valve to the multitude of unemployed people. Tripp (1997) gave an example of Tanzania where the tolerance of the government on the presence of the informal sector averted political unrest due to economic hardships caused by economic re-structuring programmes being implemented in the country.

Roberts (1990) linked the informal sector to state regulations and provision. He argued that the informal/formal distinction is important because certain rights to pensions, social security and other benefits are linked to formal sector employment. He suggested that the disappearance of the informal sector depended on the extension of similar benefits to the unemployed.

According to de Soto (1989), Thomas (1995) and Tripp (1997), the informal sector is a result of government’s bureaucracy. People operate illegally because of faults in the state system like unnecessary regulations and excessive bureaucracy. The Ministry of Foreign Affairs (1997) reported that “in a typical developing country the creation of job in the formal sector costs fifty times more than the informal sector”. High costs

and long time are also associated with the creation of a formal business rather than an informal one (de Soto, 1989; Malyamkono and Bagachwa, 1990; Ghersi, 1997).

Ghersi (1997) in particular linked the origin of informality with the inefficiency of the law. He argued that compliance with the law has a cost: the amount of time and the information necessary to comply with it. If the cost is high (meaning that there is bureaucracy), people would ignore the law and operate informally. People would comply with the law only when they perceive that the benefits are greater than the costs of complying. The cost of law (i.e. the cost of overcoming bureaucracy) could be regarded as an indirect cost. In addition, there is the direct cost of adhering to the law, which includes licensing fees, taxation, complying with health and safety regulations, etc. According to Malyamkono and Bagachwa (1990:46), in Tanzania “high tax rates combined with a deteriorating economic situation” was responsible for making people “shift production towards those activities that are difficult to tax”.

The ILO (1972) report also identified links between bureaucracy and informality. The report advocated that governments should have positive attitudes towards the promotion of the informal sector, and should review trade and commercial licensing in order to eliminate unnecessary licenses, substitute health and safety inspection for licensing, and issue licenses to any applicant able to pay the license fee. State bureaucracy leading to corruption, was also cited by Malyamkono and Bagachwa (1990) and Tripp (1997) as one of the contributing factors to informality in Tanzania.

de Soto (1989) suggested that the high cost of bureaucracy is borne by those operating in the informal sector and the whole economy. He argued that the informal sector operators could be a potential engine for economic development if the regulation that prevented them from becoming formal were removed. Quoting him:

“... informality has turned a large number of people into entrepreneurs, into people who know how to seize opportunities by managing available resources, including their own labour, relatively efficiently.... This new business class is a very valuable resource. It is a human capital essential for economic take off.” (p.243).

According to Thomas (1995), the informal sector represents a potential entrepreneurial talent that could be exploited by the removal of bureaucratic rules and regulations.

In addition, Tripp (1997) suggested that the engagement of people in the informal sector was one way of protesting about governments' laws regarding licensing and taxation. She argued that silent non-compliance to the state's regulation could be effective to force the government to adopt measures to ease the burden created by the resisted laws and regulations.

It has been argued that governments do not assist the informal sector (UNCHS, 1991). Cross (1998) argued to the contrary: in a situation where the government does not enforce licensing and taxation regulations, this could be regarded as tantamount to subsidies by the government. This approach seems to be endorsed in Zambia when its President, was quoted by Machona (1997) as saying:

“the lack of government support to the informal sector makes it illegitimate for government to ask for tax from them. We have not provided them with any facilities, they can't borrow from the banks, they lack government support ... we haven't provided them with a roof ... it would be grossly unfair to go and hunt for them.”

The above argument could be taken, on the one hand, as a genuine concern by governments for the predicament of the informal sector operators, and hence the lack of action to control and collect taxes from the sector. On the other hand, it is argued that political leaders are afraid of launching a full confrontation with the sector's operators to save their political carriers (Franks, 1994; Financial Times, 1998). An all-out confrontation with the informal sector operators could jeopardise the chances of being elected in democratic elections particularly in the urban areas where there is a large concentration of urban population engaged in informal activities.

It will be shown later in this thesis that adoption of active rather than passive policy approaches could assist the informal sector register its contribution to the creation of employment and the growth of the economy.

2.5 RELATIONSHIP BETWEEN FORMAL AND INFORMAL SECTOR

It is generally accepted that numerous and complex links exist between the informal and formal sectors (Dewar and Watson, 1991; Thomas, 1995; United Nations, 1996). According to Thomas (1995:56), the linkages may be distinguished into “economic” and “social/political” links.

The social/political links are indirect and are institutional in nature. They depend largely on how the two parties accept each other and to what extent they would use their influences to pressurise governments to take legal action against one another (Thomas, 1995). Of course, since the informal sector operates outside the legal system, this would actually reflect how it is accepted by the formal sector. For example in the trade industry, situations exist where formal traders are known to influence governments to take legal action against the informal traders on the pretext of unfair competition, health hazards and congestion of public places caused by the informal traders. However situations also exist where the relationship is not antagonistic, and formal traders use informal traders to sell their merchandise, particularly to avoid paying taxes (Mutagwaba, 1996).

Economic linkages involve direct transactions between the two sectors, and are distinguished into backward and forward linkages (Thomas, 1995; United Nations, 1996). Most goods traded in the informal sector originate in the formal sector. Informal traders actually act as a link between the formal traders and the final customers (the consumers). This represents the backward linkage between the informal and formal sector, and is the major type of linkage (Thomas, 1995).

The forward linkage involves the production of goods and/or services in the informal sector for use in the formal sector; either in the production process or as final goods and services ready to be sold to the consumer (Thomas, 1995; United Nations, 1996). For example, as it will be shown later in this work, formal building contractors buy construction material from informal material suppliers for use in their projects. According to Thomas (1995), formal industrial firms are also known to buy waste products like papers, glass bottles, plastics, tins, etc. for recycling in their plants.

With the backward linkages, the benefits to the formal sector can be easily identified. The formal sector obtain an income from the purchases made by the informal traders, and the informal sector in turn gets the income from selling to the consumer. With the forward linkages, especially where the purchased materials from the informal sector is used for production, the formal sector benefits by getting cheap raw materials (Thomas, 1995). The benefit to the formal sector is not very obvious in situations where the goods originating completely from the informal sector are sold directly to final consumers. In 1974 King argued that if the final consumer is employed in the formal sector, then the low cost of goods produced in the informal sector benefits the formal sector employers since it enables them keep down the wages of the workers (cited in Thomas 1995:59).

Other linkages including technological, consumption and credit financing linkages were cited in the United Nations (1996). Technological linkages involve the transfer of technology and skills between the two sectors. This takes place mainly as a result of movement of skilled workers and other exchanges of knowledge. A typical example of technological linkage is that of employees in the formal sector using skills gained in that sector to form informal sector enterprises, on part-time or permanent terms.

Consumption linkages involve direct links between the informal sector with final consumers who are in the formal sector. The final consumers may be households whose income depends fully on the formal sector or government holdings (United Nations, 1996).

Finally the credit financing linkages refer to the transfer of funds from the formal sector for investment and development in the informal sector. Actually, this is a special form of backward linkages only in this case it is the finance that originates from the formal sector and not the goods as discussed previously. Credit financing linkages manifest themselves when people use the income obtained in the formal sector to set up informal sector enterprises. Situations, however, do exist where persons involved in the informal sector accumulate enough capital to start a formal business (United Nations, 1996).

To understand the relationship between the formal and informal sector it was also important to address the issue of competition between the two sectors. Competition could be divided into two broad areas: for inputs and for markets. Inputs relate to raw materials, labour and capital. Although competition for raw materials could be present, it has always been in favour of the larger formal sector enterprises. For the small informal sector enterprises to survive they need “to find substitute raw materials that are not demanded by the formal sector” (Thomas, 1995:60).

The competition for labour and capital is very much limited. The labour market in the formal sector is saturated. In most countries, there is a positive flow of labour from the formal sector to the informal sector (Malyamkono and Bagachwa, 1990; Bagachwa and Naho, 1994; Tripp, 1997). Similarly, the informal sector is unable to attract capital. By definition, the informal sector lack access to credit and therefore is unable to invest in plant and equipment. According to Sethuraman (1997), most of the formal financial institutions are reluctant to advance loans to the informal sector enterprises. This force the informal sector operators to start their business with little capital obtained from their own savings and supplemented by borrowing from friends and relatives.

Competition for markets is related to prices of goods and services provided by both sectors. It has been argued that the informal sector could compete in this aspect because it offers cheap goods and services. Actually, this is an area where much antagonism exists between the two sectors. The formal sector traders in many countries have been known to protest against the presence of informal traders, as they tend to undercut their prices. They argue that the informal sector is able to offer cheap goods and services because it does not pay licensing fees and taxes, rent shopping/trade premises, etc (Terblanche, 1995). This argument is not necessarily true since in situations where the purchasing power of the population is high, people prefer to purchase goods of better quality from the formal sector (Mutagwaba, 1996). At the same time situations exist, like in construction, where lower end markets do not attract the formal sector traders (Hindle, 1997a).

It is important to appreciate that the linkages between the two sectors are vital, particularly for the development and the continuous growth of the informal sector as

well as for the development of the whole economy of the developing countries (United Nations, 1996). Later in this work, the nature of linkages between the informal and formal contractors in Tanzania will be explored and whether they are beneficial to both sectors or not.

2.6 BENEFITS OF THE INFORMAL SECTOR TO THE NATIONAL ECONOMY

In virtually all developing countries, the informal sector represents a significant component of the economy. In most cases it provides gainful employment to well over 50 per cent of the work force and contributes substantially to industrial output, goods distribution, food supply and service provision (United Nations, 1996; ICOHS, 1997; Bangasser, 2000). Its national importance is therefore a well-established fact (ICOHS, 1997; Bangasser, 1997). According to Malyamkono and Bagachwa (1990), the United Nations (1996) and Bangasser (2000), it is important to distinguish those elements within the informal sector that constitute a potential asset to the development of the nation from those that are socially and economically harmful to the healthy development of the economy. This is why the need to exclude the criminal activities from this sector was stressed earlier in this thesis.

As described above, among the important features of the informal sector is its ability to create employment. It accounted for 60-70 per cent of the urban labour force in Africa (United Nations, 1996; Ministry of Foreign Affairs, 1997), and created 85 per cent of new jobs in Latin America between 1990 to 1995 (Ministry of Foreign Affairs, 1997). In South Africa it employed 16 and 17 per cent of the total workforce in 1994 and 1995 (RSA, 1998) respectively. Similarly, the ILO (1993), the United Nations (1996) and the Ministry of Foreign Affairs (1997) estimated that the average share of the informal sector output in total GDP for Africa is approximately 20 per cent.

Other quoted statistics on the size of the informal sector in different regions of Africa and the rest of the world include:

- According to the ILO (2000), this sector accounted for over 60 per cent of the total urban employment in developing countries. Figures for individual countries showed that it was 57 per cent in Bolivia and Madagascar, 56 per cent in Tanzania, 53 per cent in Columbia, 48 per cent in Thailand and 46 per cent in Venezuela.
- The Pan African News Agency (1997) reported that the informal sector in Zimbabwe, previously looked down as inferior and with no organised structure, was slowly overtaking commerce and industry as the leading employer. In 1996, it employed 1.56 million people compared with 1.2 million in the formal sector, and the sector was viewed as an immediate solution to Zimbabwe's high unemployment rate, estimated at 40 per cent.
- According to the Financial Mail (1997), in 1995 almost one in every eight jobs in South Africa originated in the informal sector, which generated 7 per cent of the country's GDP. Trade, catering and accommodation services accounted for 45 per cent of the sector's contribution, while construction accounted for 6 per cent.
- The Foundation for Market Economy (1994) reported that in 1992 the income generated in the informal sector represented 25 to 26 per cent of the GDP in Hungary.
- Thomas (1995) reported that in Latin America, in the period between 1980 to 1992, there was an increase in the labour force in the informal sector from 40.2 to 54.4 per cent of the non-agricultural economically active population.

The above few statistics show that the informal sector is important enough to deserve adequate attention and inclusion in macroeconomic policy planning. Franks (1994) gave four reasons for its incorporation into macroeconomic policy planning: its large size; its behavioral response to macroeconomic policy, which is different from that of the formal sector; its possibility of being managed by government economic policies;

and its recognized economic benefits. He, however, cautioned against the existence of an optimal level of informality, which should be taken as a target for macro-economic policy.

Franks (1994) further summarised the advantages of developing the informal sector. These advantages, also supported by Malyamkono and Bagachwa (1990), Thomas (1995) and Marten (1996), include:

- The use of appropriate technology;
- Saving of foreign exchange, through the use of much lower levels of foreign inputs for a given output than a formal sector;
- Alleviation of poverty and distribution of income, through the creation of productive jobs much more rapidly and at lower resource costs than either the formal private sector, or the government;
- Provision of training opportunities; and
- Provision of essential goods and services at prices affordable to most people rather than those produced in the formal sector.

However, (Franks, 1994:99) argued that the existence of a large informal sector represents a “challenge to the state because of the degree of autonomy the sector enjoys and its ability to evade many government controls”. It is a constant reminder of the government’s inability to generate sufficient employment to meet the needs of its citizens.

Franks (1994) further noted that the size of the informal sector makes it a strong potential force in democratic politics. It constitutes a large number of possible voters that could be potentially mobilized by political leaders. The sector as a significant political force manifested itself strikingly in Peru (Franks, 1994) and was on the rise in many parts of the developing world (Trip, 1997).

On public policies, the ability of the informal sector to evade taxes was seen as a major problem (Franks, 1994; Marten, 1996). According to Franks (1994:99) “any policy to encourage the informal sector runs the risk of eroding the tax base and the efficiency of

government revenue collection efforts” and may make the government unable to provide important public services. Other problems include: loss of government control over urban planning and zoning (Dewar and Watson, 1991); lack of health, safety and environmental regulations in the informal sector (ICOHS, 1997); and the lack of protection in the sector for wages, job security and trade unionization (Anon, 2000).

Other cited disadvantages of the sector include: low productivity and corresponding low wages and inferior quality of goods produced with little potential for export and generating foreign exchange. It is also argued that efforts to develop the sector prohibit further modernization of the society and slow the industrialization process (Marten, 1996). With regards to low productivity, Young (1994) argued to the contrary. He found the informal sector enterprises to be more efficient in total resource use than larger ones, most notably in sectors where they predominate. The fact that this sector’s enterprises have survived despite biased and repressive policies is proof of their efficiency (*ibid.*)

It is currently accepted that the advantages of the informal sector outweigh its disadvantages. Currently most policy makers do not view the informal sector as a problem of development, but as an asset or solution (Terblanche, 1995; Bangasser, 2000). The informal sector is now seen as a source of entrepreneurship and employment creation (Kershoff, 1996; Bangasser, 2000). Therefore, it is desirable to find ways that would maximise the benefits of the informal sector while minimising its unwanted elements.

2.7 MEASUREMENT OF THE INFORMAL SECTOR

2.7.1 The size of the informal sector

In addressing the issue of the size of the informal sector, Thomas (1995) gave two dimensions, which could be used to determine the size of the informal sector in any country. The first and the simplest, is the number of people working in the sector. The second, but difficult to determine, is the value of the output of the informal sector (possibly measured as a percentage of the level of the measured GNP).

The use of employment data may sometimes give a misleading idea about the economic importance of the sector. For example, data available in Peru shows that in 1987 the informal sector although representing 52 per cent of economically active population produced only 13 per cent of the GNP of Peru's industrial sector. The large firms represented 13 per cent of the economically active population, but produced 46 per cent of the GNP. These findings give a warning of using the employment data to gauge the importance of the informal sector and proves that this sector is characterised by high levels of employment coupled with very low levels of productivity (Thomas, 1995).

To properly determine the size and economic importance of the informal sector in any country, it may be necessary to give both the levels of employment and contribution to the GNP. Unfortunately, some of the data available in different countries only gives one of the two, making it difficult to say with certainty its importance to a given country.

Later in this chapter, a brief overview of the Tanzanian informal sector, and therefore a discussion of its size, will be made. However, to underscore the importance and size of the informal sector Malyamkono and Bagachwa (1990:34) wrote:

“Contrary to the classical theories of development, which view the informal sector as a passing phenomenon destined to phase out with time, giving way to the large scale, more organised modern sector, experience in developing countries shows that this sector has considerably increased both in its level of production and the number of persons engaged in it. The informal sector is said to engage more than 50 per cent of the urban population in developing countries and this section of society is growing at a higher rate than the overall population of these countries. In India, for example, the informal sector GDP is said to be of the same order as that of the formal sector. In Africa the informal sector accounts for 60 per cent of the urban labour force and it is quite likely that it contributes between one quarter and one-third of urban incomes”.

Generally the view of many governments as discussed above was that the informal sector was a temporary phenomenon destined to phase out with time. Governments believed that with their support, informal sector enterprises could be assisted to become formal. However this does not seem to be the case. Despite the current efforts to assist informal enterprises to become formal (Thomas, 1995; Tripp, 1997), new informal

enterprises are created everyday. This has been primarily been due to continued deterioration of economies of developing countries coupled with severe unemployment caused partially by poor economies and economic re-structuring programmes (Tripp, 1997; Sethuraman, 1997).

The informal sector is therefore important in the economies of developing countries. The presented figures of the informal sector's employment and contribution to the GDP prove the role played by the sector in providing employment for the urban population and contribution to economy of the developing countries.

2.7.2 Why is measurement important

Van der Berg (1990) as quoted by Kirsten (1991) and Bagachwa and Naho (1994) pointed out that most national accounting systems used to measure economic activity were inadequate. In particular, the GDP and national income figures and labour statistics were underestimates of economic participation. Of major concern is the relative denial of the contribution made by the informal sector operators because of their elusive and shifting character (Kirsten, 1991).

According to Malyamkono and Bagachwa (1990), the omission of the informal sector data in national income data could be attributed to the accounting convention used and mistakes or deficiencies in the estimation methods used. It may also arise from difficulties in data collection particularly where activities are not easily accessible.

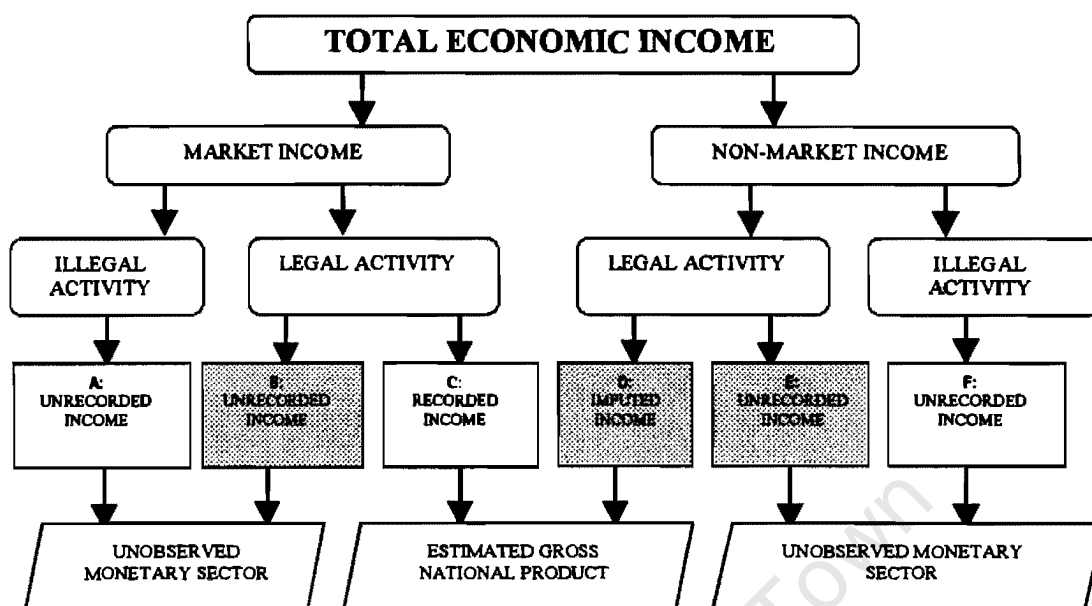
The determination of the correct size of the informal sector in any country is important for proper economic planning. Franks (1994:94) pointed out that excluding the informal sector from economic planning leads to a severe "omitted variable bias" in economic policies. He argued that because of this bias, any behavioural differences between the informal sector and the rest of the economy would introduce biases in the micro-economic models and the policies designed based on the models. By omitting the informal sector, economic policy makers could devise policies that are inappropriate for the economy as a whole.

Feige (1989), in discussing the economic sector which goes unrecorded in the government statistics, gave an overview of what constitutes national economy and income, and what income goes into government official economic statistics. The income that ought to have been reported consists of the observed and the unobserved sector. The observed sector constitutes all the measured economic activity that is recorded in the conventional national accounting frameworks, and consists mainly of market income producing activities that utilise money as a medium of exchange. The unobserved sector is that amount not reported due to a variety of reasons including tax and regulatory evasion, avoidance of costs of compliance, or mistrust of the government. The unobserved sector is made up of:

- the unobserved monetary sector consisting of both legitimate and illegitimate income producing activities. The illegitimate activities are usually excluded from national accounts, but the legitimate activities escape the national accounts due to the accounting convention used (Malyamkono and Bagachwa, 1990).
- the non-monetary sector in which goods and services are produced for consumption by the producing unit (household) or are exchanged by a bartering mechanism. Here again, legitimate and illegitimate activities exist.

Figure 2.1 summarises the components of the national income. It shows that the total unrecorded income consists of income produced from prohibited economic activities deemed illegal by the law of the land (A+F), income produced from non-market (bartered) legal activities (E) and income produced from legal markets that for various reasons escape official measurement (B). Both (A) and (F) consists the illicit informal sector activities, which were discussed in Section 2.2. This research focuses on licit informal sector activities, which fall under B, D and E.

Economists therefore face a challenge of devising methods that can capture B, D and E to show a true reflection of the country's economies. At the same time, governments must ensure that A and F, which are the unwanted elements in the economy, are eliminated.



NB: The shaded squares represent the legal informal sector, which is covered in this thesis

Adapted from Feige (1989:18, Table 1.1)

Figure 2.1 Distribution of total economic income.

2.7.3 Measurement techniques

Due to the importance of the informal sector, much effort has gone into devising various techniques for measuring its size. It can be measured either by establishing the proportion of economically active population engaged in the sector or by its contribution to the GDP (Malyamkono and Bagachwa, 1990; Thomas, 1995).

The techniques used to establish the employment in the informal sector and its contribution to the GDP falls into direct and indirect measurement. According to Kirsten (1991), these methods produce divergent figures whose respective conclusions have been the basis of many debates. These techniques are discussed in the coming sections.

To avoid confusion when interpreting the informal sector data, it is essential that individual studies adequately describe their methodologies, and an outline of the definition of the informal sector adopted. This would make future comparisons

between studies less complex and could assist efforts to measure the growth of the sector's activities over time (Kirsten, 1991).

Direct techniques

The direct approach involves the intensive investigation of samples of a given population, and was designed specifically to generate data, rather than to make sense of existing statistical data (Kirsten, 1991). Direct methods could facilitate the collection of detailed information about the structure, composition of the labour force, and the experience of people within the informal sector.

According to the ILO (1993) and Thomas (1995), household surveys is one of the most satisfactory direct methods to collect data on the informal sector. By using a simple set of questions, sufficient information could be obtained to determine the involvement of individuals in the informal sector activities. It is however important to give an acceptable criterion which will be applied to allocate individuals and small enterprises between the informal and formal sectors. This method was used in Tanzania to collect data on the informal sector in 1991 and 1995 for the whole country (GOT, 1991a), and for the Dar-es-Salaam region (GOT, 1995) respectively.

Although the direct techniques give an insight into the magnitude of informal sector activities, they have certain disadvantages; their results indicate only point estimates and are unable to provide estimates of the growth of the informal sector over time (Kirsten, 1991). However, according to the ILO (1993), it is possible to estimate the growth of the sector, if the surveys are carried out at some predetermined intervals.

Indirect techniques

Indirect approaches use already-available statistics to estimate the size of the informal economy. These methods fall into two categories. The monetary approach, on the one hand, looks at the discrepancies between the currency normally needed and that which is actually observed in the monetary sphere to determine the size of the informal sector. They include the currency-demand approach, the demand for currency equation and the

transaction approach. The income-expenditure discrepancy method, on the other hand, compares income and expenditure patterns, and it takes the difference between expenditures and income to reflect the size of the informal economy (Malyamkono and Bagachwa, 1990; Kirsten, 1991). Estimates made by these indirect techniques relate to a wide informal sector discussed in Table 2.1: they include the elements of the informal economy which are undesirable to the society. The results obtained using these methods should therefore be treated with caution.

Currency –demand approach

The currency-demand method developed by Gutman in 1977 assumes that in the informal sector transactions are undertaken by cash payments in order to escape leaving behind observable traces for tax authorities. “An increase in the demand of currency, unexplained by factors such as income, payment habits, and interest rates, must be attributed to growth in the informal economy” (Kirsten, 1991:151). Using this method Malyamkono and Bagachwa (1990) estimated that the Tanzanian informal economy was 31.4 per cent of the officially estimated Gross National Product (GNP) in 1986. In addition, taking the advantage of the method’s ability to calculate a time series of the informal economy activities, they established that between 1978 and 1986, the Tanzanian informal economy grew at an annual rate of 30.1 per cent. This was more than the official growth in GNP, which was 19.4 per cent.

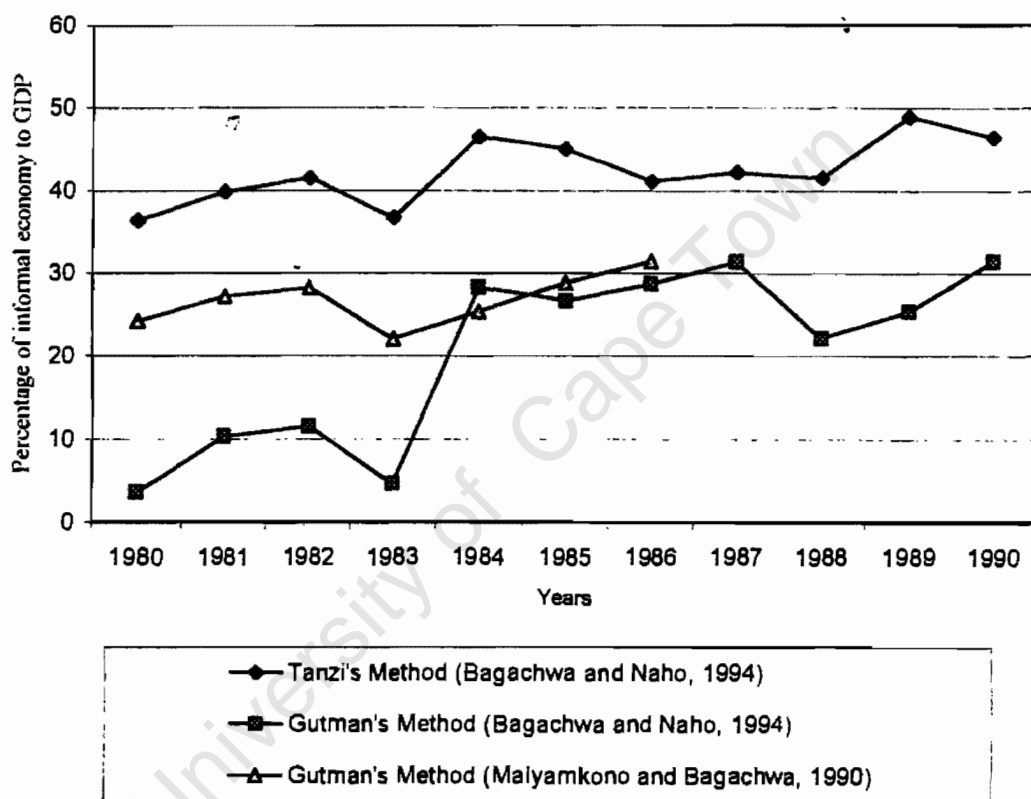
Hartzerberg and Leiman (1990) and Malyamkono and Bagachwa (1990) challenged the Gutman’s approach, particularly on the major assumption made. They argued that not all transaction in the informal economy are undertaken on a cash basis; some transaction involve both crossed and open cheques, and some involve barter exchange or even foreign money. In addition, the choice of an appropriate benchmark entailed an element of arbitrariness (Malyamkono and Bagachwa 1990).

Demand for currency equation

The demand for currency equation developed by Tanzi (1982) has the advantage that its results are not sensitive to the initial period. Again in this method, the underlying

assumption is that money is mainly used for carrying out transactions or for storing wealth in the informal economy.

Using this method Bagachwa and Naho (1994) estimated the size of the second economy in Tanzania from 1980 to 1990. Figure 2.2 shows the results, together with two pairs of results obtained using Gutman's method by the same authors and by Malyamkono and Bagachwa (1990).



Source: Bagachwa and Naho (1994:Table 3) and Malyamkono and Bagachwa (1990)

Figure 2.2 Estimates of the size of the informal economy in Tanzania

In Figure 2.2, Tanzi's (1982) method constantly yielded higher values than Gutman's approach. The highly divergent figures between the two methods obtained by the same authors could be attributed to the assumptions inherent in the methods and/or lack of consistence of official data that was used in the estimating process. At the same time results obtained by Malyamkono and Bagachwa (1990) and those by Bagachwa and Naho (1994) using Gutman's method differed very much. This again raises doubt on

the correctness of the data/information that was used in the computation. However, such discrepancies reinforce Kirsten's (1991) argument regarding the diverging estimates of the size of the informal sector that could be obtained using different methods.

Transaction method

Feige's (1979)-transaction method discussed by Kirsten (1991) assumes a constant relationship between the nature and volume of economic transactions and the official GDP. The method also assumes that informal sector transactions take place largely through cash payments. A growth in the demand for money relative to bank deposits and other more convenient media of exchange are taken to reflect the informal sector activities.

Using this method, Kantor (1989) estimated that South Africa's GDP for 1987 was 16 to 41 per cent higher than indicated in the official figures⁵. Hartzenberg and Leiman (1990) were quoted by Kirsten (1991) to challenge the method because it ignores the impact of structural changes in the economy, such as the extension of credit facilities, which they argued might also affect the nature of transactions.

Discrepancy between the National Expenditure and National Income Statistics

The discrepancy between the national expenditure and national income statistics method assumes that while people may attempt to conceal their true income, they would not hide their expenditure in responding to government surveys. In accordance to this method, the discrepancy between income and expenditure is attributed to the informal economy (Malyamkono and Bagachwa 1990). A macro-level approach of this method compares the National Accounts estimates of income sources and expenditure outlays. A micro-level approach assesses the income-expenditure discrepancy of particular individual households or groups, and using a representative sample, extrapolates the results to give an estimate of the informal economy for the whole country.

⁵ The wide range, 16 to 41 per cent, again raises doubt regarding the correctness of the method, or correctness of data/information used for determining the size of the informal sector

According to Malyamkono and Bagachwa (1990) and Kirsten (1991), the macro-level discrepancy approach seems to be a viable approach for assessing the contribution of the informal sector. However, it suffers two shortcomings. Firstly, the difference between income and expenditure figures may indicate not only the hidden informal activities, but also errors in the income and expenditure figures. These errors could arise from non-reporting or under-reporting of incomes from bartering, illegal activities, etc. Secondly, there may be errors due to differences in time and statistical approaches used for compiling the data.

The macro-level approach works well in developed countries where nearly all transactions are monetary and efforts are made to maintain accurate national statistics (Kirsten, 1991). It is unsuitable in developing countries, like Tanzania, where a considerable portion of the population still engage in barter arrangements and where national statistics are known to offer only a limited coverage of income and expenditure (Malyamkono and Bagachwa, 1990).

2.7.4 Applicability of the measuring techniques to Tanzania

The different indirect methods discussed above for determining the size of the informal sector rely on available statistics. The accuracy of the statistical data would affect the accuracy of the computed size of the informal sector. In the case of Tanzania, one major problem facing economic planners and researchers is the availability and accuracy of economic data (Malyamkono and Bagachwa, 1990). The methods also assume that most transactions are carried out using money. In developing countries like Tanzania, "subsistence and barter arrangements are important economic strategies for large segments of the population" (*ibid.*:59). Therefore the use of indirect methods may result in an underestimation of the size of the informal sector.

It was also mentioned that the methods, with the exception of the micro-level discrepancy approach, traces the movement of money regardless of what caused money to disappear out of circulation or where the money was spent. Therefore, the obtained size of the informal economy may include legal and illegal activities, and it is not possible to distinguish between the two. Since the informal sector described in this

thesis excludes illegal activities, the methods discussed do not yield the correct size of this sector.

The results on the size of the second economy obtained by the same economists using different methods and different economists using the same method differed as shown in Figure 2.2. This casts doubt on the methods themselves, or on the correctness of the data used in the computation.

With the problems highlighted above, it could be concluded that methods, which use compiled statistical data and assume monetary transactions, are unsuitable to determine the size of the informal sector in Tanzania.

Household surveys are recommended for measuring the size of the informal sector in Tanzania. By selecting representative communities throughout the country, this method could be used to establish data on income and expenditure on household accounts and people's involvement in the informal sector. With this information, it is then possible to use the discrepancy between the expenditure and income method to compute the size of the informal sector of the representative communities, and by extrapolation, its relative size in the whole country. The method, however, gives point estimates of the size, and it is therefore necessary to conduct household surveys at predetermined intervals to establish its growth rate.

2.7 INFORMAL SECTOR IN TANZANIA

2.8.1 Government's attitude towards the informal sector

As discussed previously, one of the major characteristics of an economy in a developing country is the presence of an informal sector. Tanzania is no exception.

The Tanzanian Government in the 1980's was generally against the informal sector activities (Malyamkono and Bagachwa, 1990; Kenti and Mushi, 1995; Tripp, 1997). According to Kent and Mushi (1995:150), it regarded the informal sector activities to be "clandestine, exploitative and subversive". They were found to "challenge the socialist notion of an egalitarian and classless society" that the government was trying

to build. The government regarded the sector corruptive as it was operating outside its legal system and was depriving it of tax revenue.

Notwithstanding the attitude of the government, the informal sector has continued to grow. According to Malyamkono and Bagachwa (1990), ILO (1993), Mutagwaba (1996) and Tripp, (1997), the continued growth of the informal sector in Tanzania was attributed to the following reasons:

- erosion and compression of formal wages and salaries;
- bureaucracy by the government in granting business licences;
- stagnation in formal wage employment; and lastly
- reduction by the government of its previously prohibitive stance towards it.

Tripp (1990), Malyamkono and Bagachwa (1990), and Bagachwa and Naho (1994) suggested that the growth of the informal sector in Tanzania was part of the survival strategies adopted by people to weather the economic crisis. There has been a dramatic growth of informal income generating activities of urban wage earners and their household because of declining real wages. According to Tripp (1990:49), wage earners in Tanzania suffered “a 65 per cent decline in real wages between 1979 to 1984 and consumer prices increased tenfold from 1976 to 1986”.

The ILO, together with the Ministry of Labour and Youth Development (GOT, 1991a) qualified approximately 95 per cent of informal businesses carried out in Tanzania as survival activities with limited growth potential. However, when combined, they produced a value-added of more than 32 per cent of the officially recorded GDP. The informal businesses in Tanzania provide earnings per worker that were 2.6 times higher than the minimum wages in the urban formal sector. In addition, they realized an average return on investment of 33 per cent per annum, indicating minimal levels of investment rather than general prosperity.

While it was expected that informal sector businesses would be formalised over time, the trend does not depict this. The regulations that exist in the formal sector have made it unattractive for people to make their businesses formal (Mutagwaba, 1996). These

regulations include registration and licensing, minimum standards of hygiene and building infrastructure for the work place, taxation, and application of formal accounts.

According to the Financial Times (1998), the ruling class in Tanzania generally “appreciates the buffer function of the informal sector and the political weight of its size, and has so far avoided direct confrontation with its operators”. At the same time, they see it as a threat and a nuisance, as it escapes their control, occupies large pieces of valuable land, and defies their vision of development. The lack of clear government stand on the sector leads to contradictory public statements and incoherent measures by the local government authorities mostly against the small pockets of informal sector operators. Conflicting government announcements and actions heighten the prevailing climate of insecurity within the sector.

2.8.2 Facts and Figures about the informal sector in Tanzania

In an effort to understand its informal sector, the government of Tanzania conducted a countrywide National Informal Sector Survey (NISS) in 1991 (GOT, 1991a) and the Dar-es-Salaam Informal Sector Survey (DISS) in 1995 (GOT, 1995).

The NISS was both evaluative and investigative and had the following objectives:

- To provide quantifiable national data on employment in the informal sector;
- To provide data for the national accounts estimates of the sector; and
- To provide policy guidelines for planners on the development of the informal sector.

The DISS was a follow-up survey to provide further insight into the sector and gauge its growth during the period. It was, however, carried out in Dar-es-salaam only, the largest city in Tanzania.

In the NISS and DISS studies, a "multi-phase" data collection approach was used to allow wide coverage of households and capturing many informal sector activities. (GOT, 1991a). The multi-phase approach consisted of two phases:

- The first phase involved the establishment of participation of the households in informal sector activities using a household questionnaire. It identified all the businesses falling within the scope of the survey and their owners.
- The second phase obtained detailed information on the characteristics of the businesses and workers by interviewing business owners using the operator questionnaire.

Important indicators of the informal sector in Tanzania are shown in Appendix 2.1. Salient features of the sector as summarised from the NISS (GOT, 1991a) are as follows:

- In 1991, the sector employed about 2,370,000 people; 60 per cent were in rural areas and the remaining 40 per cent were in urban areas. Dar-es-Salaam accounted for 13 and 44 per cent of the total and urban informal sector employment respectively. The total employment in the informal sector constituted 22 per cent of total employment in Tanzania in 1991.
- A large degree of self-employment in the informal sector was established. The NISS revealed that 74 per cent of people engaged in this sector were owners of businesses and only 26 per cent were employees.
- The informal sector's total gross output in 1991 was Tshs. 486.9 billion (US\$ 2,090 million). This is about 49 per cent of official GDP of Tshs. 989.6 billion (US\$ 4,427.1 million) for the same year (NCC, 1999).
- The total gross value added for the entire informal sector in 1991 was Tshs. 183.4 billion (US\$ 787.1 million), which was 32 per cent of the total official economy's value added of Tshs. 573.5 billion (US\$ 2,461.4 million).
- The estimated capital formation of the informal sector in 1991 was Tshs 5.7 billion (US\$ 24.6 million), which was 2 per cent of the official gross capital formation for the entire economy.

The above statistics suggest that the informal sector is an important part of the Tanzania economy with a high potential for providing employment and contributing to the economy.

2.9 SUMMARY

This chapter clarified the concept of the informal sector as used in this thesis. This sector has been taken to include individuals or enterprises carrying out legal businesses which are unlicensed or unregistered by the relevant institutions of the government.

The chapter has shown that the state is responsible for the emergence and growth of the informal sector through its failure to create employment in the formal private and government sector. Government policies which lead to poor economic performance and excessive bureaucracy have also been singled out to contribute to informality.

The benefits of the informal sector to the economies of developing countries, and the interaction between formal and informal sectors were also discussed. It was shown that the informal sector provides a valuable source of employment for the urban population, contributes to the GDP and provides goods and services at affordable prices, and therefore plays an important role towards the alleviation of poverty. Its disadvantages were pointed out, but were found to be less important compared to the benefits. Despite the limited competition between the formal and informal sector, a symbiotic relationship was found to exist. The two sectors were shown to depend on each other as sources of goods, raw materials, work and income.

Various methods to measure the size of the informal sector were discussed. These included direct techniques aimed to generate data and indirect techniques, which make use of already available statistics. In the Tanzanian situation, where accurate and reliable statistical data are lacking, it was recommended to use household surveys to establish data on the income and expenditure of households. The established data could then be used to compute the size of the informal sector of the representative communities using the discrepancy between the expenditure and income method.

In this chapter it was shown that the government of Tanzania, despite its previous tough stance, now appreciates the role that can be played by the informal sector in the economy. Through a study on this sector carried out in 1991, it was shown that the informal sector employed 22 per cent of total employment in Tanzania, contributed 49 per cent of the official GDP, and 32 per cent of official value added.

In the next chapter, the construction industry of developing countries will be examined in detail with respect to the existence and nature of the informal construction sector.

University of Cape Town

CHAPTER THREE

THE CONSTRUCTION INDUSTRY IN DEVELOPING COUNTRIES

3.1 INTRODUCTION

It was explained in Chapter One that this research, amongst others, aims to establish the nature of collaboration between the formal and informal construction sectors in Tanzania. Chapter Two described the concept of the informal sector, which embraces the construction industry as well as other industries of the economy.

To understand the context within which the formal and informal contractors operate, it was found important to understand the structure and some of the dynamics related to contractors that occur within the construction industry. This chapter's objectives are therefore to examine the importance, structure and *modi operandi* of the construction industry in developing countries. It examines the evolution process of construction firms and its bearing on the formal/informal contractors' dichotomy. The chapter also discusses specific characteristics of the informal construction sector.

A considerable part of this chapter is devoted to the discussion of the characteristics of small contractors due to the fact that this group is made up of both the formal and informal contractors. To capture the collaboration between the formal and informal construction sectors it was found important to understand the dynamics of this group of contractors and its impact on formal and informal relationships.

3.2 CHARACTERISTICS AND DEFINITION OF CONSTRUCTION INDUSTRY

3.2.1 General

The importance of the construction industry is well known. Quoting UNCHS (1996:xi):

“It is now well recognised that the construction industry plays an important role in the socio-economic development of every country. It provides the building and infrastructural facilities which make such development possible while contributing directly to this growth itself and stimulating activities in several sectors to which it is linked. Owing to its relatively labour-intensive nature, construction work provides opportunities for employment. As it is dispersed throughout each country, construction can improve living conditions at local level.”

Ofori (1990) summarised the role played by the construction industry in socio-economic development into direct contribution, indirect contribution and backward linkages. The construction industry contributes directly to output and employment through the construction activity. Indirectly, it facilitates the growth of other industries like agriculture, manufacturing and services by constructing the physical facilities required for production and the distribution of goods and services. The industry also has great potential for generating employment in itself and, through its backward linkages in other industries which produce and distribute building materials and equipment, and which provide financial services to the industry (Ofori, 1990; Spence *et al.*, 1993; Hillebrandt, 2000). In emphasising the importance of the backward linkages of the construction industry, Spence *et al.* (1993:31) stated that “for every job created in the construction industry a further job will materialise in the building materials, trade, transport and services sectors”.

The contribution of the construction industry through backward linkages is, however, influenced by the extent to which the industry uses its local resources. This contribution is greatly reduced in situations where most building materials, equipment and other services are imported (UNCHS, 1981).

Several parties including clients, designers and contractors are directly involved in the formal construction process. Contractors are very important in the process since they are

involved in the construction stage, which is the longest and the most expensive part of the development process. They are also involved in the long term repair and maintenance of the built structures and constitute the largest group in terms of number of participants. It is for this reason that this research concentrated mainly on the interaction between formal and informal contractors. Where other parties in the construction process are discussed, it was mainly in relation to their actions that impact on the contractors' development.

3.2.2 Definition

Various arguments and definitions have been provided to describe the construction industry (Hillebrandt, 1988; GOT, 1991b; Hong, 1992; Harvey and Ashworth, 2000; Hindle, 1997a; Gruneberg, 1997). Hillebrandt (1988) and Hindle (1997a) define the construction industry based on the Standard Industrial Classification (ISIC, 1968) and also include the parties involved in the industry including professions, contractors and suppliers of construction materials. GOT (1991b), Hong (1992) and Harvey and Ashworth (2000) define the industry based on the different processes involved including planning, regulation, design, manufacture, construction and maintenance. It is clear from all the arguments and definitions that the construction industry encompasses all spheres of human life. According to Gruneberg (1997:45), the construction industry "produces and maintains the built environment."

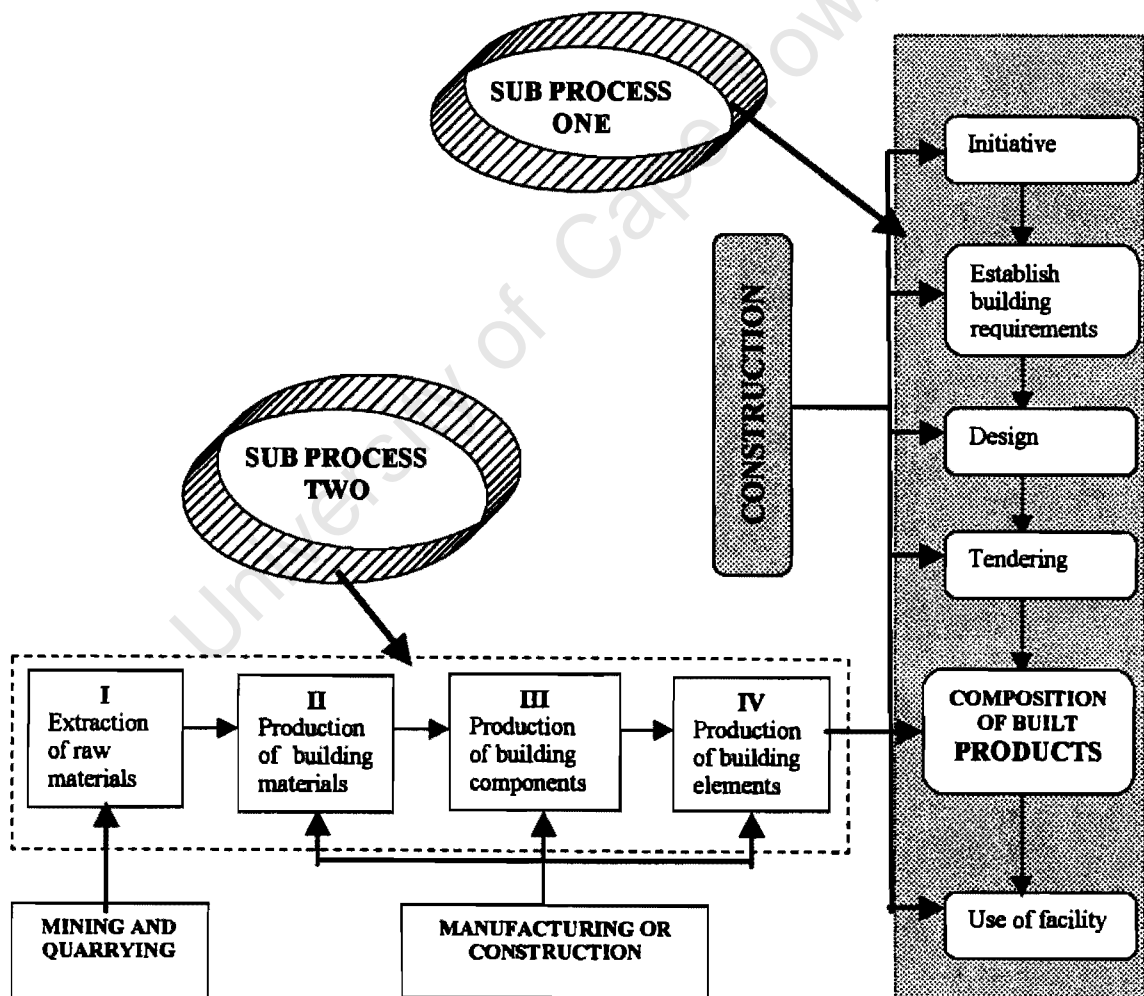
Hillebrandt (1988) and the UNCHS (1996) subdivided the construction industry into building and civil engineering according to its products. Hillebrandt (1988) reported that building accounted for around 70 per cent of the construction market in both developing and developed countries while civil works accounted for the remaining 30 per cent. The UNCHS (1996) also divided it into the informal and formal sectors. The major difference between the informal and formal construction sectors is the extent to which government regulations are observed. Hence the formal construction sector is one in which all the government's licensing and registration regulations⁶ with regard to

⁶ Usually contractors and other actors do not adhere to all government regulations. This study concentrated to the adherence of registration and licensing regulations since these are basic conditions for one to enter into business.

construction are adhered to, while in the informal construction sector some or all of the regulations are not.

The categorisation into formal and informal construction sectors formed the basis of this research. Detailed enumeration of the formal and informal concepts was made in Chapter Two of this thesis.

It is sometimes difficult to fix the boundaries of the construction industry due to its backward linkage with other sectors. Figure 3.1 shows the building process, and is used to discuss the difficulties in categorising the different processes involved in construction.



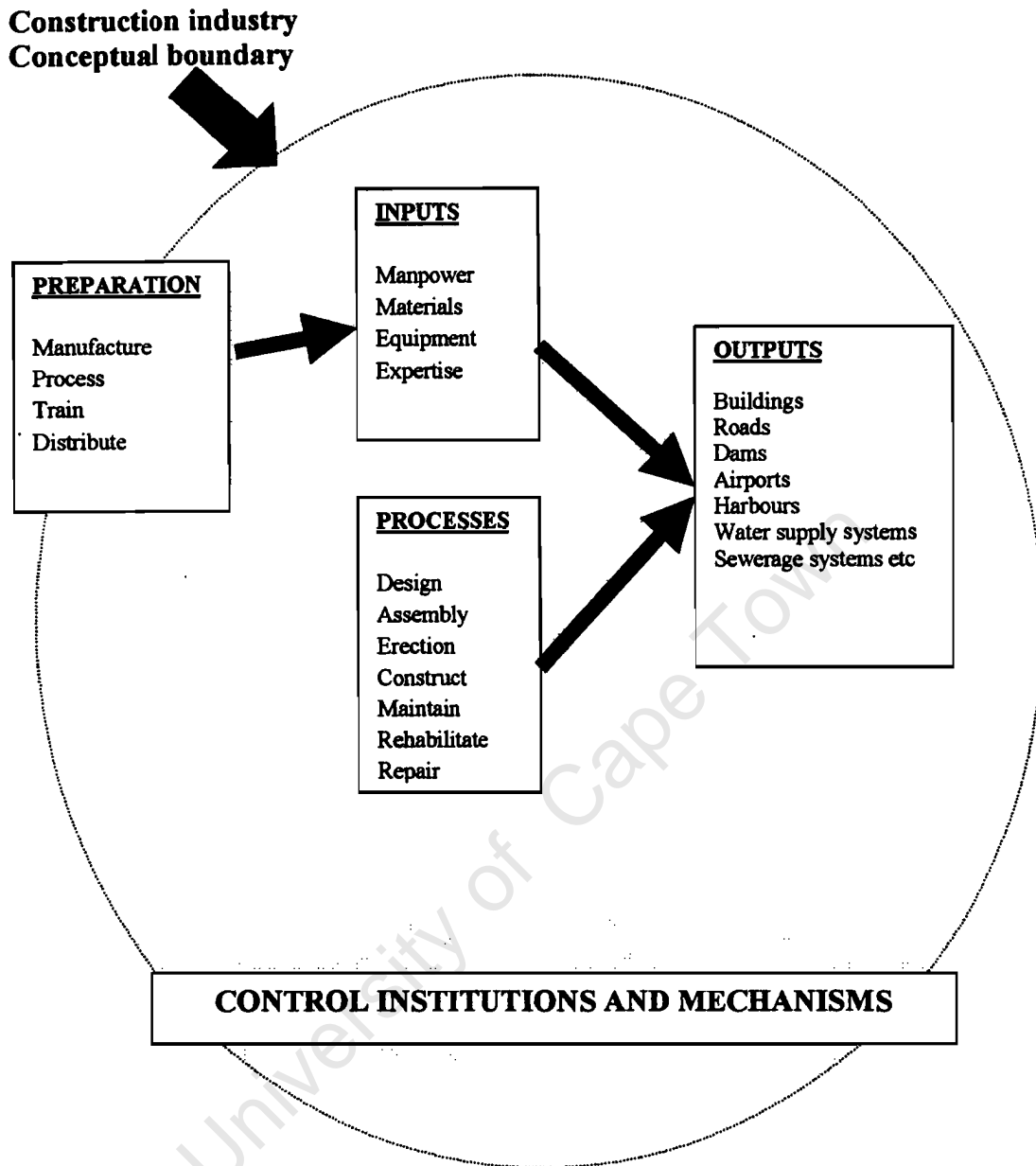
Adapted from Tegelaers (1995:6)

Figure 3.1 The construction process

Two sub-processes are presented in Figure 3.1. Sub-process One is the typical building process which, according to the International Standard Industrial Classification of all Economic Activities, is categorised as the construction industry (ISIC, 1968). Sub-process two involves the acquisition of building materials. The first step of this sub-process, the extraction of raw materials belongs to the mining and quarrying industry. Steps two, three and four would normally fall under the manufacturing industry. However, these processes also tend to fall under the construction industry due to the integration of building material production at the construction sites. Therefore, there is an overlap between the manufacturing and construction industries, and the dividing line is sometimes not very clear (Tegelaers, 1995). For example, in Tanzania it is a custom for every large contractor to own a stone quarry and to manufacture concrete blocks and pre-cast concrete products in-house (Lema, 1996; Mpembe, 1999). Under such circumstances, there is an inclination to consider the process of acquisition of building materials to belong to the construction industry.

The model presented in Figure 3.1 does not explain precisely what constitutes the construction industry. It helps nevertheless to explain the predicament that researchers face when distinguishing it from other industries linked to it. A far more inclusive model was proposed by Lema (1996), which looked at the construction industry in terms of preparations of inputs, the inputs, processes and outputs involved, as shown in Figure 3.2.

The model presented in Figure 3.2 include the preparation of inputs to the construction process., which is in line with the discussion of Figure 3.1, part of it falls outside the construction industry and part of the rectangle representing it is indicated to fall outside the boundaries of the construction industry. Similarly, some control institutions and mechanisms fall outside the industry as shown Figure 3.2. The inputs using appropriate processes gives rise to several outputs as indicated.



Adapted from Lema (1996:25)

Figure 3.2 Conceptual scope of the construction industry.

Lema's (1996) model attempts to capture all processes that in one way or another impact upon the construction industry. Such a wide conceptualisation of the construction industry could be a cause of confusion. However, the existence of a boundary in the model makes it possible to describe it to fit different purposes. For example, in Tanzania different organisations have defined the construction industry to

fit their jurisdiction. The Ministry of Works (MOW), through the National Construction Industry Development Strategy (NCIDS) of Tanzania (GOT, 1991b:1) defined it as follows:

“The sum of all economic activities related to civil and building works: their conception, planning, execution and maintenance. Such works normally comprise capital investment in the form of roads, railways, airports, ports and harbours, dams, irrigation schemes, health centres and hospitals, educational institutions, offices, godowns, factories and residential premises.”

The NCID’S definition is wide but is well captured in Lema’s (1996) model, which covers the processes involved in the construction industry as well as the products. However, being a policy document, such a wide definition was expected. Policies are expected to focus not only on the subject of their formulation, but also on other factors that may have intended or unintentional impact on the subject (Anderson, 1990). Along the same trend, in 1995, the National Construction Council (NCC) defined the Tanzanian construction industry as comprising of local indigenous consultants and contractors. This demarcation of the industry into indigenous participants was important to allow the NCC to direct its developmental efforts at building local capacity (Lema, 1996).

According to the proposed Construction Industry Policy (CIP) of Tanzania (NCC, 2000), a substantial part of the construction work in Tanzania also takes place in the informal sector of the industry. The CIP defined the informal construction sector as comprising of unregulated and unprotected individuals engaged in economic activities that include the supply of labour, materials and building components to both the formal construction sector and directly in response to the needs of clients. It also include works carried out by individuals or groups on a self-help basis without contracting.

Based on the theme of this research, there was a need for a search of a definition of the construction industry that explicitly captured both the formal and informal construction sectors. Apparently, most of the given definitions of the construction industry did not explicitly show the involvement of the informal construction sector.

In an effort to capture the involvement of the informal construction sector, the Task Group 29 (TG 29) on construction in developing countries adopted the following definition for the construction industry (CIB, 1998:xii):

“The construction industry comprises all those organisations and persons concerned with the process by which building and civil engineering works are procured, produced, altered, repaired, maintained and demolished. This include companies, firms and individuals, main and subcontractors, material and component producers, equipment suppliers and builders merchants. The industry has a close relationship with clients and financiers.”

As it will later be shown, the informal construction sector consists mainly of individuals who are either involved in the production and the supply of building materials or in direct construction on their own or as subcontractors of larger firms. The above definition captures this involvement, and was therefore, adopted as the working definition of the construction industry in this research.

3.3 THE CONTRIBUTION OF THE CONSTRUCTION INDUSTRY TO THE NATIONAL ECONOMY

Different economic indicators can be used to measure the contribution of the construction industry to the national economy. According to Wells (1986), Bjorklof *et al.* (1992), Gruneberg (1997) and Hillebrandt (2000), the most common indicators include the amount of manpower employed by the industry and the contribution to the Gross Domestic Product (GDP) and the Gross Fixed Capital Formation (GFCF).

The GDP is the total value of all goods and services produced in a country (Hillebrandt, 2000). The UNCHS (1984) and the World Bank (1984) suggested that the output of the construction sector as a percentage share of the GDP is typically in the range of 3 to 8 per cent, although substantial differences occur among various countries. According to the United Nations (1988), the contribution of the construction industry to the GDP represents the value added by the industry or the net construction output, which is the gross value of construction output minus the value of the material input and the depreciation of plant and equipment.

Table 3.1 shows that the contribution of the Tanzanian construction industry to the GDP at 1992 prices averaged 4.5 per cent from 1985 to 1999 with a peak value of 5.7 per cent in 1990 (NCC, 1999; GOT, 2000b)

Table 3.1 GDP share of construction industry in Tanzania at 1992 constant prices

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Percentage contribution to GDP	3.0	3.2	4.7	5.6	4.7	5.7	5.2	5.4	4.6	4.6	3.8	3.9	4.1	4.3	4.5

Source: NCC (1999, Table 2.7) and GOT (2000b, Table 4B)

According to the United Nations (1988), NCC (1999) and Hillebrandt (2000), the GFCF is the total value of fixed asset produced comprising housing, other new building and works, plant and machinery, vehicles, ships and aircraft, but excluding repair and maintenance. Edmond and Miles (1984), the GOT (1991a), the UNCHS (1991) and Wells (1995) reported that the share of the construction industry in both the developed and developing countries in GFCF is about 50 per cent. In countries with a low level of industrial development, the figure could be as high as 80 per cent (ILO, 1987).

Table 3.2 shows that in Tanzania the average contribution of the construction industry to the GFCF was 50 per cent for the period of 1985 to 1999. It attained a peak value of 65.5 per cent in 1990 (NCC, 1999; GOT, 2000b).

According to Edmond and Miles (1984:11), in all countries construction is a relatively labour-intensive industry. Available data suggest that the construction industry in many countries employs about 2 to 9 per cent of the total national employment, with an average figure around 4 to 5 per cent (UNCHS, 1984; Wells, 1986). Edmond and Miles (1984:11) found that the actual level of employment per 1000 population increases as one moves from the poorest to the richest countries. The data for Tanzania⁷ is shown in

⁷ Efforts to obtain up to date employment data proved to be very difficult. Secondary sources like World Employment Report did not contain relevant data for Tanzania. Similarly a primary source, the Central Statistical Bureau of Tanzania, did not have employment data for the construction industry.

Table 3.3, in which it is shown that the contribution of the construction industry to total employment in Tanzania is on average 4.2 per cent.

Table 3.2 Contribution of the Tanzanian construction industry to GFCF in 1992 prices in percentage

TYPE/YEAR	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	AVERAGE
BUILDINGS																
Residential	6.9	6.3	4.3	5.2	6.0	5.7	12.1	10.6	14.4	6.1	7.8	15.5	8.2	6.3	7.6	8.2
Rural Construction	11.9	13.0	5.8	9.0	9.0	8.2	9.6	7.9	10.8	10.0	13.3	14.5	14.8	12.5	17.4	11.2
Non-residential	7.2	8.5	6.1	12.4	9.8	7.2	10.2	8.6	9.5	10.5	10.3	16.9	12.5	6.9	8.7	9.7
Total	26.0	27.8	16.3	26.6	24.8	21.1	31.9	27.1	34.7	26.6	31.4	46.9	35.3	25.7	33.6	29.1
WORKS																
Land improvement	1.3	1.3	0.7	2.3	2.3	2.0	3.2	2.4	2.2	4.0	3.3	4.3	6.5	0.8	0.3	2.5
Roads and bridges	1.5	1.3	1.4	1.9	0.9	1.1	3.1	6.0	11.3	8.9	3.6	1.8	1.7	10.5	2.6	3.8
Water	0.6	.6	0.5	1.1	0.7	0.8	1.3	1.0	1.7	1.4	0.5	0.3	0.9	5.7	2.6	1.3
Others	3.4	5.4	14.9	29.4	19.7	40.5	22.5	17.9	4.8	7.8	6.8	9.2	10.4	3.9	3.1	13.3
Total	6.8	8.6	17.5	34.8	23.6	44.4	30.1	27.3	20.1	22.1	14.2	15.7	19.6	20.8	8.7	20.9
EQUIPMENT																
Transport	17.8	16.9	21.6	11.9	29.5	15.0	14.5	22.2	27.0	19.1	16.3	14.9	15.6	15.8	24.8	18.9
Plant and others	49.4	46.8	44.7	26.7	22.1	19.5	23.5	23.4	18.2	32.3	38.1	22.5	29.3	37.7	32.8	31.1
GFCF	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total Construction	32.8	36.4	33.8	61.4	48.5	63.5	62.0	54.4	54.8	48.7	45.6	62.6	55.1	46.3	42.3	50.0

Source: NCC (1999, Table 3.4) and GOT (2000b, Table 6)

Table 3.3 Share of the construction industry in total in employment in Tanzania.

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993
Percentage contribution to employment	5.1	4.9	4.6	4.4	4.1	3.9	3.7	3.5	3.3

Source: Lema (1996, Appendix 6A)

The information in Tables 3.1, 3.2 and 3.3 is summarised in Figure 3.3, which shows a graphical representation of the contribution of the construction industry in Tanzania to the GDP, the GFCF and employment. Figure 3.3 shows that the contribution of the construction industry in Tanzania to both the GDP and employment has remained almost constant over the period of analysis. On the other hand, its contribution to the GFCF has been fluctuating with peaks in 1988, 1990 and 1996. Its increased

contribution to the GFCF after 1988 could be attributed to the large expenditure incurred by the government of Tanzania on road rehabilitation programmes under the Sixth Highway Rehabilitation Project and later the Integrated Roads Project. Both projects were financed by the government of Tanzania, the World Bank and other world financing institutions (Msita, 1999).

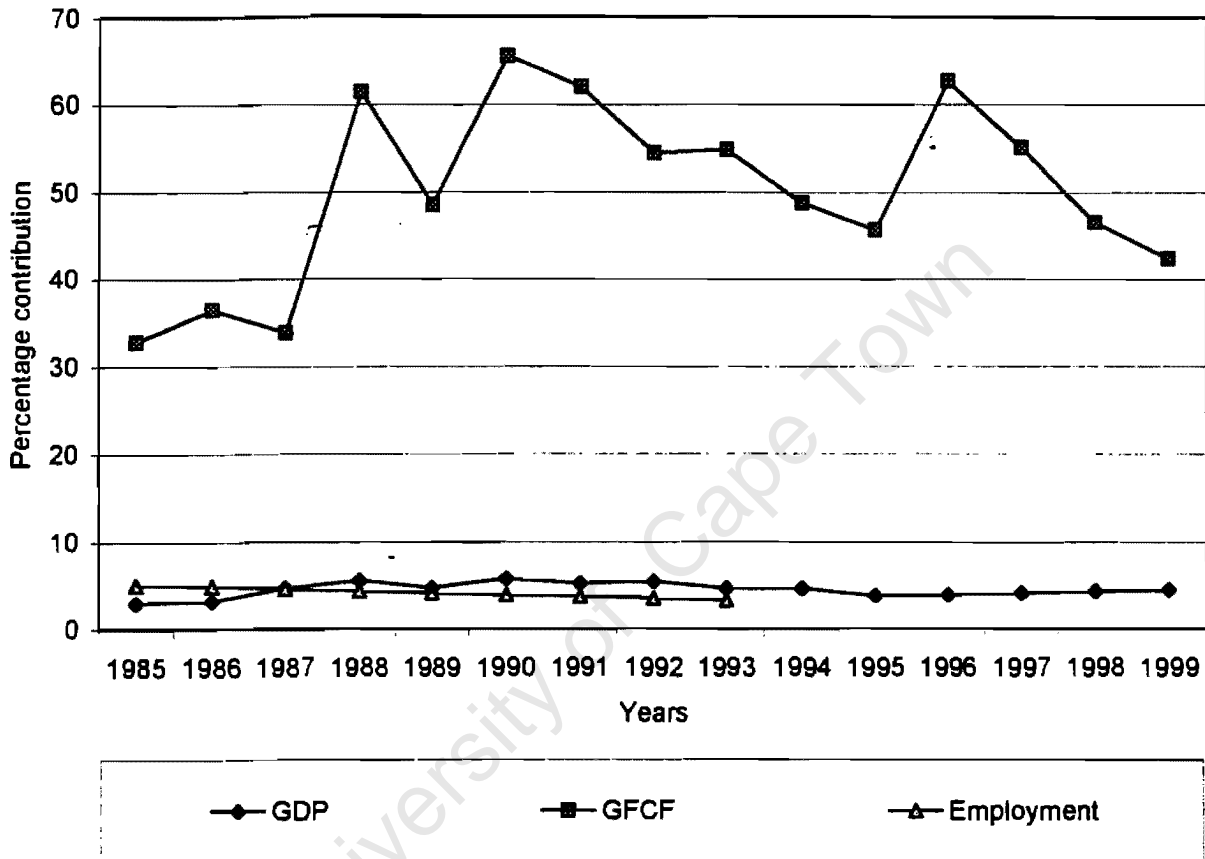


Figure 3.3 Contribution of the Tanzanian construction industry to the GDP, the GFCF and employment

According to Hillebrandt (2000), in most countries construction net output as a percentage of GDP is about the same as percentage of construction employment to total employment since the major part of construction net output comes from labour. The comparison of the two figures gives an indication of labour productivity. If the percentage of construction employment is greater than the percentage of construction output, then the output per person is low compared with the economy as a whole and vice-versa. Figure 3.3 shows that construction output as a percentage of GDP was

consistently higher percentage of construction employment reflecting that output per person in the construction industry in Tanzania is high compared with the economy as a whole.

In interpreting the data in Table 3.1 to 3.3, it is important to appreciate the difficulties in the assessment of the total value of construction output in any economy, which include (Lema, 1996):

- inflationary effects;
- lack of records and motivation on part of actors in construction industries in developing countries to provide the required data;
- the omission of capital formation arising from rehabilitation works; and
- the omission of work carried out in the informal sector.

The omission of the contribution of the informal sector in the national accounts is echoed by Kirsten (1991:150) in which it is quoted:

“The gross domestic product and national income figures and labour statistics are widely recognised as understatements of economic participation. Of major concern is the relative denial of the contribution made by informal participants as a result of their often (deliberately) elusive and shifting character.”

According to Komba (1988), government statisticians have access mainly to data from the government and public enterprises and a few large construction enterprises. Thus, the data collected excludes small scale and informal construction sector. For example in 1991, the NCC (1999) reported that the official statistics in Tanzania showed that the construction industry’s GDP was Tshs. 52,087 million (US\$ 222.7 million). During the same period, GOT (1991a) reported that the total estimated annual gross output for the informal construction sector was Tshs. 14,577 million (US\$ 62.3 million). This was about 22 per cent of the official GDP, and is normally not included in government statistics leading to a gross underestimation of the contribution of the construction industry to the economy.

Table 3.4 shows a comparison of contribution to employment, the GDP and the GFCF of the construction industry in Tanzania and other countries from different income groups.

Table 3.4 Average contribution to the GDP, the GFCF and employment in countries grouped according to income

Variable	Group I Under US\$ 350 per capita	Group II US\$ 350-700 per capita	Group III US\$ 700-2000 per capita	Group IV Over US\$ 2000 per capita	Tanzania US\$ 249 per capita (Mean 1969-93)
Value added in construction as a % of GDP	3.6 (23)	5.2 (21)	5.4 (31)	7.3 (27)	4.0
Capital formation in construction as % of GDP	8.9 (13)	10.6 (10)	13.6 (27)	13.5 (23)	9.0
Employment in construction as a % of total employment	3.1 (9)	3.4 (14)	6.6 (22)	8.1 (26)	8.9
GFCF in Construction as % of total GFCF	56 (13)	53 (10)	55.4 (26)	57.5 (23)	44

Source: Lema and Price (1998:)

NB – The figure in brackets is for the number of countries considered in the group.

The data presented in Table 3.4 fits in well with the expected contribution of the construction industry of 3 to 8 per cent of the GDP and about 50 per cent of the GFCF and 2 to 9 per cent of employment. On average, it could be concluded that the Tanzanian construction industry fares well within its income group.

Factors affecting the international comparison of construction industry data include fluctuations of the level of the national currencies, fluctuations in the construction industry workload, and execution of a large proportion of construction activities outside the formal sector. These factors could result into under or over estimating the contribution of the construction industry in the economy of a country and therefore making comparisons difficult (Lema and Price, 1998).

To properly gauge the contribution of the construction industry to the economy of most developing countries, there is a need to address the problem of lack of data. The importance of the informal construction sector is further elaborated later in this chapter.

3.4 CHARACTERISTICS OF SMALL SCALE CONTRACTORS

3.4.1 Definition

Many countries classify contractors in accordance with their sizes. On this basis, contractors could be classified as small, medium and large (UNCHS, 1996).

According to the UNCHS (1996), groupings and hence definitions of small companies differ from one country to another, and within a country they may differ according to various types of businesses. A number of criteria are used to classify businesses according to size, which include: the total number of employees, the value of fixed assets, the paid up capital, the annual turnover, or the annual volume of physical production. However, all these criteria or their combinations can not reliably measure the size of construction contractors.

Contractors have a tendency to subcontract their works in lieu of using their own employees. The total number of employees does not therefore represent the actual number of people employed and hence the size of the firm. Similarly, the workload of most contractors is not uniform and certain. This, together with the tendency of projects to spread beyond one or several financial years, makes it difficult to use annual turnover as a measure of the size of a company. The fact that they can hire equipment instead of buying and building materials can be obtained on credit from specialist suppliers makes capital holding also not a good measure of the size of a construction company.

Despite the difficulties discussed above, construction companies are still classified by size. Some of the definitions focus on the attributes of the owner, leading to defining a small company as a firm where the principals are personally still in direct day to day control of most of the office and site management functions (Duncan, 1984; Kirmani, 1988).

In places where contractors are required to register, they are classified into financial categories that indicate the ceiling of the project value that the companies in a particular group can undertake. The classification is based on pre-qualification criteria such as annual turnover, number and qualifications of employees, and the maximum number of projects undertaken recently. This system is used to register civil and building contractors in Tanzania. Table 3.5 shows class limits for various types of contractors in Tanzania. Contractors registered in different classes of the CRB are eligible to undertake full contracts (supplying of labour and material) up to the ceiling of a particular class and in any part of the country.

Table 3.5 Class limits for various types of contractors in Tanzania

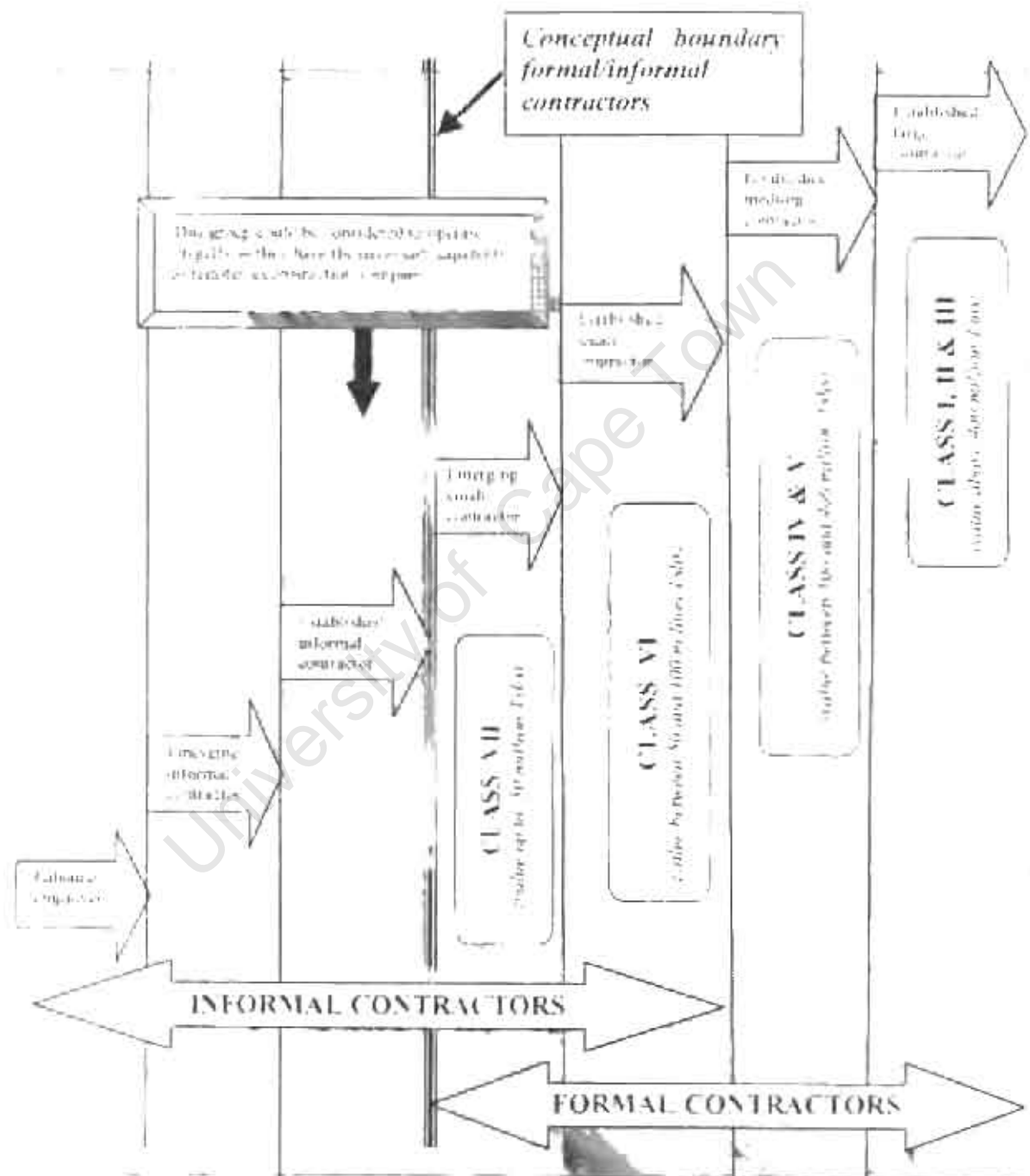
CLASS	CLASS LIMIT FOR ANY SINGLE CONTRACT* (in million Tsh.)				
	CIVIL	BUILDING	MECHANICAL	ELECTRICAL	SPECIALIST
I	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
II	1,000	800	500	300	100
III	500	400	300	200	50
IV	300	200	150	100	-
V	100	100	50	50	-
VI	50	50	20	20	-

Source: CRB (2000b)

Small contractors, in the case of Tanzania are regarded as contractors registered in Classes VI and VII (Matera, 1999). However, this classification excludes companies that are not registered as formal contractors but carry out a successful construction business. Some companies refrain from registering or disguise their actual sizes to avoid costs associated with the higher class (i.e. registration and licensing fees, taxation and competition) (Sethuraman, 1997). In order to capture all the enterprises engaged in the construction process, Mlinga (1999) proposed a classification system illustrated in Figure 3.4, which include all contractors whether registered or not.

* The ceilings for different classes are revised regularly to take care of increased construction costs due to inflation and other factors.

The proposed classification system in Figure 3.4 is in line with the system used by the CRB to group registered contractors in Tanzania (Materu, 1999). In addition, it takes on board unregistered contractors, and therefore gives a true picture of all groups involved in the construction process.



Adapted from Milne (1994)

Figure 3.4. Proposed Framework for Contractors Classification

Defining small contractors based on registration would thus omit most of the unregistered contractors who on some occasions work independently or as subcontractors to their registered counterparts. It was therefore important to adopt a definition of small contractors that would capture all those involved in the construction process whether registered or unregistered. The definition by the UNCHS (1996:39) reproduced below caters for that need, and was therefore adopted as a working definition of small contractors in this research.

“Small contractor is a company operating at, or near the basic entry level in the construction industry, with limited physical resources, usually as a sole proprietorship or simple partnership, with the owner-manager involved in most of the company’s key activities”

The above definition fits the characteristics of small formal contractors and informal contractors to be discussed later in this thesis. Based on Figure 3.4 small contractors include emerging and established informal contractors as well as registered contractors in classes VII and VI classified as emerging and established small contractors respectively. It should be noted that most small contractors operate at the periphery of the construction industry with frequent changes in the numbers and mix of entrepreneurs (Cattell, 1994). To reflect this, Figure 3.4 shows an overlap between the formal and informal contractors at the conceptual boundary. Experienced informal contractors cross over to the formal side by registering and licensing their businesses, while unsuccessful formal contractors fail to pay registration and licensing fees and are relegated to the informal sector side, or still remain formal but are forced to operate as informal contractors (Mwaiselage, 1992).

However, it should be noted that the established informal contractors have the necessary attributes to register a construction company at or above the entry level, but choose to remain unregistered and small to avoid recognition by the government authorities, and hence eligibility to pay taxes and other costs associated with a formal business. According to the ILO (1987), even some of the formal construction firms decide to remain small for a number of reasons including:

- desire to minimise administrative costs;
- desire to be involved personally in building work on site; and
- reluctance to delegate managerial authority to paid employees.

Emphasis has been made at this stage to clearly understand the definition of small contractors since this group constitutes the informal contractors and the emerging formal contractors targeted in this research.

3.4.2 Structure of the construction industry

In Tanzania and many developing and developed countries, small contractors dominate the construction industry in terms of numbers, but are relatively unimportant in terms of the official output. The number of contractors, taken in terms of their size, forms a pyramid structure, with few large contractors at the apex and many small contractors at the base (Ganesan, 1982 and Kirmani, 1988 cited in UNCHS, 1996; Ofori, 1991; Hillebrandt, 1997; Serpell *et al*, 2000).

In Tanzania, 69 and 77 per cent of formal civil works and building contractors respectively are small in size. This information is summarised in Figure 3.5 based on the number of contractors registered by the CRB in different classes by June 2000 (Materu, 2000). Data compiled by Kaduma and Msita (1999) shows the percentage of small contractors compares well with the situation in developed countries such as Japan (77 per cent), United States (93 per cent), Britain (89 per cent) and West Germany (55 per cent)

According to the UNCHS (1996) and Hillebrandt (2000), the pyramid structure is attributed to the nature and products of the construction industry, which include: a variety of construction projects in size and cost, a wide geographical dispersion of construction works, competition in the acquisition of works and easy of entry into construction. Three views have been advanced with regard to this pattern of distribution of construction firms. The first view was given by the GOT (1991b), which argued that a large number of small firms had no future and was undesirable as it led to the

inefficient use of resources. It proposed an introduction of measures that would reduce the number to leave room clear for more promising companies to develop and grow.

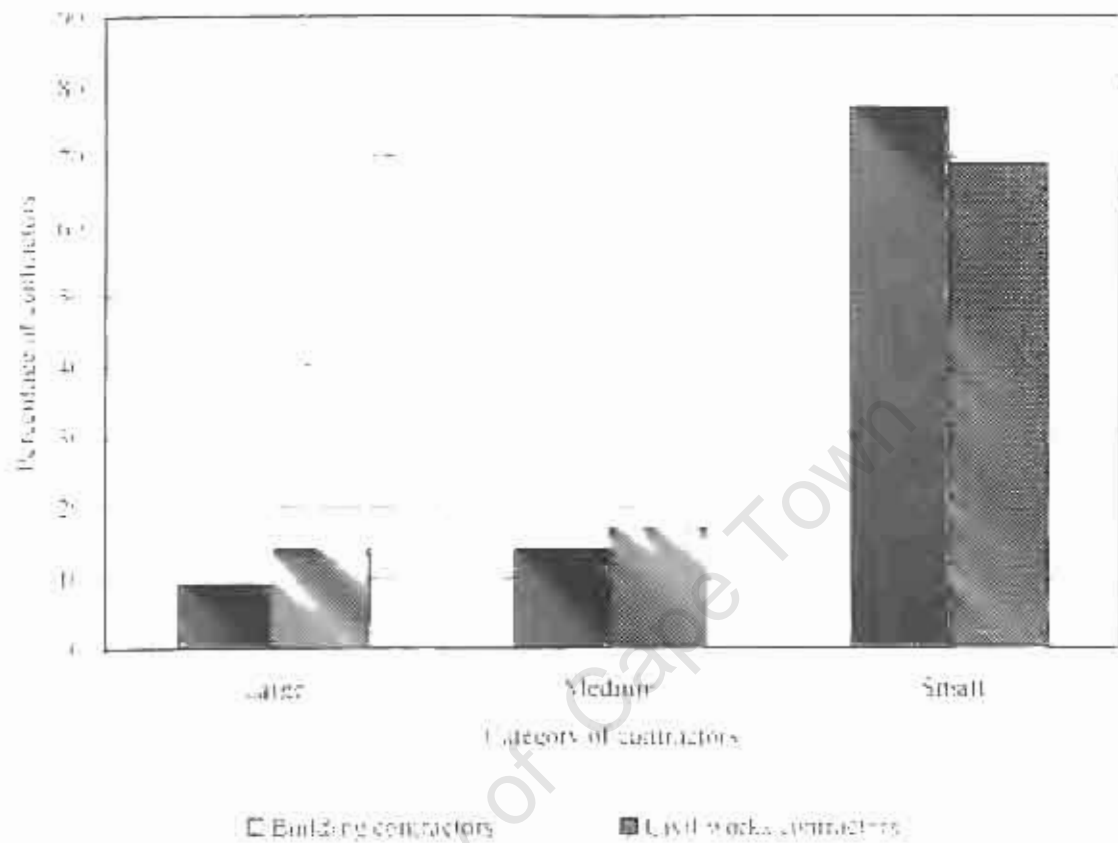


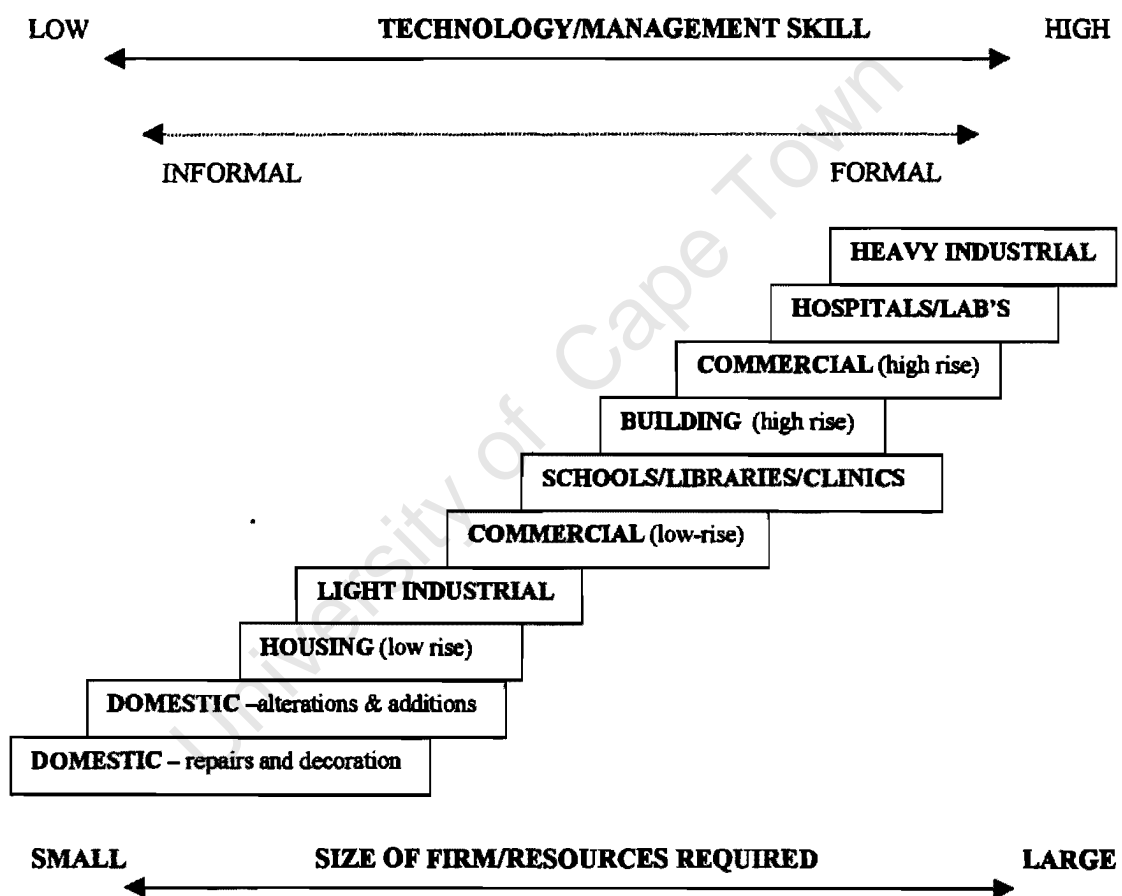
Figure 3.5 Structure of the Tanzanian contracting industry.

Andrew *et al* (1973) cited in UNCHS (1996), the ILO (1978) and Hindle (1997b) argued in favour of the pyramid structure of the construction industry by pointing out that small firms were a necessary component of the structure of the construction industry owing to the variety of sizes and construction items required by every nation and the geographical dispersion of work. Many small contractors were necessary to undertake the geographically dispersed small works, which would be unprofitable to larger firms.

Tudin (1973) cited in UNCHS (1996) and Ofori (1990) also supported the pyramid structure with a further hypothesis that large companies were expected to emerge from

the large number of small firms. They considered the large number of small firms to be useful as they provided a framework for the development of the construction industry.

Different sizes of the construction firms is important considering the different hierarchy of markets available in the construction industry. For example, Hindle (1997a) gave a hierarchy of markets for building construction, showing the level of technology required and the expected participation of different types and size of contractors. This is shown in Figure 3.6.



Source Hindle (1997a:43)

Figure 3.6 A hierarchy of markets for building construction

Figure 3.6 shows that the informal and small formal contractors could operate at the low end of the market where the technology and managerial skills involved are also on the low side. According to Hillebrandt (2000), there are few large projects and many small

projects. Conversely, large firms, which undertake large projects, are few, and small firms, which undertake the small projects, are many (Hindle, 1997a).

The structure of the construction industry in terms of output is another pyramid, which is inverted with very few large firms undertaking a disproportionately high fraction of the total amount in financial terms (Ofori, 1990; Hillebrandt, 2000). A review carried out by the CRB on the performance of Tanzanian contractors for the year 1999 revealed that the average annual turnover of large building contractors was 7 and 29 times that of their medium and small counterparts respectively. Similarly, the average annual turnover of large civil works contractors was 61 and 180 times that of medium and small contractors respectively⁹ (Materu and Uriyo, 2000).

3.4.3 Establishment background of small contractors

In order to understand and appreciate the characteristics and problems of small contractors, it was important to look at their establishment background, particularly the education and employment background of the owners.

According to the ILO (1987) and Cattell (1994), there is a wide variation among small-scale contractors attributed to a low level of technology and investment required to start a construction business. It is “relatively easy to enter the construction business at the lower end of the market” unless restriction is placed on the minimum calibre of directors or personnel, and/or equipment required to start business (ILO, 1987:24). Since there are no restrictions placed to establish a business informally, many people with little experience and with no capital can therefore easily get into the construction business. Hillebrandt (1997:153) suggested that it was possible “to run a construction firm on low capital provided that the client is prepared to finance the work by prompt payment”.

⁹ Most of the civil works projects consists of big road works projects mainly constructed by foreign contractors who according to CRB regulations must register in Tanzania. The annual turnover figures given above do not distinguish between foreign and local contractors.

Most small construction companies in developing countries are of sole ownership (ILO, 1987; UNCHS, 1996). According to Ofori (1980), the owners of the firms vary in their educational and experience backgrounds, on the basis of which he identified three groups of owners:

- Owners with background in construction including engineers, architects and technicians, who previously held senior posts in the construction industry as employees in the government or private sector. The ILO (1987) regarded the firms established by this group of owners to belong to the management route of establishment. Due to the background of owners, the firms established through the management route were reported to have managerial skills to run firms and projects.
- Owners who were former trades-persons gave rise to what the ILO (1987) regarded as firms established through the trade route. These firms were found to lack the managerial skills to run the firms and projects (ILO, 1987; Motlanthe, 1990; Merrifield, 1992 cited in Cattell, 1994).
- Owners with no technical or practical experience in construction gave rise to what the ILO (1987) regarded as firms established through the commercial route. Unlike the other two groups, these firms had the financial resources to run a construction company, and therefore posed a possibility of smooth growth. To offset the poor qualifications in construction aspects, they normally employed qualified supervisors. However, companies in this group were found to lack continuity. Ofori (1990) and Hillebrandt (1997) regarded the owners as opportunist traders remaining in construction only when prospects for profits were good. The special categories of commercial route enterprises were those established by owners with backgrounds in the manufacture and supply of building materials. These were more familiar with building site operations and could minimise problems of material supply. Consequently they were more likely to remain in the contracting market (ILO, 1987; Cattell, 1994)

While it would be an advantage to the construction industry to have most of the firms established through the management route, the situation is different. There are fewer firms established through this route. The ILO (1987) suggested that good salaries earned by qualified construction personnel and a secure working environment when employed in the government or in the private sector limited the number of people that seek to establish construction companies in this group. However, in the case of Tanzania, this situation has started to change. According to Salewi (1999)¹⁰ “the inability of the government and the formal construction sector to employ all the experienced construction personnel, lead many to resort increasingly to self employment either by establishing small formal companies or by operating informally”.

Referring back to Figure 3.4, it is important to comment on the role that the informal construction sector could play in the establishment process of construction companies. This sector could be regarded as a possible route that could be taken by individuals towards establishing legitimate construction companies. It could be a stepping stone to establishing a formal company. Individuals wishing to establish construction companies are reluctant to take the plunge into the business, partially because they are unable to meet entry requirements in terms of equipment and/or technical manpower, or because they are not assured of work (Salewi, 1999). Therefore, strategically, they would start to operate as informal contractors until they acquire resources needed to formalise the business and/or confidence in their ability to obtain jobs. During this transition stage, some would be working full time as informal contractors; while others would be doing other businesses or even remain employed until they are satisfied that the construction business can fully occupy their time.

¹⁰ Interviewed official of the National Income Generation Programme (NIGP). He is a qualified Civil Engineer and at the time he was the President of the Institution of Engineers, Tanzania.

3.4.4 Problems experienced by small contractors

Problems faced by small contractors in developing countries are well researched, and they include owner related and operating environment problems (ILO 1987; Ofori, 1991; Cattel 1994). According to the ILO (1987) and Ofori (1991), owner related problems include:

- lack of technical and managerial expertise necessary to run a construction business;
- lack of entrepreneurship;
- tight personal or family control of all aspects of the firm's operations;
- inability or unwillingness to employ qualified personnel;
- limitations in terms of variety of projects the firms can undertake;
- short horizon and limited plans for expanding the firm;
- lack of commitment to construction; and
- poor technical background to comprehend formal documentation, practices and procedures underlying the administration of construction contracts adopted by most public clients in developing countries.

The ILO (1987) identified two operating environment problems: business environment and client related problems. Problems related to the contractor's business environment include the inability to secure jobs and shortage of resources, while those related to clients include poor and inadequate project documentation, poor supervision, and delays of payments and decisions.

Other problems related to the operating environment were given by the UNCHS (1996), and include problems originating from government policies and other parties in or outside the construction industry. For example, the failure of the government's macroeconomic policies aimed at stimulating growth of the economy will indirectly affect the availability of jobs to contractors. Similarly, regulations set by regulating

organisations like the CRB¹¹, may have a negative growth effect on aspiring small contractors (Hindle, 1996).

According to the UNCHS (1996:52), another problem faced by small contractors in developing countries was what it termed as “downward plundering”. This is a situation whereby larger class contractors undertake projects with values falling into class limits of lower class contractors. This occurs in periods of low demand, and enables large contractors to ensure continued utilisation of their fixed assets and key personnel. The downward plundering coupled with keen competition among the large number of small contractors and the presence of the unregistered contractor force the formal small-scale contractors to allow exceptionally small profit margins which are unable to sustain their growth.

During its Annual Workshop in 1999, the CRB submitted for discussion a by-law aimed at preventing downward plundering. The by-law set out to limit the minimum value of the project that could be undertaken by large and medium contractors so as to prevent them from encroaching projects whose maximum value fell within the small contractors’ limit (Mwambungu, 1999). Large and medium contractors, who were to be the victims of the proposed by-law, opposed it strongly leading to its rejection. They argued that such a restriction was in conflict with the principles of the free market economy (Muhegi, 2000a).

It is the opinion of the author that the motive to introduce the by-law was justified, particularly in a situation where small contractors are penalised for the execution of projects exceeding their class limits. Some mechanism should be found which would protect the small contractors from the powerful medium and large contractors. For example partnering arrangements as suggested by the ILO (1987), the UNCHS (1991), Bjorklof *et al.* (1992) and Nyembe (1994) could ensure that construction works are shared between the large formal contractors and the small formal and informal

¹¹ CRB has a minimum requirements with regard to qualification of technical staff, number of equipment and area of office space for emerging contractors (shown in Appendix 3.1). The effect of these requirements will later be discussed.

contractors. In the next section, partnering between large and small contractors through subcontracting will be discussed.

In order to eliminate some of the problems such as the lack of technical expertise and equipment in Tanzania, the CRB has set a requirement that the directors of a construction company should have some technical background. In addition the company should possess minimum basic construction equipment commensurate with the class of registration (Mugasa, 1999; CRB, 2000a). It is argued that the requirement to have directors with technical background could reduce the presence of opportunist traders in the construction industry to a certain extent.

Appendix 3.1 shows the requirements for registration of building and civil works contractors in different classes in Tanzania. It shows the weight attached to various requirements for registration, which include: staff qualifications, plant and equipment, office and service facilities, safety gear, financial status and the experience of the firm.

The establishment procedure of a construction company in Tanzania will be discussed later in this chapter.

3.5 SUBCONTRACTING AND ITS EFFECT ON CONSTRUCTION INDUSTRY

Subcontracting is widely practised in construction, both in the developed and developing countries. The reasons for subcontracting are perhaps well explained by Lee (1997:355), who is quoted below when describing the subcontracting situation in the construction industry in Singapore:

“Although construction projects are awarded to registered main contractors, in practice, the main contractors always subcontract out nearly all labour to trade subcontractors (kepalas). The tender system does not encourage main contractors to provide direct employment to construction workers. A substantial proportion of the work on any project is actually carried out by the trade subcontractors, leaving the main contractors the task of overall management and control. Only in some smaller projects, main contractors may directly employ workers to carry out the works. In fact, most of the tradesmen and workers in the industry are employed directly by kepalas or trade contractors. The trade subcontractors are therefore an important component in the construction industry”.

The above quotation though summarising what is happening in Singapore, presents the picture of what is happening in the construction industries of many countries in the world. Subcontracting of construction works is quite a common and long existing practice in the construction industry both in developed and developing countries. The need to minimize labour costs, the different skills involved at different stages of the construction process and the increasingly complex nature of large infrastructural projects that often involve multi-disciplinary expertise necessitate the subcontracting of various parts of the work to subcontractors and specialist subcontractors. For the same reasons, subcontractors may sometimes further sub-let some of their works and hence result in what is known as a multi-level subcontracting¹² (Shing-see, 1999).

Taking the U.K as an example of a developed country, Winch (1998) and Wells (1998) reported an increasing trend of self-employed workers operating as labour only subcontractors. Figure 3.7 shows the proportion of self-employed works in U.K as a proportion of total construction workforce between 1961 to 1997.

Figure 3.7 shows a general increasing trend of self employed workers to a peak of about 45 per cent in 1993. According to Winch (1998), “with this generally rising trend in self-employment, the use of labour only tends to be more common in large firms rather than small firms, in the main trades rather than specialist trades, and in building rather than civil engineering”

Similarly, it was reported that subcontracting was an established part of the South African construction industry, and was the major form of procuring work in the black housing industry (Cattel, 1994). Subcontracting is also predominant in the Kenyan construction industry (IDS, 1999).

¹² Multi-level subcontracting is in most cases discouraged for subcontractors other than specialist subcontractors. It tends to place the main contractors far away from the people who execute the works and may have serious consequences on the quality of the work.

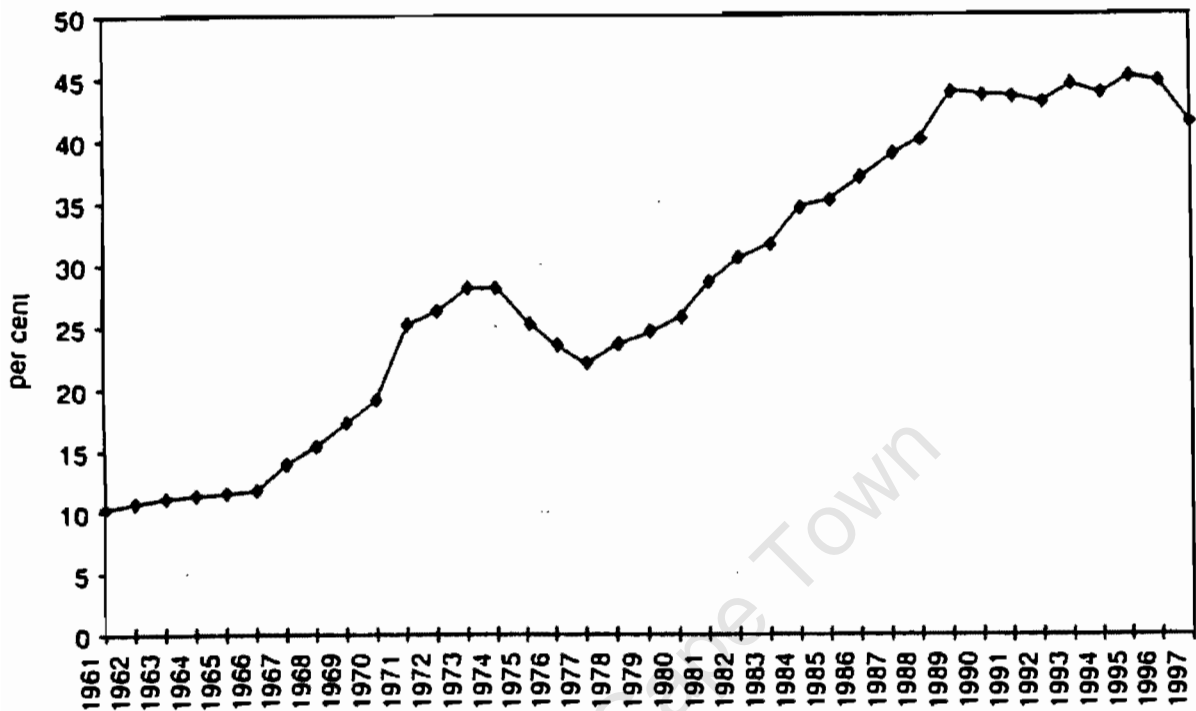


Figure 3.7 Self-employed as a proportion of the U.K construction Workforce 1961-1997

According to Cattell (1994), subcontractors employed by principal contractors fell into labour and materials subcontractors and labour-only subcontractors. Labour and material subcontractors perform specialised elements of building work and supply their own staff and materials. Depending on the nature of their agreement they may use their own equipment or some of the general contractors' equipment. On the contrary, a labour-only subcontractor supplies only the labour, and in many cases they perform unspecialised works. Normally labour-only subcontracting firms are owned by skilled artisans, often former employees of large contractors.

Labour and material subcontracting entails a certain level of establishment by the subcontractors in terms of capital and specialization. Accordingly, in this case the "contractual relationship is one between capital and capital" whereby both parties have their capital tied up in the project (Winch, 1998: 532). In the labour-only subcontracting

'the contractual relationship is between capital and labour" (*ibid.*). In the construction industry, labour-only subcontracting can take form ranging from a fully fledged employer of contract labour, to a ganger who takes on the main responsibilities of the main employer, to the agent for a gang of men, to an individual operative. Winch (1998:532) refers to labour-only subcontracting as a form of internal subcontracting whereby the main contractor retains much of the main responsibilities of running the project. This should be distinguished from "external subcontracting" like the labour and materials subcontracting where the subcontractor has increased responsibility of ensuring that his materials and his work conforms to the quality requirements of the project.

Increased subcontracting in the construction industry could be best explained by the "Flexible Firm Model" (Ofori and Debrah, 1998). According to Atkinson and Gregory (1986) and Doeringer *et al.* (1991), both cited in Ofori and Debrah (1998), the employers using this model divide their workers into a core of full-time employees and a periphery of marginal or contingent/temporary workforce. The core workforce of full-time employees are normally well trained, participate in various functions and perform key activities of the organisation. Generally, this group of workers enjoy full benefits of employment, have good wages and good prospects of career advancement. To the contrary, peripheral workers do not enjoy the same benefits, and are mainly "part-timers, temporary, short contract workers, outsourced or self-employed people who are outside the organisation" (Ofori and Debrah, 1998).

In accordance to the Flexible Firm Model, a core of workforce provides the firm with functional flexibility while the peripheral employees provide numerical flexibility. Adoption of functional and numerical flexibility enables firms to attain financial flexibility achieved by reducing the number of core employees and by adjusting wage levels for the peripheral employees, thus limiting the firm's financial commitment (*ibid.*). In addition, the "substitution of peripheral for permanent employees helps link wages directly to workers' output, and gives the management greater control on the performance of labour (Moore, 1988 cited in Ofori and Debrah, 1998)"

Subcontracting could offer benefits to large as well as to small construction companies. For small companies, on the one hand, it could be an important source of jobs and could enable the companies to acquire both technical and managerial skills particularly when involved in large and complex projects. Subcontracting could result in a greater number of small firms obtaining access to work opportunities than would otherwise have been the case (ILO, 1987). Large companies on the other hand, through subcontracting could do large volumes and varieties of work. Subcontracting could also enable large contractors to lower their overhead costs and to specialise and invest only in important areas (ILO, 1987; UNCHS 1996; IDS, 1999).

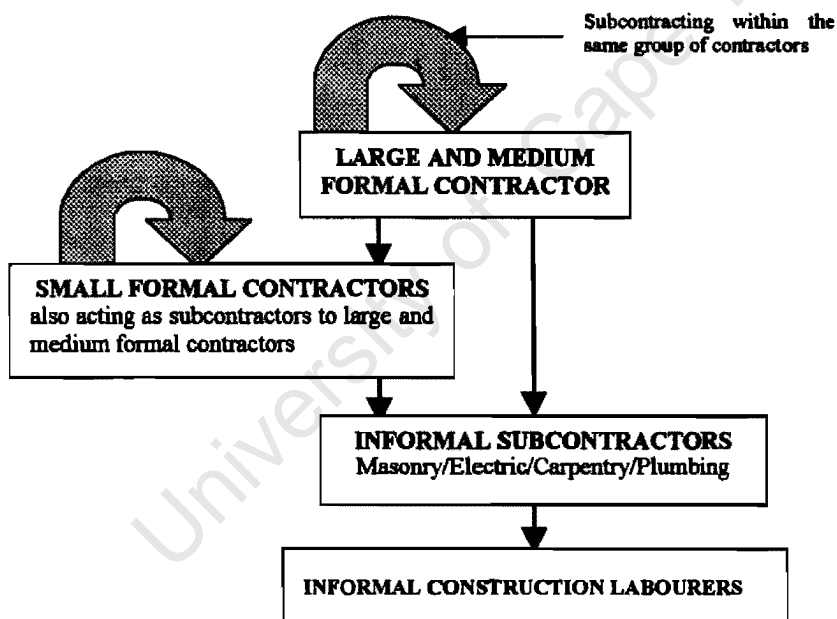
However, subcontracting is associated with several problems. The most important problem is the lack of incentive by large contractors to develop and train workers (Hillebrandt, 1988:216; Gruneberg, 1997:66). According to Gruneberg (1997:66), “the separation of contractors from the labour force is the heart of many difficulties currently facing the construction sector. For example, this separation does not encourage contractors to train their workers ...” Other problems resulting from increased subcontracting are (Hillebrandt, 1988; Gruneberg, 1997; Winch, 1998):

- poor quality of jobs due to poor quality of subcontractors;
- co-ordination difficulties of a large number of small subcontractors that may be employed on a project; and
- non-adherence to health and safety requirements of construction works.

Despite the problems, labour-only subcontracting is seen as one way in which the formal and informal construction sectors could collaborate. According to the UNCHS (1991), the formal construction sector in developing countries depended on the informal sector to provide labour for activities such as mass concreting, masonry, carpentry works, etc. This dependence was attributed to the inability of large firms to employ a permanent labour force due to the lack of continuous workload. Indeed, the fluctuating workload in the construction industry could be taken as a catalyst for encouraging the development of an efficient informal construction sector, which would act as a buffer for the labour force to cater to the fluctuating demand.

The UNCHS (1991:41) further supported the importance of the interaction between the formal and informal sector. It is quoted that “if direct links between formal and informal sectors were strengthened, the latter would be able to produce the much needed construction materials and components and undertake subcontracts for the former.”

Figure 3.8 shows a possible mode of collaboration between formal and informal contractors. Large and medium contractors subcontract their works to small formal or informal contractors. Similarly, small formal contractors subcontract to informal contractors. The informal contractors whether acting as individuals or as small enterprises could further subcontract to construction labourers. Situations also exist where formal contractors in the same category subcontract to one another.



(Adapted from Portes and Sassen-Koob 1987)

Figure 3.8 Possible modes of collaboration between the formal and informal contractors.

Bjorklof *et al.* (1992) while analysing the construction industry in Tanzania called for the teaming up of the formal and informal construction sectors to address the housing problems in the urban areas. The same call “of combining the basic skills and community acceptance of the informal sector with the financial muscle and technical

know-how of the formal sector” to solve housing problems was made by Nyembe (1994:28) when speaking of the South African housing problems.

The provision of housing is one area where the collaboration of the informal and formal construction sectors could be very useful. The possible reason that could be posed here is the simplicity of technology that is involved in housing, which is at the lower end of construction markets (Hindle 1997a). However, with proper training and proper subcontracting arrangements informal contractors could execute jobs that are much more complex. Later in this chapter the role of the informal construction sector in the provision of housing will be discussed.

The ILO (1987) suggested that governments could encourage subcontracting by introducing appropriate policy measures. It identified two policy options: subcontracting preference policy and subcontracting regulation policy. The subcontracting preference policy, on the one hand, allows tender biases towards the large contractors according to the proportion of the work by value specified in advance as being undertaken by subcontractors. The subcontracting regulations policy, on the other hand, involve the client specifying in advance which parts of the contract would have to be carried out by subcontractors. The second option represents an intervention from the client, and could make large contractors add premiums to their tender quotes to cover for the inconvenience of working with unknown construction firms. While incentives could be introduced to large contractors that subcontract to the small formal and informal contractors, no contractor should be influenced in the selection of subcontractors.

3.6 INFORMAL CONSTRUCTION SECTOR

3.6.1 General

Several authors, including the UNCHS (1981), Mlinga (1998), Ngare (1998) and Wells (1998) have written on the importance and the need to develop the informal construction sector in developing countries. The sector is particularly important in the provision of housing for both urban and rural population at lower prices (Erkelens, 1980; Bjorklof *et al.*, 1992; GOT, 2000a). Chana (1981) reported that the informal construction groups provided 90 per cent of all construction in the rural areas in developing countries, in addition to more than 50 per cent of housing in the urban areas. Riedel and Schultz (1977) cited in Bjorklof *et al.*, (1992) suggested that the dwellings built by the informal sector (non-regulated sector) in developing countries was about four times the number reported in official statistics. The World Bank (1989) also revealed that the informal sector built houses for about 30 and 80 per cent of the population in Nairobi, Kenya and in Lusaka, Zambia respectively

Bjorklof *et al* (1992) put the figure of buildings constructed by the informal construction sector in Tanzania to be about 65 to 80 per cent of all buildings. According to Mwaiselage (1992), projects carried out by the informal contractors in Tanzania covered a wide range from low to high cost housing projects, costing above US\$ 125,000.

The above gives an overview of the importance of the informal construction sector in the developing countries and specifically in Tanzania.

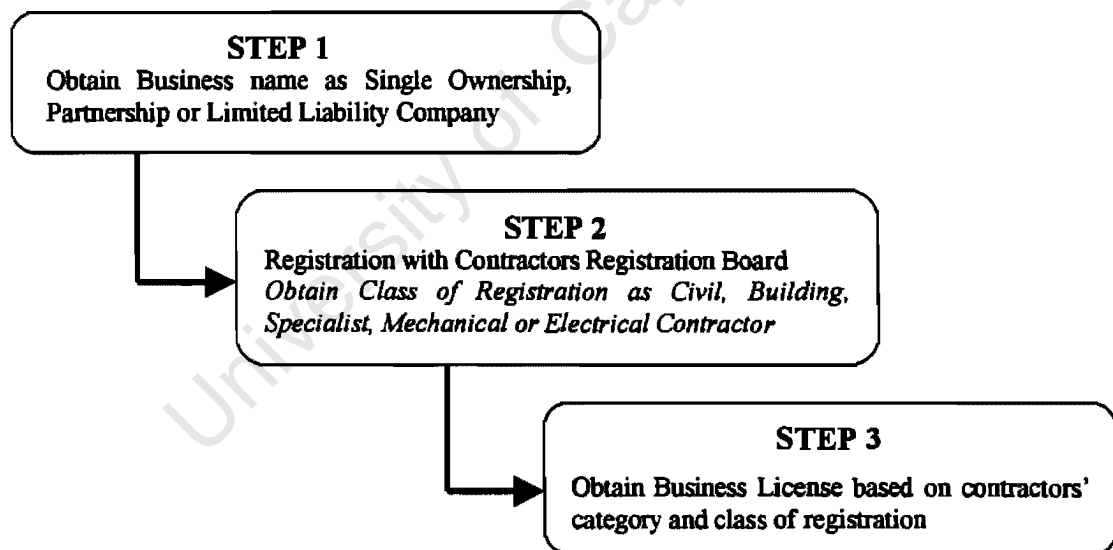
3.6.2 Informal contractors – Tanzanian context

The definition adopted at the first meeting of the CIB Task Group 29 (Wells, 1999) for the informal construction sector is reproduced below:

“The informal construction sector comprises of unregistered and unprotected individuals and small enterprises that supply labour and contribute in various other ways to the output of the construction sector.”

Based on the above definition, and in the context of Tanzania, informal contractors refers to enterprises or individuals carrying out and supplying labour for construction work without business licences and/or not registered with the CRB.

Just like other businesses, conducting construction business in Tanzania without a valid business licence is a punishable offence (GOT, 1998). In addition to a business licence, contractors must register with the CRB: failure to register is also a punishable offence (GOT, 1997). The CRB is a statutory organisation established by Act of Parliament No. 17 of 1997 and charged with the responsibility of registering and regulating activities and conduct of contractors in Tanzania (GOT, 1997). Currently the CRB classifies and registers contractors into seven classes under five categories namely, Civil works, Building, Mechanical, Electrical and Specialist Contractors. The various categories of contractors and their class limits were shown in Table 3.5. Figure 3.9 summarises the process followed to establish a formal construction company.



Source (Muhegi, 1999)

Figure 3.9 Legalisation process of construction business in Tanzania

Prior to the establishment of the CRB, the procedure under the defunct National Board of Architects, Quantity Surveyors and Building Contractors (NBAQSBC) was

confusing and unclear (Mugasa, 1999). Prospective contractors were first required to obtain a business licence before applying for registration as contractors. Instead of following the order presented in Figure 3.9, applicants were actually required to fulfil steps one and three before going to step two. This usually resulted in confusion because occasions occurred where contractors with business licences were denied registration as they could not meet the NBAQSBC requirements, which were in most cases different from those of the licensing authorities.

The CRB introduced the new procedure depicted in Figure 3.9 to ensure that unregistered contractors are not issued licence. Currently, business-licensing authorities would only issue a licence to a contractor already registered by the CRB, and actually the fees for licences have been set depending on the class of registration. Still, under the current practice there is no guarantee that a company with a business name would be registered as a contractor.

Appendix 3.2 shows a flow chart used by the CRB to process contractors' applications for registration. The flow chart shows what would happen to a contractor's application to register once it has been submitted to the CRB. It is aimed to inform contractors how their applications for registration would be processed and to bring transparency in the CRB's registration procedure (Muhegi, 2000a).

During the CRB Annual Workshop of 1999, contractors expressed dissatisfaction with the time taken to process applications for registration with the CRB. They proposed that the flow chart for processing an application should include a time frame of a maximum of 60 days. This was adopted by the CRB (*ibid.*). It is, however, still not clear how the CRB would be able to meet the proposed time frame to process an application, given that all applications from the whole country must be processed in its centralised head office located in Dar-es-Salaam (Mlinga, 2000).

The CRB allows unregistered contractors (informal contractors) to operate as long as the value of the projects is small i.e., not exceeding Tshs. one million (US\$ 1,250). However, three issues are raised here. Firstly, as it will be shown later in this work,

most of the jobs carried out by the informal contractors are labour contracts: a labour contract of Tshs. one million is quite substantial especially if a few individuals execute it in a short period. Secondly, a big project executed in phases of short intervals could give rise to several labour contracts with the total value exceeding Tshs. one million. Thirdly, a successful informal contractor could obtain many small labour contracts below the allowed limit, with a substantial annual turnover. In essence no guideline exist on the duration of the projects, the number of projects that could be carried out in parallel and the number of projects that could be executed in a given duration by an informal contractor. This argument is presented to challenge the basis on which the ceiling set by the CRB has been arrived at. However, while this remains a challenge to the CRB, it is a loophole that could be used by the informal contractors to carry out their business unhindered (Mlinga, 2000). It was mentioned previously that informal contractors carry out projects with values exceeding US\$ 125,000, which is one hundred times larger than the set limit for the informal contractors. Later in this work, the size of projects executed by the informal contractors will be established based on a survey questionnaire, and will offer light on the reasonableness of the CRB's limit.

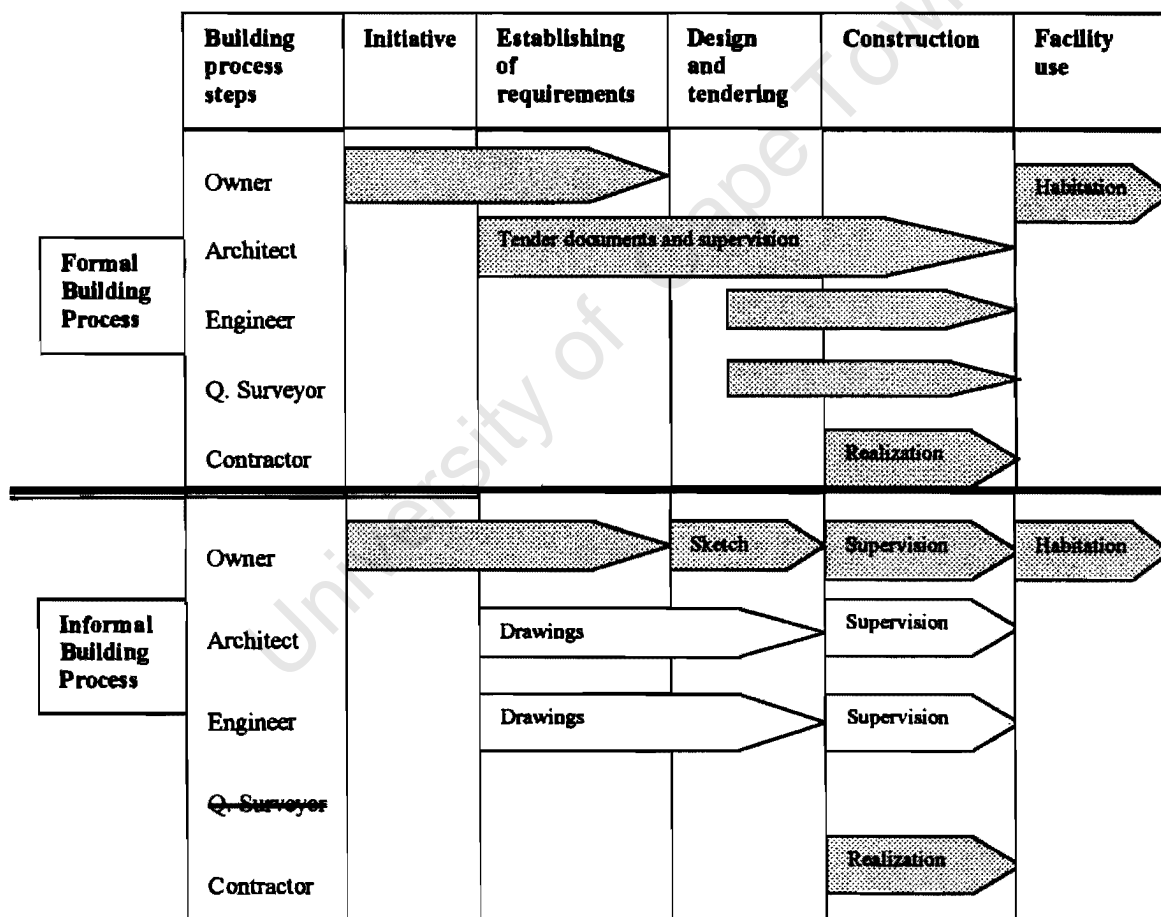
In summary, what has been discussed above shows the boundaries within which unregistered contractors can operate. It was important at this stage to define the boundaries so that the meaning of the term informal contractor as used in the Tanzanian context is understood.

3.6.3 Informal construction process

Wells (1999) identified four approaches to informality in construction. One of the approaches is the informal construction sector composed of small enterprises and contract labour. This is the focus of this research. Other approaches not covered in this research include informality in terms of planning and regulation, informality in relationships between clients, designers and contractors, and lastly informality in construction contracts. It is important however to note that, in the last two approaches the actual construction may be carried out by either a formal or an informal contractor.

It has been suggested that the emergence of informality in planning, regulations and contracts in Tanzania could be attributed to laxity and bureaucratic procedures of the government. According to Bjorklof *et al* (1992), this has made informal practices popular even in areas where it was expected to have a fully regulated industry.

Figure 3.10 shows the involvement of various actors in the informal and formal building construction process. Apart from the fact that the actors operating in the informal building construction process are not registered with relevant bodies, the process involves three main actors, the client, the contractor and material suppliers (not shown in Figure 3.10).



Adapted from Tegelaers (1995:55)

Figure 3.10 Involvement of various actors in the formal and informal building Construction process.

Consultants are not involved in the informal process, unless the client can afford to employ one. External financiers are also not usually involved in the process. The client pays the costs of materials and construction from his own savings or borrows from friends and/or family. Lastly, the involvement of the government as a regulator is also limited.

Generally, the construction professionals like architects and engineers are sometimes involved in the informal construction process. Their involvement is found mainly in planned residential areas in which it is necessary to obtain building permits. In such areas, clients who can not afford the services of registered consultants usually engage such services informally. After the plans have been approved, the clients engage a contractor, usually an informal one, and a consultant may be paid to supervise the construction informally. In other situations the clients supervise construction themselves.

3.6.4 Classification of informal contractors

According to Mwaiselage (1992), informal contractors in Tanzania operate in three different systems. In the first system, the informal contractor has his own gang and is able to undertake a number of operations on a construction site like excavation, masonry works, etc. In some cases, this type of contractor may undertake the construction of a complete house. The firm/gang owners may participate in the actual construction themselves or hire labour mostly on a casual basis.

The second system involves informal contractors who possess a certain skill and undertake jobs limited to their area of skill e.g. roofing, steel fixing, formwork fixing, plumbing, tiling, etc. In this group, the contractor executes the work himself, and only hires a limited number of people to assist when there is a need. By using this system, the client is forced to hire different contractors for different stages and activities of the project.

The last group involves contractors who specialise in certain jobs like concrete pouring, formwork fixing, steel fixing, etc. The contractor, on securing a job, assembles gangs of skilled and unskilled labour to carry out the work within the agreed time frame. The client makes payment to the contractor who pays his own gang.

The divisions given by Mwaiselage (*ibid.*) are not static. The informal contractors may operate in each of the three systems, depending on the acquired job. However, most contractors prefer to operate in the first system, in which they actually acted like a formal contractor and entered into an informal contract with the client. Experienced contractors in this category could even undertake jobs categorised for class VI and VII in the formal sector. Even some of the small-scale formal contractors could operate this way when they were unable to obtain jobs in the formal sector, hence the overlap of the boundary between the formal and informal contractors shown in Figure 3.4.

Currently, although the presence of informal contractors is known and is acknowledged, no efforts have been made to classify them. Mlinga (1999) suggested that the contractor classification system and framework for contractor development proposed by Milne (1994) could form the basis of formulation of a suitable classification system for Tanzanian contractors regardless of whether they are formal or not. The proposed classification system is shown in Figure 3.4.

3.6.5 Informal construction sector and housing

Most of the documented literature on the informal construction sector is related to its contribution to the provision of housing for the urban population. Several writers including Thomas (1995), Tripp (1997) and Sethuraman (1997) suggested that much of the urban population in developing countries were becoming increasingly poorer due to the economic restructuring programmes being implemented by those countries. This has made them rely largely on goods and services provided by the informal sector. The simple and cheap technology required for construction of residential houses and the high demand of housing in developing countries increases the potential of the informal construction sector.

In developing countries like Tanzania where there is no organised system either in the public or private sector for the provision of housing, the urban population increasingly settles in unplanned settlements. According to the GOT (2000a), in 1995 about 70 per cent of the urban population in Tanzania lived in informal settlements, which contained about 60 per cent of the urban housing stock. Most of these houses were built by the informal sector.

The situation is the same in other countries. For example, in Kumasi Ghana the informal sector built 57 per cent of houses in 1988, with the construction taking an average of four years (Tripple and Korboe, 1998). In Nairobi, Kenya, the informal settlements constructed by the informal builders house 55 per cent of the population (Alder, 1998). Generally, in Tanzania and other African countries, little efforts have been made towards the provision of human settlements. For example, according to Okpala (1990), human settlements accounted for between 2 to 3 per cent of the total capital and technical assistance to the Africa region in the first half of the 1980s. For Tanzania the figure was 2 per cent.

Tanzania lacks formal mortgage housing finance facilities. Past efforts by the government to introduce mortgage facilities are summarised below:

- In 1965 the government of Tanzania established a Revolving Housing Loan Fund to finance renovation, construction or purchase of houses for its employees. The Tanzania Housing Bank (THB) established in 1973 took over the functions of this Fund (GOT, 2000a:12).
- The THB was a mortgage institution charged with the responsibility of mobilising domestic savings and foreign funds to make credit available for the provision of housing loans for housing development in Tanzania. Due to financial constraints, the THB closed in 1995. During its existence of more than twenty years, the THB only managed to advance loans to individuals and organisations for the construction of 36,000 housing units in both rural and urban areas. It is estimated

that only five per cent of the prospective house developers obtained loans from this bank (GOT, 2000a:16).

- In 1992, due to the failure of the THB to provide its required service, the government of Tanzania re-introduced a Revolving Housing Loan Fund for civil servants. For a period of six years (1992-1998), the Fund was able to loan Tshs. 300 million (US\$ 600,000) to only 161 civil servants (GOT 2000a:12).

The failure of the government's effort to have sustainable mortgage house finance facilities, has made house construction a difficult process for most households especially those in the low-income category. Housing in Tanzania is mainly financed from personal and family savings over a long period, on an average of eight years (Wells *et al.*, 1998). This has had two implications. Firstly, it has made most of those wishing to construct houses look for cheap plots in unplanned settlements and engage cheap informal contractors to construct the houses. As explained above, 60 per cent of housing stock in Tanzania in year 1999 was found in unplanned settlements. Secondly, it has led to the non-adherence of building regulations. According to the GOT (2000a), most housing in Tanzania was constructed without reference to planning authorities even in planned areas, and this has resulted in the construction of substandard structures. In 1999, only 35 per cent of houses in urban Tanzania complied with the existing government regulations.

The discussion above reinforces the importance of the informal construction sector. With the reported demand of 2,200,000 housing units in year 2000¹³ and urban population increasing at an annual rate of nine per cent (GOT, 2000a), the Tanzanian government needs to mobilise all the available resources in the country to overcome the housing problems of its citizens. The informal construction sector has already proved its strength in the provision of housing to the urban poor. In stressing the potential of the informal construction sector to provide housing, Moavenzadeh (1987:96) is quoted saying:

¹³ See footnote 2 for comments

“Although the need for housing in the cities of developing world is tremendous, the only hope of meeting that need is through the efforts of many scale firms, some in the formal, others in the informal sector; since the two sectors share so many characteristics, it seems pointless to try to judge which is the better provider of low-cost shelter. Policy makers are beginning to recognise that the informal construction sector has quietly been fulfilling a staggering percentage of demand for urban housing.”

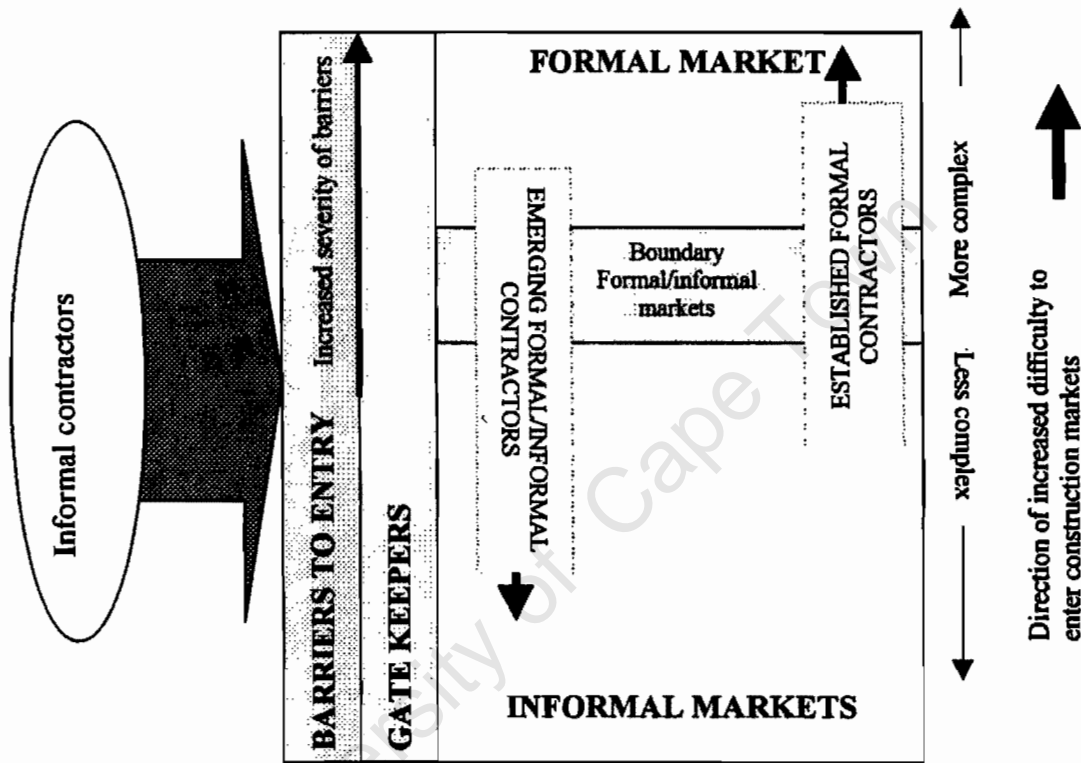
It is suggested that mobilisation of resources in the informal construction sector would assist the government of Tanzania in its goal to provide adequate shelter to its population as spelt out in the National Human Settlements Development Policy (GOT, 2000a:21).

3.7 PARTICIPATION OF INFORMAL CONTRACTORS IN CONSTRUCTION MARKETS

The informal contractors' entrance in the construction markets is denied by what Hindle (1996:14) described as “barriers to entry” and “the gate-keepers”. The barriers to entry are described as those things, which make entry to the market difficult and include levels of technology, access to market information, capital requirements, the rules of the game, access to raw materials, lack of track record/experience, scale of economies and customer differentiation. The gatekeepers are bodies or organisations controlling most aspects of entry into the market, and include the government through its regulating bodies, customers and those who set the rules of engagement within the construction industry. The relationship between the informal contractors and the construction market is shown in Figure 3.11.

Figure 3.11 shows that the construction market consists of informal and formal markets. Formal markets represent construction markets controlled mainly by the government, public institutions and the private sector in which formal contract procurement procedures are applied. The formal markets at the lower end consist of simple repairs and decorations, and maintenance of government and public properties, which because of accountability have to follow all formal procedures including the execution by formal contractors. At the upper end they may consist of complex industrial and shopping complexes commissioned by private investors or complex civil and building projects

commissioned by the government or public institutions. The complex nature of such projects requires more organised and more transparent approaches for delivery. Generally, the informal contractors do not participate in the formal markets due to the existing regulations, which strictly prohibit their employment in the projects or because they lack capacity and they are incapable to execute such works.



Adapted from Hindle (1996:14)

Figure 3.11 Obstacles faced by the informal contractors to enter the construction markets

The informal markets relate to markets with no strict adherence of formal procurement procedures. The informal construction market at the lower end consists of individual house developers in which no form of documentation may be required at all, while at the upper end it consists of low technology industrial or commercial buildings commissioned in the private sector.

The boundary between the formal and informal markets is not very clear, especially for projects commissioned by the private sector. The existing regulations by the CRB, for example, although stipulate a need by private developers to employ registered contractors commensurate with the value of the projects, they do not interfere with the selection process of the contractors and the kind of contract between the developer and the contractors (Muhegi, 2000b).

The capacity and capability of the formal contractors is such that they are able to execute jobs in both the formal and informal markets. On the one hand, the established large and medium contractors are expected to execute projects on the upper end of the formal market. However, it was discussed earlier that many execute jobs belonging to the lower end of the formal market and upper end of the informal market. The emerging (small) formal contractors, on the other hand, are expected to execute jobs that belong to the lower end of the formal markets and upper and middle ends of the informal markets.

The informal contractors would be capable of executing jobs in the lower and middle end of the informal markets, and the lower end of the formal markets. The jobs at the lower end of the informal markets are unattractive, and therefore a preserve of the informal contractors. Within Tanzanian context these would consist of projects that falls below Tshs. one million, which is the limit set by the CRB for the informal contractors to operate. Projects of value of less than Tshs. one million could also exist in the formal markets, but because of procurement procedures used they must as a matter of necessity be carried out by the formal contractors.

Irrespective of the markets, the entrance of the informal contractors to the markets, and hence to the construction business is affected by what has been described above as barriers to entry and gatekeepers. Barriers to entry include some of the constraints faced by informal contractors when establishing business, and the regulating bodies like the CRB and the licensing authorities could be regarded as gatekeepers. Later in this work, the constraints faced by the informal contractors to establish business and the role of the CRB and the licensing authorities as gatekeepers will be discussed based on contractor's questionnaires.

3.8 THE ATTITUDE OF THE GOVERNMENT OF TANZANIA TOWARDS THE INFORMAL CONSTRUCTION SECTOR

In Chapter Four, major government policies towards the construction industry and the informal sector will be discussed. It is however important to mention here that a major government shift in favour of the informal construction sector came in 1991, with the conduct of the NISS (GOT, 1991a) and the release of the NCIDS (GOT, 1991b).

The government of Tanzania through the NCIDS (GOT, 1991b) was in favour of the participation of the private sector in the development of the Tanzanian construction industry. In the document there are statements that could be interpreted in favour of the informal construction sector. The statements/strategies are reproduced below:

On Design:

- “Assistance shall be provided to informal designers in rural areas by providing guidelines on the proper use of local and other materials” (GOT, 1991b:9).

On Construction:

- “Labour based construction and maintenance methods will be fostered in order to reduce the requirement for foreign exchange and to provide for the greater use of local labour” (GOT, 1991b:11).
- “Self-help projects, whilst not considered to be a commercial sector of the construction industry, are considered to be valuable means of complementing the efforts of the industry and as such, will continue to be encouraged particularly in rural areas” (GOT, 1991b:12).
- “Contractor training and advisory services will be continued and strengthened to ensure efficient execution of construction and development programmes. In particular, labour based construction and maintenance methods will be fostered through specific training programmes” (GOT, 1991b:A4).

- “A review of the capacity and capability of all sectors of the industry will be undertaken” (GOT, 1991b:A4).
- “The informal sector of the industry, especially in rural areas, will be given guidelines on the use of local construction materials, construction standards, regulations and techniques, as well as standard, simplified designs” (GOT, 1991b:A5).

On Construction materials.

- “More concerted effort will be made to educate people on the use of locally available materials and guidelines on standards and quality control for producing and using materials shall be given” (GOT, 1991b:17).
- “Small scale producers of building materials (e.g. building blocks, concrete products, timber products, etc.) will also be certified as a pre-requisite for licensing: such registration will be made by the Board responsible for registering contractors. This will ensure identification, which will facilitate the monitoring of their activities and the standards of their products” (GOT, 1991b:28).

On Equipment

- “As a means of encouraging self employment in construction, arrangements will be made whereby artisans and small firms, on completion of their training, will be assisted to procure their own sets of tools and basic equipment” (GOT, 1991b:A10).

The above statements extracted from the NCIDS (GOT, 1991b) did not categorically address the informal sector, but they represented potential areas for deploying it. It was argued that measures which promote the use of labour only construction methods, and which simplify the standards and the design of construction work provide a potential for the use of informal contractors (Bjorklof *et al*, 1992; Salewi, 1999).

In general, there have been some efforts by the Tanzanian government through the NCC to develop the construction industry (Msita, 1998). However little has been done to implement the NICDS in favour of the informal construction sector. To date one of the problems facing Tanzanian policy makers and researchers is to know the capacity and capability of the informal construction sector (NCC, 2000). This would have been the starting point, if there were any serious measures towards developing the sector.

There has been general encouragement of using labour intensive technologies in road construction which is an area where there is a possibility to explore the use of informal contractors. However, the emphasis has always been on formally registered contractors. The NCC's training programmes of labour based contractors in Tanzania qualifies contractors for training only if they are registered as building contractors or civil works contractors (Msita, 1999)¹⁴. The proposed training of contractors by the CRB would also focus on its registered members (Materu, 1999; Materu, 2000).

In the building sub-sector, although there has been no positive action from the government to develop the informal sector, it has steadily grown unhindered. This could be attributed to the fact that residential houses in Tanzania are largely constructed informally. The interaction, which now exists between the informal and formal construction industry in Tanzania, is natural and no government efforts have been taken to enhance it (Marten, 1996).

Various measures could be taken by the government to promote the informal construction sector. Marten (1996:58) suggested that the government should not interfere with the sector. She argued that "as long as the government does not follow a restrictive policy, the informal sector would probably manage itself as it has been doing in the past". This approach called for no positive action from the government to the informal sector apart from just allowing it to operate. It therefore, does not create a conducive environment in which it can operate. With such an approach government officials could continue to harass the informal sector operators, and at the same time the

¹⁴ Interviews with Mr. Msita who is the Executive Secretary of National Construction Council.

operators would not know the boundaries within which to operate. It was suggested that the informal sector should be encouraged and assisted rather than being left to take care for itself (UNCHS, 1991; Bjorklof *et al.*, 1992).

The UNCHS (1991) suggested two steps in developing the informal sector. The first step would be to create an enabling environment by coming up with clear policies that would encourage the sector's activities and protect the rights of those involved in it. The next step would be to design strategies aimed at solving problems facing the sector including lack of capital and credit, lack of equipment and spares, lack of technical and managerial skills, lack of market and customers, and lack of reliable working premises. Learning what other countries have done to promote their emerging construction industries could assist in the formulation of appropriate strategies. For example, South Africa has formulated a National Emerging Contractors' Development Programme (Hodgson and Gwagwa, 1997; Merrifield, 1997; Hodgson and Bici, 2000) which could be used as a model for developing a strategy for Tanzania. The programme, amongst others, aims at assisting emerging contractors to (Hodgson and Gwagwa, 1997:175):

- gain access to the market;
- overcome problems of inexperience, lack of managerial and marketing ability;
- overcome financial problems i.e., lack of capital and access to credit facilities; and
- improve their business skills and develop the trade skills of their operatives.

The strategies under the South Africa's National Emerging Contractors' Development Programme are in line with the UNCHS (1991) strategies discussed above and the proposed Tanzanian Small and Medium Enterprises Policy (SMEP) to be discussed in the next chapter.

3.9 SUMMARY

This chapter covered important aspects of the construction industry in developing countries. The relevance and significance of the formal and informal construction sectors to the economy of developing countries was briefly explored with particular emphasis on Tanzania. The role of the informal construction sector in the provision of urban shelter was examined to justify its importance.

The chapter also discussed the establishment background of small construction companies. Special attention was given to the boundary between the informal and formal construction sectors, emphasising a two-way movement across the boundary, into and out of the informal or formal sector. A framework for contractors' classification, which would enable all contractors to be captured irrespective of their informality, was proposed.

The chapter demonstrated that construction industries in developing countries have an important role to play to boost the growth of the economy and creation of employment. Similarly it showed that the informal construction sector is important in the economy of developing countries particularly in the provision of affordable shelter for the urban population

The chapter also discussed the extent of subcontracting in the construction industry and the role it could play towards the collaboration between the formal and informal construction sectors. Lastly, it was shown that the government of Tanzania acknowledges and supports the existence of the informal construction sector but no concrete steps have been undertaken to develop it.

In the next chapter a review of the policy formulation process and different policies that impact on the construction industry and the informal sector in Tanzania will be discussed.

CHAPTER FOUR

PUBLIC POLICIES ON THE INFORMAL SECTOR AND THE CONSTRUCTION INDUSTRY IN TANZANIA

4.1 INTRODUCTION

One of the objectives of this research as set out in Chapter One was to establish policy implications on the development of the construction industry in Tanzania. The previous two chapters discussed the concepts of the informal sector and the construction industry in Tanzania. Both chapters revealed that policies could play an important role in the development of the informal construction sector.

This chapter aims to capture major policy decisions in Tanzania and their effect on the construction industry and the informal sector. Its objective is to establish the role that the policies could play in developing the informal construction sector and in shaping the collaboration between the formal and informal construction sectors in Tanzania.

The chapter discusses policy issues relating to the construction industry and the informal sector. It also covers in brief the process of formulation of policies to highlight how public policies, including those that affect the construction industry and the informal sector, are formulated.

A short review of Tanzanian policies relating to the construction industry and the informal sector is also made. This would form the basis of policy direction for the informal construction sector later in this work.

4.2 NATURE OF PUBLIC POLICIES

4.2.1 Definition of public policy

The term policy has been widely used in this thesis without being properly defined. Generally, it is used to designate the behaviour of some actor or set of actors in a given area of activity. Andrew *et al.* (1979:5) defined a policy as:

“a goal directed or purposive course of action followed by an actor or a set of actors in attempt to deal with a problem”

Policy is different from a decision, “which is a choice among competing alternatives” (Anderson, 1990:5). Policy is supposed to reflect what is done, as against what is proposed or intended. Therefore, if the organisations or governments policy is to do something on a certain aspect, and nothing is done, it can be concluded that the policy on that aspect is that of inactivity. Hence, a definition given by Koenig (1986:1) that, “public policy is a governmental activity (or inactivity)¹⁵ that affects our well being”.

Policies are not restricted to governments only. Many organisations, private and public, have policies that govern their daily activities. However, with regard to the government, a public policy is defined as (Peters, 2000):

“authoritative decisions made in the legislative, or judicial branches of government that are intended to direct or influence the actions, behaviour, or decision of others”

According to Anderson (1990), public policy may be positive or negative. A policy takes a positive form when it is implemented as intended and a negative form when it is not. Therefore, while governments may have policies in place for various issues or aspects, it is in their positive form that they are worthwhile. A good policy is one that can be implemented successfully and one that actually reaches the goals set for it (Linda and Peters, 1989).

It is particularly important to emphasize the need to implement policies. Normally governments spend many resources on formulation of policies, and in some situations

¹⁵ Inactivity as used here refers to non-implementation of a policy.

come up with very ambitious policies with unmatched resources for the implementation (CDE, 1999). Later in this chapter, key components of good policy making will be given which includes, amongst others, the need to insure that resources required for the implementation of the policy are considered during its formulation.

4.2.2 Types of public policies

According to Frohock (1979), public policies can be grouped into five categories: regulatory, distributive, re-distributive, capitalisation and ethical policies. The policies that regulate how people can act towards one another are termed regulatory policies, and include criminal law, civil right laws, etc. The distributive policies are formulated to grant goods and services to the population, and may include policies that aim to provide education or health services to the population, etc. The re-distributive policies aim at “re-arranging one or more of the basic schedules of social and economic rewards” (*ibid.*: 13). They aim to transfer wealth from the rich to the poor; for example, progressive tax policies in which the rich pay more than the poor. Capitalisation policies in most cases relate to policies that provide subsidies to a group of people to improve their productive capacity. For example, subsidies given to farmers to improve the agricultural industry or subsidies given to local manufacturers so that they can compete with foreign counterparts¹⁶. The last group, ethical policies aim to “establish the correct practice for some moral issue” (*ibid.*: 14); for example, laws which ban abortion or prostitution.

Other classifications also exist. Anderson (1990) classified public policies into “substantive and procedural policies” (p.10) or into “distributive, regulatory, self-regulatory and re-distributive policies” (p.11). Substantive policies involve what the government intends to do to its people. They directly distribute advantages and disadvantages, and benefits and costs to the people. The procedural policies are different from substantive policies in that “they pertain to how something is going to be done or who is going to take action”. Self-regulatory policies, like regulatory policies described

¹⁶ In Tanzania, the 7.5 per cent preference margin given to local contractors under local competitive bidding of road works (Msita, 2000) could be considered as some form of subsidy to enable them compete with foreign contractors.

above, involve the restriction or control of some matter or group. They particularly intend to promote or protect interests of the members of the regulated group.

The discussion of the groups of policies is important to enable proper conceptualisation of public policies. Of course, in a wide policy like the construction industry policy, the employment policy, etc., it is possible to encounter different groups of policy as discussed above. For example, a construction industry policy could be regarded as distributive when it addresses the aspects of providing infrastructural facilities or other construction services to the population. At the same time, it could be regarded as re-distributive when directing those facilities from the more developed areas to the less developed ones; for example, the policy may stipulate the need to improve the less developed rural transport network at the expense of the more developed urban network. Similarly, it may be regarded as capitalisation when it has elements that favour a certain group of actors in the industry; for example, a construction industry policy may call for preferential treatment to local contractors when bidding for local contracts. Lastly, the policy may contain a code of conduct for professionals in the industry, in which case it can be regarded as being ethical.

4.3 FORMULATION OF PUBLIC POLICIES

4.3.1 The process of formulating public policy

According to Jenkins (1978) and Anderson (1990), in order to understand the process of formulating policy, it is important to break the process into the following categories: policy demands, policy decisions, policy statements, policy outputs, and policy outcomes.

The environment in which we live and the problems it produces gives rise to public policy. A policy problem can be defined as a condition or situation that produces needs or dissatisfaction among people and for which relief or redress is sought. Not all problems are important enough to warrant policy actions. However, problems which affect the majority of the population or a group of influential people in the politics of a given country, give rise to policy demands (Picus, 2000). According to Anderson (1990), policy demands are demands for action or inaction to the problem by the

government, and they give rise to public policy. For example, with respect to the informal sector in Tanzania, the lack of recognition by government gave rise to continued harassment by government officials, lack of working premises and lack of credit facilities (Mutagwaba, 1996). This is a problem on the part of informal sector operators, which could give rise to policy demand, especially in a situation where it affects a considerably high proportion of the population, as is currently the case in many countries. At the same time, the informal traders could be perceived to be a nuisance through their occupancy of prohibited trading areas, unfair competition with the formal traders and their failure to pay taxes (Thomas, 1995). This is a problem, but this time it is on the part of the government. Either the citizens or the government therefore perceive problems that give rise to policy demands.

According to Koenig (1986:2), although public policies are supposed to respond and solve problems, sometimes they can also give rise to problems. Diery (1999:163) refers to this as a notion of “policy by the way” in which an existing public policy becomes a chief producer of a constraint/problem which would eventually give rise to another policy to solve it. For example, policies on taxation although aimed at providing the government with the revenue needed to run many of its programmes, could sometimes be oppressive to the taxpayers. For a problem to give rise to policy formulation it must get the attention of public officials and government leaders. In some cases immense suffering, non-compliance and hostile confrontation by the public could be necessary to attract attention in the government circles.

It is important to appreciate that politics is involved in the public policy formulation process (Frohock, 1979; Koenig, 1986; Williams 1998; Cockrel, 2000). According to Cockrel (2000:1), ‘the policy process is obscure, at best, and at its worst it seems underhanded. Politics is involved in the process, and you need to understand it to teach public policy education’. Because of politics, the acceptance of policy demands emanating from the population not in the power circles, would largely depend on how much the demands appeal to or threaten the people in power. In some cases, public policies are formulated to safeguard the interests of the rulers. For example, section 2.6 of this thesis mentioned the influence that the informal sector could play in democratic elections. With the increasing number of people engaging in the informal sector

activities, coupled with the government's failure to generate gainful employment, government leaders are forced to initiate policies in favour of the informal sector to ensure re-election (Financial Times, 1998).

Within a given political framework, policy demands would give rise to policy decisions, which are the authoritative decisions taken by the public officials. Policy decisions authorise or give direction and content to public policy actions. They include decisions to enact statutes, to issue executive orders, etc. (Anderson, 1990).

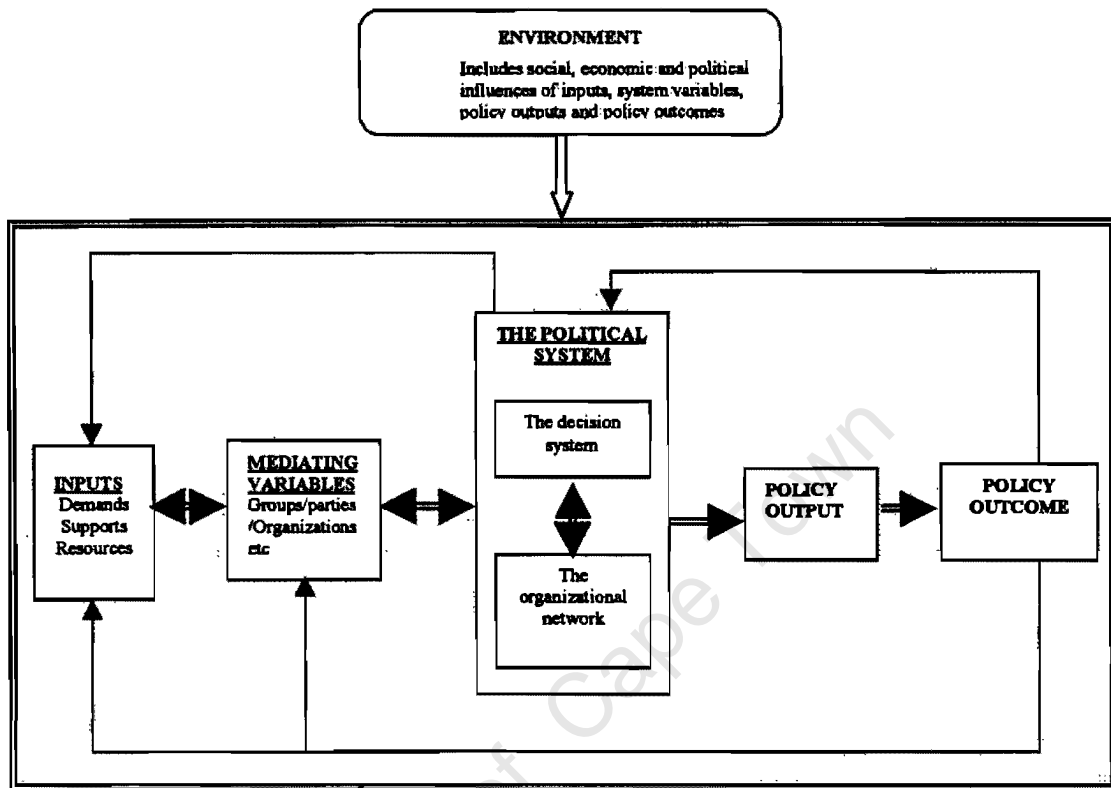
In order for a policy to be capable of implementation, it must translate into policy statements. These are the formal expressions or articulations of public policy, and include legislative statutes, executive orders and decrees, administrative rules and regulations, court opinions, and statements and speeches by the public officials. They indicate the intentions and goals of the government and how to realise them (Anderson, 1990). Policy statements are sometimes ambiguous, and in some cases different levels, branches or units of government could issue conflicting policy statements.

The worthiness of a public policy is judged in its positive form. The actions actually taken in pursuance of policy decisions and statements are termed policy outputs. They are the tangible manifestations of public policies, and constitute what a government does, as distinguished from what it says it is going to do. Policy outputs can normally be measured (Anderson, 1990).

Implementation or non-implementation of a policy leads to the policy outcomes. These are the intended or unintended consequences to society that flow from action or non-action by the government. Normally, it is difficult to measure the policy outcomes.

Figure 4.1 shows the Amended System Model of the policy process. It shows how the different factors discussed above are related. Attention is drawn to the cyclic nature of the policy formulation process as shown in the figure. As discussed before, a public policy could give rise to more problems than those that it intends to solve. According to Diery (1999:163), public policy making is a precarious venture which may result into externalities and unanticipated consequences alongside the intended outcomes." While

not all the unanticipated consequences may be bad; the bad ones can create problems, which in turn call for policy action, and the process starts all over again.



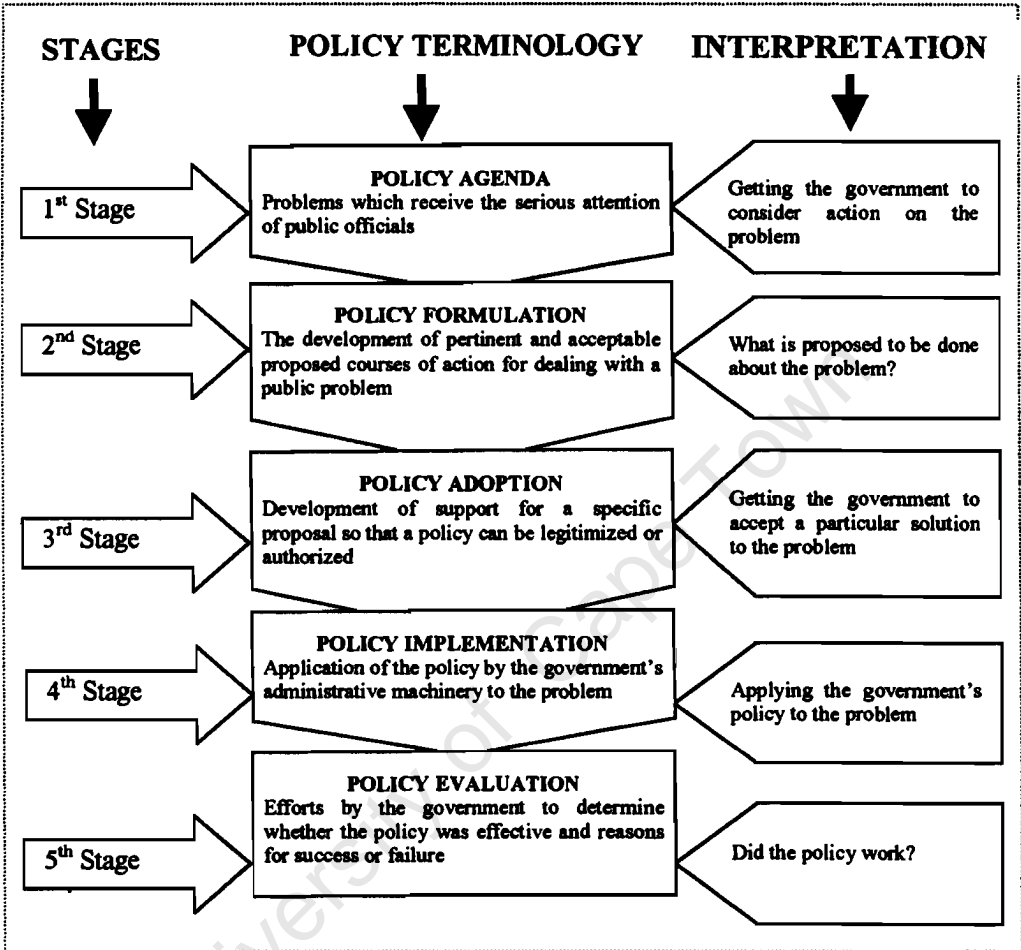
Source: Jenkins (1978:18)

Figure 4.1 The Amended Systems Model of the policy process.

In its simple form, the amended systems model shows what is happening in the policy formulation process. The model captures the influence of various groups, parties and organizations in the policy making process. The mediating variables represent the various groups, which gave rise to policy demands, and therefore beneficiaries of the formulated policies. The struggles within groups and with the government would largely influence the policies formulated. Similarly, the political system is a major determinant in the nature of policies formulated. For example, as will be discussed later in this chapter, in Tanzania, during the era of the political system of socialism and self-reliance, economic policies were directed towards state and public ownership.

Policy formulation process involves a sequential pattern of actions involving a number of functional categories of activities that can be analytically distinguished. The different

categories of activities making up the policy formulation process are summarized in Figure 4.2.



Adapted from Anderson (1990:36 Table 1.3)

Figure 4.2 The policy process

The CDE (1999) argued that many public policies suffer problems of implementation due to the neglect of basic components of good policy making as summarized below:

- Understanding the department, policy, programme or system needing changes. This in essence calls for the proper identification of the problems that need policy intervention.

- Identification of alternative courses of action prior to developing the policy. For a selected course of action, it must be clear why it was selected.
- Identification of consequences of the policies to be implemented before proceeding. This leads to the selection of the best course of action, which would minimize unwanted consequences.
- Establishment of costs and benefits of each potential course of action before adopting the policy.
- Identification of all relevant stakeholders, and establishment of their views about the policy and how they would react to it. This could be achieved through consultation.
- Setting of targets, which are not very ambitious and difficult to implement by the government. It is better not to promise anything rather than promise something that can not be delivered. This calls for the assessment of the capacity (human and financial resources) in the country and the bodies that would implement the policy to see whether the available capacity matches that required to implement it successfully. If the available capacity is less than that required, then it may necessitate revisions in the proposed policy or in the time frame for its implementation.
- Measurement of chosen policy approach against important government values, principles and policies to ensure reasonable consistency. This calls for identifying the political system of a country and making sure that policies conform to it. It also calls for co-ordination in the formulation of various policies to ensure that they do not contradict each other. Policies formulated at the provincial or local government level are particularly prone to contradiction with those of the central government.
- Classification of the roles to be played by different officials, institutions and other actors in order to implement the policy successfully.

- Preparation of a programme for implementation and prioritization of the implementation measures accordingly. It is always impossible to deal with everything at once, and sometimes it is impossible to make progress unless certain goals have been achieved first. A properly prepared programme of implementation takes care of the priority of different measures.

The CDE (1999:20) particularly recommended that for proper implementation of policies, “policy advocacy” should be replaced by “policy analysis”. The CDE (*ibid.*) defined policy analysis “as a structured way of thinking about choices before deciding on a particular course of action”. It enables making of rational and informed choices on the best course of action where a number of alternatives exist: It helps policy makers identify why one course of action is preferable to another. In addition, it enables officials to assess the strengths and weaknesses of a policy before implementing it, and therefore help them to decide whether a policy should be adopted or not.

4.3.2 The actors in the formation of public policy

Public policies almost invariably affect everybody, but its making may involve only a few individuals. Authorities are responsible with the formulation of policies in the political system. According to Anderson (1990:5), the authorities are “engaged in the daily affairs of a political system”, and their actions “are accepted as binding most of the time by most members of the system so long as they act within the limits of their roles”. Authorities include elders, paramount chiefs, executives, legislators, judges, administrators, councilors, monarchs, and the like.

Anderson (*ibid.*) further argued that the initiation of a policy process does not necessarily involve those involved in making the policy itself. Different interest groups in the society or even the general population may trigger a policy process. When a few individual “elites” are entrusted with the task of making policy it gives rise to what is known as an “elite theory of policy-making” (Koenig, 1986:14, Anderson 1990). According to Anderson (1990:28), policy making by elites “reflects the values and preferences of a governing elite” rather than the demands and actions of the people. An example of policies under this category includes taxation policies made by state and

local executives and legislatures. However, it could be argued that the demand by the people to be provided with services indirectly gives rise to the need by the state and local governments to formulate policies on taxation or other related issues. These policies, although necessary to raise funds needed for development, could be unpopular to the people. In principle, the elites are expected to be rational in their decisions and formulate policies representing the interests of the public. However, situations are known where they have formulated policies that are costly, disastrous, and erroneous (Koenig, 1986).

The group theory of policy making asserts that policy making is an outcome of struggles between groups (Koenig, 1986; Anderson, 1990). Groups in this case are regarded as a collection of individuals with shared interests. It is argued that “when groups fail to achieve their goals sufficiently through private action, they may resort to politics and public policy-making to advance their interests”(Koenig, 1986:16). Usually groups use resources within their reach to influence the legislature or executive bureaucracy in the policy formulation process.

The citizens, in countries with democratic systems, can influence policy decisions. This has been termed as the “citizen participation theory of policy making” (Koenig, 1986:20). The election manifesto of a political party is actually a public declaration of its policies. Through the election process, the citizens choose between alternative policies and the competing candidates who identify with specific policies. Democratic elections is the only powerful tool that the citizens could use to identify themselves with policies which represent their interests or shun policies deemed to affect them. According to Wagschal (1997:223), “the Swiss electorate often blocks expenditure increases requested by the government”, particularly if they are not satisfied with the nature of expenditures.

Despite the power of citizens to influence policies, in many developing countries where majority of the people are poor, people have been excluded from the policy making process and often marginalized (Robb, 2000). It should be appreciated that enabling the people, particularly the poor, to participate in the formulation of the policies can lead to their empowerment, and make policy implementation easier (*ibid.*).

The extent to which the public accepts a policy could sometimes be explained by knowing who gave rise to the policy. Since most of the public policies are directed to the general population, their acceptance would largely depend on the extent to which the public was involved in the formulation process. One of the basic components of good policy making, as suggested by the CDE (1999), is to ensure public participation in the formulation process. It is therefore important to identify all relevant stakeholders in a policy and ensure that they participate through soliciting their opinions on the contents and effects of the policy. To ensure acceptability of policies prepared without wide public input, it may be important to educate the public on the objectives and the benefits of the policies prior to their implementation.

It could prove necessary to organize different meetings of stakeholders so as to ensure adequate participation of the public in the policy formulation process. An example can be borrowed from the formulation of the construction industry of South Africa. Following the release of the Green Paper (Department of Public Works, 1997), a number of groups were established, and workshops and conferences were convened to discuss various aspects of the policy (Department of Public Works, 1999a). The different meetings of the task team, reference groups and focus groups, and various workshops coupled with the ample time given for various stakeholders to discuss the Green Paper ensured wide consensus with regard to different issues that needed policy intervention (Rwelamila, 2000).

4.4 POLICY EVALUATION

4.4.1 Policy impact

Policy evaluation in its formal sense is an examination of the effects of policies and programs on their targets in terms of the goals they are intended to achieve (Fischer, 1980; Koenig, 1986: 184; Anderson, 1990; Cockrel, 2000). According to Cockrel (2000) “after a new policy is implemented, advocates, opponents, or other interested parties begin to consider the its implementation and consequences. At this point, the final stage of policy making has begun. Either through formal means such as data analysis or through informal means such as citizen reaction, evaluating a policy reveals its success, failure, or the need for modification”. It is important to note that policy

evaluation could occur throughout the policy process and not simply of the last stage as depicted in Figure 4.2. It is a very important process, and in some cases, it may restart the policy process in order to continue, modify or terminate existing policy.

In evaluating a policy, one needs to look at its impact on both the intended and unintended objects. According to Anderson (1990:223-226), impact of a policy has several dimensions:

- The impact on the public problem at which it is directed and on the people involved. This entails the knowledge (i.e. definition) of the target group, and the intended effect of the policy. It is important also to establish the unintended consequences of the policy.
- Policies may have effects on situations or groups other than those at which they are directed, sometimes referred to as “externalities or spill-over effects”.
- Policies may have long-term effects i.e. they may impact on the future as well as the current conditions. For example, the effects of an educational policy which aims at ensuring every school age going child goes to school will be felt for a long time to come and will be there to stay.
- Policies have direct as well as indirect costs. While direct costs incurred by the government in implementing the policy are easy to determine, those incurred by the private sector may be difficult to determine. The indirect costs experienced by the public e.g., inconvenience, dislocation etc. are in most cases difficult to measure. It should also be reminded that just as it is difficult to measure the indirect costs of implementing a public policy, it is equally difficult to measure its indirect benefits for the public.

As discussed previously, it is always in the interest of the policy and its implementers to establish the impact of the policy during its formulation. By addressing the impact at the formulation stage, a decision can be made on whether to proceed with the implementation of the policy or not, and where necessary design mitigating measures for undesirable effects of the policy (Nachimias, 1979 cited in Koenig 1986: 191).

It should always be the intention of policy makers to see that policies have the intended impact on the public problems they aim to solve. Unfortunately, this is not always the case. A variety of reasons described below may cause the policy not to attain its goals (Anderson, 1990):

- Inadequate resources devoted to dealing with the problem.
- Administering the policies in a fashion that lessens their impact
- Addressing policy to only one or a few factors that are the cause of the problem.
- Response or adaptation of people to the public policies in such a manner as to negate much of the policy impact.
- Policies may have incompatible goals that bring them into conflict with one another.
- The solutions for some problems may involve costs that are greater than the problems.
- Many public problems may not be soluble, or at least not completely.
- The nature of the problem at which policy is directed may change while policy is being developed or applied.
- New problems may arise that distract the attention and action from a given problem.

What has been discussed previously could act as a guideline in analyzing the success and/or failures of policies towards their intended goal. Although considered as guidelines for analyzing policies, the discussion above could also offer a guide in the preparation of policies. By adhering to the positive aspects and avoiding the negative ones, the formulation and implementation processes of a policy could be streamlined to maximize its impact on the intended objects.

4.4.2 Problems in policy evaluation

It is important to appreciate some of the problems that may be encountered in trying to evaluate some of the policies. Anderson (1990:228-235) identified about six problems:

- *Uncertainty over policy goals* i.e. when the goals of a policy are unclear, diffuse, or diverse, then it becomes difficult to determine the extent to which they have been attained.
- *Causality*: i.e. in some cases it is not easy to determine whether changes have occurred because of the implementation of the policy. In some situations, changes may happen with or without the policy.
- *Diffuse policy impact*: i.e. policy actions may affect groups other than those at whom they are specifically directed.
- *Difficulties in data acquisition*: Unavailability of accurate and relevant statistical data and other information can make the process of evaluation difficult or impossible. The unavailability of data or information could be due to the improper keeping of relevant data and information or the mere reluctance of those with information to disclose it.
- *Official resistance*: Behind any policy implementation there will always be the “beneficiaries and implementers”. Either party will resist evaluation, and may offer misleading information if it perceives that the results of the evaluation will not be in its favour.
- *A limited time perspective*: Time dimension of the policy is an important aspect that must be considered. Any evaluation done before the maturity of a policy is unfavourable and may yield unsatisfactory results.
- *Evaluation lacks impact*: On some occasions, the interested parties may ignore or attack the results of policy evaluation as inconclusive or unsound if the results do not fall in their favour.

Despite the existence of highly systematic systems of evaluating public policy (Koenig, 1986; Anderson, 1990), in this research an informal and unstructured evaluation of Tanzanian policies relating to the construction industry and informal sector was made. The evaluation looked at the existence of such policies, their formulation process and the intended objectives; and whether they meet the requirements of the construction industry and the informal sector. The evaluation was based on secondary information (information documented in literature). The use of primary information (information obtained through interviewing implementers of the policies and the objects of the policies) was excluded due to time constraints and costs that are required to effectively carry out such a survey.

4.5 BACKGROUND TO TANZANIAN ECONOMIC POLICY FRAMEWORK

In order to appreciate different policies in Tanzania, it was important to discuss the political system of the country since its independence. As discussed previously, the political system of a country at any given time is responsible for shaping the major policy decisions that are made.

Tanzania attained its independence in 1961. For seven years (1961-67) following its independence, it promoted the capitalist economic system, which it had inherited from its British rulers. The government then supported the growth of the private sector and this resulted in increased foreign investment and brought significant increase in the economic performance of the country (Kenti and Mushi, 1995).

In 1967, the Arusha Declaration came into force. It signaled the end of the capitalist free market economy and paved way to a political system of socialism and self-reliance. According to Malyamkono and Bagachwa (1990:1), "this was deemed necessary in order to develop a locally based economy which would bring structural changes, foster equity and hasten rural development". The Arusha Declaration in effect made the government control all major economic activities in the country including banks, industries and commercial farming. Multitudes of parastatal organizations were established to take up this challenge, and the private sector was "deliberately suffocated

and denied all access to both the environment and the means to grow and thrive” (Mutagwaba, 1996:1).

With respect to the construction industry, this meant socializing it and relying on the public sector to provide most of the construction services¹⁷. The first ten years of the Arusha Declaration were used to establish public construction organizations (Bjorklof *et al.*, 1992). In terms of employment, the Arusha Declaration emphasized rural development where most of the Tanzanians would be involved in rural farming, instead of migrating to the cities in search of paid employment (Malyamkono and Bagachwa, 1990).

However, due to a number of reasons, the political system of socialism and self-reliance failed to bear the expected fruits of economic growth and empowerment. According to Malyamkono and Bagachwa (1990:1), “in the 1970s economic performance weakened and by the early 1980s the country had plunged into an economic crisis of unprecedented proportions”. For example, the GDP growth per annum that averaged 6 per cent between 1960-69 fell to 4.9 per cent between 1970-79. It went to as low as 0.6 per cent between 1980-85. Other economic indicators are given in Table 4.1

Table 4.1 Tanzania’s economic performance 1960-1985

	GDP growth per cent per annum	GDP/Capita growth per cent per annum	Inflation rate Per cent per annum	Investment as per cent of GDP	Trade Balance Million US\$
1960-69	6.0	3.3	7	14	-34
1970-79	4.9	1.8	12	20	-190
1980-85	0.6	-2.2	30	19	-456

Source: Mutagwaba (1996:3)

Some of the reasons attributed to the failure of the system were related to socialist policies that were formulated in line with the political system. These policies, on the one hand, led to the nationalization of major means of production and the establishment of a state directed economy. This had an effect of dampening foreign investment that

¹⁷ Two parastatal organization were established: National Estates and Design Co. Ltd. (NEDCO) to deal with design and Mwananchi Engineering Construction Company Ltd. (MECCO) to deal with construction of building and civil engineering works. Currently NEDCO has been privatized and MECCO is in the process of being privatized.

was important in transforming the country's economy from being agricultural to industrial based. On the other hand, the government embarked on massive social welfare programmes for its citizens, which could not be supported by the economy. Through the same policies, Tanzania felt that it had a moral obligation to assist in the liberation struggle in Southern African countries. The support in this struggle together with its war with Uganda in 1979 to 1980 further increased the Tanzanian economic crisis (Malyamkono and Bagachwa, 1990; Mutagwaba, 1996).

In the 1980s the Tanzanian government, with pressure from the World Bank, the IMF and other donor organizations undertook some economic reform measures. These led to a decreased participation of the public owned parastatals and increased participation of the private sector in the economy.

In 1991, the Zanzibar Declaration came into force, and it modified many aspects of the Arusha Declaration (Tripp, 1997). Although Tanzanian leaders to-date still proclaim that the official economic policy of the country is that of socialism and self-reliance, the introduction of the Zanzibar Declaration saw a rapid increase of capitalist elements in the economy. Of importance was the overall increase in the participation of the private sector in many sectors of the economy. Most of the government owned parastatals were privatized and the process is still going on. According to Rubambe (2000), by December 2000, about 330 parastatals had been privatized out of the earmarked 395 parastatals since the privatization process started in 1992. The remaining 65 parastatals are scheduled for privatization up to year 2003.

The implementation of economic recovery programmes instituted in the mid 1980s resulted in the improvement of the economy. Between 1986-92, the annual average growth of the GDP was 4 per cent compared to 0.6 per cent between 1980-85. During the same period there was a rise of 1.5-2 per cent in the per capita income compared to the decline of 2.2 per cent between 1980-85 (GOT, 1993). The growth rate of GDP 1991-95 was 2 per cent per annum, the fall being attributed to severe drought the country faced during the period. Between 1996-97 the GDP growth rate increased to 3.8 per cent per annum (ILO and GOT, 1998). The GDP annual growth rates for 1998 and 1999 were 4 and 4.8 per cent respectively (GOT, 2000b).

Given the country's big debt burden, which has accrued since the early 1960s, the benefits of an improved economy were not registered to people. For example, debt servicing grew from 5.9 per cent of the GDP in 1986/87 to 7.4 per cent of the GDP in 1991/92 (GOT, 1993). In 1998/99 and 1999/2000 the government spent 22 per cent of its income to service its external debt. The same percentage was planned for the financial year of 2000/2001 (GOT, 2000b). Actually, the implementation of economic restructuring programmes has aggravated the employment problem. For example, between 1993-1995 a total of 30,460 employees¹⁸ were retrenched (Mjema, 1999) and since then more workers have been retrenched in the privatization of loss making parastatals (PSRC, 2000).

It was discussed in Chapter Two that economic hardship forms a breeding ground for the informal sector activities. It is argued that as long as the annual debt servicing remains above the annual GDP growth rate, the economic hardships facing the country will continue to increase resulting in the increase of the informal sector.

4.6 GOVERNMENT POLICIES TOWARDS THE CONSTRUCTION SECTOR

4.6.1 The role of policy in developing the construction industry

The ILO (1987) and the UNCHS (1996) cited inappropriate government policies and their co-ordination as being one of the problems hindering development of the construction industries in developing countries. The UNCHS (1996:50) observed that "few developing countries had comprehensive plans or policies for addressing problems confronting the construction industry. The industries were taken for granted and were ignored in the national development plans".

According to Kirmani (1987) cited in Msita (1998), governments have an important role to play in developing the construction industry. He stated that:

"....government commitment is an essential requirement for the development of construction capacities in member countries. Government must, not only have a general

¹⁸ Most of the retrenched workers end up establishing businesses, formal and informal, thus leading to an increased competition in the respective markets.

objective of developing a domestic construction industry, it must be prepared to support a nascent or ailing industry through responsible financing and contracting of its public works construction and maintenance, and through introduction of policy and procedural reforms to remove constraints which affect the industry.”

The ILO (1987) identified three categories of policy interventions that are necessary for the development of the construction industries of developing countries. These are:

- Policies to improve small contractors' access to work;
- Policies to create a more favourable business environment; and
- Policies and programmes for training and technical advice.

As discussed previously, one of the difficulties facing small contractors is their inability to obtain work. Governments, being one of the major clients, particularly in public sector works, could improve the situation by devising appropriate policies to improve access to work. The ILO (1987) listed ten areas of intervention, which could fall under three groups:

- Creation of jobs in the public and private sector;
- Preferences or tender biases to big contractors subcontracting to small contractors; and
- Simplification of tendering procedures and tendering documents, and standardization of design.

It was suggested that the adoption of the above policy measures would make jobs available in the market, and therefore facilitate the effective participation of small contractors.

A harsh business environment was also cited as one of the problems inhibiting the growth of small contractors. The governments, through appropriate policy measures, could introduce a business environment conducive for the small contractors to operate. These include:

- Relaxation of contractors licensing and registration procedures;
- Relaxation of tendering requirements;

- Improving contractors access to financing, materials, tools and equipment; and
- Improving contractor payment procedures.

Policy measures could also be introduced to overcome the contractors' owner-related problems being mainly the lack of technical and managerial expertise. This could be achieved through training and provision of advisory services (Materu, 2000; Sengenge, 2000).

However, it is important to realize that policy intervention measures taken to develop the construction industry would not work if the country's economy is poor. A good economy is important as it creates demand for construction services. According to Kirmani (1987), cited in Msita (1998) "the industry, and any interventions designed to support it cannot prosper without a sustained demand for construction services". This calls for macroeconomic policies, which stimulate the growth of the economy.

4.6.2 Tanzanian policies towards the construction sector

A landmark in the construction industry in Tanzania came in 1977 after the conduct of the Local Construction Industry Study (LCIS) (GOT, 1977). The purpose of the study was to review conditions of the Tanzanian construction industry and recommend appropriate measures that were to be taken to improve the efficiency and capacity of the industry. The study found that:

- There was a shortage of resources including building materials, equipment and spare parts, and skilled manpower, causing a high dependence on foreign resources.
- Private firms controlled most of the building industry, and most of them were small or medium size family firms with low capacities and were often owned by non-citizens.
- The construction costs were very high in comparison with developed countries.
- There were no Tanzanian standards, resulting in the common use of British Standards and Codes of Practice, sometimes inappropriately.

- There was a lack of communication between research institutions. This also manifested itself in most institutions in the field of construction that worked in isolation, with little information on what other institutions were doing.

The LCIS concluded, amongst others, a need to improve planning, co-ordination and communication through the establishment of a Construction Council and strengthening of the Planning Unit of the Ministry of Works. The Construction Council was to be a forum for discussing problems and making recommendations, and could establish task groups to tackle special problems. The Planning Unit was to monitor capacities in the sector, support other ministries with adequate statistics for planning purposes, co-ordinate long term and annual planning on construction requirements and form the secretariat of the Construction Council and its task groups (GOT, 1977).

Based on the recommendation of the Study, the NCC was established in 1979 by an Act of Parliament No. 20 as a parastatal organization under the Ministry of Works (GOT 1979), and became operational in August 1981. The NCC was vested with the responsibility of promoting the development of the Tanzanian construction industry.

At the time of conducting the LCIS and establishing the NCC, the development vision of Tanzania was based on centralized policies of socialism and self-reliance. This entailed the creation of a state economy. Thus, participation of the private sector was in essence a temporary phenomenon and was to be decimated in time. The LCIS was very clear on this as quoted (GOT, 1977:40):

“The aim of the government is to try as hard as it can to use public institutions for construction works so as to eliminate exploitation which is being done by groups or individuals. The way to increase that ability is to try and develop public co-operation which exist now and if there is a need, which there is, to form new construction groups.”

The success of the LCIS is mainly reflected in the NCC’s successes (Msita, 1998). The NCC spearheaded the development of the construction industry in Tanzania in a number of areas, including:

- *Promotion of the establishment of professional association and allied organizations.* The following associations were established through the initiative of the NCC: the Association of Consulting Engineers Tanzania (ACET), the Tanzania Building Contractors Association (TABCA)¹⁹ and the Architectural Association of Tanzania (AAT). Others are the Tanzania Institute of Quantity Surveyors (TIQS), the Tanzania Roads Association (TRA), the Tanzania Civil Engineering Contractors Association (TACECA)²⁰ and the Tanzania Institute of Arbitrators (TIA). The establishment of these associations was important for effective co-ordination of the actors in the construction industry.
- *Improvement of the construction industry performance through training.* The NCC has conducted several seminars and short courses on a number of topics and to a wide range of construction professionals. Since 1987 it was involved in general contractor training in construction and maintenance of road works, and since 1992 in contractor training in labour-based road rehabilitation methods.
- *Advisory services to contractors as well as clients.* The services included consulting assignments to review tender evaluations, selection of consultants, assessment of training needs, packaging of work and contract/project management issues. This also included conducting technical audits at various stages in a project's life cycle.
- *Settlement of disputes.* This was achieved through the publication of Arbitration Rules and maintenance of a list of arbitrators. The NCC co-ordinated the arbitration processes and acted as a link between the arbitrating parties.
- *Promotion of optimum use of local construction materials.* This was achieved through research, seminars, exhibitions, and publication of a directory of locally manufactured construction materials.

¹⁹ All the associations are still active with the exception of TABCA which has been dormant from about 1992 (BICCO, 1996).

²⁰ TACECA members are civil works contractors only. Currently there are efforts to establish a contractor's association that will cater for all groups of contractors in the CRB's categories.

- *Research activities on issues affecting the construction industry.* With the exception of the research aimed at establishing a schedule of rates and labour productivity constants, the main pre-occupation has been on studies on the status or finding a solution to certain constraining conditions in the industry.
- *Documentation and dissemination of information relating to construction activities.* This was achieved through the establishment of a small reference library, seminars, and a newsletter, a journal and publication of various documents. Published documents include: Code of procedure for tendering for civil and building works in Tanzania, Standard conditions of contract for building works in Tanzania, Arbitration rules, Directory of construction materials, Technical audit guidelines and Guidelines on contract administration.
- *Advisory role to the government on strategic interventions needed for the development of the industry.* Some of the interventions included: The National Construction Industry Development Strategy (NCIDS) issued in 1991 and development strategies for local contractors and consultants. Currently the NCC is co-ordinating the formulation of the Construction Industry Policy (CIP) to supersede the NCIDS. The Council is also spearheading the establishment of Construction Industry Development Trust Fund (CIDTF), which is expected to solve financial problems experienced by contractors (Kaduma and Msita, 1999).

In 1991, the government of Tanzania issued the NCIDS²¹. The objective of the NCIDS was to encourage the development of infrastructural facilities through the optimum use of existing resources (GOT, 1991b). It further aimed to develop an efficient and effective construction industry competent to meet the requirements of the infrastructure development within the country's overall development objectives. The strategy focussed on many aspects of the Tanzanian construction industry including planning, design, construction, maintenance, resources, research and development, regulatory measures, and organizational framework of the industry.

The NCIDS came into effect almost 15 years after the LCIS and 10 years after the establishment of the NCC; however, at the time of its inception the construction industry was still beset by almost the same problems identified by the LCIS. Actually, some of the problems in the NCIDS were a manifestation of the failure of the political system of socialism and self-reliance which was actively pursued by the country before 1985. These problems include (GOT 1991b: 2):

- Lack of clear developmental objectives for the industry;
- Heavy dependence on foreign resources such as materials, equipment and expertise which continued to be supplied largely by foreign consultants and contractors; and
- Control of the building sub-sector by small or medium size family firms operating at low levels of capacity and with inadequate working capital.

The objectives of the NCIDS largely coincided with the recommendations of the LCIS towards the development of the construction industry. Unlike its predecessor, the NCIDS encouraged the participation of the private sector in the construction industry and the use of the informal sector particularly for rural housing.

The LCIS and NCIDS were all conceived under the Ministry of Works, which is generally regarded as responsible for the development of the construction industry. However, the construction industry is affected by and/or depends on decisions of many actors including the Planning Commission, different ministries and government institutions, donor organizations and the private sector. These actors affect or influence the construction industry through planning, co-ordination and policy, financing, regulation, physical planning, supply and distribution of construction materials and equipment, execution of construction works and skills development and technological enhancement. The development of the construction industry should therefore be a concerted effort of various bodies and organizations that are positively or negatively affected and/or involved in construction activities.

²¹ The formulation of NCIDS was to a large extent due the pressure of the World Bank, which at the time was financing the Integrated Road Project aimed to improve the Tanzanian road network.

4.7 GOVERNMENT POLICIES TOWARDS THE INFORMAL SECTOR

4.7.1 The role of policy in developing the informal sector

The UNCHS (1991) suggested that an important juncture towards developing the informal sector would be attained by creating an enabling environment. This entails coming up with clear policies to encourage the sector's activities and protect the rights of its actors, followed by designing strategies to solve problems facing the sector. The most documented problems of the informal sector operators include lack of capital and credit, lack of equipment and spares, lack of technical and managerial skills, lack of market and customers and lack of reliable working premises (ILO, 1972; UNCHS, 1991)

The UNCHS (1991) gave some of the strategies for developing the informal sector. They could be summarized into three groups:

- *Policy Intervention measures:* The emphasis here is to provide an enabling environment for the informal sector to operate; which calls for the introduction of appropriate policies that shall support, address and reduce the severity of the problems facing the sector.
- *Marketing and Financial measures:* The informal sector should be supported financially by making credit available on soft terms. In addition, markets should be created for goods produced by the sector, and this could be achieved by establishing proper links with the formal sector and encouraging government departments to purchase from the sector.
- *Training measures:* The informal sector operators should be trained in business and marketing skills required to run a profitable business. In addition, their technical skills should be upgraded to improve the quality of products produced.
- *Technological measures:* There is a need to create regulations, standards, codes and specifications for the production and use of items produced by the sector.

The informal sector caters for the needs of a wide population in Tanzania, including the employed and unemployed, the low and middle-income people, etc. Its inputs and outputs cover a wide range of industries i.e. construction, trade, manufacturing, mining and quarrying, transport and communication, etc. Therefore policy intervention to promote the sector should be a co-ordinated effort of all stakeholders. Mutagwaba (1996) classified the policies governing the operation of the informal sector into: regulatory policies, global policies, and promotional policies.

Regulatory policies provide a regulatory environment within which the informal sector can exist, and include: regulations concerning licenses; minimum standards of hygiene and building infrastructure for the workplace and for the output of the enterprise; national and local taxes; and formal accounts in business operations. Most of these regulations are considered stringent to most of the informal sector operators.

Global policies relate to policies that regulate the economy and make it grow. The informal sector would thrive well in a good economy. Macro and anti-inflationary policies for the economy would set an appropriate environment for the activities of the informal sector. Other policies falling under this category which affect the activities of the informal sector include foreign exchange and trade policies, monetary and credit policies, fiscal policies, infrastructure policies, labour laws and regulations and training policies.

Finally, promotional policies involve the creation of an explicit legal and institutional framework for the sector. It also involves the creation of institutions to assist the informal sector with technical and economic services, credit services, provision of tools and raw materials, training and marketing assistance.

4.7.2 Tanzanian policies towards the informal sector

According to Kenti and Mushi (1995), prior to the Arusha Declaration there was little need to develop informal sector businesses as the unemployment was low and basic human needs were satisfied. People in the rural areas gained employment on plantations while those in the urban areas worked for the government or in the factories and services sector. This was at a time when a capitalist, free market economy was the policy of the country.

The Arusha Declaration, which became operational in 1967, had two major implications for the informal sector activities. Firstly, because of the economic hardships it brought, it left people with no alternative other than to engage in the informal sector activities (Malyamkono and Bagachwa 1990; Tripp, 1997). The economic hardship manifested itself in the shortage of basic commodities, and a fall in real incomes due to high inflation and high unemployment among the urban population. Secondly, while it created the need to engage in the informal sector activities, it was not in favour of the existence of such activities. According to Kenti and Mushi (1995:50), the government regarded the informal sector activities as corrupt since they “challenged the socialist notion of an egalitarian and classless society”.

Therefore, in the 1970s and 1980s there was generally an increasing need for the informal sector activities to alleviate economic hardships which people were facing. At the same time, the government was waging a war against such activities. Kenti and Mushi (1995:51) enumerated a number of events by the government to eradicate the informal sector activities. These included:

- The abolishing of the issuance of urban trading licenses to self-employed traders in 1973.
- The attempts to re-settle Dar-es-Salaam’s self unemployed in *Ujamaa* (socialist) villages in 1976;

- The enactment of a Penal Code amendment in 1983, which branded the self-employed as unproductive and as idle disorderly persons who were to be banned from towns.
- The passing of the Human Resources Deployment Act in 1984, which introduced official identification cards in an attempt to rid towns of idlers and loiterers i.e., the unlicensed self-employed.

According to Kenti and Mushi (1995:51), the above government policies to eradicate the informal sector activities had one major shortfall; they failed to differentiate between “bona fide operators with established businesses and those who were either unemployed migrants or undertaking criminally illegal activities”.

The informal sector continued to thrive despite the concerted effort by the government to eradicate it. The government also from 1985 embarked on a policy of privatization and restructuring of government owned parastatals. This together with restructuring in the governments’ owns labour force led to retrenchment of an excess labour force. New entrants to the job market could not get employment as well. This exacerbated the problem of unemployment, and caused the informal sector to continue to grow (Malyamkono and Bagachwa, 1990; Mutagwaba, 1996; Tripp, 1997).

In 1987, the government of Tanzania was forced to publicly admit the importance and potential of the informal sector. In May 1987, the President of Tanzania was quoted as acknowledging that “since the government could not afford to pay people adequate salaries, they should be free to do various income generating activities to support themselves” (Kenti and Mushi, 1995:15). Despite the President’s permission to allow people to engage in the informal sector activities, officials of local governments continued to harass the informal sector occasionally. In 1988 and 1989, in what could be taken as an official policy direction on the informal sector, the President formally denounced the harassment of street vendors whether licensed or not. He vowed that stern action would be taken against any police or militia found harassing vendors (Daily News, 1989 cited in Kenti and Mushi, 1995:15).

Since 1987, the government, donor organizations and non-governmental organization (NGOs) have undertaken various efforts to assist the informal sector. The first challenge towards assisting the sector was to understand the people involved and the size of the sector. The conduct of the NISS in 1991 (GOT, 1991a) paved the way to understanding the Tanzanian informal sector and has since then been referred to when formulating strategies its development.

Therefore in summary, the study of policies on the informal sector in Tanzania could be grouped into three periods:

- *Period before the Arusha Declaration (1961-67)*: During this period, the economy provided adequate employment and met basic human needs. There was therefore no need for the informal sector activities. The informal sector during this period did not manifest itself as a problem to the government and therefore there was no need to formulate any policies with regard to the sector.
- *Period between 1967-1987*: This period was characterized by the implementation of the Arusha Declaration. As discussed above, it was during this period that informal sector activities increasingly gained their importance as survival strategies in the face of increasing economic hardships. To conform with the policy of socialism and self-reliance, the government was forced to institute policies that banned this sector's activities. These policies did not succeed in ending the sector because they addressed it as a problem to be eradicated. They did not its growth as a response to social-economic problems in the country and that to actually eradicate the sector entailed the eradication of the problems that gave rise to the sector.
- *Period after 1987*: The government's acceptance of the role that could be played by the informal sector to alleviate economic hardships facing its citizens created a new era for the informal sector activities. Policies have since then been formulated on how to promote and not on how to eradicate it. The policy makers, having realized the problems that led to its existence, regarded it to be a solution to those problems and not a problem in itself.

It is the period after 1987 that is of interest to this research. One of the major assumptions made in this thesis is that the informal sector exists in Tanzania and the government officially accepts it. However what is lacking is proper policy direction for its development.

4.8 CURRENT EFFORTS IN POLICY FORMULATION IN TANZANIA

4.8.1 The need for new policies

After the introduction of the free market economy in Tanzania in the mid 1980s', it was important to formulate new policies in line with the government's economic, social and political ideology, which would conform to new emerging local and international demands. A number of policies have been or are in the process of being formulated. This section will discuss policies which impact directly on the construction industry and the informal sector. As discussed before, there are linkages of the construction industry with other industries, and the informal sector operators occur in almost every industry. It was therefore imperative that policies formulated to address different industries would have some impact on the construction industry and the informal sector.

The policy formulation process, as discussed in section 4.3.1 of this work, if adhered to, would result in the proper co-ordination in the formulation of various policies to ensure that various policies do not contradict each other.

Policies discussed in this section include the following:

- Construction Industry Policy (CIP).
- National Human Settlements Development Policy (NHSDP);
- The National Employment Policy (NEP);
- Sustainable Industrial Development Policy (SIDP); and
- Small and Micro Enterprise Development Policy (SMEP);

These policies generally address positive aspects (advantages) of the informal sector and therefore the need to support it. Despite the shortcomings of individual policies which shall later be discussed, a common shortcoming is that no policy has addressed the disadvantages of the sector and how this should be addressed.

4.8.2 Construction Industry Policy (CIP)

Since independence there have been a number of initiatives aimed at fostering the local construction industry in Tanzania. As discussed earlier, serious initiatives came after 1977 as a result of the LCIS, which was discussed in Section 4.6.2 of this chapter. The initiatives included the establishment of the NCC, contractors and professionals registration boards, plant and hire company facilities, and professional and allied trade associations. Other equally important initiatives were the formulation of the NCIDS and training programmes for contractors. The NCC (1997) reported that despite such interventions, the local construction industry has continued to exhibit inadequate capacity, lack of working capital, low participation of work opportunities, dominance of foreign players and poor quality services and products.

Participants in the workshop to formulate objectives and work opportunities for enhanced participation of work opportunities for local contractors and consultants in Tanzania, which was held in June 1997, expressed amongst others a lack of clear and appropriate policy as a major constraint to the development of the construction industry in Tanzania (NCC, 1997). Historical reasons relating to Tanzanian economic policies were attributed to be one of the root causes. The government of Tanzania, through its policy of socialism and self-reliance, did not support the private sector initiatives and went ahead to create a state construction industry which later became a burden to the government (Bjorklof *et al.*, 1992). In the NCIDS, the government came out clearly in support of the participation of private sector in the industry, but because of the previous repression, the sector did not possess the capacity and capability to discharge its new recognized role.

Other reasons cited for the lack of clear and appropriate construction industry policy were:

- Unclear government vision;
- Non-involvement of key players in the formulation of policies;
- Absence of strong pressure groups; and
- Lack of awareness of the players on their rights embodied in laws and policies.

The same workshop (NCC, 1997) suggested strategies to mitigate the policy constraints, which included:

- Preparation of appropriate and clear construction industry policy by involving the key players in the process; and
- Creation of awareness of existing laws and policies affecting the players in the industry.

Since 1997, the NCC has embarked in the policy formulation process. In the process, it solicited views and opinions of the players in the construction industry. The NCC presented a draft policy document for discussion in a workshop held in May 1999. This workshop included a cross section of representatives of the stakeholders in the Tanzanian construction industry. Inputs and comments obtained from the participants of this workshop were used to improve the policy document. A one-day workshop was again organized in June 1999 to discuss the policy document to ensure that changes proposed in the previous workshop have been included. After this workshop the draft of the policy was submitted to the Ministry of Works which is the Ministry responsible for the construction industry in Tanzania.

The document was then reviewed by the Ministry of Works officials and the Council of the NCC to give rise to another draft document, which was submitted in April 2000. The mission, goal and objectives of the CIP are summarized in Table 4.2.

Table 4.2 Mission, goal and objectives of the Construction Industry Policy.

<p>Mission of the Construction Industry as per the Construction Industry Policy (CIP) To meet the demand for construction products to support sustainable economic and social development objectives.</p> <p>The goal of the CIP To develop an internationally competitive construction industry so that it can undertake most of the construction projects in Tanzania and export its services and products.</p> <p>Objectives of CIP</p> <ul style="list-style-type: none">• Improved capacity of contractors, consultants and the informal sector• Improved capacity of the public sector and private sector clients• Improved competitiveness• Ensuring cost effectiveness• Environmental sustainability• Support other socio-economic development objectives• Improved national, regional and international collaboration for capacity and performance improvement.• Improved co-ordination, collaboration and performance of development support agencies.
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Source: Msita (2000)

The proposed policy has been prepared to conform to the Tanzanian long-term development strategy “Vision 2025”. According to the GOT (1999c), the goal of Tanzania Development Vision 2025 is to move Tanzania from a least developed country to a middle-income country by the year 2025. Amongst the policy issues addressed in the CIP is the improvement of the performance of the informal construction sector.

Clause 6.3 of the CIP defines the informal construction sector, its importance and hence the need for improvement, and the strategies that will be implemented by government to improve the performance of the sector. This is shown in Table 4.3.

The CIP also addresses the importance of the informal sector in support of human settlement development. Clause 6.12.2(c) of the policy, which is reproduced below, covers a strategy that will be pursued to realize this.

“Facilitating self-help initiatives and informal sector activities for adequate shelter delivery through provision of building designs and construction practice guidelines.”

The policy, however, does not focus on poverty eradication despite the discussed role of the informal sector in the creation of employment and hence in eradicating poverty. It can however, be concluded that this role of the informal sector is covered under section 6.3.3 of the policy reproduced herein as Table 4.3. The strategy covered in section 6.3.3 (a) of the policy: “recognizing and promoting the useful existence of the informal construction sector as an integral part of the construction industry” could be taken as an indication that all positive aspects of the informal construction sector would be taken care of.

Table 4.3 Composition, importance and strategies contained in the CIP for the development of the informal construction sector.

6.3	Improvement of the performance of the informal construction sector
6.3.1	The informal construction sector comprises of unregulated individuals and enterprises engaged in economic activities in construction involving the supply of labour, production of building materials and building components. It is also involved in the production of buildings – without the involvement of contractors – directly in response to client needs
6.3.2	The informal construction sector has a great role to play in the development of the construction industry and the economy – particularly with regard to employment creation and supply of houses in rural and urban areas. It supplies building materials and labour to the formal sector through sub-contracting arrangements. On the other hand, the formal sector acts as one of the outlets of the outputs of the informal construction sector. This symbiotic relationship makes the promotion of the informal construction sector a growing necessity in the context of overall national economic policies and with regard to the effective performance of the construction industry. It is, however, beset by a number of constraints, which negate its effective contribution. Such constraints include lack of skills, lack of capital, prohibitive regulations, and insecure operating environment. There is also very little information available on its activities or even in terms of its contribution to the Gross Domestic Product (GDP). Hence, there is no reliable basis to plan comprehensively for its development.
6.3.3	In order to improve the performance of the informal construction sector, the following strategies shall be implemented: <ul style="list-style-type: none"> a). Recognizing and promoting the useful existence of the informal construction sector as an integral part of the construction industry. b). Researching, documenting and disseminating information on the informal sector for the purpose of its development. c). Improving productivity and quality through measures that shall include training, formulation and dissemination of simple practice guidelines. d). Supporting the establishment of credit facilities for the informal sector.

Source: NCC (2000)

The proposed CIP has the following shortcomings:

- It does not appreciate the effect of other existing policies and legislation and the effect they will have on the construction industry;
- Its formulation process has not been representative enough. The participation of stakeholders was mainly in the two organized workshops. Different organizations were not given adequate time to look at the proposed CIP and deliberate upon it before the workshops. It is therefore not clear whether the views obtained were of the individuals or the organizations they were representing;
- The responsibilities of various actors in the implementation of the policy are not clearly spelt out. While the role of the NCC has clearly been spelt out in section 6.18.6 of the policy document, the role of the Ministry of Works in the implementation of the policy is clearly missing. The same is with other actors; and
- The programme of implementation is lacking i.e., the priority of implementation of various proposed strategies to address policy issues is not shown.

4.8.3 National Human Settlement Development Policy (NHSDP)

The NHSDP, which was a culmination of a three-year process involving various meetings, workshops and consultation, was approved in January 2000. Its goals are (GOT, 2000a):

- To promote development of human settlements that are sustainable; and
- To facilitate the provision of adequate and affordable shelters to all income groups in Tanzania.

The role of the informal sector in the provision of urban and rural housing was discussed in section 3.6.5 of this work. The proposed policy, in its background information corroborates this role played by the sector. It is quoted (GOT 2000a:4)

“The informal sector, bearing in mind its rapid growth and expansion since 1990, is now the major financier and provide of housing especially in urban areas in the country”

With the estimated 30 per cent of Tanzanian population living in urban areas (GOT, 2000a), this contribution of the informal sector to housing is very significant. It would have been expected that with the acknowledged importance of the informal sector in the provision of housing, there would be adequate attention given to the sector. This is not well reflected in the NHSDP. The main objective of the policy covers aspects that could somehow be related to the informal sector to a certain extent. These include:

- **Facilitation of creation of employment opportunities and eradication of poverty;**
- **Promotion of capacity building of all actors involved in shelter delivery and human settlements development;**
- **Promotion of the use and production of building materials that are affordable; and**
- **Assistance of the poor to acquire decent shelter.**

The NHSDP expects that eradication of poverty and acquisition of shelter by the poor would be achieved through building the capacity of the informal contractors and informal building materials producers who are the actors in the shelter delivery process. However, when examining policy issues and policy statements there is very little coverage of how the role of the informal sector in achieving those objectives would be achieved. The few notable policy statements reflecting on the informal sector are:

- **Building and construction standards shall be revised so that they become functional and performance based rather than prescriptive. They shall be flexible and affordable;**
- **The government shall promote small scale building material industries;**
- **The government shall promote labour intensive projects e.g. during the provision of infrastructure in human settlement;**
- **The government shall earmark special areas within neighbourhoods for informal sector activities; and**

- Private and informal sectors shall be encouraged to engage in the production of building materials by giving them incentives.

The policy does not address how to control problems of urban zoning which are caused by the informal sector activities, nor how to mobilize the informal sector and its resources towards the provision of affordable shelter which is the main goal of the policy.

Unlike the CIP, the NHSDP shows the responsibilities of various actors in the implementation of the policy and the time frame for implementation. However, the priority for implementation of different policy issues is not given.

4.8.4 The National Employment Policy (NEP)

The role of the informal sector in the provision of employment for the urban population was discussed in section 2.6 of this thesis. It is therefore expected that government policy on employment should acknowledge this role and should have strategies to boost the role played by the informal sector in employment creation. Indeed the National Employment Policy (NEP) which came into effect in 1997 does so.

Section five of the NEP clearly summarizes the size and the role that can be played by the informal sector in employment creation (GOT, 1997b). It also gave a brief overview of the problems facing the sector. The aim and objectives of the policy amongst others are (GOT, 1997b):

- To strengthen (through the removal of legal bottlenecks) the relationship between formal and that of self-employment; and
- To encourage self-employment activities in the informal sector.

The policy does not however come up with any strategies to promote the informal sector. For example, despite of the fact that manufacturing and trade industries constitute the largest component of informal sector enterprises (GOT, 1991a), the policy does not show strategies to promote the employment of the informal sector in these

industries. The policy further proposed the creation of a National Employment Council. Representation to the Council excludes the informal sector.

A need arose in 1999 to review the policy because of such shortcomings and others unrelated to the informal sector that were identified in the adopted policy, and the lack of the definitions of roles and responsibilities of stakeholders. The revised NEP linked the growth of the informal sector with that of small-scale enterprises, and put forward a strategy for the critical review of policies and legal framework constraining the smooth running and expansion of these sectors. It further proposed the establishment of the National Employment Advisory Committee with fourteen members including one member representing the Informal Sector Associations. Even then, the revised policy did not come up with specific strategies for promoting employment in the informal sector. It only appreciated the employment potential of the informal sector and called for a critical review of policies and a legal framework constraining the smooth running of the sector (GOT, 1999e).

Despite the efforts to revise the policy, basic issues like responsibilities of various actors in the implementation of the policy and a programme for the implementation of the policy are lacking.

4.8.5 Sustainable Industrial Development Policy (SIDP)

The Sustainable Industrial Development Policy (SIDP) came into effect in 1996 (GOT, 1996b). It recognized the role played by the informal sector as a source of potential entrepreneurs. One of the objectives of the SIDP was the contribution to human development and the creation of employment opportunities. The policy aimed to achieve this through, amongst others, the promotion of small-scale industries and informal sector activities.

The policy aims to assist the informal sector to gradually develop entry into the formal sector to enable it to benefit from facilities available in the formal sector under the umbrella of the Small and Medium Enterprises (SMEs). The strategies to develop small

and medium enterprises are contained in section 3.52 of the SIDP, and include (GOT, 1996d);

- Strengthening the capacities of SMEs service providers;
- Improving the access of capital to SMEs;
- Improving the regulatory environment;
- Assisting the informal sector to gradually enter the formal sector; and
- Supporting indigenous entrepreneurs through improved access to finance, business information, technology, training and a simplified registration process.

The policy implementation programme was divided into three phases. The first five years of the policy duration is referred to as the short term phase, the period between the fifth and fifteenth year is referred to as the medium term phase, and lastly the period beyond fifteen years is referred to as the long term phase. There is, however, no clarity of the priority given to the implementation of strategies to develop SMEs in this programme.

The SIDP, as a policy addressing the manufacture and trade/restaurant/hotel industries has an enormous impact on the informal sector. It was revealed from the NISS that 76 per cent of informal sector enterprises were operating in these industries and employed 73 per cent of the informal sector workers (GOT, 1991a). The informal sector is clearly a very important component of these industries. It was therefore expected that the policy would have spelt out clear and adequate strategies to promote the informal sector and to avert the hostility which exists between the formal traders and the informal sector operators. The policy falls short of doing that.

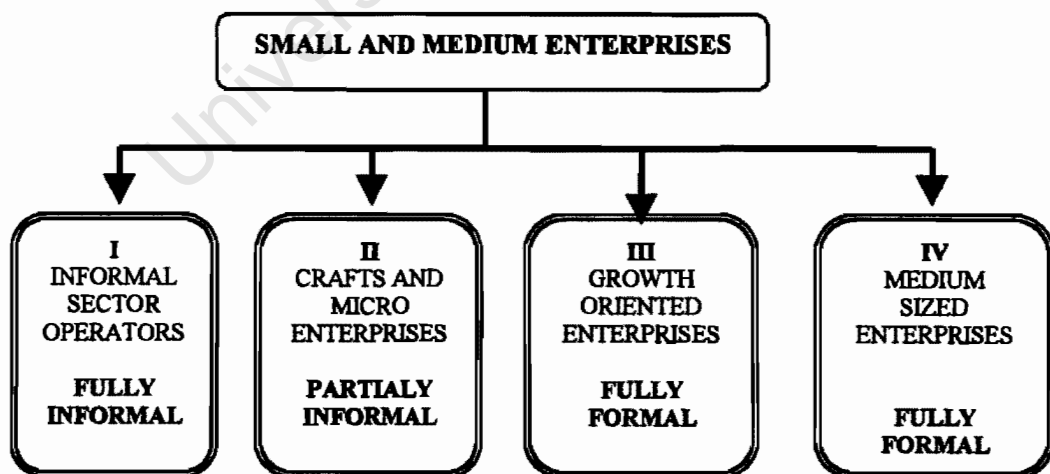
4.8.6 Small and Medium Enterprise Policy (SMEP)

The SMEP is supposed to cater for the needs of the informal sector. Its formulation started in 1998 with the aim of creating a favourable environment for the SMEs (Wangwe, 1999). For the purpose of SMEP, SMEs include:

- Informal sector operators carrying out, almost exclusively, informal trading activities;

- Crafts and other micro-enterprises which are small businesses often involving only the owner, some family member and, up to 5 employees; with an annual turnover not exceeding Tshs. 20 million;
- Growth oriented small enterprises that are tax-registered, operate from business or industrial premises and meet other formal registration requirements. They employ between 6 to 30 people and have an annual turnover of up to Tshs. 100 million; and
- Medium sized enterprises facing obstacles and constraints that cannot be solved through normal market forces and private sector action. These employ between 31 and 50 people with an annual turnover not exceeding Tshs. 500 million.

Figure 4.3 shows the different groups of SMEs as categorized in SMEP. The first (I) group and part of the second (II) group consist of what has continuously been referred in this thesis as the informal sector i.e., unlicensed and unregistered individuals or enterprises. Some of the enterprises in the second (II) group, and all the enterprises in the third (III) and the fourth (IV) group are fully licensed and registered enterprises and comply with taxation and other business regulations.



Adapted from (Wangwe, 1999)

Figure 4.3 Groups of small and medium enterprises.

According to Wangwe (1999), the SMEs makes a vital contribution to job creation, income generation, competitiveness and export growth. In addition, the development of SMEs increases opportunities for traditionally disadvantaged groups of the Tanzanian population and ensures a more equitable distribution of wealth.

Proposed policy measures include, amongst others, the following:

- Creation of enabling legal and regulatory framework;
- Establishing differential taxation and other incentives;
- Developing of clusters/estates for small industries and other SMEs;
- Facilitating access to business advisory services;
- Supporting access to technology;
- Supporting SMEs exports;
- Promoting rural industrialization;
- Compliance with environmental regulations;
- Training in entrepreneurship, skills and management;
- Fostering linkages with large enterprises;
- Improving access of SMEs to information;
- Easing access to guarantees;
- Promoting the establishment of venture capital funds; and
- Empowering saving and credit institutions in rural areas.

The major shortcoming that could be identified is the wide coverage of the SMEs. There could be a danger that the proposed policy measures, although directed to all the groups as shown in Figure 4.3, would more likely be implemented in favour of groups II, III and IV. The measures, as presented, focus on what should be done to enable the SMEs in Group I graduate to fully licensed and registered SMEs in Group II with subsequent growth to levels of Group III and eventually to Group IV. Different groups, particularly those at the lower end, may need special attention and different approaches to their development.

4.9 SUMMARY

This chapter reviewed the process of policy formulation and evaluation and used it as a basis for discussing policies that impact on the informal sector and construction industry in Tanzania. Five policies at different stages of formulation were discussed including the CIP, NEP, NHSDP, SIDP and SMEP.

It was revealed that appropriate policies are important in fostering development in the world, Tanzania being included. However, it was shown that policy making is a complicated process, influenced by the struggles of different interest groups within a country and the politics of people in power i.e., the rulers. It is only through the rational decisions of the rulers that public policies reflecting the need and aiming to solve the problems confronting the society would be formulated.

The chapter also revealed that in Tanzania the policy of socialism and self-reliance, whose active implementation lasted for about 20 years (1967-1985), had severe effects on the economy and affected the performance of the construction industry. It led to an increase in the informal sector activities. Its failure gave rise to flexible policies that encouraged the participation of the private sector in the economy with reduced antagonism to the informal sector.

The chapter further demonstrated that the government of Tanzania is in the process of formulating various policies, including the CIP, the SMEP and the NEP; all of which affect the informal sector. The policy formulation process however, is not well coordinated and does not ensure wide representation of the stakeholders. The policies also lack implementation programmes, responsible implementers and the resources required for implementation. This may result in the overlap of responsibilities, shortage of resources and non-compliance at the implementation stage.

The discussion made in this chapter will form a valuable input for discussing the research results and testing the hypotheses later in this work. In the next chapter, the research methodology will be discussed.

CHAPTER FIVE

RESEARCH METHODOLOGY

5.1 INTRODUCTION

The previous three chapters covered the literature review on the informal sector, the construction industry and policy issues which are relevant to this thesis. The purpose of this chapter is to build on the introduction to the research methodology as it appears in Section 1.7 of Chapter One and to justify its use in this research.

The research problem is revisited to justify it in the light of the presented literature review. In addition, the chapter discusses the process of identifying the research method, the survey population, the sample design and the methods adopted for data collection. The questionnaires used for data collection and the response rates to the interviews are also illustrated. The chapter also gives the expected contribution to the knowledge by this thesis as well as pointing out the possible bias in the research process.

5.2 JUSTIFICATION OF THE RESEARCH PROBLEM

Chapter One of this thesis set out the research problem and the related sub-problems. To reiterate, the problem addressed in this research is: *Do the absence of appropriate policies on the informal sector affect the realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania?*

To answer the above research problem, it was found necessary to set up the following two sub-problems:

Sub-problem one: Does Tanzania lack appropriate policies on the informal sector?

Sub-problem two: Is the interaction between the formal and informal construction sectors beneficial?

To prove the problem and its sub-problems, the research set out to test the following hypotheses:

Hypothesis one: There are no appropriate policies on the informal sector activities in Tanzania.

Hypothesis two: There are potential benefits of interaction between the formal and informal construction sectors.

Hypothesis three: Lack of appropriate policies on the informal sector has resulted in the non-realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania.

The research problems and its sub-problems are strongly reinforced by the literature review on the informal sector, the construction industry and Tanzanian policies presented in Chapter Two, Three and Four respectively. The literature review revealed that the informal construction sector is growing, and plays an important role in providing employment and housing for the urban population in developing countries like Tanzania (Bjorklof *et al.*, 1992; GOT, 2000a). It also contributes to the country's GDP, GFCF and value added, making it an important sector in a country's economy. However, while there has been support extended by the government of Tanzania to the informal sector in trade and manufacturing industries, no similar support has been extended to the informal sector in the construction industry. It was shown that support to the informal sector, particularly appropriate policy intervention measures, is necessary to enable the sector perform well.

In addition, the literature review suggested that collaboration between the formal and informal construction sectors is beneficial to both sectors, and needs to be fostered to enable the construction industry to register its maximum impact on the economy of the country. It was pointed out that collaboration could largely be achieved through subcontracting arrangements. It was however shown that existing government policies and regulations were not supportive of the growth of the informal construction sector and therefore there was a need to develop new and/or reformulate the existing policies.

Chapter Four showed that Tanzanian policies based on the political ideology of socialism and self reliance contributed to the growth of the informal sector. The country has now shifted to a free market economy ideology, which supports private sector initiative, including the informal sector, in the economy. Therefore, it was important to formulate new policies in line with the government's new economic, social and political ideology. Efforts made by the government of Tanzania to formulate policies were discussed in Chapter Four. However, some formulated policies do not seem to address the actual problems, and at the same time they are inadequate and lack co-ordination.

In the light of further evidence gathered in the literature review, the presented research problem appears to be genuine and justifiable.

Later, in Chapter Eight the research hypotheses will be tested in the light of the data obtained from interviewing contractors and various government officials.

5.3 JUSTIFICATION OF THE METHODOLOGY USED

5.3.1 General

Various references were consulted in search of a methodology best suited for this research. These included Buckley *et al.* (1976), Casley and Lury (1981), Bless and Smith (1995), Czaja and Blair (1996), Fellows and Liu (1997), Leedy (1997) and Walker (1997). All these publications provided useful input towards the design of this research.

Fellows and Liu (1997) and Leedy (1997) defined research methodology as a systematic and logical procedure for solving a problem through the support of facts. Different approaches are available to classify research depending on the methodology employed to generate knowledge, on the nature of data required for the research or on the method employed to generate the data.

The following classification was considered in this chapter:

- Deductive and inductive research;
- Qualitative and Quantitative research; and
- Opinion, empirical, archival and analytical research.

5.3.2 Deductive and inductive research

The essential feature of research for a doctoral degree is that it leads to the discovery of new facts and information that makes an original contribution to knowledge (Phillips and Pugh, 1994). In order to contribute to knowledge, a research may aim to generate a new theory, in which case it is inductive; or may aim to test an existing theory, and is therefore deductive. According to Buckley *et al.* (1976), deductive research on the one hand is guided by hypotheses that are either accepted or rejected during the course of research. The use of deductive research requires some prior knowledge upon which to construct the hypothesis. The inductive research, on the other hand, is guided by a scientific inquiry and the researcher's efforts are concentrated on the procedures to obtain and analyse data and focus the analysis to the generation of a new theory. However, some researches consist of both modes. The conduct of inductive research could often result in a hypothesis that may require testing through deduction. Similarly, deductive research may raise a need for a detailed inquiry into a certain aspect of a problem, in which induction is applicable.

This research was primarily deductive in the sense that it essentially did not aim to generate a new theory. It sought to test hypotheses put forward in Chapter One. The hypotheses formulated were based on the existence of a body of knowledge relating to policies, the informal sector and the construction industry. This research puts to test the existing knowledge with regard to the following issues:

- The importance of the informal sector and the construction industry in the economy of developing countries;
- The nature of interaction between the formal and informal construction sector; and
- Effects of policy on the interaction between the formal and informal construction sector.

5.3.3 Quantitative and qualitative research

An array of qualitative and quantitative methods exist for carrying out research, and these have an impact on the manner in which the data is collected, analysed, interpreted and presented.

According to Holt (1998:83), a qualitative approach means to “utilise subjective methods very often based on a personal opinion, perception or feeling”. The qualitative approach seeks to gain insights and to understand people’s perception of things surrounding them. Strauss and Corbin (1990) regarded qualitative research as any research that produces findings not arrived at by any means of statistical procedures or other means of quantification. For a qualitative research, data is collected in an open-ended narrative that does not seek to make them fit into predetermined, standardised categories characterised by a typical test or questionnaire (Patton, 1980). Holt (1998) asserted that the underlying strategy in a qualitative research is to facilitate the emergence of relevant information from the analysis of the subject under study without pre-supposing what that relevant information may be. Qualitative research methods include process observation, opinion or expressions, unstructured interviews and open question surveys.

Kerlinger (1986:10) defined a quantitative research methodology as “the systematic, controlled, empirical and critical investigation of natural phenomena guided by theory and hypothesis about the presumed relations among such phenomena”. The quantitative approach involve gathering of factual data and studying relationships between facts and how such facts and relationships agree with the theories and findings of previous researches. The methodology is concerned with the size and magnitude of the situation being studied, and therefore its data collection involves making measurements. This could be achieved using structured interviews, structured surveys, symbolic models and physical experimentation (Holt, 1998).

Quantitative and qualitative methods have been customarily associated with research in the natural sciences and social sciences respectively. This has always been a source of conflict, particularly, for research in engineering management or other disciplines that

lie between the natural and social science. In most cases, researchers in the middle-of-the-road disciplines were forced to adopt quantitative approaches even in situations where the research involved human subjects (Fellows and Liu, 1997). This did not provide an understanding of the subject being studied particularly the behaviours that gave rise to the situation being measured. According to Fellows and Liu (1997:79), there is an increasing recognition of the potential of qualitative studies in what may be primarily a quantitative study. They attributed this to “acknowledgement of the potential for qualitative methodologies to get beneath the manifestations of problems and issues which are the subject of quantitative studies, and thereby, to facilitate appreciation and understanding of basic causes and principles, notably, behaviours²².”

Fellows and Liu (1997:95) defined triangulation as the “use of two or more research methods to investigate the same thing”. Triangulation is employed to complement the advantages while minimising the disadvantages of the individual approaches. According to Smith *et al.* (1991:133-134) research triangulation fall into four categories: theoretical, data, investigator and methodological. These are discussed below:

- *Triangulation of theories* involves using models from one discipline to explain situations in another discipline.
- *Data triangulation* relates to research in which data is collected over different time frames or from different sources.
- *Triangulation by investigators* refers to a situation where different people collect data on the same situation and the results are compared.
- *Methodological triangulation* uses both quantitative and qualitative methods of data collection.

²² The qualitative studies enable the researcher to establish the causes and behaviours leading to a situation which has been established by a quantitative study.

This research employed a methodological triangulated approach. A quantitative approach was used to collect statistical data on the contribution of the construction industry and the informal sector to the economy of Tanzania and to establish the basic demographic data of the interviewed contractors. A qualitative approach was used to solicit opinions from government officials and contractors through interviews.

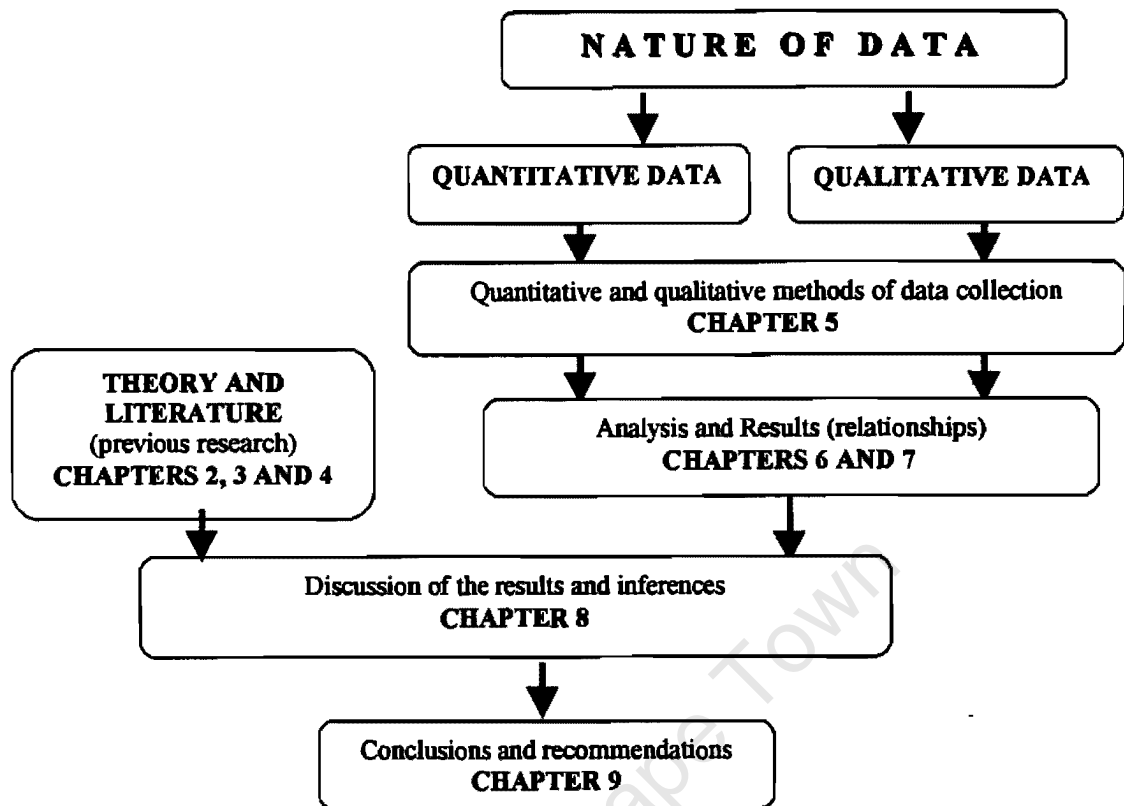
It was important to use both approaches because of the nature of the data itself. On the one hand, it was necessary to gather factual data to describe the informal and construction industry in the context of the whole economy and therefore attach some measure to their importance. At the same time, it was necessary to measure various parameters relating to characteristics, problems, and the nature of collaboration between the formal and informal contractors. On the other hand, there was a need to seek opinion from various individuals regarding the advocated importance of the informal construction sector, and whether something should be done to promote it. Similarly, it was necessary to seek opinion from the contractors regarding their working relationships and problems to gauge whether they have had an effect on the contractors' informality.

Figure 5.1 adopted from Fellows and Liu (1997:8) illustrates the framework of the methodological triangulation approach used in this research. The methodology for obtaining both types of data is explained later in this chapter while the resulting data are discussed later in Chapters Six and Seven. Other chapters, with the exception of Chapter One, are indicated in Figure 5.1 to show how they fit into this research framework.

5.3.4 Opinion, Empirical, Archival and Analytical Research

According to Buckley *et al.* (1976:15), there are four research strategies depending on whether the research is deductive or inductive. They defined a strategy to "refer to the essential nature of data and the process by which it is found and analyzed". The strategies give rise to four types of research, which include:

- *Opinion research* in which a researcher seeks views, judgement or appraisals of other persons with respect to a research problem. This is usually achieved through interviews, opinion polls and questionnaires (Buckley *et al.*, 1976:36)



Adapted from Fellows and Liu (1997:8)

Figure 5.1 Framework of Methodological Triangulation used in the research

- *Empirical research* which is based on observation or experience by the researcher through experimentation or fieldwork. This approach calls for the researcher to actively participate in the observation, instead of relying on the experience of others. Empirical research, unlike opinion research, “examines what actually happens as opposed to what people say has happened, is happening or may happen” (Buckley *et al.*, 1976:37).
- *Archival research* is concerned with the examination of recorded facts either in their primary, secondary or physical form. Primary data consist of original documents or official files and records, while secondary data consist of published data gathered by other investigators based on summaries or analyses of primary data. Both primary and secondary archives can be obtained through written records, tapes and other form of documentation. This distinguishes them from

physical data, like archaeological data, which is based on physical observation (Buckley *et al.*, 1976:40).

- *Analytical research* entails the use of internal logic by the researcher to solve the research problem. The problem is usually broken down into its component parts to discover its true nature and causal relationships among its variables. With analytical research, there is no necessity for the explicit reference to external data. The problem is solved “logically or philosophically” (Buckley *et al.*, 1976:41)

This research was conducted using archival and opinion strategies. The previous chapters on the literature review made use of secondary data from various sources to establish the size and importance of the construction industry and the informal sector. The method also allowed the gathering of documented opinions on the construction industry, the informal sector and policy issues. In summary, the data and opinions presented in the chapters on literature review were obtained from various documents using the archival strategy. Most of the data were obtained from the Tanzania Central Statistical Bureau (TCSB) and the NCC. Other data were obtained from publications and reports including the NISS (GOT, 1991a), the DISS (GOT, 1995), Basic Statistical Information for the Construction Sector – 1976-1997 (NCC, 1999). The ILO and World Bank publications and various research papers and textbooks were also consulted. The data obtained from the NISS and the DISS will be used in combination with the opinion data obtained from structured interviews to discuss the characteristics of informal contractors.

The fieldwork of this research made use of the opinion survey. Opinions were solicited from informal and formal contractors on issues that affect them in their working environment. The information/opinions that were solicited from the formal and informal contractors shall be discussed later in this chapter.

In carrying out the opinion survey, consideration was made of three survey methods: mailed questionnaires, telephone interviews and face to face interviews. Despite the long duration and high cost associated with face to face interviews; the method was favoured for the following reasons:

- It has a higher response rate compared to other methods. According to Czaja and Blair (1996:32), mailed questionnaires has the worst response rate²³, usually 45-75 per cent, against 60-90 per cent for telephone interviews and 65-90 per cent for face to face interviews.
- It allows the administration of more difficult and complex questions, which would otherwise be impossible to ask in mailed or telephone interviews.
- It results in the good quality of the recorded response. The involvement of the researcher in the recording process assists in the proper interpretation of the information later during the analysis.

The disadvantage of the high cost associated with face to face interviews was overcome by prior identification of areas to be visited for the interviews. These were clustered, and a programme of conducting interviews in different clusters was prepared which reduced travelling time, and therefore cost. Other problems associated with face to face interviews include the reluctance of interviewees to report sensitive behaviours or very personal issues when facing the interviewer. Respondents were more likely to provide socially desirable responses in a face to face interview (Czaja and Blair, 1996:47). To overcome this problem, an effort was made to ensure that the interview questions were not socially threatening. In addition, prior to the conduct of the interview, a brief explanation of the purpose of the research and the intended use of the data were indicated.

5.4 POPULATION GROUPS AND THEIR SIZE

The population is defined as “the entire set of objects and events or group of people, which is the object of the research and about which the researcher wants to determine some characteristics” (Bless and Smith, 1995:85).

²³ Unlike Tanzania and many developing countries, this is not the case with developed countries with efficient postal systems. Similarly, it is not a big problem, like in construction industry, for industries that operate from fixed location.

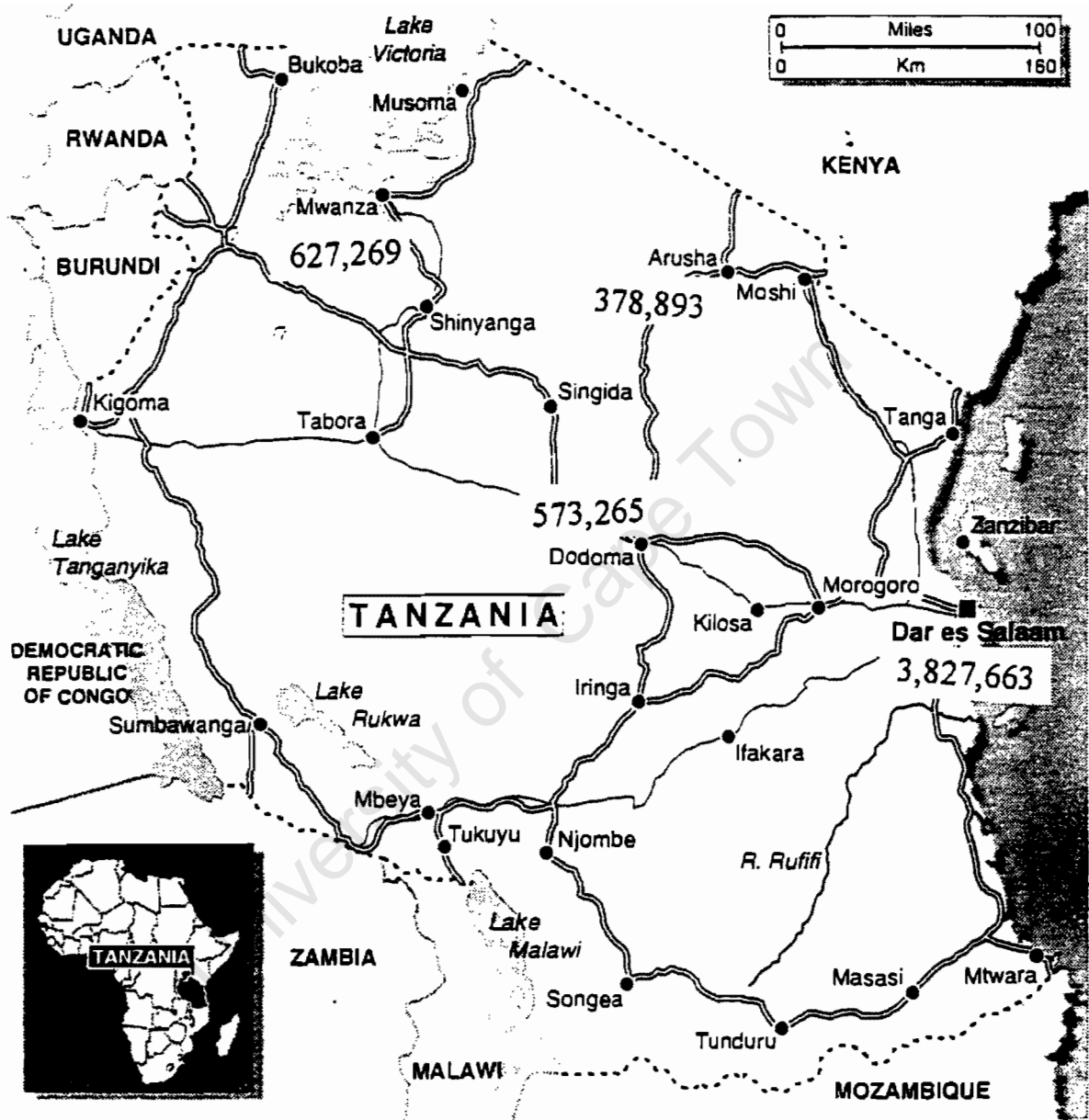
Despite the fact that this research covered the informal sector and construction industry in Tanzania mainland, it was decided to concentrate the research in four urban centres namely Dar-es-Salaam, Arusha, Mwanza and Dodoma. The selection of these urban centres for data collection was not based on any probability sampling, but rather on their rank in terms of urban population. It was assumed that high urban population resulted in high construction volumes, with a high involvement of both formal and informal contractors.

Tanzania mainland consists of twenty urban/regional centres. Figure 5.2 shows the map of Tanzania with all twenty regional centres. In addition, the estimated populations for the year 2000 for the four selected regional centre are indicated on the map. Population figures were obtained by projecting the population census figures of year 1988 to year 2000 based on an annual urban population growth rate of 9 per cent (GOT, 2000a).

The population for this research consisted of four groups:

- i) Government officials involved with the informal sector and the construction industry.
- ii) Informal contractors in Arusha, Dar-es-Salaam, Dodoma and Mwanza.
- iii) Small formal contractors in Arusha, Dar-es-Salaam, Dodoma and Mwanza.
- iv) Large and medium formal contractors in Arusha, Dar-es-Salaam, Dodoma and Mwanza

The first group consisted of officials from different government ministries and departments involved in the activities of the informal sector and construction industry. This group was considered the best source of information regarding government policy measures that have an impact on them. Statistics on the Tanzanian construction industry and informal sector were also obtained from this source.



Source: Marek (1999:299)

Figure 5.2 Map of Tanzania Mainland showing selected urban centres for research together with their population

Different individuals were interviewed from the following organisations:

- National Construction Council (NCC);
- Contractors Registration Board (CRB);
- Tanzania Central Statistics Bureau (TCSB);
- National Income Generation Programme (NIGP);
- Ministry of Works (MOW);
- Ministry of Labour and Youth Development (MLYD);
- Ministry of Lands and Human Settlements Development (MLHSD);
- Regional Engineers Offices in Arusha, Dar-es-Salaam, Mwanza and Dodoma; and
- City/Municipal Engineers Offices in Arusha, Dar-es-Salaam, Mwanza and Dodoma.

The NISS (GOT, 1991a) was used as the basis for determining the size of the population of informal contractors. The size of the population of informal contractors in Dar-es-salaam as established in the NISS was 10,752. The remaining nineteen regional centres had 18,136 informal construction enterprises, and it was assumed that the number of informal contractors is proportional to the urban population. The number of informal construction enterprises in Dar-es-Salaam increased from 10,752 (GOT, 1991a:1-15) to 15,375 (Ngoi, 1997). This increase represented a growth rate of about 10 per cent. This growth rate was used to calculate the number of informal construction enterprises in year 2000. The computation of the number of informal contractors in the nineteen regional centres is shown in Appendix 5.1. The number of informal contractors in the selected urban regional centres i.e., Arusha, Dodoma and Mwanza is shown in Table 5.1.

The size and population of formal contractors was obtained from a list of building contractors kept by the CRB (CRB, 1999). This is also shown in Table 5.1.

Table 5.1 Size of population of formal and informal contractors in year 2000

PLACE OF DATA COLLECTION	POPULATION SIZE		
	Small formal contractors	Large and medium contractors	Informal contractors
DAR-ES-SALAAM	451	142	25,398
ARUSHA	39	14	2,811
DODOMA	31	8	4,254
MWANZA	32	16	4,654
TOTAL	553	180	37,117

Source: the NISS (GOT, 1991a) and the CRB (CRB, 1999)

5.5 SAMPLE GROUPS AND THEIR SIZE

5.5.1 General

According to Leedy (1997:204), the purpose of the sample is to be “able to see all the characteristics of the total population in the same relationship that they would be seen were the researcher, in fact, to inspect the total population”.

The basic assumption behind any kind of sampling is that a sample, which is a cross section of a population group, would be characteristic of the population as a whole. Therefore, the most important factor to be considered when sampling, is the representativeness of the sample in terms of whether the sample, can to a certain degree of confidence, show the characteristic of the population group.

5.5.2 Government officials group

Non-probability sampling by convenience was used to sample the government officials group (Bless and Smith, 1995: Leedy, 1997): the researcher visited identified organisations and requested an interview with responsible members depending on their availability.

This approach was used because it was not possible to identify in advance the individuals to be interviewed within the selected organisations.

5.5.3 Informal contractors

The size of the sample of informal contractors was determined using guidelines suggested by Gay (1996:125) as quoted by Leedy (1997:211). The guidelines suggested that the size of the sample decreased with increasing size of the population. As a rule of thumb, it suggests the following sample sizes:

- For a population size less than 100, to survey the whole population;
- For a population size around 500, then 50 per cent of the population should be sampled;
- For a population size around 1,500, then 20 per cent of the population should be sampled; and
- For a population size equal or exceeding 5,000, a sample size of 400 is adequate.

Based on these guidelines, it was decided to have sample sizes of 300 in Dar-es-Salaam and 150 for each of the selected regional centres. The sample size of informal contractors was therefore 750, which was 350 above the suggested size. This was considered necessary to allow for the possibility of non-location or non-response of the contractors to be interviewed.

However, due to the scattered construction activities in the selected cities, it was difficult to use probability sampling to select individual units to be interviewed. Therefore, discussions were made with City/Municipal Engineers to establish areas with high construction volume, in which informal contractors were expected to be working. Similarly, construction sites, public and private, which were under construction by registered contractors, were visited to interview the informal contractors who were employed there as subcontractors.

5.5.4 Large and medium formal contractors

An alphabetical listing of contractors obtained from the CRB was used to identify contractors falling under large and medium categories. Again, the size of the sample was determined using Gay's (1996) guidelines. With the exception of Dar-es-Salaam,

the population size in other regional centres was small enough to justify the interviewing of every member of the population.

Based on the guidelines, from 142 contractors available, a sample size of 100 contractors was considered adequate for interviewing in Dar-es-Salaam. These were selected randomly using random numbers generated by the computer using a Microsoft excel random number generator. Random numbers between 1 and 150 were generated (Appendix 5.2) and assigned to contractors in the compiled list starting with the first random number in the list. In the case where the number has been assigned, it was skipped. Numbers greater than 142 were skipped as well. Further allocation of random numbers to contractors was stopped after obtaining the required 100 contractors.

5.5.5 Small formal contractors

In the regional centres, the whole population of small formal contractors was considered for interviewing. In Dar-es-Salaam, from 451 contractors available, 200 were selected for interviewing. The procedure described above for large and medium formal contractors was used; however, in this case random numbers between 1 and 500 hundred were generated (Appendix 5.3) and assigned to contractors in the compiled list obtained from the CRB.

5.6 DATA COLLECTION FROM OFFICIALS OF GOVERNMENT INSTITUTIONS

Data from various government institutions was collected by non-scheduled structured interviews (Bless and Smith, 1995; Fellows and Liu, 1997). The aim of the interviews was to obtain information on the Tanzanian construction industry and the informal sector. Guiding interview questions shown in Appendix 5.4 were used.

Normally the researcher identified the person/s to be interviewed in a given institution. These persons were approached, and upon acceptance to be interviewed were given the interview questions and the date for interview was then fixed. While it was initially planned to interview government institutions before starting administering questionnaires to contractors, it proved to be difficult due to busy schedules of the

interviewees. Flexibility was thus built to the programme to allow the interviews to proceed on an *ad hoc* basis depending on the willingness and availability of the interviewee.

One senior official was interviewed in each of the organisations visited²⁴. In most of the organisations, with exception of NIGP, NCC and CRB, the officials did not present themselves to a face to face interview. Instead they requested to be given a guidance of interview questions, based on which they provided the researcher with relevant documents which were useful sources of data for the research.

5.7 DATA COLLECTION FROM FORMAL AND INFORMAL CONTRACTORS

5.7.1 General

Data from formal and informal contractors was collected through scheduled structured interviews mainly through questionnaires based on categories of answers already established by the researcher (Bless and Smith, 1995; Fellows and Liu, 1997).

Separate questionnaires were used for each category of contractors, as discussed in Section 5.3. Advice was sought from employees of the NCC, the CRB and two construction companies during the preparation of the questionnaires. An introductory letter attached as Appendix 5.5 accompanied the questionnaires to the formal contractors.

Due to the large numbers of contractors scheduled for interviews, it was necessary to recruit a research assistant who was a Graduate Engineer. The research assistant was deployed to collect data in the Dar-es-Salaam City only. Prior to data collection it was necessary to train the research assistant on the methodology to be adopted, nature of data and tools for collection. The researcher and the assistant did the interviewing of the first 10 contractors from each category. This was made to ensure that data of the same quality of data was obtained.

²⁴ See section 5.4 for the list of visited organisations.

Although, no appropriate set up was adopted, most of the interviews with contractors were conducted face to face. The researcher usually spent about 15 minutes to explain the purpose of the interview, and about 45 minutes to ask the interview questions in Swahili language and recording the responses. However, about 50 informal contractors and 30 formal contractors filled the questionnaires themselves.

The data collection exercise was generally successful, save for few problems which are highlighted below:

- Locating of informal contractors was generally a very difficult task. It entailed visiting many sites public and private²⁵ with ongoing construction works. In some cases concrete mixers hire centers, welding and carpentry workshops were also visited to establish contacts with informal contractors.
- Reluctance on part of some potential interviewees to refuse to respond to the questionnaires. This reluctance was due to fear on the motive of the whole exercise. Some feared that the data collected would be made available to income tax officials and other government officials hostile to informal sector activities. This was overcome by spending some time trying to explain in detail the motive and the intended use of data and information provided.
- Difficulties in locating offices, particularly for contractors. In most cases, the physical addresses provided in the contractor register were not up to date. This was overcome, in some cases, by hiring escorts who had experience with different contractors in the locality.

5.7.2 Informal contractors questionnaire

The questionnaire for informal contractors is attached as Appendix 5.6. The questionnaire consisted of thirty questions intended to address nine main items as summarised in Figure 5.3

²⁵ Since the study aimed to compare the informal and formal contractors, most of the private houses visited were in the surveyed area, and of values which could attract formal contractors.

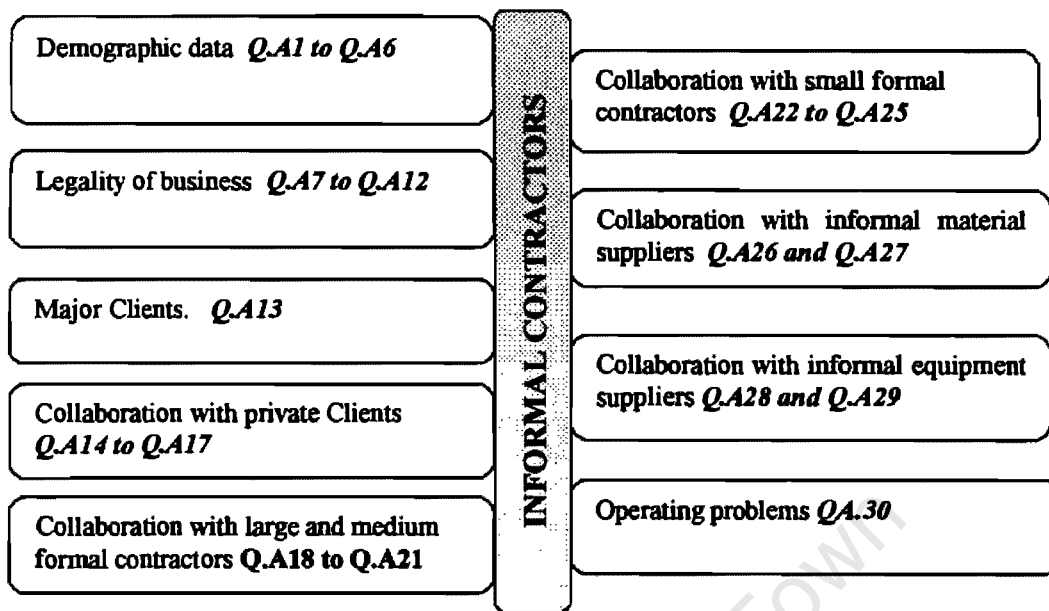


Figure 5.3 Issues addressed in the informal contractors' questionnaire.

From a sample size of 750 informal contractors, only 405 responded to the interview. This represents a 54 per cent response rate. A summary of responses from the different regions of data collection is shown in Table 5.2.

Table 5.2 Summary of responses on informal contractors' questionnaire

PLACE OF DATA COLLECTION	Total number available	Number planned for interview	Number responding to interview	Percentage of total planned for Interview	Response Rate (per cent)
DAR-ES-SALAAM	25,398	300	150	1.2	50
ARUSHA	2,811	150	90	5.3	60
DODOMA	4,254	150	80	3.5	53
MWANZA	4,654	150	85	3.2	57
TOTAL	37,117	750	405	2.0	54

The response rate of 54 per cent is low compared with the expected rate of 65-95 per cent (Czaja and Blair, 1996:32). This was attributable to problems of locating informal contractors active on construction sites for the interviews. However, the obtained response rate was sufficient for data analysis.

5.7.3 Small formal contractors' questionnaire

The questionnaire for small formal contractors as shown in Appendix 5.7, consisted of 24 questions intended to establish the working relationship between small formal contractors with private clients, big and medium formal contractors, informal material and equipment suppliers and informal contractors. The major issues addressed in the questionnaire and their relevant questions are summarised in Figure 5.4.

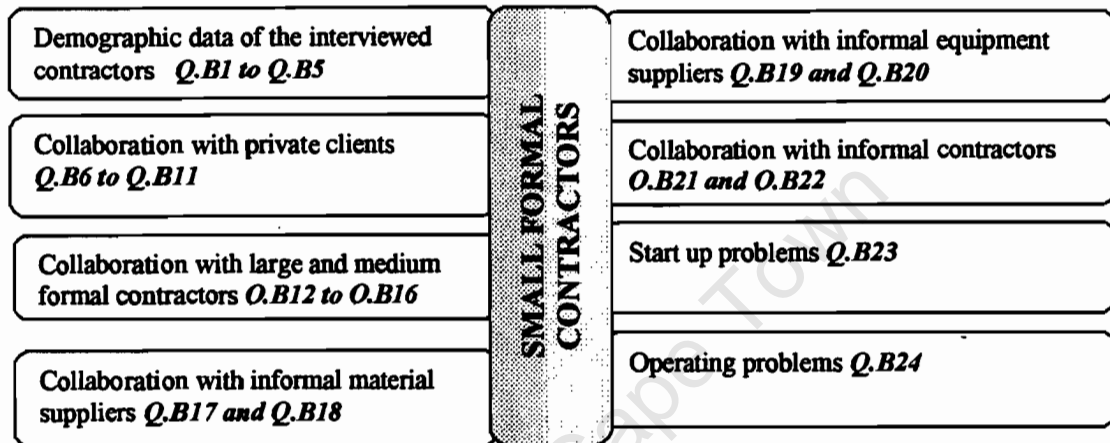


Figure 5.4 Issues addressed in small formal contractors' questionnaire.

An overall response rate of 55 per cent was achieved in the interviews with small formal contractors as summarised in Table 5.3. Again the obtained response rate is lower than expected. This was attributed to difficulties in locating the offices of registered small contractors, and the refusal of some contractors to be interviewed.

Table 5.3 Summary of responses on small formal contractors' questionnaire

PLACE OF DATA COLLECTION	Total number available	Number planned for interview	Number responding to interview	Percentage of total planned for interview	Response Rate
DAR-ES-SALAAM	451	200	112	44	56
ARUSHA	39	39	20	100	51
DODOMA	31	31	18	100	58
MWANZA	32	32	15	100	47
TOTAL	553	302	165	55	55

5.7.4 Large and medium formal contractors' questionnaire

The questionnaire for large and medium formal contractors consisted of 20 questions intended to establish mainly the working relationship between large contractors with small formal and informal contractors, and informal equipment and the material supplier. The main issue addressed and the relevant questions in the questionnaire are summarised in Figure 5.5. The questionnaire is attached as Appendix 5.8.

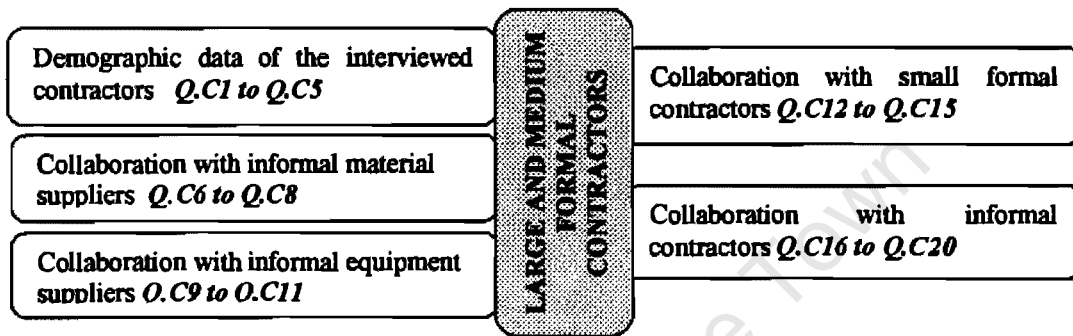


Figure 5.5 Issues addressed in large and medium formal contractors' questionnaire

The rate of response by large and medium contractors to the interview is summarised in Table 5.4. An overall response rate of 40 per cent was achieved. This low response rate was attributed to the refusal of contractors to respond to the questionnaires. Therefore, the interpretation of the responses on this questionnaire needs to be treated cautiously because it does not present views of the majority large and medium contractors. The 60 per cent of unresponsive contractors could hold a view different from that obtained from the responding contractors.

Table 5.4 Summary of responses on large and medium formal contractors' questionnaire

PLACE OF DATA COLLECTION	Total number Available	Number approached for interview	Number responding to interview	Percentage of total approached for interview	Response Rate
DAR-ES-SALAAM	142	100	40	70	40
ARUSHA	14	14	8	100	57
DODOMA	8	8	2	100	25
MWANZA	16	16	5	100	31
TOTAL	180	138	55	77	40

5.8 CONTRIBUTION TO KNOWLEDGE

5.8.1 General

This section looks at how this thesis would contribute to knowledge, which is an essential feature of a doctoral degree (Bless and Smith, 1995; Fellows and Liu, 1997; Leedy, 1977; Walker, 1997). According to Phillips and Pugh (1994:61), a doctoral degree research could be regarded as making an original contribution to knowledge if the research:

- a) carries out empirical work that has not been done before;
- b) makes a new synthesis that has not been tried before;
- c) makes a new interpretation of existing material;
- d) *tries out something in a geographical area, such as a country, that has previously not been carried out in that area before;***
- e) applies a particular technique in a novel way;
- f) *introduces substantial new evidence to an old issue;***
- g) is cross-disciplinary and uses different methodologies; and
- h) adds to knowledge in a way that has not previously been tried before.

This research examined the relationship between formal and informal contractors in Tanzania, and how this relationship is influenced by the existing policies. Its theme fits in well with criterion (d) since no similar research has been conducted in Tanzania. The research would therefore offer a better understanding of how the informal construction sector operates in Tanzania and the impact of the policies on successful operation of the sector. It also fits in with criterion (f) since there is an assumed symbiotic relationship between the formal and informal construction sectors. This research offered to establish the nature of the relationships between the two sectors, and hence substantiate the assumed relationship. The coverage of the above two themes justifies it as a Ph.D. research.

The research also aimed to test the three hypotheses put forward in the beginning of this chapter. The acceptance or rejection of the hypotheses would contribute to knowledge, as discussed in the following sections.

5.8.2 Hypothesis one

The hypothesis states that “there are no appropriate policies on the informal sector activities in Tanzania”. Provision of evidence for accepting or rejecting this hypothesis would contribute to knowledge on the current policy stand of the government of Tanzania on the informal sector activities.

As discussed in Chapter Four, policies are important to give direction on what should be done, in this case, in the development of the informal construction sector. The presence, absence or appropriateness of policies would help to explain the success or failure of the informal construction sector in Tanzania.

Review of existing policies relevant to the informal and construction sectors in Tanzania as discussed in chapter four would enable the testing of this hypothesis. Further, the importance and *modus operandi* of informal contractors as would be revealed in Chapters Six and Seven would justify whether or not there is a need for policy intervention for the development of the informal construction sector.

5.8.3 Hypothesis two

This hypothesis, which states that “there are potential benefits of interaction between formal and informal construction sector”, serves to show the extent of collaboration between the formal and informal construction sectors and the benefits through such collaboration.

Chapter Two discussed the need for strengthened collaboration between the formal and informal sectors, and in Chapter Three it was suggested that the linkages between them were mutually beneficial. The provision of evidence to support or reject this hypothesis would contribute to knowledge on the nature of linkages that exist between the two sectors. The outcome of the interviews with the informal contractors, small contractors, and large and medium formal contractors to be discussed later in Chapter Seven would be used to test this hypothesis.

5.8.4 Hypothesis three

Hypothesis three which states that the “lack of appropriate policies on the informal sector has resulted in the non-realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania” links the first and second hypotheses. It gives a causal relationship between the two hypotheses, and suggests that benefits of interaction between the two sectors could be realised if there were appropriate policies.

Acceptance or rejection of this hypothesis would contribute to knowledge on the causal relationship between the policy and the issues it addresses. This hypothesis would be tested through deductive reasoning based on the first two hypotheses. A decision tree shown in Figure 5.6 will be used to determine whether hypothesis three should be accepted or rejected. Rejection or acceptance of hypothesis one and two would determine the acceptance or rejection of this hypothesis. It would only be accepted if both hypothesis one and two are accepted.

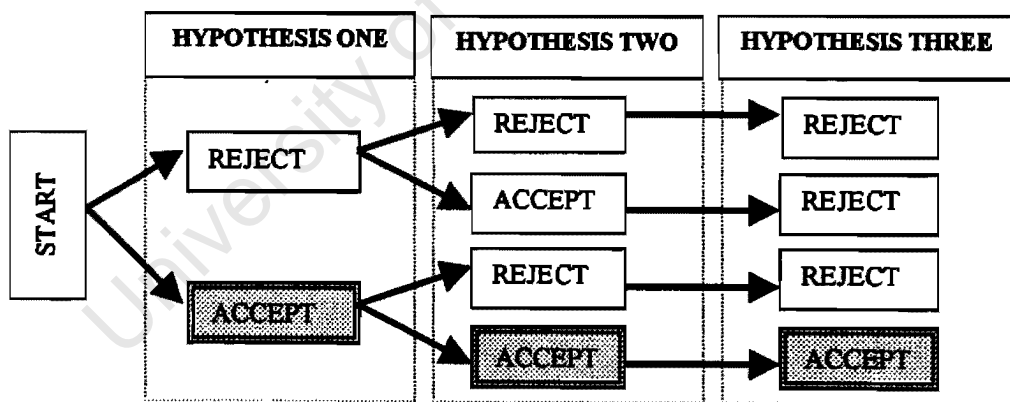


Figure 5.6 Decision tree to test hypothesis three.

5.9 BIAS IN THE RESEARCH PROCESS

Leedy (1997:219) defined bias as “any influence, condition, or set of conditions that singly or together distort the data from what may have been obtained under the conditions of pure chance; furthermore, bias is any influence that may have disturbed the randomness by which the choice of a sample population has been selected”.

The following is the author's acknowledgement of possible bias in the research and the questionnaire.

- i) Randomness bias in the selection of the government institutions and individuals, and the informal contractors to be interviewed (Leedy, 1997).
- ii) Researcher bias on the self completed responses in the questionnaires. "Responses given in the closed questionnaire sometimes represent the researcher's and may not necessarily represent the respondent's answers or opinions in the absence of leading responses" (Fellows and Liu, 1997:91).
- iii) Researcher bias in the research design, data collection and analysis. This could be attributed to human error or misinterpretation (Leedy, 1997).
- iv) Respondent bias introduced by the respondents that did not respond or gave false information due to "mistrust, fear, conformity, or social status" (Bless and Smith, 1995:145)

5.10 SUMMARY

This chapter discussed the methodology adopted for this research, elaborating in particular on the sampling procedures and the tools used for data collection. It was shown that this research is deductive aiming to test existing knowledge rather than generating a new theory. The research was a triangulated one, making use of qualitative and quantitative methods, as well as archival and opinion strategies to collect the necessary data.

Detailed discussion of the questionnaires and response rates to the administered questionnaires was made. The response rate to small contractors' questionnaires equalled that of informal contractors' questionnaire at around 55 per cent, while that of large and medium contractors was 40 per cent. The observed response rates were satisfactory for the purpose of data collection, but make it impossible to generalise the results to all contractors.

The chapter also discussed how the research hypotheses will be tested, in the light of data collected from the field, and how this will lead to the contribution of knowledge.

Chapter Six will make use of the collected data to discuss the characteristics of the informal contractors in Tanzania. In the same way, Chapter Seven will use the data to discuss the working relationship between the formal and informal contractors in Tanzania.

University of Cape Town

CHAPTER SIX

CHARACTERISTICS OF INFORMAL CONTRACTORS IN TANZANIA

6.1 INTRODUCTION

Chapter Five discussed the research methodology and methods of data collection. The collected data is used in this chapter to discuss the characteristics of the informal contractors in Tanzania to reveal the extent and the importance of the informal construction sector in Tanzania. This is important to establish the justification for its development.

The chapter examines the informal contractors' basic demographic data, ownership of basic resources, source of materials and equipment, motives of establishing business, reasons for not formalising their business and source of capital. It also discusses difficulties experienced by the informal contractors in establishing and running a business and the contribution of the informal construction sector to the national economy. Responses by the informal contractors to questions A1-A30 of the informal contractors' survey questionnaire attached as Appendix 5.6 in this thesis were used for that purpose. In addition, information gathered from the NISS (GOT, 1991a) and the DISS (GOT, 1995) was used to compare and/or establish some of the characteristics.

A brief overview is first given on the purpose and methodology of the informal sector surveys, and this is later followed by detailed characteristics of the informal contractors.

6.2 INFORMAL SECTOR SURVEYS (1991 AND 1995)

In an effort to understand its informal sector, the Tanzanian government conducted a country wide NISS in 1991 (GOT, 1991a) and the DISS in 1995 (GOT, 1995). Both surveys concentrated on all possible informal sector activities, in which construction is a subset. The NISS and DISS covered 163,438 and 15,008 informal construction enterprises respectively.

In the NISS, 22,327 informal construction enterprises were covered in the Dar-es-Salaam city alone, representing 14 per cent of the informal construction sector enterprises covered countrywide. All urban areas including Dar-es-Salaam represented 31 per cent of the total indicating that majority (69 per cent) of the informal sector construction enterprises were found in the rural areas. It is important to note that the high number of informal construction enterprises is due to the fact that more than 98 per cent are sole proprietorships. This implies that the 22,327 informal construction sector enterprises in actual fact represented individuals (GOT, 1991a).

The basic definition of the informal sector as used in the NISS and DISS was given in Chapter Two of this thesis²⁶. The main difference in the definition that was used for the two studies related to the size of paid employees. In the NISS, informal sector enterprises with more than five paid employees were excluded from the survey, while the DISS expanded the limit to ten paid employees.

The NISS and DISS data provided point estimates of the informal sector in 1991 and 1995 respectively. To make a comparison of the data, particularly monetary values, it was important to make sure that effects of inflation and the effects of the definition and criteria for grouping the informal sector operators are taken into account.

The data for the Construction Industry Enterprises (ICE) from the NISS and DISS discussed in this thesis is summarised in Appendix 6.1 and 6.2 respectively. This data was only referred to in the discussions but it was not reproduced in the body of the report either in the form of tables or charts. However, to allow cross-referencing of data from the NISS and DISS, letters “D” and “E” have been assigned to refer to Tables represented in the appendices.

- **D** – Refers to tables summarising the NISS data shown in Appendix 6.1
- **E** – Refers to tables summarising the DISS data shown in Appendix 6.2

²⁶ For the definition of informal sector see page 27.

These letters, together with the corresponding number of the table, appear in the brackets in bold font in front of the sentence referring to information from the NISS or DISS.

6.3 INFORMAL CONTRACTORS SURVEY

The Informal Contractors' Survey (ICS) refers to interviews, which were administered to the informal contractors. The methodology and tools used for collecting data for the ICS were discussed in detail in Chapter Five.

The informal construction sector was defined in Chapter Three²⁷. The ICS adopted the same definition. Unlike the NISS and DISS, it had no limit on the number of paid employees. Actually, the only criteria used to classify the individuals or the enterprises as informal, was the non-possession of a business licence and/or registration certificate from the CRB.

In this chapter, the term Informal Construction Enterprise (ICE) used in the NISS and DISS to describe an enterprises operating a construction business in the informal sector, is used interchangeably with the term Informal Contractor (IC) as used in the Informal Contractor's Survey (ICS).

Questions A1-A30 of the informal contractors' survey questionnaire were used in the following discussions. To allow cross-referencing, each table or figure refers to the question to which it is based. The bold numbers in brackets in the title of a table or figure represent the relevant question in the questionnaire. The informal contractors' questionnaire is attached as Appendix 5.6.

²⁷ For the definition of informal construction sector see page 85

6.4 ICE OWNERSHIP AND EMPLOYMENT

The studies revealed that individuals own most of the ICE. Table 6.1 shows that 76 per cent of enterprises are of sole proprietorship, as compared to 24 per cent partnership enterprises. The NISS and DISS established that 99 and 98 per cent of the enterprises are sole proprietorship respectively (D4&E1). Both the NISS and DISS showed that males owning 99 and 96 per cent of the enterprises respectively dominate the informal construction sector (D1&E3).

Table 6.1 Ownership of informal construction enterprises (A1).

	Category			Total
	Sole ownership	Partnership	Co-operative	
Number of responses	308	97	-	405
Percentage	76%	24%	0%	100%

The figures of sole ownership of the ICE established by the ICS are low compared to those of the DISS and NISS. According to Msita (1999)²⁸, this could be attributed to the increasing trend of skilled and unskilled persons to mobilise themselves into gangs that specialise in carrying out specific manual construction tasks like concreting, excavation, etc. These fall under the category of partnership, and hence a higher percentage of partnership firms obtained in the ICS compared to the NISS and DISS.

The ICS further established that 67 per cent of enterprises are owned by artisans, 18 per cent are owned by civil/building engineering technicians, and 9 per cent are owned by non-technical people (see Figure 6.1). These results corroborate the establishment background of small contractors discussed in section 3.4.3. Based on these results, it could be concluded that most informal construction enterprises are sole proprietorship and have been established through the trade route by former trade persons i.e. artisans.

Regarding employment, the informal contractors employed mainly unskilled and skilled labourers on a part-time basis. Figure 6.1 shows that about 75 and 63 per cent of the interviewed enterprises were employing between two and five unskilled and skilled

²⁸ Comments during an interview with Mr. Msita, the Executive Secretary of National Construction Council.

labourers respectively, while 26 per cent of the enterprises were employing more than ten unskilled labourers.

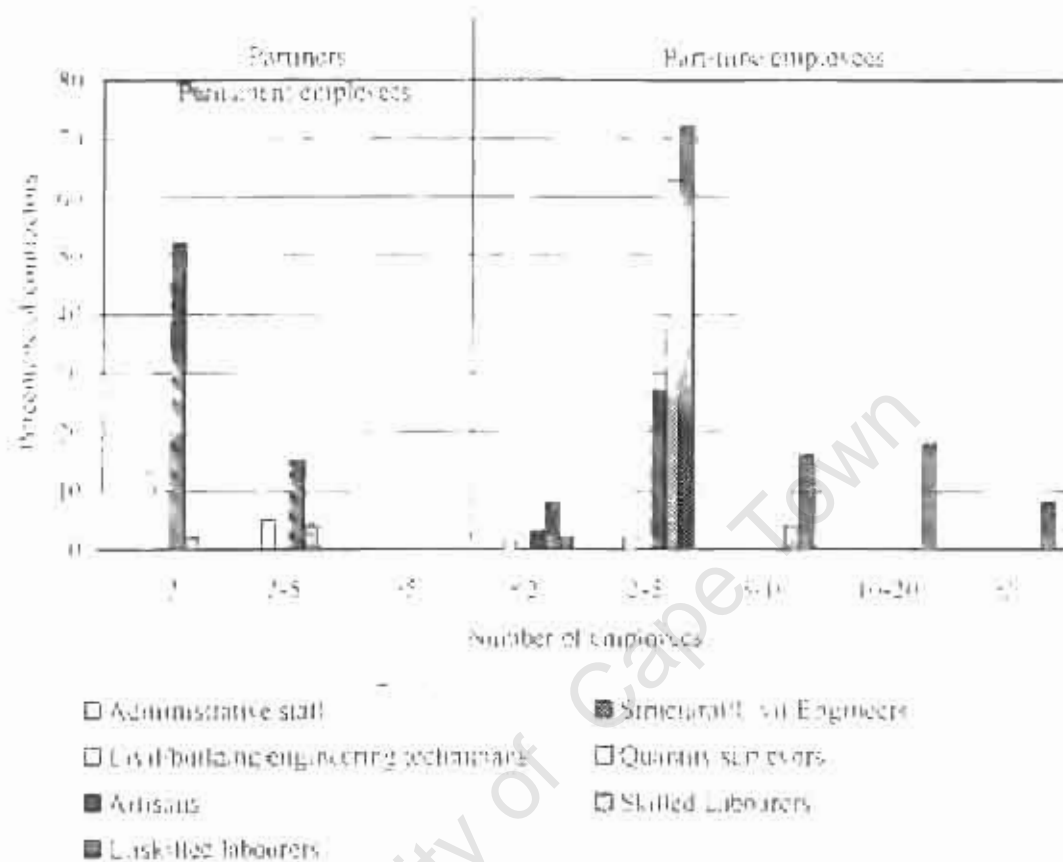


Figure 6.1 Ownership and employment by informal contractors (A2)

A further examination of Figure 6.1 reveals that about 85 per cent of interviewed enterprises had partners who were either civil/building engineering technicians or artisans. Using the qualifications of the directors as a criterion for registration with the CRB, then 85 per cent of the enterprises would qualify for registration since they met the minimum conditions set to register in class VII (Mugasa, 1999; CRB, 2000b).

Although the ICS did not set the limit on the number of people employed by the informal contractors, its results showed that 74 per cent of the enterprises actually employed less than ten workers, therefore falling within the criterion for the number of employees used in the DISS.

6.5 EQUIPMENT OWNERSHIP

The ICS established that 85 per cent of the interviewed informal contractors did not own any equipment (see Table 6.2). Using this as a criterion for registration with the CRB, most of them would not qualify to register as contractors. The CRB requires a contractor to possess at least a light duty vehicle to register at entry level (Mugasa, 1999; CRB, 2000b), and only 13 per cent of the interviewed contractors fulfilled this condition.

Table 6.2 indicated that major equipments owned by the informal contractors included welding machines (15 per cent), block making machines (14 per cent), pickups (13 per cent) and a few concrete mixers and vibrators (5%). Most of these items, except the pickup, are low cost items affordable to some of the informal contractors.

Table 6.2 Equipment ownership by the informal contractors (A3)

Equipment	Number and percentage of contractors owning the given equipment (N=415)							
	1		2		3		4	
	No.	%	No.	%	No.	%	No.	%
Concrete mixers	21	5	-	-	-	-	-	-
Concrete vibrators	16	4	-	-	-	-	-	-
Dumper	-	-	-	-	-	-	-	-
Tipper trucks	1	1	-	-	-	-	-	-
Pickups	54	13	-	-	-	-	-	-
Block making machine	59	14	-	-	-	-	-	-
Grinding machine	16	4	-	-	-	-	-	-
Welding machine	66	14	5	1	-	-	-	-
Carpentry tools (sets)	-	-	10	2	-	-	-	-

6.6 PROJECTS EXECUTED

Figure 6.2, according to the ICS, shows that 56 per cent of the interviewed informal contractors had executed between five and ten projects in the past two years, while 33 per cent had executed more than ten projects. Figure 6.3 shows that the smallest project executed had an average value of Tshs. 206,000, while the largest had an average value of Tshs. 3,644,000. Actually, 13 per cent of informal contractors had executed projects with a value greater than Tshs. five million, and 5 per cent had executed projects with a value exceeding Tshs. twenty million.

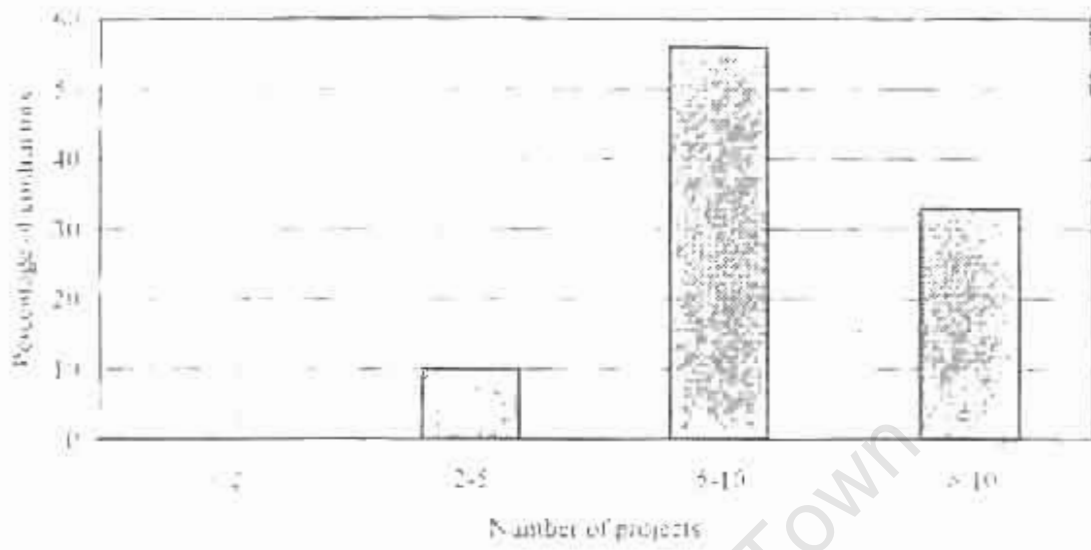


Figure 6.2 Number of projects carried by informal contractors in the last two years (A4)

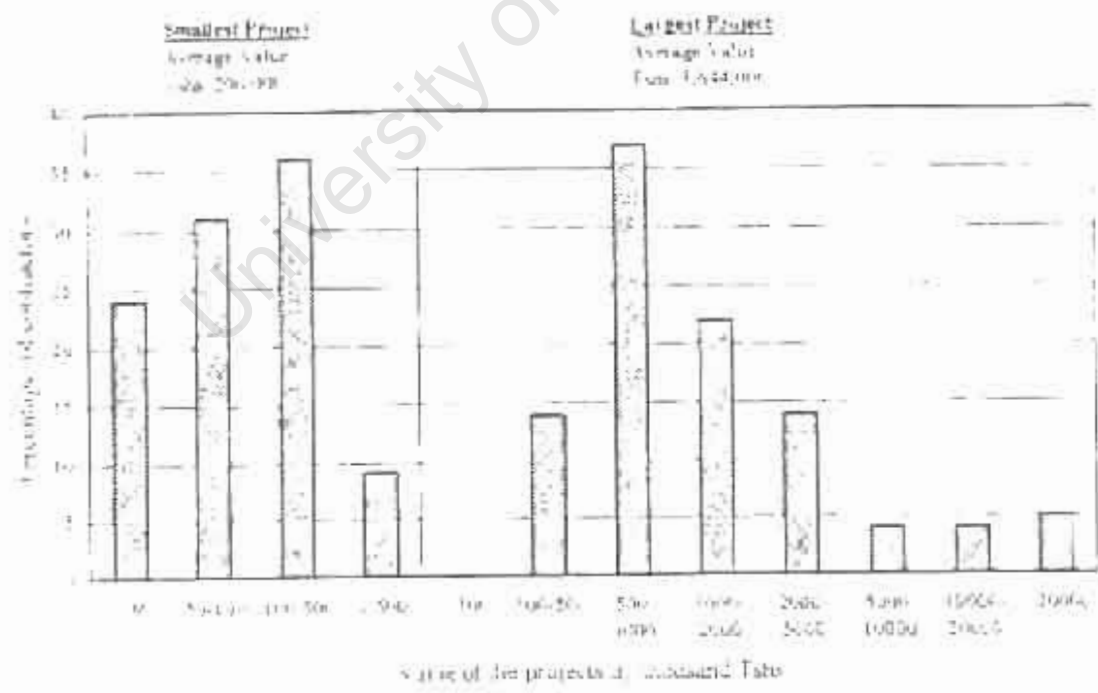


Figure 6.3 Size of projects executed by informal contractors in the last two years (A5)

Referring to Figure 6.3, the informal contractors on average executed projects that were three and half times bigger than the allowed limit of Tshs. one million. Taking this as a criterion, 49 per cent of informal contractors were actually operating illegally by executing projects that exceeded the allowed upper limit for unregistered contractors as discussed in section 3.6.2.

Figure 6.4 shows that the average annual turnover of informal contractors was Tshs. 6.3 million, with 21 and 8 per cent of the informal contractors' turnover being below Tshs. two million and above Tshs. twenty million respectively. The majority had an annual turnover between Tshs. 2 to 5 million.

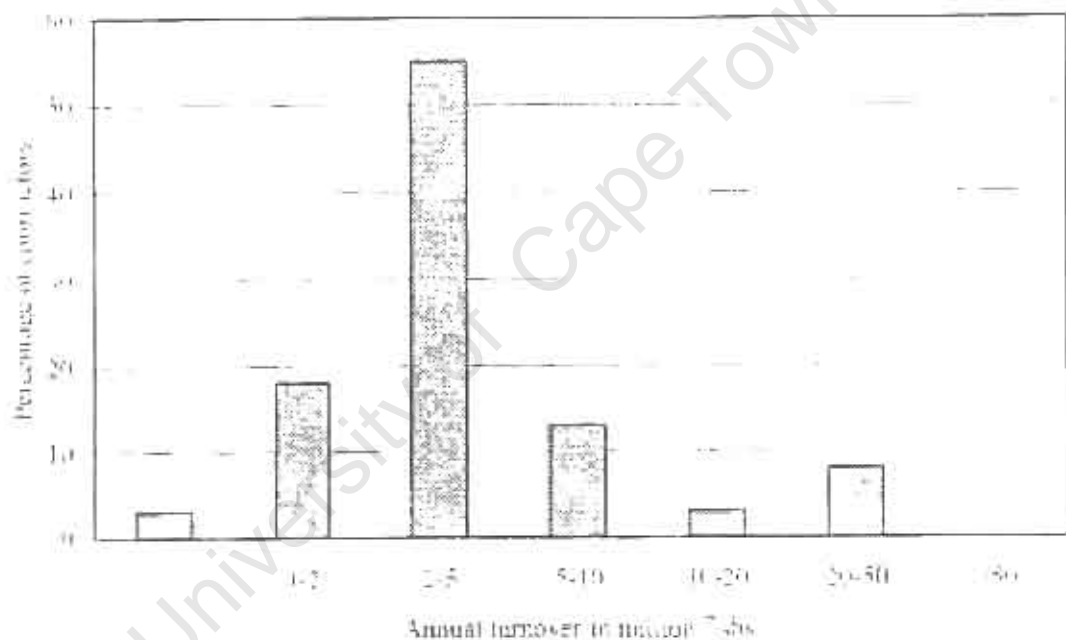


Figure 6.4 Annual turnover of informal contractors (A6)

6.7 OPERATING LOCATION

All the interviewed informal contractors in the ICS were active on construction sites. Table 6.3 shows that only 17 per cent of the contractors had an office, service workshop or storage yard. Again, it is found that most of the informal contractors would not qualify to register their companies at entry level as the CRB requires them to have an office of not less than ten square metres (Mugasa, 1999, CRB, 2000b).

The NISS revealed that 83 per cent of the informal construction enterprises operated from no fixed location (D5) compared to 58 per cent with the DISS. The DISS further revealed that 23 per cent operated from construction sites (E9). These results support the basic characteristic of construction projects whereby contractors spend time on one site for a specified period, and after completion moves to another.

Table 6.3 Office and workshop spaces for informal contractors (A7)

	Areas in square metres (N=405)								
	Office			Service workshop			Storage yard		
	< 10	10-20	>20	< 10	10-20	>20	< 10	10-20	>20
Number of responses	-	3	7	-	21	13	-	5	-
Percentage	-	1%	2%	-	5%	8%	-	1%	-

6.8 LEGALITY OF BUSINESS

As expected, most of the ICE had no business licenses and/or were not registered, hence their classification as informal contractors.

Table 6.4 shows that 95 per cent of the informal contractors operated without business licenses and 4 per cent had licenses as building material suppliers, but decided to extend their business into construction without registration and the appropriate business licenses. This figure concurs with that obtained by the DISS, which revealed that 97 per cent of the ICE had no business licenses and were not registered (E2).

Table 6.4 Possession of business licenses by the informal contractors (A8)

	YES	NO
Number of responses	16	389
Percentage of total (N=405)	4%	96%

In order to discuss problems experienced by the informal contractors when processing for business licences, an index to measure the importance that respondents attach to a proposed problem or reason was introduced. This index termed an **Importance Index (II)**, can take values between one and three. A value of three means that the proposed problem or reason is very important and a value of one means that it is the least important. The Importance Index has been calculated using equation 6.1 (Al-Khalil and Al-Ghaffly, 1999: 649; Smailwood, 2000: 133).

$$\text{Importance Index (II)} = \frac{W_i \times F_i}{N} \quad \text{equation 6.1}$$

Where W_i = Weight assigned to the option on the importance scale

F_i = The number of respondents who responded to i^{th} option or gave i^{th} rank

N = Total number of respondents

Similarly other terms are introduced that will be used later in this chapter

The **Frequency Index (FI)** is introduced to explain the extent frequency with which informal contractors take a certain option. This index can take values between one and three. A value of three means that the option is always taken and a value of one means the option is not taken at all. The Frequency Index has been calculated using equation 6.2

$$\text{Frequency Index (FI)} = \frac{W_i \times F_i}{N} \quad \text{equation 6.2}$$

W_i , F_i , and N has the same meaning as in equation 6.1

The **Average Ranking Index (ARI)** is introduced to represent the ranking attached to a given reason by the interviewed contractors, and is computed using Equation 6.3. An Average Ranking Index of one means that the offered reason ranked very high while an Average Ranking Index of three means that the reason ranked very low.

$$\text{Average Ranking Index (ARI)} = \frac{R_i \times F_i}{N} \quad \text{equation 6.3}$$

Where F_i and N has the same meaning as in equation 6.1 and R_i = Rank of the given reason.

Table 6.5 shows that informal contractors possessing business licenses as material suppliers encountered the following problems when processing a license unclear procedures (II=3), long procedures and difficulties in meeting requirements (II=2.8) and corruption (II=2). However, these results are not reflective of the majority of the contractors since they involved only 4 per cent of the interviewed contractors.

Table 6.5 Problems faced when processing a business license (A9)

Problem	Importance Scale/Number of responding contractors			Importance Index (II)
	Most important (3)	Important (2)	Least important (1)	
Unclear procedures	16	-	-	3
Long procedure	11	3	-	2.8
Corruption	-	16	-	2
Difficulties in meeting requirements	11	3	-	2.8

The informal contractors who operated without business licenses cited the ability to operate without a license as the main reason for not obtaining one (II=2.6). Other reasons include high costs, difficult requirements and cumbersome procedures but they were not as important as shown by their low Importance Indices in Table 6.6.

Table 6.6 Reasons given by informal contractors for not obtaining business licenses (A10)

Reason	Importance Scale/Number of responding contractors			Importance Index (II)
	Most important (3)	Important (2)	Least important (1)	
Costs involved are too high	78	166	205	1.7
Cumbersome procedures	43	141	205	1.6
Difficult requirements	73	113	203	1.7
Can operate without a license	295	20	74	2.6

As explained in Section 3.6.2, any contractor conducting a construction business in Tanzania must be registered with the CRB. In this particular case Table 6.7 shows that on the one hand, 53 per cent of informal contractors expressed their ignorance on the existence of the CRB and that it was in fact illegal to conduct construction business without registering. These contractors were not required to offer reasons for not registering, as it was assumed that ignorance is the main factor. On the other hand, 47 per cent of the informal contractors knew of the existence of the CRB and that it was

(illegal to conduct a construction business without registering. Their main reasons for not registering with the CRB include the ability to operate without registering, difficult requirements, high costs and cumbersome procedures. The importance attached to the reasons by the contractors is almost the same as depicted by the Importance Indices in Table 6.8

Table 6.7 Awareness of the informal contractors on the existence of the CRB (A11)

	YES	NO
Number of responses	192	213
Percentage of total (N=405)	47%	53%

A high percentage of contractors expressing ignorance on the existence of the CRB suggest that the CRB need to take a more active role to promote its existence. Perhaps this could be achieved by instituting incentives for registering with CRB, rather than using penalties for not doing so. This will be enumerated later in this thesis.

Table 6.8 Reasons for the informal contractors not registering with the CRB (A12)

Reason	Importance scale/Number of responding contractors			Importance Index (II)
	Most important (3)	Important (2)	Least important (1)	
Costs involved are too high	75	78	39	2.2
Cumbersome procedures	63	90	39	2.1
Difficult requirements	104	41	42	2.3
Can operate without registering	117	4	74	2.4

6.9 MOTIVES FOR ESTABLISHING BUSINESS

The ICS did not establish the informal contractors' motives for establishing a construction business. However, the DISS established the reasons/motives that made owners of the informal construction enterprises establish a construction business, in which 35 per cent of owners indicated that unavailability of other work was the major reason (E8). Other reasons included earning additional income for the family (15 per cent), providing employment having been released from other work (12 per cent) and earning good income provided by construction business (8 per cent). The offered reasons suggest that the informal construction business was regarded as a survival

strategy for people that have been unable to obtain employment in other areas or for people that lost their previous employment

6.10 INFORMAL CONTRACTORS' CLIENTS

All the surveys addressed the issue of clients to the informal contractors. The NISS and DISS were particularly concerned with all clients, and they revealed that 91 and 99 per cent respectively of the informal contractors' clients were private individuals (D24&E7)

The ICS tried to establish the extent to which the informal contractors were working with private clients, registered small contractors, and registered large and medium contractors. Table 6.9 indicates that informal contractors were mainly employed by individual private clients (FI=2.4). However, the extent to which they work for large and medium contractors and small contractors was low and the same (FI=1.5)

Table 6.9 Informal contractors' clients (A13)

Client	Frequency scale: Number of responding contractors			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Private house developers	198	190	17	2.4
Big registered contractors	9	219	186	1.5
Small registered contractors	9	186	210	1.5

6.11 WORKING RELATIONSHIP BETWEEN INFORMAL CONTRACTORS WITH CLIENTS

The previous section has shown that private clients and large, medium and small contractors employ informal contractors. The Frequency Indices shown in Table 6.10 indicate that informal contractors are predominantly employed by private clients to supply labour only (FI=2.8). However, their employment to large, medium and small contractors is limited to the supply of labour only (FI=3)

Table 6.10 Type of services offered by informal contractors to clients (A14, A18 and A22)

Customer/Client		Frequency scale/Number of responding contractors			Frequency Index (FI)
		Always (3)	Sometimes (2)	Never (1)	
Private clients (N= 388)	Labour only	335	43	10	2.8
	Full contract	10	43	355	1.2
Large and medium contractors (N= 219)	Labour only	219	-	-	3
	Full contract	-	-	219	1
Small contractors (N= 195)	Labour only	195	-	-	3
	Full contract	-	-	195	1

Table 6.11 shows that 23 and 12 per cent of the informal contractors employed by private clients undertook labour and full contracts to construct complete buildings respectively. Otherwise, the majority of contractors were employed by private clients, small contractors, and medium and large contractors to provide labour to carry out some specific activities in a building project. The main activities carried out include excavation, concreting, steel fixing, masonry and carpentry works.

Table 6.11 Type of activities carried out by informal contractors when working for different clients (A15, A19 and A23)

ACTIVITIES	PRIVATE CLIENTS (N=388)		LARGE AND MEDIUM CONTRACTORS (N=219)		SMALL CONTRACTORS (N=195)	
	Labour only	Full Contract	Labour only	Full Contract	Labour only	Full Contract
Complete building	23%	12%	-	-	-	-
Excavation	13%	-	46%	-	25%	-
concreting	35%	-	51%	-	37%	-
Steel fixing	73%	-	34%	-	32%	-
Framework fixing	13%	-	27%	-	26%	-
Masonry setting	23%	-	36%	-	21%	-
Plastering	23%	-	36%	-	21%	-
Scratching	23%	-	36%	-	21%	-
Tiling	7%	-	42%	-	22%	-
Roofing	10%	-	26%	-	24%	-
Welding works	9%	3%	11%	-	7%	-
Carpentry - interior works	12%	-	18%	-	19%	-
Carpentry	5%	-	2%	-	5%	-
Painting works	4%	-	-	-	3%	-

Table 6.12 tabulates the problems that the interviewed informal contractors encountered when working for private clients, small and large and medium contractors. Irrespective of the clients they worked for they encountered the same problems namely, delayed payments by the clients, late delivery of materials by the clients and the poor quality of materials supplied by the clients. The problems, with a computed importance index of less than two, were regarded as not very severe to the contractors.

Table 6.12 Problems experienced by the informal contractors when working with clients (A16, A20 and A24)

Customer Client	Reason	Importance scale/Number of responding contractors			Importance Index (I)
		Very Important (3)	Important (2)	Least important (1)	
Private clients	Delayed payments by the client	-	381	-	2.0
	Postponement by the client on execution of agreed works	-	235	153	1.6
	Frequent stoppage of works by the client	-	88	700	1.2
	Poor quality of materials supplied by the client	-	151	47	1.9
	Late delivery of materials by the client	-	767	98	2.0
Large and medium contractors	Delayed payments to the client	-	191	37	1.9
	Postponement by the client on execution of agreed work	-	120	96	1.6
	Frequent stoppage of works by the client	-	38	195	1.2
	Poor quality of materials supplied by the client	-	155	67	1.7
	Late delivery of materials by the client	-	187	45	1.9
Small contractors	Delayed payments by the client	-	181	14	1.9
	Postponement by the client on execution of agreed works	-	104	91	1.5
	Frequent stoppage of works by the client	-	46	179	1.1
	Poor quality of materials supplied by the client	-	136	59	1.7
	Late delivery of materials by the client	-	172	27	1.9

Earlier in this thesis it was suggested that there was a symbiotic relationship between the informal contractors and their clients. Table 6.13 shows that informal contractors benefited from clients by getting jobs, improving their financial position and gaining

skills. The contractors perceived more gain in skills when working for large and medium contractors (II=2.7) than when working for small contractors and private clients (II=2.4). Later in this chapter the benefits gained by formal contractors in subcontracting to informal contractors will be discussed.

Table 6.13 Benefits gained by the informal contractors when working with clients (A17, A21 and A25)

Customer client	Benefit	Importance scale			Importance index (II)
		Number of responding contractors			
		Very important (3)	Important (2)	Least important (1)	
Private clients	Continued work load	345	43	-	2.9
	Improving cash flow	290	58	-	2.7
	Gaining skills	184	168	30	2.4
Large and medium contractors	Continued work load	177	45	-	2.8
	Improving cash flow	120	102	-	2.6
	Gaining skills	155	59	8	2.7
Small contractors	Continued work load	156	39	-	2.8
	Improving cash flow	118	77	-	2.6
	Gaining skills	99	83	13	2.4

6.12 SOURCE OF MATERIALS AND EQUIPMENT

All three studies established the source of materials used by the informal contractors. The ICS, however, did not explore all possible sources of material, but examined only the extent to which the informal contractors obtained their material and equipment from informal suppliers and the reasons for doing so.

Generally, according to ICS, only about 12 per cent of the informal contractors working for private clients supplied material for the work. Table 6.14, which shows that overall there was very little use of materials from informal suppliers, supports this.

The reasons given for using material from informal suppliers and their Average Ranking Indices are given in Table 6.15.

Table 6.14 Working relationships between the informal contractors and the informal materials suppliers (A26)

Building material	Frequency Scale: Number of responding contractors			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Concrete blocks	33	35	337	1.2
Precast concrete products	33	35	337	1.2
Soft wood timber	8	62	335	1.2
Hardwood timber	8	62	335	1.2
Timber products	8	62	335	1.2
Timber props	8	62	335	1.2
Aggregate	51	24	376	1.3
Sand	51	24	376	1.3
Cement	7	22	376	1.1

Table 6.15 Reasons of informal contractors for using construction material from the informal materials suppliers (A27)

Material	Reasons/ Number of responding contractors											
	Cheap			Available when required			Good quality			Supplement other sources		
	1	2	3	1	2	3	1	2	3	1	2	3
Concrete blocks	0	5	13	-	17	12	-	16	25	40	-	-
Precast concrete products	0	5	13	-	17	12	-	16	25	40	-	-
Soft wood timber	8	12	18	15	50	5	-	4	27	63	-	-
Hardwood timber	4	12	18	15	50	5	-	4	27	63	-	-
Timber products	8	12	18	15	50	5	-	4	27	63	-	-
Timber props	8	12	18	15	50	5	-	4	27	63	-	-
Aggregate	48	-	-	54	12	-	-	16	40	63	-	-
Sand	48	-	-	54	12	-	-	16	40	63	-	-
Cement	10	-	-	-	23	-	-	-	13	15	-	-
TOTAL	198	68	262	60	425	68	-	100	244	465	-	-
Average Ranking Index (ARI)	2.12			2.01			2.71			1		

Contractors were requested to identify three reasons for using material from informal material suppliers and rank them one to three in order of importance. These were used to compute the Average Ranking Index (ARI) defined in equation 6.3. In calculating the ARI, each construction material represented in Table 6.15 was considered to be independent. Of the reasons offered, supplementation of other sources of construction material ranks higher (ARI=1), followed by the availability of the material when required (ARI=2) and lastly cheapness of the material (ARI=2.1). Good quality of the material with ARI=2.7 was regarded not to be an important reason. It should however be noted that this finding can not be generalised for all contractors since it involved only 12 per cent of the interviewed contractors.

Table 6.16 shows that there was a moderate frequency (FI=1.7) of the informal contractors to obtain equipment from the informal equipment suppliers. The main equipment hired included concrete mixing and compaction equipment, and transport equipment like tipper trucks and pickups. The type of equipment hired represented the most common equipment used by small contractors for building works.

Table 6.16 Working relationships between informal contractors and informal equipment suppliers (A28)

Equipment	Frequency scale/ Number of responding contractors			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Concrete mixers	145	-	260	1.7
Concrete vibrators	145	-	260	1.7
Wheel loaders	-	-	405	1
Dumpers	-	-	405	1
Excavators	-	-	405	1
Tipper trucks	70	10	525	1.4
Pickups	52	13	540	1.3
Thendelir	21	13	571	1.1
Levelling instruments	21	19	571	1.1

Table 6.17 shows the reasons given by the informal contractors for obtaining equipment from the informal equipment suppliers, which include the supplementation of contractors' equipment holding (ARI=1.3), cheap hire rates for the equipment (ARI=1.7) and availability of the equipment when required (AR)=2.0). It should be noted here that although the survey indicated that equipment was hired to supplement contractors' holding, in actual fact as shown in Table 6.2, most of the contractors did not own any equipment at all.

The NISS revealed that 45 and 6 per cent of the informal contractors obtained materials from individuals and small enterprises respectively, and 43 per cent needed no materials (D23). On the contrary, DISS revealed that 90 per cent of the informal contractors did not indicate their source of materials (E6). Under such circumstances, it could be concluded that clients supplied material for projects under the execution of the informal contractors that responded to the interview.

Table 6.17 Reasons by the informal contractors for using construction equipment from informal equipment suppliers (A29)

Equipment	Reasons: Number of responding contractors														
	Cheap			Available when required			Good working condition			Efficient			Suppliers other sources		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Concrete mixers		36	8	29	98	17			36			17	18		8
Concrete vibrators		36	8	29	98	17			36			17	18		8
Wheel loaders															
Dumpers															
Excavators															
Tipper trucks	72	10	1	16	41	26			14			26	28		8
Pickups	41	10	1	16	21	26			8			11	25		8
Theodolite				1	11	11			2			11	28		
Leveling instruments					11	11			2			11	28		
TOTAL	720	10	88	112	214	98	0	44	170	8	0	16	100	0	52
Average Ranking Index (ARI)	1.56			1.97			2.8			3			1.28		

6.13 DIFFICULTIES IN ESTABLISHING AND RUNNING OF BUSINESS

Only the NISS investigated problems that the informal contractors experienced when establishing their business. It established that lack of adequate capital, difficult access to equipment and spare parts, and difficulties in getting customers were the main problems (D16).

All three studies established major operating difficulties of the informal contractors. The main problems established by the ICS are shown in Table 6.18, and include lack of financing (II=2.9), difficulties in obtaining projects (II=2.8), lack of equipment (II=2) and lack of skilled labour (II=1.8). The established reasons corroborate with those established by the NISS and DISS.

Table 6.18 Operating problems faced by the informal contractors (A30)

Reason	Importance scale/Number of contractors responding			Importance Index (II)
	Most important (3)	Important (2)	Least important (1)	
Lack of financing	368	22	15	2.9
Lack of equipment	90	238	69	2.0
Lack of skilled labour	21	302	82	1.8
Difficulties in obtaining projects	342	63	-	2.8

6.14 CAPITAL AND SOURCE OF CAPITAL

Only the NISS and DISS established the initial capital required to start a business. The NISS further established the source of capital. Despite the difficulties the informal construction enterprises have in acquiring credit facilities or raising capital, it was suggested in Chapter Three that it was easy to enter into the construction business, and this could be attributed to the low capital required to start and run a business. According to the NISS and DISS, the average start up capital for an ICE was Tshs. 5,560 (US\$ 24) in 1991 and Tshs. 20,545 (US\$ 37) in 1995 respectively (D7&E4). This, when analysed in terms of US\$ at the current exchange rates to take care of high inflation in Tanzania, indicates that in 1995 it was about 1.5 times more expensive to establish a business as an informal contractor compared to 1991.

The NISS established that 72 per cent of the ICEs were established using owners' savings, 13 per cent using funds obtained from owners' friends/relatives, and 7 per cent using funds borrowed from friends and/or relatives (D8). It further established that the average fixed and working capital for an ICE in 1991 was Tshs. 10,713 (US\$ 46) and Tshs. 720 (US\$ 3) respectively (D9&D10). However, although it is argued that with such small capitals it is difficult to prosper and grow into a competitive business, for a poor country, like Tanzania, the established average figures for capital would be unaffordable to the majority of the population, whose an average per capita income is less than one US\$ per day (GOT, 1996b; World Bank, 2000).

6.15 CONTRIBUTION TO NATIONAL OUTPUT

The NISS and DISS established the contribution of the informal sector to the national economy as summarized in Table 6.19.

Table 6.19 Contribution of the informal construction sector to the Tanzanian economy

Economic indicator	NISS (1991)		DISS (1995)
	Dar-es-Salaam region	Total in the country	Dar-es-Salaam region
Total Gross output Tshs million	5,187	14,577	14,775
Total Value added Tshs Million	3,964	10,864	10,543
Number Employed by the Sector	27,327	163,498	25,240
Total Capital formation Tshs '000	44,387	186,280	121,501

Source: GOT (1991a) and GOT (1995)

Comparing the figures of total gross output, total value added, total capital formation and employment for Dar-es-salaam obtained by the NISS and those of DISS, there was an indication that the informal construction sector was growing, and its contribution to the national economy was increasing. For the case of Dar-es-Salaam, the number of people employed by the sector increased by 13 per cent in four years (1991-95). Similarly, when the comparison is made in terms of a more stable US\$ the total gross output, the total value added and total capital formation increased by 20, 44 and 15 per cent respectively.

In Chapter Two it was discussed that household activities constitute a non-monetary part of the informal sector. Data on Gross Fixed Formation (GCF) and Gross Domestic Product (GDP) for the construction industry in Tanzania was obtained from the TUSH (GOT 1999a) and are summarized in Appendix 6.3. The contribution of rural own-construction in this case regarded as a non-monetary part of the construction industry to the GCF and GDP was computed from the data in Appendix 6.3. The results are shown in Figure 6.5.

Figure 6.5 reveals that the contribution of rural-own construction to the GDP of the construction industry was above 15 per cent for almost eleven years (1987 to 1998) with a peak of 23 per cent in 1995. Similarly, its contribution to the GCF of the construction industry during the same period was above 10 per cent with a peak of 16 per cent in

1996. Taking these figures into account, the contribution of the informal construction sector to the economy is therefore very significant. The contribution could even be higher if the own construction of urban houses and construction carried out by the informal contractors for payment were included.

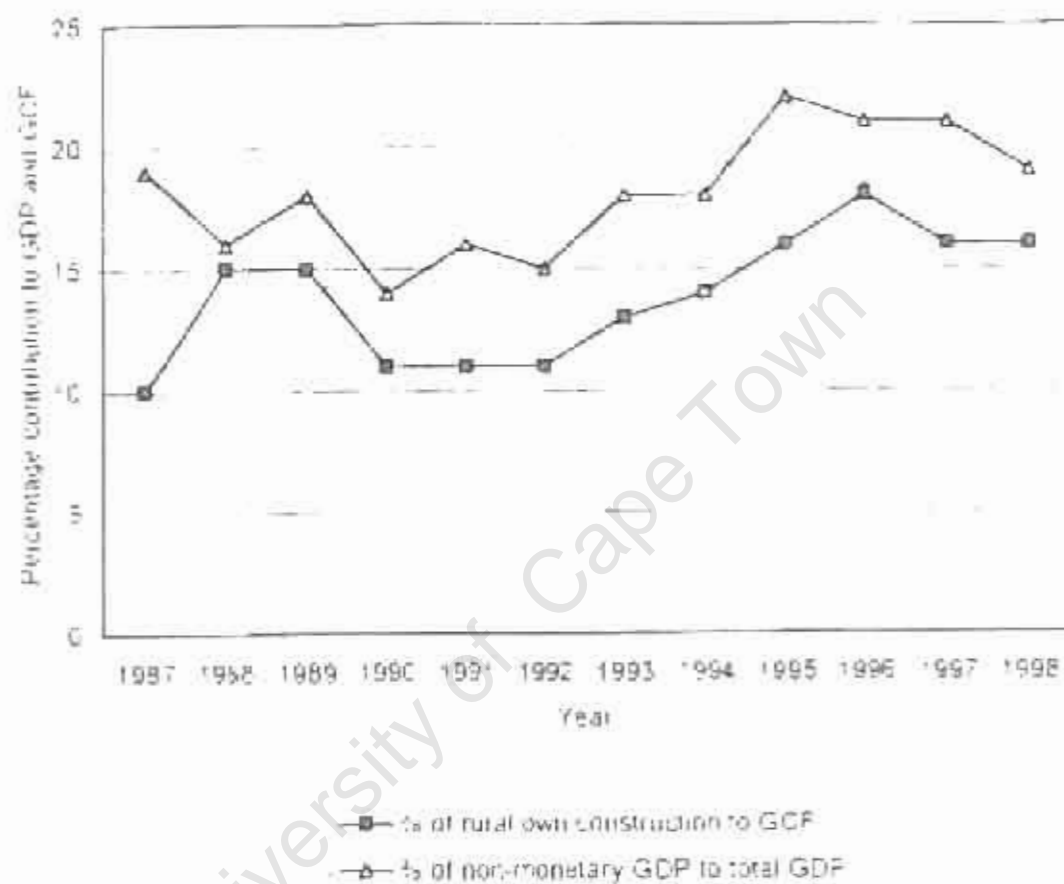


Figure 6.5 Contribution of rural own construction to the construction industry's GDP and GCF

Similarly, assuming that the selected sample represents the population, Table 6.20 shows the computed figures of level employment and volume of business carried out in the urban informal construction sector based on the ICS.

Table 6.20 Employment and level of business carried out in the Tanzanian urban informal construction sector in year 2000(A2 and A6)

	Total number of urban ICE	Sample Averages	Population total
Number of Permanent Jobs	62,700	12	753,192
Number of part-time jobs		1.5	94,149
Annual turnover (million Tshs)		6.3	395,426

Source: GOT (1991a) and GOT (1995)

It is seen in Table 6.20, that the urban informal construction sector significantly contributes to employment and volume of construction business

6.16 SUMMARY

This chapter has provided a summary of data that was collected using the informal contractors' questionnaire. The data, together with that obtained from the NISS and DESS, was used to establish the characteristics of the Tanzanian informal contractors. The established characteristics support some of the arguments given on previous chapters on the importance of the informal sector and elaborate on how the informal contractors conduct their business.

The Chapter established the following major characteristics of the informal contractors

- Most ICE were of sole proprietorship, owned predominantly by men.
- Majority of owners of ICE are artisans, and the sector employs mainly unskilled workers.
- Majority of ICEs did not own basic equipment and did not have offices or workshops.
- Majority of contractors (about 55 per cent) had an annual turnover between Tshs 2 to 5 million, which is below the average turnover of Tshs 6.3 million. With this kind of turnover, these contractors were contravening CRB's regulations.

- Almost all (96 per cent) of ICE were operating without business licences. They cited that the ability to operate without business licence contributed to their failure to obtain licenses,
- About half of the informal contractors were unaware of the existence of contractors regulating body (CRB), and even for those that were aware of its existence, they cited that ability to operate without registration, difficult requirements and high costs contributed to their failure to register,
- There is limited collaboration between informal contractors and informal materials and equipment suppliers, and
- The major clients for informal contractors are private house developers as well as registered small and big contractors. In all incidences, the informal contractors were employed to supply labour only.

In summary, it was found that the informal construction sector is growing in size and its contribution to the economy is increasing. In addition, many informal contractors did not have the resources required to establish formal construction companies at entry level and carry out small projects that can not sustain growth.

The characteristics and the importance of the informal construction sector established in this chapter, will be used together with the findings on the nature of collaboration between formal and informal contractors to test the hypotheses and develop policy proposals later in this work. Chapter seven is devoted to discussing the nature of collaboration between formal and informal construction sectors based on the contractors' responses to the informal and formal contractors' survey questionnaires.

CHAPTER SEVEN

WORKING RELATIONSHIP BETWEEN FORMAL AND INFORMAL CONSTRUCTION SECTORS

7.1 INTRODUCTION

The previous chapter examined the characteristics of informal contractors: how they are organised, how they operate and how they contribute to the national economy. This chapter discusses the working relationship between the formal and informal construction sectors in Tanzania. It examines the collaboration amongst the formal contractors and between formal contractors and informal contractors, material suppliers and equipment suppliers. The work contained in this chapter will be used later in Chapter Eight to test the research hypothesis.

The discussion in this chapter is based on the responses of contractors to the small contractors' questionnaire (Appendix 5.7) and the large and medium contractors' questionnaire (Appendix 5.8). The data collection process using these questionnaires was discussed in Chapter Five.

The tables and figures shown in this chapter refer to the relevant survey questions included in the questionnaires. To allow cross-referencing each table refers to the question to which it is based. The bold numbers in brackets in the title of the table or figure represent the relevant question in the questionnaire. Letters B and C have been assigned to the questionnaire to simplify referencing.

- B – Refers to the small contractors' questionnaire (Appendix 5.7) and
- C – Refers to the large and medium contractors' questionnaire (Appendix 5.8).

7.2 BASIC DEMOGRAPHIC DATA OF THE INTERVIEWED CONTRACTORS

7.2.1 Small formal contractors

The classification of Tanzanian contractors was discussed in Section 3.4.1. On the basis of this classification, small contractors were regarded as contractors registered by the CRB in classes VI and VII. Figure 7.1 shows that out of 165 small contractors that were interviewed, 75 per cent were in class VII and 25 per cent in class VI. In addition, 42 per cent of the contractors interviewed were also registered as civil works contractors in classes VI and VII.

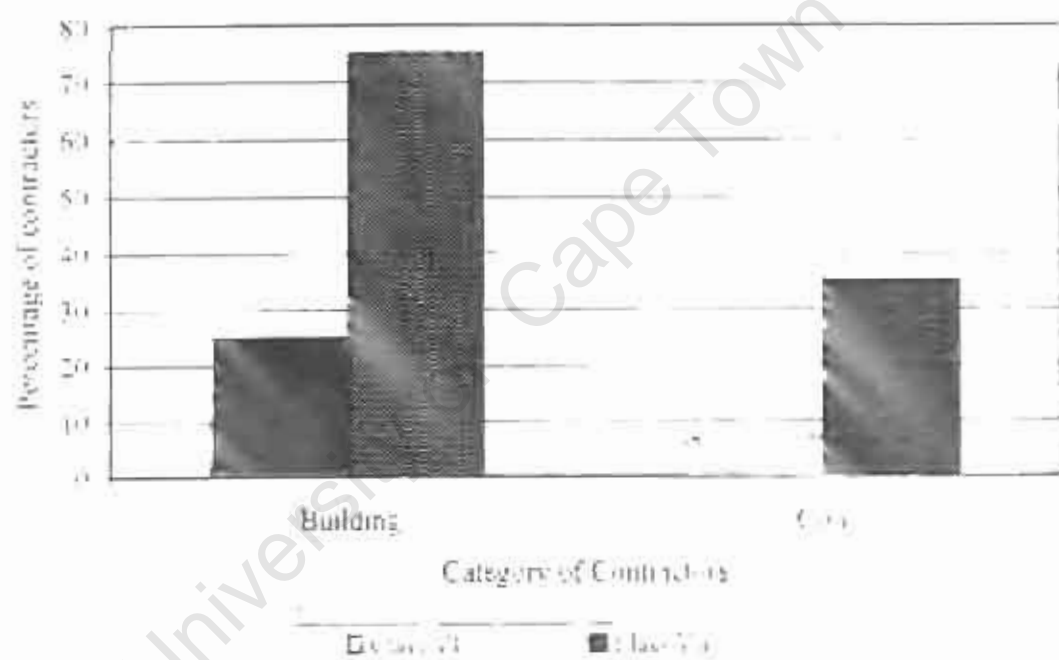


Figure 7.1 Classes of registration of the interviewed small contractors (B2)

Most of the interviewed contractors indicated that they worked for both public and private sector clients. Private sector clients, as used in this research, included developers for commercial and residential houses. Figure 7.2 shows that the average annual turnover of small contractors was Tshs 248 and 82 million from public and private sector clients respectively. The total average annual turnover was Tshs 293 million, with 6 per cent of contractors registering an annual turnover below Tshs 50 million and 5 per cent registering an annual turnover above Tshs 500 million.

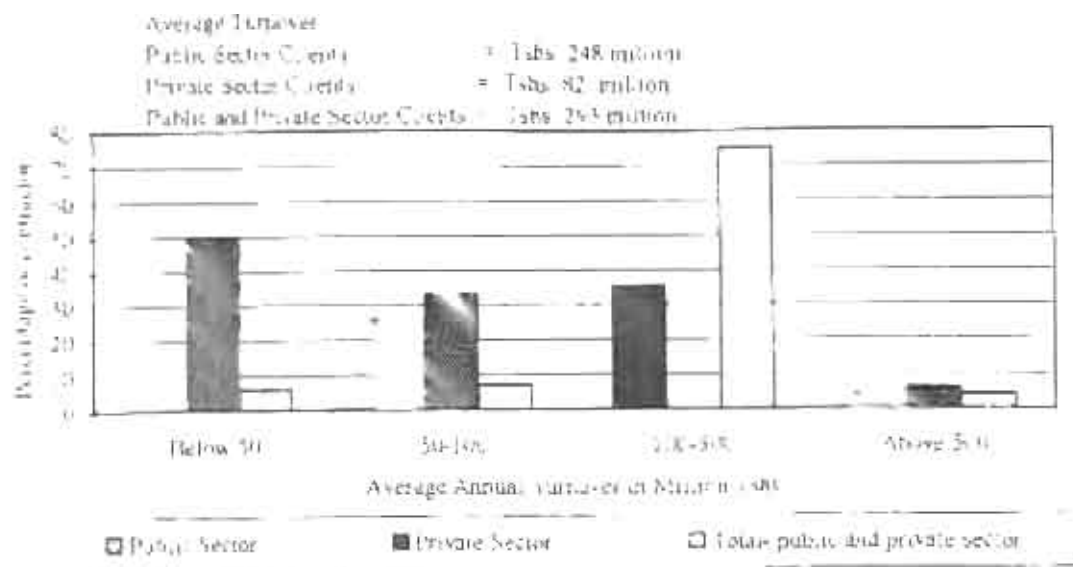


Figure 7.2 Average annual turnover of small contractors (B3)

Small contractors according to the CRB's classification are not allowed to execute projects with values exceeding Tshs. 100 million (Mugasa, 1999; CRB, 2000). Figure 7.3 shows that most of the projects executed by small contractors were within the allowed range with most of them falling below Tshs. 50 million. However, about 22 per cent of the interviewed contractors carried out projects with values exceeding Tshs. 100 million. Actually, 5 per cent of contractors carried out projects with values above Tshs. 200 million, which is double the allowed class limit.

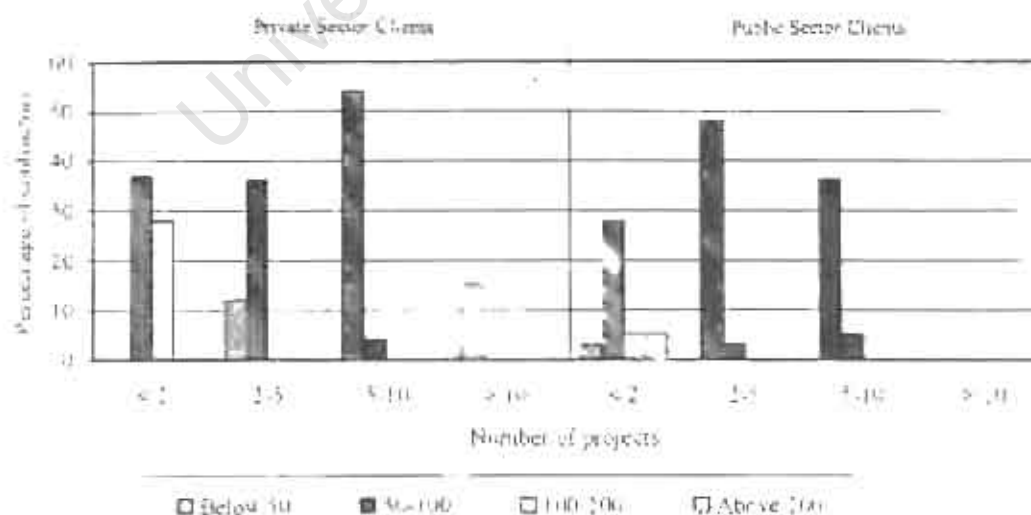


Figure 7.3 Value of projects executed by small contractors (B5)

Under the existing regulations in Tanzania, a contractor wishing to construct a project exceeding the allowed class limit must apply for, and obtain a dispensation from the CRB. In granting the dispensation, the CRB would consider the experience of the contractor, the size and complexity of the project, and the number of projects that he has in hand (Muhegi 2000b)²⁹. In this particular case, it was not established whether the contractors that executed projects with values exceeding the class limit had obtained a dispensation. It is, however, unlikely that dispensation would be allowed for projects with values equal to or more than twice the class limit.

The small contractors' questionnaire also established the type and number of staff employed by the firms. Figure 7.4 shows that 66 and 47 per cent of the interviewed contractors employed one administrative staff and one structural/civil engineer respectively. All the interviewed contractors employed technicians, 65 per cent employed one technician and 35 per cent employed between two and four technicians. Similarly, 86 per cent of the interviewed contractors employed between one to four artisans, 91 per cent employed between two to nine skilled labourers, 84 per cent employed between ten and nineteen unskilled labourers. Lastly, 22 per cent of the interviewed contractors employed more than twenty unskilled labourers.

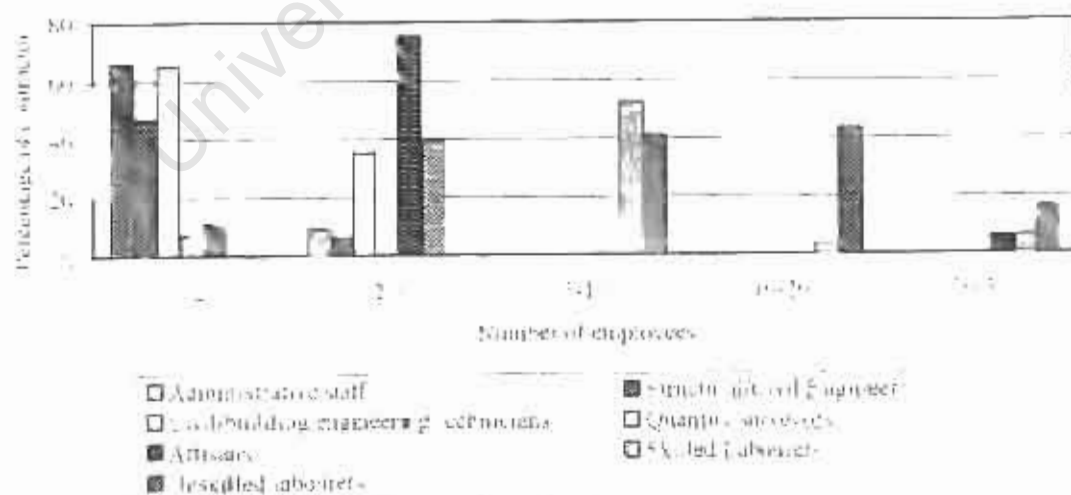


Figure 7.4 Employment by small contractors (B4)

²⁹ Comments during an interview with Mr Muhegi, the Registrar of CRB.

As discussed in Chapter Three, the CRB requires contractors to employ a minimum number of technical staff commensurate with the class of registration. Appendix 3.4 shows the minimum staff requirements for different classes of building and civil works' contractors. The emphasis is placed mainly on the technical staff (i.e. engineers, technicians and artisans). Contractors are of course expected to employ more workers above the minimum figures depending on their workloads. So the number of workers employed by contractors would fluctuate depending on the number of projects available for execution. All the contractors that were interviewed met the minimum staff requirements as stipulated in the CRB's requirements. It is however, important to comment that some contractors may have given numbers of employed staff falling within the CRB's requirement for the fear that later the information they provide may be used against them.

7.2.2 Large and medium formal contractors

The characteristics of the interviewed contractors were established by questions C4 to C5 in the questionnaire for large and medium contractors detailed in Figure 5.5 and attached as Appendix 5.8. Large contractors, as explained in Section 3.4.1, fall under classes I, II and III in the CRB's register. Medium contractors fall under class IV and V. Figure 7.5 shows that 53 per cent of the interviewed contractors were in the large category, and 47 per cent were in the medium category. At the same time 32 per cent of the contractors were operating as civil works contractors in various classes of registration.

Figure 7.6 shows that 100 and 94 per cent of the interviewed contractors respectively worked for public sector and private sector clients. The average annual turnover recorded by contractors from public clients was Tshs. 1,787 million, with 38 per cent lying between Tshs. 100 and 500 million, and 35 per cent between Tshs. 500 and 2,000 million and 27 per cent above Tshs. 2,000 million. In contrast, the average annual turnover recorded from private sector clients was one seventh (i.e. Tshs. 268 million) that of public sector clients, with 89 per cent being below Tshs. 500 million. The average total annual turnover, which combined turnover from private and public sector clients, was Tshs. 2,004 million, with 18 per cent being below Tshs. 500 million, 53 per

cent between Tshs 500 and 2,000 million, and 29 per cent being above Tshs 2,000 million. These results in general show that most of the jobs executed by formal contractors come from public sector clients. These results however need to be treated with caution. It was mentioned in Chapter Three that some formal contractors undertake private sector jobs using informal contracts in order to avoid paying taxes and other related costs. So there could be a possibility of these contractors hiding the income earned from the private sector.

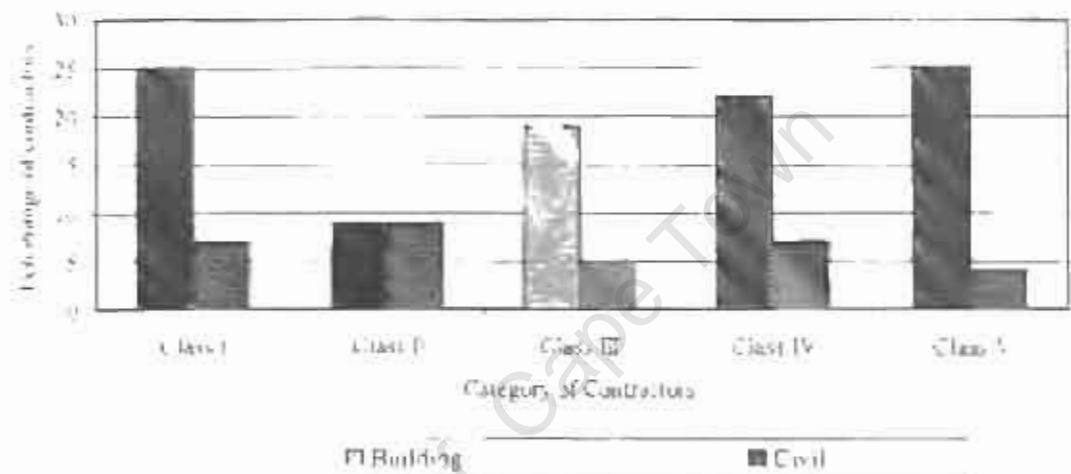


Figure 7.5 Classes of registration of the interviewed large and medium contractors (C2)

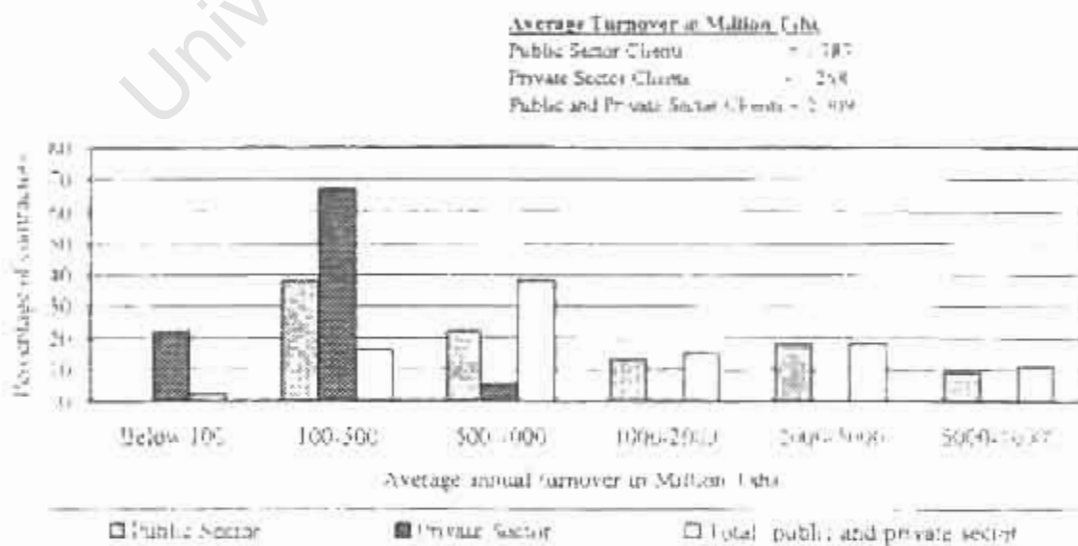


Figure 7.6 Annual turnover of large and medium contractors (C3)

The value of projects executed by large and medium contractors occupied two extreme ends: some were below Tshs 100 million, which is the allowed range for small contractors in class VI, while others exceed Tshs 3 billion. Figure 7.7 shows that 63 and 29 per cent of the contractors had executed projects with values below Tshs 100 million and between Tshs 1,000 and 3,000 million respectively for public sector clients. Only 4 per cent of contractors had executed contracts with values greater than Tshs three billion. At the same time, 89 per cent of contractors had executed projects with values less than Tshs 100 million for private clients.

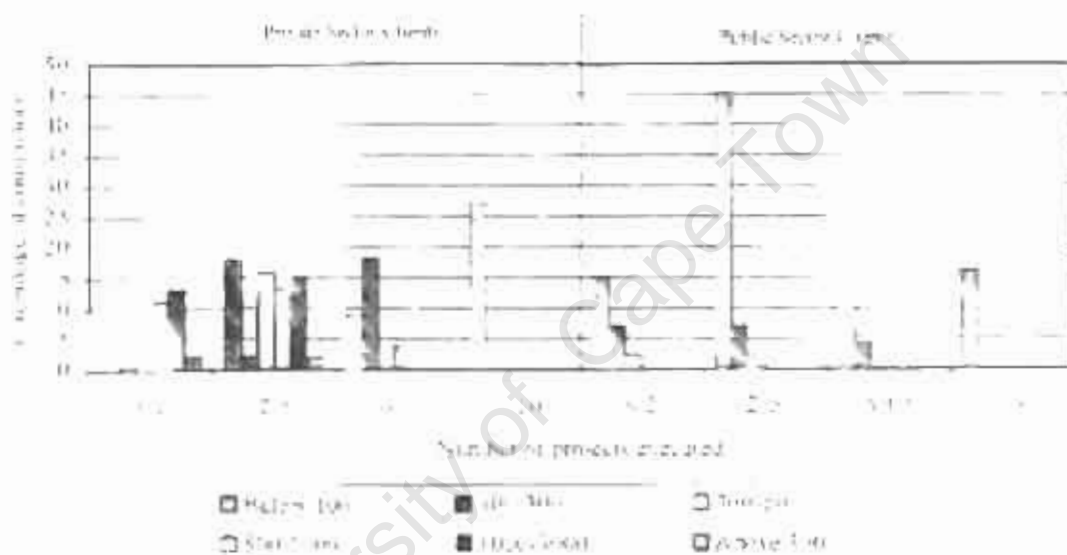


Figure 7.7 Value of projects executed by large and medium contractors (C5)

Generally, it is seen that large and medium contractors engaged in all sizes of projects, including small projects capable of being carried out by the small contractors. This justifies the opposition that was staged by this group of contractors to a proposed by-law by the CRB that would have limited them to carry out small projects (see Section 3.4.4). It must however be appreciated that a project may be small in size, but difficult to execute by the small contractors, because of other factors like duration of completion and level of technology involved. Similarly, not every big project in value is difficult to execute by small contractors, hence the essence of granting dispensations to allow contractors to execute projects with values exceeding the set class limits (Muhegi 2000b).

As expected, this group of contractors employs quite a substantial number of administrative staff, engineers and technicians. Figure 7.8 shows that 53 per cent of the interviewed construction firms employed one administrative staff, and 44 per cent employed between two and four. At the same time, 64 per cent of the firms employed one engineer and 37 per cent employed between two and four. 44 per cent of the firms employed one quantity surveyor.

A high level of employment of technicians was established, with 65 per cent of firms employing between two and four technicians and 24 per cent employing between five and nine. With regard to lower qualification staff, 64 per cent of the firms employed between five and nine artisans, 55 per cent employed between ten and nineteen skilled labourers, 55 per cent employed between twenty and forty-nine unskilled labourers, 18 per cent employed between fifty and ninety-nine unskilled labourers. Only 9 per cent employed more than one hundred unskilled labourers.

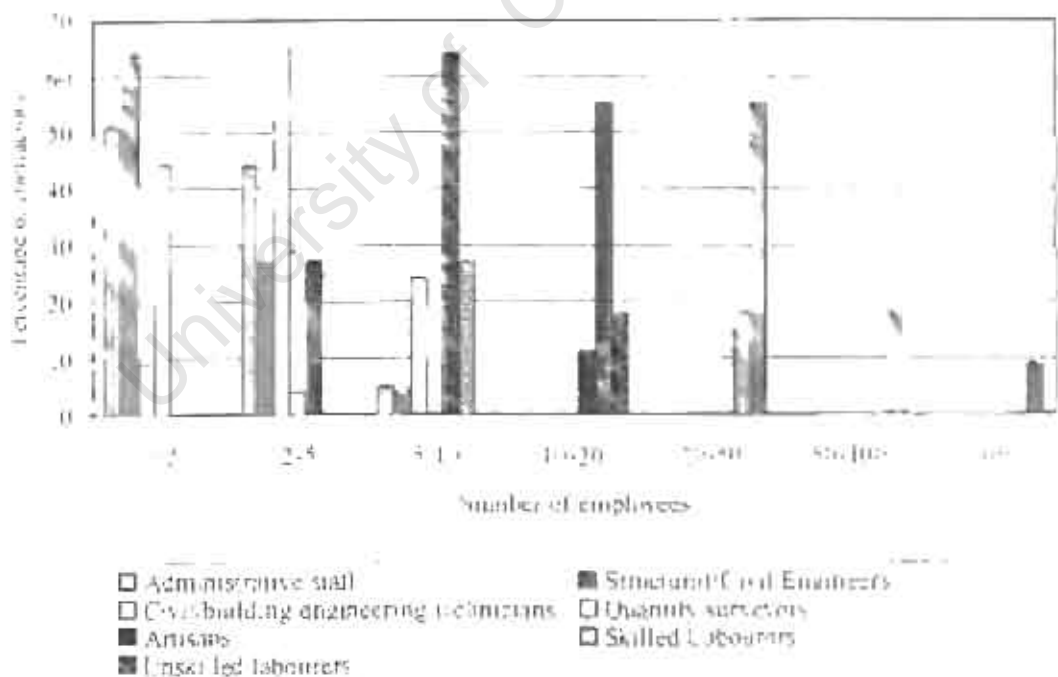


Figure 7.8 Employment by large and medium contractors (C4)

7.3 WORKING RELATIONSHIP BETWEEN SMALL CONTRACTORS WITH CLIENTS

7.3.1 Private clients

Table 7.1 shows that 84 per cent of the interviewed small contractors worked for private clients. Only 16 per cent have never worked for private clients. Table 7.2 shows the reasons that motivated the contractors to work for private clients, the major reason being the job opportunities offered by private clients (II=2.2)¹¹. Other reasons included unbureaucratic procedures (II=2), uncomplicated contract documentation (II=2), good profit prospects (II=1.9) and timely payment by private clients (II=1.8).

Table 7.1 Extent of small contractors working for private clients (B6)

	YES	NO
Number of responses	138	27
Percentage of responses (N=165)	84	16

Table 7.2 Reasons of small contractors for working for private clients (B7)

Reason	Importance scale/Number of responding contractors			Importance Index (II)
	Very important (3)	Important (2)	Least important (1)	
Unable to get jobs in public sector	25	18	95	1.5
Timely payment by private clients	17	76	45	1.8
Less bureaucracy when working for private clients	15	165	36	2.0
Uncomplicated documentation	15	105	36	2.0
Good profit to be obtained	7	122	36	1.9
Another source of job	82	36	47	2.2

The computed frequency index in Table 7.7 shows that more contractors were employed by private clients on a labour contract (FI=2.2)¹² as compared to a full contract (FI=1.8). The differences are however, negligible. Actually it was only about 17 per cent of contractors that undertook labour contracts only.

¹¹ The Importance Index (II) was defined by equation (6.1).

¹² The Frequency Index (FI) was defined by equation (6.2).

Table 7.3 Type of services offered by small contractors to private clients (B8)

	Frequency scale/Number of responding contractors			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Labour only	23	15	-	2.2
Full contract	-	15	23	1.8

Contractors were also required in the questionnaire to express problems they encountered when employed by private clients. Table 7.4 shows that the problems include delayed payments by the client (II=1.9), poor quality and late delivery of materials supplied by the client (II=1.9) and lastly postponement of execution of the agreed works by the client (II=1.8).

The small contractors' questionnaire also solicited from contractors that had never worked for private clients the reasons for not doing so. This group consisted of 16 per cent of all the interviewed contractors, and they responded that apart from the fear of the possibility of non-payment by the clients and the long execution period for the projects, they had never been offered jobs by private clients. This is reflected by the Importance Indices shown in Table 7.5.

Table 7.4 Problems experienced by small contractors when working for private clients (B9)

Problem	Importance scale/ Number of responding contractors			Importance Index (II)
	Very Important (3)	Important (2)	Least Important (1)	
Delayed payments by the client	-	124	14	1.9
Postponement by the client on execution of agreed works	-	104	34	1.8
Frequent stoppage of works by the client	-	58	80	1.4
Poor quality of materials supplied by the client	-	124	14	1.9
Late delivery of materials by the client	-	151	7	1.9

Table 7.5 Reasons by small contractors for not working for private clients (B12)

Reason	Importance scale			Importance Index (II)
	Number of responding contractors			
	Very Important (3)	Important (2)	Least Important (1)	
The value of the projects is small	0	12	5	1.4
Projects do not have proper contract documents	0	11	16	1.4
Possibility of non-payment by the Client	7	20	0	2.3
Long execution period for the projects	0	20	0	2.3
Not offered any job by the private clients	15	8	7	2.3
Small profit expected	0	10	14	1.5

Another important aspect that was investigated was the benefits gained by the small contractors when employed by private clients. Table 7.6 gives the benefits, the most important being work opportunities and gaining of skills and income. This is reflected by the high computed Importance Indices.

Table 7.6 Benefits to small contractors of working for private clients (B11)

Benefit	Importance scale Number of responding contractors			Importance Index (II)
	Very important (3)	Important (2)	Least important (1)	
Continued work load	132	73	0	2.8
Improving cash flow	115	50	0	2.1
Gaining skills	135	32	0	2.8

7.3.2 Large and medium contractors

Table 7.7 shows that 51 per cent of the interviewed small contractors were employed by large and medium contractors, and the services offered were limited to labour contracts only as shown in Table 7.8.

Table 7.7 Extent of small contractors to work for big contractors (B12)

	YES	NO
Number of responses	84	81
Percentage of responses (N=165)	51	49

Table 7.8 Type of services offered by small contractors to large contractors (B14)

	Frequency scale/Number of responding contractors			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Labour only	84			3.0
Full contract			84	1.0

The main reasons offered for working for large and medium contractors are given in Table 7.9 the most important being that large and medium contractors provided opportunities for work for small contractors (II=2.6). Other reasons include opportunities to gain technical and managerial skills (II=2).

Table 7.9 Reasons of small contractors to work for big contractors (B13)

Reason	Importance scale/Number of responding contractors			Importance Index (II)
	Very Important (3)	Important (2)	Least Important (1)	
Unable to get jobs from other sources	-	11	66	1.3
Good pay by big contractor	-	29	55	1.7
Less bureaucracy when working with big contractors	-	54	30	1.6
To gain technical skills	-	84	-	2.0
To gain managerial skills	-	84	-	2.0
Another source of job	58	20	6	2.6

Small contractors that had never worked for large and medium contractors were requested to provide reasons of not doing so. They admitted not having explored the possibility of getting jobs from those contractors. This is reflected by an Importance Index of three for that reason as shown in Table 7.10.

Small contractors were interviewed on the possible benefits to be gained when they work for large and medium contractors. Table 7.11 shows that the contractors expected to gain technical experience (II=2.8), managerial experience (II=2.7), access to jobs (II=2.5) and income (II=2.4).

Table 7.10 Reasons of small contractors not working for large contractors (B15)

Reasons	Importance scale			Importance Index (I _i)
	Number of responding contractors			
	Very important (3)	Important (2)	Least important (1)	
The value of projects is small	-	-	81	1.0
Projects do not have proper contract documents	-	28	53	1.1
Possibility of non-payment by the big contractors	-	51	36	1.6
Long execution period for the projects	-	9	75	1.1
Not offered jobs or explored the possibility	81	-	-	3

Table 7.11 Benefits to small contractors of working for large contractors (B16)

Benefit	Importance scale/Number of responding contractors			Importance Index (I _i)
	Most important (3)	Important (2)	Least important (1)	
Continued work load	86	85	-	2.5
Improving cash flow	59	196	-	2.4
Gaining technical experience	129	16	-	2.8
Gaining managerial experience	114	51	-	2.7

7.4 RELATIONSHIP BETWEEN FORMAL CONTRACTORS AND INFORMAL MATERIAL SUPPLIERS

7.4.1 Small formal contractors

The majority of the small contractors indicated that on some occasions they had obtained their building materials from informal building material suppliers. This is reflected in the computed Frequency Indices shown in Figure 7.12, which ranged from 1.9 to 2.5. The main materials purchased included aggregates, followed by timber and timber products and lastly concrete blocks and precast concrete products. Cement was hardly bought from informal suppliers (FI=1.1).

Table 7.12 Frequency of small contractors to purchase materials from informal materials suppliers (B17)

Building material	Frequency scale ¹			Frequency Index (FI)
	Number of responding contractors			
	Always (3)	Sometimes (2)	Never (1)	
Concrete blocks	16	113	27	1.9
Precast concrete products	7	122	27	1.9
Soft wood timber	38	106	17	2.2
Hardwood timber	38	106	17	2.2
Timber products	38	106	17	2.2
Timber props	38	106	17	2.2
Aggregate	85	59	17	2.5
Sand	85	59	17	2.5
Cement	9	-	147	1.1

The main reasons for procuring building materials from informal material suppliers are shown in Table 7.13 and included supplementation of contractors' own sources (ARI=1) and availability of materials when required by the contractor (ARI=1.9)¹²

Table 7.13 Reasons by small contractors for using construction materials from informal material suppliers (B18)

Material	Reasons and their ranking Number of responding contractors											
	Cheap			Available when required			Good quality			Supplement other sources		
	1	2	3	1	2	3	1	2	3	1	2	3
Concrete blocks	7	5	101	-	124	5	-	-	23	157	-	-
Precast concrete products	5	5	101	-	124	5	-	-	23	137	-	-
Soft wood timber	4	20	94	15	124	5	-	-	45	115	-	-
Hardwood timber	4	20	94	15	124	5	-	-	45	115	-	-
Timber products	4	20	94	15	124	5	-	-	45	115	-	-
Timber props	4	20	94	15	124	5	-	-	45	115	-	-
Aggregate	46	25	57	27	108	5	-	-	87	78	-	-
Sand	46	25	57	27	108	5	-	-	87	78	-	-
Cement	-	-	-	-	2	-	-	-	1	2	1	-
TOTAL	152	141	692	101	969	40	-	-	329	892	-	-
Average Ranking Index (ARI)	2.5			1.9			3			1		

¹² the Average ranking index (ARI) was defined by equation (7.1)

7.4.2 Large and medium formal contractors

Table 7.14 shows that 82 per cent of large and medium contractors indicated that they sometimes obtained building materials from the informal building materials suppliers. The remaining 18 per cent indicated that they had never used materials from this source. Materials purchased included concrete blocks and precast concrete products, timber and timber products, and aggregates. The computed Frequency Indices shown in Table 7.15, which range from 1.7 to 1.9, imply that all the materials mentioned had almost the same frequency of being purchased, with the exception of cement, which had never been bought from the informal suppliers (FI=1).

Table 7.14 Frequency by large and medium contractors of purchasing materials from the informal material suppliers (C6)

	Frequency scale			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Number of Contractors	0	45	10	1.8
Percentage of responses	0%	82%	18%	

Table 7.15 Frequency of materials purchased by large and medium contractors (C7)

Building material	Frequency scale			Frequency Index (FI)
	Number of responding contractors			
	Always (3)	Sometimes (2)	Never (1)	
Concrete blocks	1	41	0	1.8
Precast concrete products	1	41	17	1.8
Soft wood timber	2	42	12	1.9
Hardwood timber	2	42	12	1.9
Timber products	1	47	11	1.8
Timber props	2	41	11	1.9
Aggregates	6	18	11	1.9
sand	6	38	11	1.9
Cement	0	0	55	1.0

The questionnaire for large and medium contractors requested contractors to list three reasons in order of importance that led them to procure materials from informal suppliers of building materials. The reasons, which are given in Table 7.16, included supplementation of contractors' own sources (ARI=1) and the availability of materials when required (ARI=2.1).

Table 7.16 Reasons by large and medium contractors for using construction materials from the informal material suppliers (CB)

Material	Reasons and their ranking/Number of responding contractors											
	Cheap			Available when required			Good quality			Supplement other sources		
	1	2	3	1	2	3	1	2	3	1	2	3
Concrete blocks	-	1	26	-	18	4	-	1	17	42	-	-
Precast concrete products	-	1	26	-	18	4	-	1	17	42	-	-
Soft wood timber	1	2	27	-	19	7	-	1	17	43	-	1
Hardwood timber	1	2	27	-	19	7	-	1	17	43	-	1
Timber products	1	2	27	-	19	7	-	1	17	43	-	1
Timber props	1	2	27	-	19	7	-	1	17	43	-	1
Aggregate	1	2	26	1	40	7	-	1	14	42	1	1
Sand	1	2	26	1	40	7	-	1	14	42	1	1
Cement	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	15	18	212	2	118	26	0	8	106	140	2	6
Average Ranking Index (ARI)	2.9			2.1			2.9			1.0		

7.5 RELATIONSHIP BETWEEN FORMAL CONTRACTORS AND INFORMAL EQUIPMENT SUPPLIERS

7.5.1 Small formal contractors

Only 16 small formal contractors responded to questions related to their working relationship with the informal equipment supplier. Of the responding contractors, 77 per cent indicated that they had done so on some occasions. The equipment hired varied from one contractor to another, but the main equipment hired was concrete mixers and vibrators, followed by tipper trucks and light duty vehicles. This is shown by the computed Frequency Indices for the materials in Table 7.17.

Small contractors were also requested to give reasons for the hiring of equipment from informal equipment suppliers. According to Table 7.18, the main reasons given included supplementation of contractors' own sources of equipment (ARI=1) and the availability of equipment when required (ARI=1.9).

Table 7.17 Frequency of small contractors to hire equipment from the informal equipment suppliers (B19)

Equipment	Frequency scale:			Frequency Index (FI)
	Number of responding contractors			
	Always (3)	Sometimes (2)	Never (1)	
Concrete mixers	52	52	37	2.1
Concrete vibrators	52	52	33	2.1
Wheel loaders	-	29	152	1.1
Dumpers	-	29	152	1.1
Excavators	-	38	119	1.2
Tipper trucks	31	77	53	1.9
Pickups	24	84	53	1.8
Theodolite	14	72	75	1.6
levelling instruments	14	70	77	1.6

Table 7.18 Reasons given by small contractors for using construction equipment from the informal equipment suppliers (B20)

Equipment	Reasons and their ranking/Number of responding contractors														
	Cheap			Available when required			Good Working condition			Efficient			No pleases of other sources		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Concrete mixers	20	30	10	10	80	-	-	9	92	-	-	1	11	-	-
Concrete vibrators	30	5	15	50	85	-	1	92	-	11	61	-	-	-	-
Wheel loaders	-	-	-	-	70	-	-	22	-	-	-	-	29	-	-
Dumpers	-	-	7	-	29	-	-	22	-	-	-	-	29	-	-
Excavators	-	-	10	-	48	-	-	22	-	-	-	-	70	-	-
Tipper trucks	10	10	35	12	91	5	-	37	-	-	11	80	-	-	-
Pickups	7	-	17	12	81	5	-	30	-	11	90	-	-	-	-
Theodolite	14	7	15	-	71	-	-	41	-	7	78	-	-	-	-
levelling instruments	14	8	15	7	59	36	-	37	-	8	64	-	-	-	-
TOTAL	101	66	211	106	585	46	11	436	-	60	71	-	-	-	-
Average Ranking Index (ARI)	2.3			1.9			3.0			1.7			2.0		

7.5.2 Large and medium formal contractors

Table 7.19 shows that 20 per cent of large and medium contractors hired equipment from the informal equipment suppliers. The remaining 80 per cent of contractors had never hired equipment from this source. All the equipment shown in Table 7.20 was hired on very few occasions as reflected in their low Frequency Indices. In this

particular case it could be implied that equipment hired by large and medium contractors from the informal equipment sources is negligible

Table 7.19 Frequency of large and medium contractors to hire equipment from the informal equipment suppliers (C9)

	Frequency scale			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Number of Contractors	-	11	44	1.7
Percentage of responses	0%	20%	80%	

Table 7.20 Frequency of large and medium contractors to hire specific equipment from the informal equipment suppliers (C10)

Equipment	Frequency scale			Frequency Index (FI)
	Number of responding contractors			
	Always (3)	Sometimes (2)	Never (1)	
Concrete mixers	-	9	46	1.2
Concrete vibrators	-	9	46	1.2
Wheel loaders	-	8	47	1.1
Dumpers	-	7	48	1.1
Excavators	-	5	50	1.1
Tipper trucks	-	9	46	1.2
Pickups	-	5	50	1.1
Theodolite	-	4	51	1.1
Levelling instruments	-	3	52	1.1

It is not surprising to observe such a low rate of hiring equipment from the informal sector even the fact that the basis of qualification to be a contractor in this group is the possession of basic equipment like concrete mixers and vibrators, tipper trucks, pickups etc (SRB 2000b)

Contractors that hired equipment from the informal equipment supplier were requested to provide reasons for making them hire equipment from this source. However, other contractors, that had never used equipment from the informal equipment suppliers provided what they thought were the reasons that could compel a formal contractor to hire equipment from the informal suppliers. The reasons are shown in Table 7.21, and

are similar to the reasons offered by small contractors, which include supplementation of contractors, equipment and availability of equipment when needed.

Table 7.21 Reasons by large and medium contractors for using construction equipment from the informal equipment suppliers (C11)

Equipment	Reasons and their ranking						Number of responding contractors	
	Cheap	Available when required	Good condition	Working	Efficiency	Complement other sources		
Concrete pumps	1	24	8	13	12	2	13	13
Concrete mixers	5	24	8	12	12	1	11	11
Wheel loaders	2	21	7	10	12	1	7	7
Excavators	11	2	9	11	12	1	8	8
Excavators	12	28	8	8	12	2	8	8
Trailer trucks	7	27	8	10	2	2	30	30
Pickups	8	24	8	10	2	2	12	12
Disc plough	8	24	9	11	12	1	11	11
Levelling instruments	5	24	8	9	12	1	11	11
TOTAL	42	290	81	99	108	15	109	109
Average ranking index (ARI)	3	2.3	2.5	3	1			

7.6 RELATIONSHIP BETWEEN FORMAL CONTRACTORS AND INFORMAL CONTRACTORS

7.6.1 Small contractors

Small formal contractors were requested to indicate the extent to which they subcontracted construction works to informal contractors. 97 per cent indicated that they employed informal contractors on labour only contracts. The computed Frequency Indices shown in Table 7.22 reveals that the frequency of subcontracting to various categories of informal contractors (trades) is almost the same. The subcontracted groups included specialised unskilled gangs, plumbers, electricians, masons, steel fixers, tiles fixers, carpenters, painters and land surveyors.

Table 7.22 Frequency of small contractors to subcontract work to the informal contractors (B21)

	Frequency scale			Frequency Index (FI)
	Number of responding contractors:			
	Always (3)	Sometimes (2)	Never (1)	
Specialised unskilled gangs	16	138	7	2.1
Plumbers	11	125	5	2.2
Electricians	11	120	10	2.1
Steel fixers	16	140	5	2.1
Carpenters	16	140	5	2.1
Masons	9	140	12	2.0
Tile fixers	24	132	6	2.1
Painters		141	17	1.8
Land surveyors	8	131	22	1.9

The reasons given by small contractors for subcontracting to informal contractors are shown in Table 7.23. They include supplementation of contractors' own labour force and availability of labour when required. It is important to note that cheapness and quality of job done by the informal contractors ranked last in the list of reasons given by the majority of contractors. This implied that works executed by informal contractors could be of poor quality and could sometimes be expensive.

Table 7.23 Reasons by small contractors for subcontracting work to the informal contractors (B22)

Trade	Reasons and their ranking/Number of responding contractors											
	Cheap			Availability when required			Quality job			Supplement other source		
	1	2	3	1	2	3	1	2	3	1	2	3
Specialised unskilled gangs	8	13	126		10	13			10	143		
Plumbers		13	126		10	13			17	130		
Electricians		11	125		10	13			17	140		
Steel fixers		14	117		10	13			17	136		
Carpenters		11	126		10	13			17	140		
Masons		5	126		10	13			17	129		
Tile fixers		6	126		10	13			17	140		
Painters		6	126		10	13			17	139		
Land surveyors		6	116		10	13			17	129		
TOTAL	8	89	1115	6	127	89			146	1281		
Average ranking Index (ARI)	2.9			2.1			3			1		

7.6.2 Large and medium contractors

Table 7.24 shows that 82 per cent of the large and medium contractors subcontracted work to the informal contractors. Only 18 per cent indicated to the contrary. The reasons given for subcontracting are shown in Table 7.25. The main reason, as shown by the computed Importance Index, was to supplement the contractors' own labour (II=2.7). Other equally important reasons were to supplement skills available in the company and to keep the company labour force to the minimum (II=2.1).

Table 7.24 Frequency of large and medium contractors to subcontract work to the informal contractors (C16)

	Frequency scale			Frequency index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Number of Contractors		45	0	1.8
Percentage of responses	0%	82%	18%	

Table 7.25 Reasons by large and medium contractors for subcontracting works to the informal contractors (C18)

Reason	Importance scale/ Number of responding contractors			Importance index (II)
	Most important (3)	Important (2)	Least important (1)	
To supplement own labour	31	14	-	2.7
To supplement skills available in the company	26	17	2	2.1
To keep company labour force to the minimum	25	18	2	2.1
To offer work opportunities to small contractors	2	8	45	1.0

The major activities that were subcontracted are shown in Table 7.26 and include manual works like excavation and concreting, steel fixing and formwork fixing. The informal contractors only supplied labour for the works.

Table 7.26 Building activities subcontracted by large and medium contractors to the informal contractors (C19)

Activities	Type of contract			
	Labour only		Full contract	
	No. of responding contractors	%	No. of responding contractors	%
Excavation	42	93	-	-
Concrete	41	89	-	-
Steel fixing	38	84	-	-
Formwork fixing	35	78	-	-
Block walling	25	56	-	-
Plastering	20	44	-	-
Screeding	20	44	-	-
Trunk	16	35	-	-
Roofing	25	56	-	-

Large and medium contractors were requested in the interview to give their opinions on the benefit to be gained by subcontracting to informal contractors. From Table 7.27 all contractors were of the opinion that subcontracting to informal contractors could bring them benefits which include acting as a buffer to fluctuating workload, obtaining expertise not within the company and relieving the company of training costs of their own employees.

Table 7.27 Benefits gained by large and medium contractors for subcontracting to informal contractors (C20)

Benefit	Importance scale/Number of responding contractors			Importance Index (II)
	Most important (3)	Important (2)	Least important (1)	
Act as a buffer for fluctuating work load	39	13	-	2.60
Obtaining expertise not within the company	42	18	2	2.43
Relieving the company of training costs	16	28	8	2.03

7.7 WORKING RELATIONSHIP BETWEEN LARGE AND SMALL CONTRACTORS

The interviews established a high tendency of sub-contracting by large and medium contractors to small contractors. Table 7.28 shows that 93 per cent of the interviewed contractors subcontracted works to small contractors. The main reasons offered for this tendency are given in Table 7.29 and include supplementing large contractors' own labour and skills in the company and keeping the company labour force to a minimum. Apparently, apart from the benefits gained by the subcontracting firms, there was no implied effort to assist the small contractors.

Table 7.28 Frequency of large and medium contractors for subcontracting works to small contractors (C12)

	Frequency scale			Frequency Index (FI)
	Always (3)	Sometimes (2)	Never (1)	
Number of Contractors	1	51	4	1.9
Percentage of responses	100%	93%	7%	

Table 7.29 Reasons of large and medium contractors for subcontracting works to small contractors (C13)

Reason	Importance scale			Importance Index (II)
	Most important (1)	Important (2)	Least important (3)	
To supplement own labour	59	12		2.76
To supplement skills available in the company	59	11	1	2.68
To keep company labour force to the minimum	39	29	1	2.57
To offer work opportunities to small contractors	1	11	29	1.29

Table 7.30 shows that large and medium contractors subcontracted almost all major building activities to small contractors on labour only contracts. This could be attributed to the fact that small contractors, within its workforce, consist of skilled trade persons specialised in different trades, so these contractors could undertake any building activity that was offered to them.

Table 7.30 Building activities subcontracted by large and medium contractors to small contractors (C14)

Activities	Type of contract			
	Labour only		Full contract	
	No. of responding contractors	%	No. of responding contractors	%
Excavation	50	91	-	-
Concreting	51	93	-	-
Steel fixing	51	91	-	-
Formwork fixing	51	93	-	-
Block-walling	49	89	-	-
Plastering	48	87	-	-
Screeding	48	87	-	-
Tiling	48	87	-	-
Roofing	49	89	-	-

The interviewed large and medium contractors expressed that they benefited by subcontracting works to small contractors. Table 7.31 shows the perceived benefits, which include acting as a buffer to fluctuating workload, obtaining expertise not within the company, and relieving the company of training costs.

Table 7.31 Benefits gained by large and medium contractors in subcontracting works to small contractors (C15)

Benefit	Importance scale: Number of responding contractors			Importance index (II)
	Most important (3)	Important (2)	Least important (1)	
Act as a buffer for fluctuating work load	44	11	-	2.8
Obtaining expertise not within the company	36	18	1	2.6
Relieving the company of training costs	18	27	10	2.1

7.8 SUMMARY

In this chapter the collaboration between the formal and informal construction sectors in Tanzania was discussed. It was established that large and medium contractors subcontracted their works to small formal and informal contractors in order to supplement their labour force and the skills available within their companies. It was also established that subcontracting helps contractors to keep their labour force minimal. In a similar manner, small formal contractors subcontracted works to informal contractors. The groups, which are subcontracted i.e., small formal and informal contractors benefited by gaining skills and improving their financial position.

Both large and small formal contractors used the services of informal material suppliers to supplement their own sources of material. Small formal contractors also hired equipment from informal equipment suppliers. This was, however, limited to the large and medium contractors.

The portrayed scenario shows the importance of the informal construction sector as a supplier of construction labour, and that the co-existence of the formal and informal construction sectors is important and complementary.

The nature and benefits of collaboration between formal and informal construction sectors established in this chapter and the characteristics and importance of the informal sector established in the previous chapter will be used to test the hypothesis in the next chapter. In addition they will form the basis of recommendation of policy proposals for the Tanzanian informal construction sector in Chapter Nine.

CHAPTER EIGHT

ANALYSIS AND SYNTHESIS OF FINDINGS

8.1 INTRODUCTION

The previous two chapters summarised and presented the findings of the contractors' survey with regard to the characteristics of the informal contractors and the nature of collaboration between the formal and informal contractors.

This chapter makes an analysis of the main findings of the survey based on the literature review and the information contained in Chapters Six and Seven. It also makes an overview of policy direction of the Tanzanian government towards developing the informal construction sector based on the discussion presented in Chapter Four. This will form the basis of testing the research hypothesis later in this chapter and developing policy proposals for the informal construction sector in Tanzania, later in Chapter Nine.

In this chapter the research hypotheses are tested, and the implication of the outcome to the construction industry in Tanzania is also outlined.

8.2 DISCUSSION OF THE MAJOR FINDINGS FROM THE LITERATURE REVIEW AND CONTRACTORS' SURVEY

8.2.1 General

Chapter Six discussed in detail the characteristics of the informal contractors in Tanzania as established using the responses to the informal contractors' questionnaire and the data obtained from the 1991 and 1995 informal sectors' surveys.

Chapter Seven looked at aspects of collaboration between formal contractors and informal contractors, material suppliers and equipment suppliers. The nature and extent of collaboration was established through contractors' responses to the formal and informal contractors' questionnaire.

The results of the contractors' survey contained in the two chapters were used to discuss important aspects of the informal construction industry, which are divided into five groups, namely:

- Economic significance of the informal construction sector;
- Potential of the informal construction sector to create employment and eradicate poverty;
- Causes of informality in the construction industry;
- Linkages between the formal and informal construction sectors; and
- Constraints facing the informal construction sector.

8.2.2 Economic significance of the informal construction sector

The literature review on the significance of the informal construction sector was discussed in Chapters Two and Three. From the review it was revealed that the sector is important and is growing in most developing countries like Tanzania. The data available to substantiate this in the case of Tanzania are few and scattered except for the NISS and DISS, which were carried out in 1991 and 1995 respectively. Despite the paucity of data, the archival data gathered support the premise that the informal construction sector contributes significantly to the Tanzanian economy.

The discussion given in Section 6.15 gave an overview of the economic significance of the informal construction sector in terms of its contribution to the GDP, GFCF, Value Added and Employment, in which it can be summarised that the informal construction sector in 1991 contributed:

- 3 per cent of the informal sectors' GDP, which was 1.5 per cent of the official GDP in Tanzania. This figure is very significant given the fact that the share of the construction industry in the country's GDP was on average 4.5 per cent from 1985 to 1999 (see Table 3.1).
- 5.9 per cent of value added in the informal sector, which was 1.9 per cent of the official value added in Tanzania.

- 3.1 per cent of the informal sectors' capital formation, which was 0.07 per cent of the country's official capital formation.
- 7 per cent of the total employment in the informal sector, which was 1.5 per cent of the employment in the whole country. This is a significant contribution when compared to the construction industry's contribution to employment in the country averaging at 4.2 per cent.

The sector also in year 1999/2000 employed around 753,192 and 94,149 on part-time and permanent basis respectively. Similarly, the construction volume was around Tshs. 395 billion during the same period.

With the observed size and economic contribution of the informal construction sector, it is argued that it is important that programmes designed to develop the construction industry take into account what is happening in this sector. For example, programmes to train construction industry personnel on issues like improvement of productivity, quality, health and safety on construction sites, would be unsuccessful in the long term if they fail to address the informal contractors, who are the executors of works on construction sites (Msita, 1999)³³.

Arguments were raised in Chapters Two and Three which connect the informal construction sector to health and safety problems on construction sites, poor quality of work and failure to pay government taxes. However, this is not the problem of the informal construction sector alone. Problems of poor quality and non-adherence to health and safety regulations by formal contractors is a common occurrence in many countries (Lema, 1996; Rwelamila, 1996; ICOHS, 1997), and has particularly been a matter of concern in Tanzania (Msita, 2000; Muhegi, 2000a).

Problems relating to non-payment of taxes are also not limited to the informal contractors alone. Some of the interviewed officials indicated that generally in Tanzania tax evasion is a big problem in formal businesses, including construction. At the same

³³ Interview responses

time, income generated in the informal construction sector is small to attract taxes. According to GOT (2000b), the minimum annual personal taxable income in Tanzania was Tshs. 540,000 (US\$ 675) in year 2000. Section 6.6 of this thesis show that the average annual turnover of informal contractors was Tshs. 6.3 million (US\$ 7,875). If it is assumed that contractors' profits are 10 per cent of the annual turnover, then annual profits would amount to Tshs. 630,000 (US\$ 788), which exceeds the minimum taxable income by a small margin. However, it was shown in Figure 6.4 that 76 per cent of contractors have an annual income of less than Tshs. 5 million (US\$ 6,250) and therefore the annual profits are less than Tshs. 500,000 (US\$ 625). Based on the same assumed profit margin of 10 per cent on annual turnover, it could be concluded that the annual income of 76 per cent of the informal contractors falls outside the taxable range.

However, some interviewed officials expressed the problem of non-payment of taxes to be that of non-enforcement, rather than non-adherence to tax regulations. Some of the interviewed people argued that because of the lack of an accurate data base of various businesses, the government was unable to follow up properly on businesses to pay their taxes. Others argued that it was a combination of the failure of the government to follow up and the high rate of tax (35 per cent of profit) which made people reluctant to meet their tax obligations (Salewi, 1999)³⁴.

It was mentioned earlier that the NCC, an organisation charged with the responsibility of developing construction industry, has been training formal contractors in management related aspects of running construction companies and projects so as to assist them improve productivity, quality, health and safety on construction sites. It would be beneficial if similar programmes were extended to informal contractors, who as was discussed in Section 3.5 are the actual executors of work on the construction sites (Msita, 1999). There has been some attempt to initiate training programmes for the informal contractors, but they were unsuccessful due to the confusion surrounding the status of the informal sector (NCC, 1996).

³⁴ Interview responses

Conclusion

From the foregoing discussions, it can be concluded that the informal construction sector is an important component of the construction industry. With the proper support it could play a very significant role in the country's economy. Development programmes for the construction industry, which ignore the informal construction sector, may be prone to failure, because of the important role provided by the sector in providing labour for the execution of construction works.

8.2.3 Employment and poverty eradication

In Chapter Six it was established that most informal construction firms are sole proprietorships, with owners who are mainly artisans. This suggested that most of the firms were established through the trade route, which was discussed in Section 3.3.3 of this thesis. Female participation in the informal construction sector is very limited as revealed by the small percentage of women (less than 5 per cent) who own informal construction firms.

Most informal contractors employ skilled and unskilled labour on a part-time basis. This is obvious from the nature of work carried out in the construction industry, which fluctuate with time and not predictable to justify the full employment of personnel. Even the formal contractors, because of fluctuating and unpredictable work loads subcontract the works to trade subcontractors in lieu of employing a permanent work force (Lee, 1997).

Further analysis of information contained in Figure 6.1 revealed that on average one informal construction enterprise was able to generate 12 jobs on a part-time basis and every two enterprises were able to generate 3 jobs on a permanent basis. This is a significant employment creation potential. It is, however, important to note that employment in the informal sector is on the basis of know-who and in some cases it is restricted to family members and close friends (GOT, 1991a). Normally, the informal contractors keep a list of skilled and unskilled operatives to engage when they acquire construction contracts. The list would mainly consist of relatives and/or friends, and it was only when they acquired many jobs or when the people were occupied on other jobs that they would employ new people.

There are two different, yet complimentary processes to eradicate poverty. First, poverty could be eradicated by providing gainful employment to the people. Based on the discussion above, it could be concluded that the informal sector is able to fulfil this role. Discussions in Section 2.4 of this thesis revealed that it was generally easier to generate employment in the informal sector than the formal sector (Ministry of Foreign Affairs, 1997). Therefore for governments wishing to create employment for its citizens, there was every justification to promote activities in the informal sector (Bangasser, 2000).

The second method to eradicate poverty is to provide goods and services at a price the poor could afford. To fulfil this, many governments, for example, devise progressive tax policies in which the rich pay more than the poor (Anderson, 1990). Discussions in Chapter Two revealed that the informal sector was able to provide goods and services at affordable prices. Of particular interest to this thesis was the ability of the informal construction sector to provide affordable shelter to the urban population. As discussed in Section 3.6.5, the housing problem in Tanzania is very serious, and the informal construction sector could play an important role in alleviating this problem.

Therefore, the informal construction sectors' potential of generating employment coupled with its ability to provide shelter at affordable prices could play an important role in eradicating poverty, which is a serious problem in Tanzania. However, the motives for establishing a construction business given in Section 6.8 suggest that the informal construction business is considered by many to be a survival strategy for people that have been unable to obtain employment in other sectors, or for people that have lost their previous employment. There is, however, a small group of informal contractors (about 8 per cent), that construction business can be regarded as a profitable business. This group executes projects with an annual turnover above Tshs. 20 million (US\$ 25,000), and could be regarded to be operating illegally since they have the capacity and capability to formalise their business.

In Tanzania, the potential of the informal sector as a whole, towards alleviation of poverty through employment has been recognised as reflected in the objectives of the National Employment Policy (NEP) discussed in Section 4.8.4 of this thesis. Similarly,

the potential of the informal construction sector towards provision of employment and cheap shelter has also been recognised as reflected in the NHSDP and the proposed CIP.

Conclusion

From the foregoing discussions, it can generally be concluded that the informal construction sector can play an important role in creating employment and in eradicating poverty. Although, the income obtained in the sector is small, its potential for eradicating poverty is complimented by the cheap prices of services provided by the sector.

8.2.4 Causes of informality in construction

The literature survey carried out suggested that informality is caused by the difficult requirements to establish a legal business coupled with bureaucracy on the part of the government. It was also mentioned in Section 3.6.2 that formal contractors in Tanzania must register with the CRB and must possess business licenses. Therefore, to analyse the informality of contractors, it was important to look at the procedures and requirements for registration with the CRB on the one hand, and the procedures and requirements for obtaining a business licence on the other.

The procedures and requirements for registration with the CRB.

The procedure and requirements for registration with the CRB were discussed in Section 3.6.2. However, to reiterate, contractors wishing to register must fulfil minimum conditions commensurate with the class of registration, with regard to the following:

- Technical staff;
- Equipment holding;
- Land and service facilities; and
- Financial standing.

The above requirements are shown in Appendix 3.1 for the different classes of registration. These requirements are further discussed in the light of information obtained from contractors' interviews.

Technical staff:

The qualifications of the owners of the informal construction firms as discussed in Section 6.4 are adequate for registration of a construction company at entry level. It was revealed that owners of 85 per cent of the informal construction firms were either artisans or civil/building technicians and therefore had the required minimum technical qualifications set out for directors to establish a construction company. It can therefore be concluded that qualifications of the owners is not one an obstacles towards registration of a company.

However, there have been arguments that the requirement of having at least one of the directors with technical qualifications limits people with capital who would like to establish construction companies as sole owners. They are forced into unsustainable partnership with people with technical qualifications.

While the issue of technical qualification is important; equally important is the need to attract adequate capital into the construction industry. In order to attract capital and yet maintain quality, owners with non-technical qualifications could be requested to show proof of employing qualified technical persons as a condition of registration.

Equipment:

The majority of the informal contractors, as discussed in Section 6.5, did not own construction equipment, and therefore would not qualify to register based on the CRB's criteria. On this basis, it can be concluded that the requirements on equipment ownership are detrimental or a hindrance towards to registration.

The requirement to own minimum equipment as a condition to register in a particular class can however be criticised. The decision to or not own equipment is taken on the basis of the extent to which a contractor will make use of the equipment. Ownership of

equipment whose utilisation levels are very low could bring a loss to a contractor and thus kill the business altogether. It was shown in Chapter Six that most of the informal contractors carried out business as labour only subcontractors, and therefore would not necessarily need the equipment included in the CRB list. In addition the small size of the projects executed by the informal contractors earned them an inadequate income to buy the required equipment. At the same time, in a country where financing institutions are not supportive of the process of establishing a business, the existing requirements for equipment becomes even more difficult to meet (Kaduma and Msita, 1999). For example equipment requirements to establish a building construction company in class VII when translated into financial terms amounts to Tshs. 2.5 million (US\$ 3,125). This amount would be unaffordable to most of the informal contractors who operate mainly as labour-only subcontractors with the majority having an annual turnover of less than Tshs. 5 million (US\$ 6250). For a contractor with such an annual turnover, assuming a profit of 10 per cent of the turnover, the annual profit will be Tshs. 500,000 (US\$ 625). If all the profit is invested in equipment it would take 5 years to obtain the equipment, which is perhaps unnecessary or could be hired more cheaply from the industry when needed.

Land & services facilities:

The CRB requires contractors to possess a storage yard, a service workshop and an office. The requirement for the entry class is only the possession of an office with an area of 10 square metres. However, discussions in Section 6.7 of this thesis revealed that most contractors operated from construction sites. Only 17 per cent of the interviewed contractors had an office, service workshop or a storage yard. Based on this criterion, most of the contractors would not qualify to register with the CRB. Muhegi (2000b)³⁵ argued that this requirement is not detrimental to registering on the grounds that a contractor fulfilling other registration conditions could easily obtain the required office facilities on lease terms. However, the problem is with landlords who request the annual office rent to be paid in one instalment. A simple room of ten square metres, without any office furniture, would cost more than Tshs. 60,000 (US\$ 75) per annum.

³⁵ Interview response.

Although this is a small amount of money, it adds to the burden of high costs of starting a business given the fact that it is paid at the start of the business.

Financial standing

The CRB's requirements on the financial status of contractors applying for registration at entry level are very relaxed. Contractors need not provide any evidence of liquidity nor fixed assets (Mugasa, 1999; CRB, 2000b). Although this could be regarded as a positive measure in encouraging contractors to register, it could bring up problems of unsuccessful implementation of projects. Contractors admitted without proof of being financially capable and in the absence of credit facilities would be unable to execute even very simple projects. Unfortunately, the credit facilities are always based on redeemable financial securities, fixed assets, etc. To ensure consistency and performance, similar conditions should have been placed on the financial status considering that the maximum value of the projects that entry class contractors are allowed to execute is Tshs. 50 million (US\$ 62,500).

The examination of the projects executed by the informal contractors revealed the extent they fair with respect to the limit set by the CRB for unregistered contractors. The value of the projects executed by the informal contractors are generally on the low side with the exception of about 13 per cent who executed projects with values above Tshs. 5 million (US\$=6,250). Despite the small value of projects executed about 49 per cent of informal contractors would be considered to operate illegally since their project values exceeded the upper limit of Tshs. one million (US\$ 1250) allowed by the CRB for unregistered contractors. In Section 3.6.2, queries were raised on the justification of this limit. During interviews, it was established that the CRB assumed that informal contractors engage in private housing projects on labour-only contracts; and therefore a limit of Tshs. one million adequately covered the cost of labour of a modest urban house valued at Tshs. 8 to 10 million (US\$ 10,000 to 12,500). According to the CRB, this limit was large enough and would give enough room for the informal contractors to operate (Muhegi, 2000b). The CRB further argued that any informal contractor whose projects are of values greater than Tshs. one million was large enough to register as a formal construction company in class VII or in specialist contractors category.

Procedures for obtaining a business license

A license to conduct construction business is normally issued by the Regional Offices of the Ministry of Trade and Industries. Currently a license would only be issued after a contractor presents his certificate of registration with the CRB. The process involves the following activities (Dar-es-Salaam City Trade Officer, 1999)³⁶:

- Filling in and submission of license application forms.
- Inspection of business premises (offices) by trade officers and evaluation of the application. Acceptance of the application would be made if trade officers were satisfied with the status of directors and the location and condition of the office. For a construction business some of the issues checked are repetitive since registration with the CRB was made on the basis of satisfying the same conditions.
- After trade officers are satisfied that a licence can be granted, the applicant is informed of the intent. The applicant is then required to open an income tax file, in which an assessment of income tax (normally a fixed sum for new entrants) is made. The estimated amount of tax is paid in four instalments, with the first instalment having to be paid before being issued with a business licence.
- The applicant is issued a business licence after presenting proof of payment of the assessed income tax.

Currently, the assessed income tax for class VII is about Tshs. 500,000/- and a business license costs Tshs. 300,000. So at the start of the business, a contractors is required to pay Tshs. 425,000 which includes the license fee and first instalment of income tax (Dar-es-Salaam City Trade Officers, 1999).

³⁶ Interview response.

Status of interviewed contractors with regard to business licences and registration with the CRB

All the interviewed informal contractors were not licensed and registered as contractors. The major reason given for being unlicensed is not related to the licensing requirements, procedure or cost, but rather the possibility of conducting a business without a license. Based on this reason it could be interpreted that failure of the government to enforce the Licensing Act contributed to the informality in the construction industry. The situation is however different with regard to registration with the CRB. More than half of the interviewed informal contractors indicated no knowledge of the law requiring contractors to register. The informal contractors with the knowledge of the existence of the CRB did not register their business because they could get away with it. This suggests that failure of the CRB to enforce the Registration Act contributed to the informality of contractors. Although contractors mentioned that requirements for registration, procedures and cost also contributed to their failure to register, it is doubtful if they would formalise their business if there was a strict enforcement of the Registration and Licensing Acts.

From the survey, it was still not conclusive that government's bureaucracy contributes to informality as argued by de Soto (1989), Thomas (1995) and Trip (1997). It was also not conclusive that the high costs of establishing a formal business, as argued by de Soto (1989), Malyamkono and Bagachwa (1990) and Ghersi (1997), contributes to informality. Non-enforcement of existing regulations was seen to be the main contributing factor.

Although the results of the contractor survey points at non-enforcement of regulations as the contributing factor to informality, still the high costs involved with the registration process could contribute to informality. The level of capital required to start and run an informal construction business was shown in Section 6.13 to be very low. The requirements for licensing and registration total about Tshs. 3 million (US\$ 3,750) as shown in Table 8.1.

Table 8.1 Financial requirements for establishing a building company in class VII

Minimum Requirements	Estimated monetary value (in Tshs.)
<u>Plant and Equipment</u> <ul style="list-style-type: none"> • Light duty vehicles – 1 No. • Hand compactor – 1 No. • Block making machine – 1 No. 	2,500,000
<u>Office requirement</u> 10 m ² leased at annual rent of Tshs. 60,0000	60,000
Business Licence	300,000
Registration with CRB	90,000
<u>Income Tax</u> Estimated fixed income tax of Tshs. 500,000 payable in four instalments	125,000
TOTAL	3,075,000

The total financial requirement for establishing a building construction firm obtained in Table 8.1 suggests that it is almost 150 times more expensive than establishing an informal company. Moreover, the amount is spent before a company is assured of getting jobs on its formalisation.

It was mentioned in Section 3.4.3 that the informal construction sector could act as a stepping stone towards establishing a formal company. The situation that prospective contractors have to spend large sums of money without any assurance of getting jobs would discourage the contractors to operate formally. Salewi (1999)³⁷ suggested that an allowance could be made for prospective contractors to operate informally or on easy terms to enable them to acquire the resources required to formalise the business and to gain ground and confidence in the construction business. At the same time he proposed that ways should be found to develop the informal contractors and assist those showing positive signs of growth to register. The proposed classification system shown in Figure 3.4 could form a basis for the creation of a system which would enable informal construction firms to grow progressively from their emergence to established informal contractors ready to register as formal construction firms.

³⁷ Interview response.

It was not established whether the non-enforcement of the licensing regulation was due to the high costs associated with their enforcement or was due to the government's softening stance towards the informal sector. The CRB, in its case, reported to have limited resources to monitor the activities of registered and unregistered contractors (Muhegi, 2000b). The CRB generates the funds required for its activities from fees paid by contractors. To acquire adequate funds to monitor contractors, it must register as many contractors as possible and charge higher fees. Registration of many contractors, particularly in a situation where they have to pay fees to be registered, would largely be determined by the market conditions. In situations where there is a booming construction market, more contractors would be willing to join the business. When the market is in recession, some of the already registered contractors would stop the construction business, and the aspiring contractors would find no incentive to join, due to high competition. There is therefore, at any given time, a threshold number of contractors that would register commensurate with the market conditions. Charging high fees, would discourage contractors from registering, and could be considered unfair unless the charged fees are used to improve the contractors' share of jobs in the market.

The limited resources available to implement regulations bring up an important aspect, which tends to be ignored when setting up new policies, laws or regulations. If regulations are instituted without regard to the resources required for implementation, they become impossible to implement and this manifests itself as a failure of the policies or regulations. It would always be useful for governments to have fewer regulations, which could be implemented, rather than have many regulations, which can not be implemented.

According to Muhegi (2000a), the requirements of registration for Class VII contractors are already on the lower side. While this is not debatable, the CRB still has a room and a duty to introduce more classes or special categories of contractors with simple and affordable entry requirements. Trade subcontractors discussed by Lee (1997) are examples at hand.

Currently the CRB has a group of specialist contractors, which according to Muhegi (2000a), is supposed to take care of contractors who do not qualify to register as Class VII building or civil works contractors. Specialist contractors category, however, relate to trade specialisation, and not to the size of the contractor. For example, trades given under this group relating to building and civil works include terrazzo paving, roofing, glazing, demolition, plumbing and sanitation, drilling, water works and sewerage, piling, paving, landscaping and labour based road maintenance (CRB, 2000b). Although some informal contractors specialise in some of the trades mentioned, they still do not fit into this classification since most are small and they supply labour only. It is proposed that a special category of labour only contractors should be established, and within it several groups should be identified depending on the size of the enterprise.

Conclusion

From the contractors' survey it was not conclusive whether high costs, bureaucracy and difficult conditions and requirements were responsible for informality. Instead non-enforcement of regulations was found to be the cause of informality in construction. However, it has been argued that it is almost 150 more expensive to establish a formal than an informal construction business, with the expenses incurred at start up without assurance of getting jobs once a formal company has been established. It is therefore concluded that even if there were enforcement of regulations, prospective contractors could not afford the high costs associated with establishing a formal business.

8.2.5 Linkages between formal and informal construction sector

Section 2.5 of this thesis discussed the relationships between the formal and informal sectors, and it was suggested that existing linkages were benign and benefited both sectors. In addition, Section 2.5 showed that the collaboration between the formal and informal construction sector manifests itself mainly through subcontracting arrangements. In this section, the following modes of collaboration will be discussed:

- Collaboration between informal contractors and informal materials and equipment suppliers;
- Collaboration between formal contractors and informal contractors;

- Collaboration between formal contractors and informal materials and equipment suppliers;
- Collaboration between large and small contractors.

Informal contractors versus informal materials and equipment suppliers:

The survey results generally showed a limited collaboration between informal contractors and informal materials suppliers. It was shown that most of the informal contractors were engaged in labour-only contracts, and therefore their involvement in the supply of building materials for projects was limited. There is a possibility that the clients obtained the building materials from the informal suppliers; however, this was not investigated. It is therefore inconclusive as to what extent the informal contractors use materials from informal materials suppliers. However, the absence of the direct purchase of materials by the informal contractors from informal materials suppliers does not rule out the use of materials from this source which could have been brought to the site by the clients.

There is equally limited collaboration between the informal contractors and informal equipment suppliers. In this particular case, two reasons could be suggested for this. Firstly, most of the activities carried out by the informal contractors are labour intensive and make use of simple tools only. Secondly, with the exception of tipper trucks and pickups, only limited construction equipment is available in the informal sector.

Formal versus informal contractors

The formal and informal contractors' survey established a high tendency for small and large contractors to subcontract construction works to informal contractors. Most of the informal contractors were subcontracted to supply labour for activities like concreting, steel fixing, formwork fixing, masonry, plumbing, tile fixing, roofing, etc.

The working relationships between the two were found to be beneficial to both sides. The informal contractors, apart from gaining access to work, and therefore income, also gained skills. However, the skills gained by informal contractors were perceived to be more when working for large and medium contractors than when working for small

ones. This could be attributed to the fact that large and medium contractors were in many cases involved in large and more complex projects compared to those awarded to small contractors. Also, large and medium contractors, in principle, were expected to have more experienced personnel who may impart the necessary skills to the informal contractors' personnel.

For the formal contractors, subcontracting to informal contractors helped them keep the labour force to a minimum. It was discussed previously that the construction industry suffers from fluctuating workloads, and contractors always take precautions by having only a core group of technical staff, and the rest were obtained from the labour market through subcontracting. The informal contractors in this case are used to supplement the large contractors' labour force, and act as a buffer to fluctuating workload. Normally the formal contractors core workforce would include workers on trades, which are regularly executed by the company. Other less regular trades were normally subcontracted out. Here again the informal sector is used to supplement unavailable skills within the company.

The overall benefits of large and medium formal companies subcontracting whether to small formal or informal contractors include the creation of employment buffers to fluctuating workload, obtaining expertise not within the company and relieving the company of training costs. The first two benefits are not harmful to the construction industry. In fact they provide the opportunity for the small and informal contractors to participate in the construction process in what is otherwise a very competitive environment. The last benefit is however a problem which the construction industry needs to address. Actually, as discussed in Section 3.5, one of the disadvantages of large firms subcontracting to small firms is that of large firms divorcing themselves from the well being of the construction workforce. Labour only subcontracting enables large firms not to train employees and not to pay workers benefits, etc., (Gruneberg, 1997).

Large versus small formal contractors

Large contractors subcontract extensively to small contractors. It was shown in section 7.8 of this thesis that about 93 per cent of the interviewed large and medium contractors subcontracted to small contractors, and this was corroborated by about 51 per cent of the interviewed small contractors that indicated that their major clients were large and medium contractors. The major reasons for subcontracting are similar to those of formal contractors subcontracting to informal contractors and the benefits also almost flow along the same lines but with the small formal contractors in this case taking the position of the informal contractors.

However, despite the fact that subcontracting provides employment of the small contractors, there was large downward plundering, with large contractors carrying out small projects relative to their class limits. It was mentioned in Section 3.3.4 of this thesis that a move by the CRB to prevent downward plundering was rejected by the large and medium contractors on the argument that it would kill competition, which is a key ingredient in an open market economy which is being encouraged by the government of Tanzania. While it is acceptable that competition and transparency in the tendering process is the key to a strong construction industry, it would be important to find mechanisms which would ensure that contractors in the lower end of the spectrum get a share in the existing competitive construction markets. It has been argued that for a construction job in which a larger construction firm competes with a small firm; the smaller firm's chances of winning are better because of its lower overhead costs. However, small contractors argued to the contrary. In many cases, although the value of the project falls within their class limit, it is the medium and large contractors who are invited to tender. In other situations projects are made unnecessarily big thus excluding their participation. Therefore, what is actually lacking is not competition, but rather a chance to compete through invitation to tender.

There is equally a considerably large number of small contractors who carry out projects exceeding their limit. As discussed in Section 7.2.1, contractors can only execute projects with a value exceeding their class limit if they are granted a dispensation from the CRB. According to the CRB's rule 20 (5) execution of projects

above the class limit without dispensation is a punishable offence in which a contractor is liable to a fine of 10 per cent of the excess amount or Tshs 500,000 (US\$ 625) whichever is higher (Mwambungu, 2000). This is also debatable. If the CRB can allow large contractors to encroach on small contractors' territory, why should they protect the large contractors' territory? The decision to hire a specific contractor should rest with the client. In the same way that a client is free to award a Tshs. 10 million (US\$ 12,500) to a Class I contractor, he could decide award a Tshs. 200 million (US\$ 250,000) contract to a Class VII contractor who is capable of performing and completing the contract to his satisfaction. Some of the interviewed government officials and contractors proposed that the CRB's registration of contractors should be limited to providing guidelines to the clients on the capacity and capability of contractors in different classes. In addition, they should educate clients on the dangers of taking a contractor of a lower class for a big job. Otherwise, the decision of choice of contractors for any size of the project should be left entirely to the client without any limitation on the class.

Formal contractors versus informal materials suppliers

Many formal contractors use construction materials from the informal materials suppliers to supplement their own sources. Apparently the materials purchased include those with a notable input of the informal sector operators, like the quarry products, pre-cast concrete products, and timber and timber products.

The building materials sub-sector has a notable involvement of the informal sector operators. A visit to roads leading to major construction areas in Tanzanian cities would reveal a considerable number of people involved in the production of concrete blocks and pre-cast concrete products like fencing poles, decorative fencing blocks, etc, and selling sawn soft and hardwood timber, props etc. The quality of the materials produced varies very much to satisfy different categories of clients. For example, a simple measure of the quality of sand-cement or concrete blocks is the number of blocks obtained from one bag of cement. For a 460 x 230 x 150-mm blocks, one bag could be used to produce 30, 25 and 20 blocks with prices ranging from Tshs. 250 to 600 (US\$ 0.32 to 0.77). Because of this ability to address wide quality requirements by the clients,

the informal material producers and traders have experienced a growing market (Mpembe, 1999).

Another area where informal material suppliers are found in Tanzania is in the selling and production of crushed aggregates. Here again the material produced differs in quality and hence prices. But also, compared to formal producers of aggregates who sell in some specified large quantities, the informal suppliers can sell in very small quantities to meet customers' demand and transport capacities.

Generally, there is a large potential for the informal materials producers to cater for different categories of customers in the construction industry, and could therefore contribute to the alleviation of housing problems. Indeed the NHSDP encourage the informal sector to engage in the production of building materials (GOT, 2000a:41).

Formal contractors versus informal equipment suppliers

A considerable proportion of small formal contractors was found to use equipment from the informal equipment suppliers. The situation is different from their larger and medium counterpart, of which only a few use equipment obtained from the informal sector. The main equipment hired by the small contractors consists of concrete mixers and vibrators, tipper trucks and pickups, which corroborate the suggestion given earlier that this is the main equipment found from the informal suppliers. It can, however, be argued that with the exception of concrete mixers and vibrators, which are not licensed owners of pickups and tipper trucks can not be regarded as informal. To own a pickup or tipper truck, it must be properly registered and issued with a paid road license. The road licences are renewed annually subject to proof that the owner of the vehicle has paid all the necessary taxes.

Regardless of whether tipper or pickup owners are formal or not, a substantial number of such equipment exist on the market. This raises a question of necessity for prospective contractors in class VII to own a light duty vehicle, which could easily be obtained from the market as required.

Conclusion

From the above discussion it can be concluded that there is a wide collaboration between large and small formal contractors; formal contractors and informal contractors; and formal contractors and informal material suppliers. The informal contractors and suppliers benefit by gaining income while the formal contractors gain by supplementing resources available in their companies. The relationship between the two sectors is therefore symbiotic. The nature of links can be well presented diagrammatically as shown in Figure 8.1

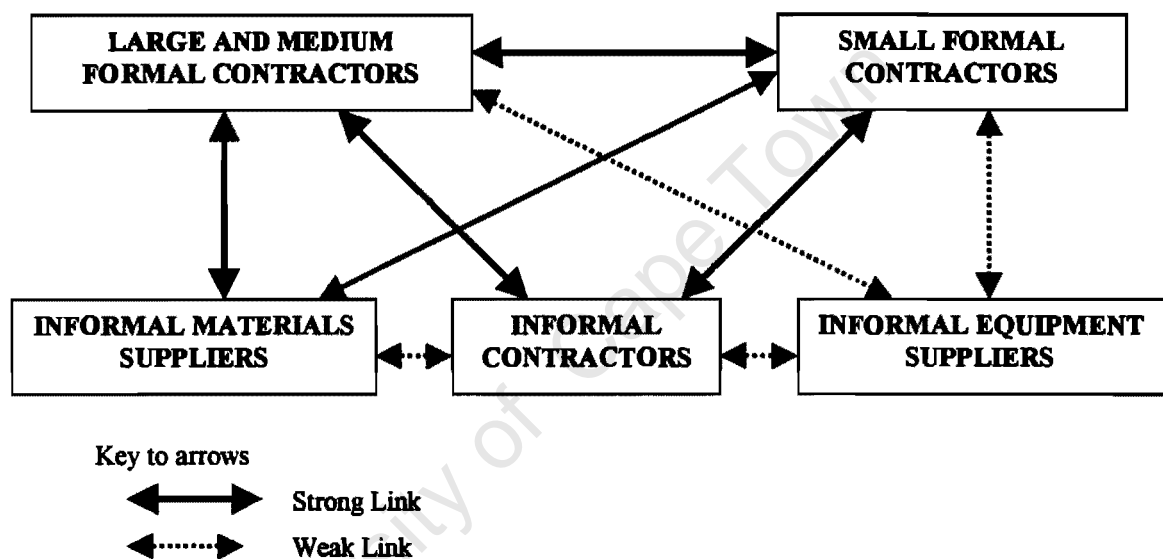


Figure 8.1 Mode of collaboration between the formal and informal construction sector in Tanzania

8.2.6 Constraints faced by the informal contractors

Informal contractors lack adequate capital and have difficulty in accessing equipment needed to establish a business. However, these problems, would not be considered very critical given the fact that the activities of the informal contractors are mainly labour intensive and therefore do not require large capital outlay. This is proved by the small start up and working capital, which was on average US\$ 24 and US\$ 3 respectively in 1991 (GOT, 1991a). In 1995 the average start up capital was US\$ 37 (GOT, 1995). Such small capital, on the one hand, makes it possible for people to establish a business from their own savings or borrowing from friends without recourse to formal credit

institutions like banks. On the other hand, it makes it difficult to prosper and grow into a competitive business.

The informal contractors face a number of problems in running their business, including the lack of financing, difficulties in obtaining projects, lack of equipment and lack of skilled labour. It is, however, the opinion of the author that the problems of lack of financing and equipment given by the contractors are mainly related to the establishment of the formal business rather than running an informal business. From the nature of their operations, as disclosed in the interviews, most informal contractors need only simple tools and in a situation where a particular piece of equipment is required, the client would normally provide it. Difficulties in obtaining projects could be attributed to the large number of informal contractors competing for a few jobs available in the market. In some cases, even small registered contractors compete for the same jobs thus aggravating the problem (Mwaiselage, 1992). The problem of skilled labour is not a manifestation of the informal sector alone. Even the formal sector suffers the same problem as evidenced in the quality of finished projects in Tanzania (Msita, 2000).

Conclusion

It can be concluded from this section that informal contractors suffer a number of problems during start up, which hinder the establishment of viable business units. At the same time they suffer a number of problems during the execution of their business which hinders their growth.

8.3 POLICIES ON INFORMAL SECTOR DEVELOPMENT

The role of policy in developing the construction industry and the informal sector was discussed in Sections 4.6.1 and 4.7.1 of this thesis respectively. Efforts in the formulation of policies that have an effect on the construction industry and the informal sector industry were discussed in Section 4.8.

It was discussed in Section 4.5 of this thesis that that prior to 1991, the Tanzanian policy framework was that of socialism and self-reliance. Within this framework the

participation of the private sector in major economic activities was limited. The government also could not tolerate the informal sector activities. It is therefore obvious that before 1991 there was no effort to develop the informal sector. It was also discussed in Section 4.3.1 that policies are developed to solve problems that affect or occur in a society. Approached from this angle, before 1980 the economic performance of Tanzania was good and the informal sector did not manifest itself as a serious problem. During this period there was no need to formulate policies on the informal sector.

The period after 1980 was characterised by increasing informal sector activities due to economic hardships experienced by the Tanzanian population. The government instituted various policies/measures discussed in Section 4.7.2 aimed to end the informal sector activities. These policies failed because they did not address the actual problems that led to informality.

It was only after 1987 that the government started to recognise the role played by the informal sector in the alleviation of economic hardships facing the population. This led to the conduct of NISS in 1991 and since then there have been uncoordinated efforts towards developing the informal sector. In recognition its role, a number of policies aimed at promoting and supporting this sector have been developed, or are still in different stages of development. The Small and Medium Enterprise Policy (SMEP) discussed in section 4.8.6 of this thesis in particular takes on board the development of the informal sector.

The problem of the SMEP, however, is related to grouping of all enterprises from very small street vendors to large enterprises with annual turnovers of about Tshs. 500 million (US\$ 625,000). The different groups of enterprises covered by the SMEP were illustrated in Figure 4.3, and it was mentioned that this research is mainly concerned with the unlicensed and unregistered individuals or enterprises that fall fully under the informal sector operators or partially under crafts and micro enterprises. It is argued that the different groups presented in Figure 4.3 would require different policy intervention for their development. For example, while it would be possible to market the large enterprises to the financial institutions to obtain loans required to establish and run

business, the same marketing would fail for the enterprises at the lower end of the spectrum. Grouping of very small and large enterprises together may result into diversion of resources to the more strong enterprises placed at a better position to compete for the scarce resources.

At the same time enterprises in different industries for example, those in manufacturing may require different interventions from those in construction. The SMEP is more inclined towards enterprises in manufacturing and trade industries, hence for example the strategies for developing clusters/estates for small and medium enterprises may not work very well for enterprises in construction industry or in mining and quarrying. The SMEP marries well with the Sustainable Industrial Development Policy (SIDP). Actually, the SMEP could be regarded to be an amplification of strategies to develop small and medium enterprises contained in the SIDP.

It is argued that because of the differing nature of operations and problems in various industries, the development of the informal sector should be tackled at the industrial level. The policy on the informal sector should only focus on giving a direction and a guideline on the status of the informal sector and a general development framework, and leave out the specific details of development to the respective industries, where different categories of the informal sector belong. The different industries will be in a better position to gauge the development of the informal sector in line with their overall short and long-term development plans. For example, the development of the informal construction sector should be the responsibility of the construction industry, and this should be clearly reflected in the construction industry development policy.

The proposed Construction Industry Policy (CIP) addresses the role played by the informal construction sector and gives strategies for improving the performance of the informal sector. The strategies have a clear vision of what is to be done, but as was discussed in Section 4.8.2, the policy remain silent on who will be responsible for the development of the informal construction sector and other policy issues. From previous discussions it is clear that a large group of operators in the informal construction sector are in construction and a few in design. Already organisations exist that are responsible for monitoring construction and design in Tanzania. For example, the role of the CRB

in monitoring the informal contractors is currently not very clear. Despite a call that was made in the Annual Workshops of CRB in 1999 to recognise the potential of the informal contractors and to introduce additional classes that would accommodate the small informal contractors; the CRB still does not find a justification of this request (Muhegi, 2000a).

Another problem of the CIP, which was mentioned in Section 4.8.2, was the lack of adequate representation of the stakeholders in the policy formulation process. The identification of relevant stakeholders with their views on the policy and possible reaction was mentioned in Section 4.3.1 to be one of the basic components of good policy making. Problems identified above with the CRB not identifying itself with the development of the informal contractors could be attributed to non-adherence of this basic requirement of good policy making. The actions of the CRB contradict the strategies contained in the CIP to develop the informal construction sector; indicating that the CRB, as a contractor regulating body, did not consent to the proposed strategies.

The National Human Settlement Development Policy (NHSDP), despite acknowledging the role played by the informal construction sector in the provision of urban and rural housing, does not give strategies on how the informal construction should be mobilised and assisted to perform this role better.

Conclusions

From the above discussions it can be concluded that:

- *Different policies that are being developed lack co-ordination and adequate involvement of the stakeholders during their formulation.*
- *The SMEP, which is expected to take care of the informal sector, is inclined more towards enterprises in manufacturing and trade industries and groups together the unlicensed very small enterprises to the licensed large enterprises. This grouping may divert resources towards the more developed and stable licensed enterprises leaving the unlicensed small enterprises with inadequate resources for development.*

- *The CIP gives clear strategies for improving the performance of the informal construction sector, but does not assign responsibilities of implementation to any specific bodies. Bodies that exist for the development and monitoring of the construction industry like the CRB do not have defined programmes for the development of the informal contractors.*

8.4 IMPLICATION OF THE RESULTS TO THE RESEARCH HYPOTHESIS

8.4.1 General

The research hypothesis were set out in Section 1.4 of this thesis, and it was argued in Section 5.8 that it is through the acceptance or rejection of the research hypotheses that this research would have answered the research problems and contributed to knowledge.

The discussions in Sections 8.2 and 8.3 in this chapter gave a summary of information that is required to test the hypothesis.

8.4.2 Hypothesis one

Hypothesis one states that “*there are no appropriate policies on informal sector activities in Tanzania*”.

Discussions in Section 8.3 of this chapter show that in the 1990s there had been efforts in Tanzania to recognise and formulate policies for the informal sector. The carrying out of the NISS in 1991 (GOT, 1991a) and DISS in 1995 (GOT, 1995) shows the recognition given to the sector and efforts made to understand how the informal sector in Tanzania is structured.

The already formulated policies like the NEP, SIDP and NHSDP, and those under formulation like the SMEP and CIP recognise the role played by the informal sector. However, there are problems as given in the conclusion to Section 8.3 of this chapter, which may hinder the proper implementation of the proposed policies. The grouping of unregistered and unlicensed small enterprises together with the licensed large enterprises and the grouping of informal sector enterprises of different industries

together are particularly seen to be the major obstacles to the successful implementation of the SMEP.

Although the CIP gives clear strategies for improving the performance of the informal construction sector, the lack of assigning responsibilities of this role to a particular organ and the inadequate involvement of stakeholders in the policy formulation process are seen as obstacles towards the successful implementation of the proposed strategies. In Section 4.2.1 of this thesis it was discussed that a good policy is one that is capable of implementation. With the highlighted problems above, it is doubtful whether the policies being formulated would be implemented successfully.

On the basis of the above arguments, **hypothesis one is accepted** leading to a conclusion that **there are no appropriate policies on the informal sector activities in Tanzania.**

Note that accepting hypothesis one does not indicate an absence of policies on the informal sector in Tanzania. What is lacking is the **appropriateness** of the policies. The arguments presented, which forms the basis of accepting the hypothesis show that although policies exist and some are in the process of formulation, they are inappropriate and incapable of successful implementation.

8.4.3 Hypothesis two

Hypothesis two states that *“there are potential benefits of interaction between the formal and informal construction sectors”*.

The significance of the construction industry to the Tanzanian economy was presented in Section 3.3 of this thesis. It was argued that the given contribution to the economy was an underestimation of its overall contribution because it excluded the contribution made by the informal construction sector. The economic significance of the informal construction sector was summarised in Section 8.2.2.

From the reported contribution of the formal and informal construction sectors, it is obvious that both sectors have a significant share in the overall contribution of the construction industry to the national economy, and that the sectors cater for different markets of the industry. The formal sector cater for the more organised public, large and small private sector organisations and upper and middle-income individuals, while the informal sector cater for the small private sector organisations and the middle and lower income individuals.

In addition, the two sectors interact as discussed in Section 8.2.5. There is a wide collaboration between the formal contractors and informal contractors and material suppliers. Through this collaboration, the formal contractors are able to supplement the pool of their resources, while the informal counterparts gain income.

On the basis of the above arguments, **hypothesis two is accepted** leading to a conclusion that **there are potential benefits of interaction between the formal and informal construction sectors.**

8.4.4 Hypothesis three

Hypothesis three states that *“lack of appropriate policies on the informal sector has resulted in a non-realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania”*. In Section 5.8.3 it was discussed that this hypothesis links the first and second hypotheses, and gives a causal relationship between the two, suggesting that benefits of interaction between the two sectors could be realised if there was appropriate policies. It was also mentioned in Section 5.8.3 that deductive reasoning would be used to accept or reject this hypothesis, and that it would be accepted only if both hypotheses one and two have been accepted.

Since both hypotheses one and two have been accepted, **hypothesis three is thus accepted**. It is therefore concluded that **the lack of appropriate policies on the informal sector has resulted in the non-realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania.**

Although hypothesis three has been accepted based on deductive reasoning, the review of what is happening in the construction industry in Tanzania reinforces this acceptance. For example, in Section 3.5 of this thesis it was mentioned that subcontracting could be used to foster collaboration between the formal and informal contractors. The contractors' survey has proved that indeed, there is extensive subcontracting between the formal and informal contractors, which is beneficial to both parties. However, there are efforts by the CRB to prevent this kind of subcontracting. The CRB is able to do so because there is no policy which sets out clearly the status of the informal contractors and what should be done to promote them. Banning subcontracting will of course stop the flow of benefits between the parties.

8.5 IMPLICATION OF THE RESULTS AND ACCEPTANCE OF THE HYPOTHESES TO THE CONSTRUCTION INDUSTRY IN TANZANIA

Some of the major findings on the literature review and contractors' survey discussed in Sections 8.2 and 8.3 have been used to test the research hypotheses in the previous section, resulting in the acceptance of all the hypotheses. This has the following implications to the formal and informal construction sectors in Tanzania:

- There is a need to formulate new policies and/or review the existing policies so that they rid the informal construction sector of the constraints discussed in Section 8.2.6, and they encourage and foster collaboration between the formal and informal construction sectors in all areas discussed in Section 8.2.5.
- In the absence of assistance to the informal construction sector, there is a need to review the licensing and CRB's registration procedure so as to encourage more contractors to join the formal sector and benefit from its available facilities.

In the next chapter policy proposals for the development of the informal construction sector will be given.

8.6 SUMMARY

This chapter discussed the major findings of the literature review and contractors' survey, and used them to test the research hypotheses. Based on the findings, all three hypotheses were accepted.

The chapter showed that the informal construction sector is an important part of the construction industry, and contributes significantly to the GDP and capital formation of the Tanzanian economy. The sector also provides employment and plays an important role in the eradication of poverty.

The chapter also discussed the causes of informality and revealed that a lack of enforcement of regulations was a contributing factor. In addition, the chapter discussed the nature and extent of collaboration amongst formal contractors and between formal contractors and informal contractors and material and equipment suppliers. It showed a wide collaboration between large and small formal contractors, formal and informal contractors, and formal contractors and informal materials suppliers. However, the informal contractors' potential to perform was beset by a number of constraints like lack of capital, lack of skilled manpower and lack of support from the government.

Finally, a summary of efforts to develop policies aimed to develop the informal sector was presented, in which it was concluded that the policies being developed are inappropriate for the development of the sector.

In the next chapter, the major conclusions and policy proposals for the development of the informal construction industry in Tanzania will be discussed. Recommendations for further studies would also be given.

CHAPTER NINE

CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION

The aim of this research was to establish how the absence of appropriate policies on the informal sector has affected the realisation of potential benefits of interaction between the formal and informal construction sectors in Tanzania. The research examined the role of the informal sector in the national economy, particularly in the provision of employment and poverty alleviation. The construction industry of developing countries was also analysed: the main emphasis being placed on the structure of the industry, and how this affected the informal/formal dichotomy. The role that could be played by the informal construction sector in the provision of shelter for the urban poor and, in subcontracting was also examined. Several policies that impact on the informal sector and the construction industry were analysed to find out their appropriateness towards fostering collaboration between the formal and informal construction sectors.

Through the literature review and the interviews of formal and informal contractors in Tanzania, the research has established that the interaction is beneficial to both sectors. However, the existing policies are detrimental to the interaction.

This chapter presents the major conclusions of this research and gives proposals on what should be done to promote the performance of the informal construction sector to enable it to contribute positively towards the growth of the construction industry in Tanzania. It particularly addresses the policy interventions necessary to promote the sector, and aims to add on the efforts already in place. It is argued that the given policy proposals could be useful to the legislators and all bodies involved with the development, control and monitoring of the construction industry in Tanzania.

Finally recommendations for further research and actions are given and a critical assessment of the adopted research method and the contribution to knowledge made in this research is made.

9.2 CONCLUSIONS

9.2.1 The importance of the informal construction sector to the economies of developing countries

The importance of the informal construction sector to the economies of developing countries was discussed in Chapter Three. As can be seen, despite its importance, the sector was ignored and was not assisted to develop in the same way as the formal sector. This thesis has further demonstrated that, even without the support of the government, the sector is growing and contributes significantly to the GDP, value added, and employment of the construction industry in Tanzania. It particularly plays a leading role in the provision of rural and urban housing: which is a major concern to developing countries like Tanzania. This thesis therefore concludes that the contribution of the sector to the economy of Tanzania would be more than what was established in this research, if the government was to institute measures that would rid the sector of the problems inhibiting its performance, and that would promote its positive contribution.

9.2.2 The role of policies towards developing the informal construction sector

The role of policies towards the development of the informal sector and the construction industry was discussed in Chapter Four. Various policies including the CIP, the NHSDP, the NEP, the SIDP and the SMEP were discussed in relation to their impact on the informal construction sector. The research established that the existing policies in Tanzania do not promote and facilitate the activities of the informal construction sector. They lack co-ordination and do not specifically focus on the characteristics of the informal construction sector, and hence the need to revise the policies and harmonise them to address the characteristics and to cater for the needs of the informal construction sector.

9.2.3 The role the of informal sector in subcontracting in construction industry

The prevalence and importance of subcontracting in the construction industry was discussed in Chapter Three. This research has established that large formal contractors subcontract their work on a labour-only basis to small formal and informal contractors. Similarly, small formal contractors subcontract on a labour-only basis to informal contractors. The informal contractors were therefore seen as a pool of construction

workers, used by the formal contractors. In this set up, it was established that formal contractors benefited by getting cheap labour and supplementing the labour force and skills available in their companies and the informal contractors benefited by gaining an income and improving their managerial and technical skills.

Given the importance of subcontracting, it was suggested in Chapter Three that governments could encourage subcontracting through introducing appropriate policy measures: subcontracting preference policy and subcontracting regulations policy (ILO, 1987). However, the prevalence of subcontracting in the informal sector of the construction industry makes it difficult for programmes designed to develop the industry, through such measures as training to succeed, since in many cases they do not address the actual people involved in construction operations i.e. the informal contractors. In promoting subcontracting, care should therefore be taken to ensure that technology transfer takes place from the more skilled formal contractors to the less skilled informal contractors and thereby lead to an increase in productivity and the quality of finished products.

9.2.4 Informal construction sector as a route towards the establishment of strong and viable construction companies

It was established in this research that it is about 150 times more expensive to establish a formal construction company compared to an informal one; and this contributed to aspiring contractors to operate informally. It was however suggested that the informal sector could be used as a stepping stone towards the establishment of strong and viable construction companies. Therefore, with the proper operating environment, such as the existence of a recognised classification of labour-only contractors, the aspiring contractors could enter into the industry at the lowest level, and progressively move into higher more demanding classes of contractors as they gain capital and experience.

9.2.5 Measurement of the informal sector

The direct and indirect methods used for measuring the size of the informal sector were discussed in Chapter Three. On the one hand, direct methods, particularly the household surveys, are used to generate data on the informal sector by means of intensive investigation of the given representative populations. Indirect methods, on the other

hand, make use of already available statistics to determine the size of the informal sector. The indirect methods were found unsuitable for Tanzania and other developing countries, where statistical data are inaccurate and where large segments of the population still practise barter trade. It was concluded that a micro-level approach of discrepancy between national expenditure and national income statistics based on data of income and expenditure from representative communities established by household surveys best suited the situation in Tanzania and other developing countries.

9.2.6 Linkages between formal and informal construction sectors

This research established the nature and benefits of collaboration between formal and informal contractors. Strong links of collaboration were established between large and small formal contractors; large formal contractors and informal contractors; small formal contractors and informal contractors; and formal contractors and informal material suppliers. Labour only subcontracting was found to dominate the collaboration amongst large formal contractors with small contractors, and formal contractors with informal contractors.

However, despite the fact that small formal contractors and informal contractors were able to obtain jobs under this arrangement, there was a considerable amount of downward plundering, in which large contractors undertake small works, which could be undertaken by small contractors. It was generally observed that downward plundering was not healthy for the development of small contractors.

9.2.7 Informality in the construction industry

It was established in this research that informality in the construction industry was mainly caused by non-enforcement of regulations set up by the CRB and licensing authorities. However, it was argued that although the enforcement of regulations would reduce the number of informal contractors, still with stringent regulations and high costs it was unlikely that most of those operating informally would formalise their businesses.

This research does not, however, argue in favour of relaxed conditions, since this would lower the quality and calibre of the contractors; instead, it calls for the introduction of a parallel registration system for labour-only contractors with relaxed entry requirements.

9.2.8 Role of informal construction sector in employment and poverty eradication

It was established in this research that the informal construction sector has a large potential to generate employment in the construction industry. On average a single enterprise was found to generate 12 part-time jobs and 1.5 permanent jobs. Most of the jobs generated by the sector are of low skills and therefore offered the opportunity for people with low education and skills to work in the construction industry. At the same time it was concluded from the literature review that the informal construction sector is able to provide shelter at cheap and affordable costs to most of the rural and urban population. The combination of the two, i.e., the ability to generate employment and the ability to provide shelter at affordable prices, makes the sector's potential to alleviate poverty very high.

9.3 RECOMMENDATIONS FOR ACTION

9.3.1 The CRB's role in the development of the informal contractors

In Chapter Three it was discussed that informal contractors form the lower end of the contracting industry. It was also discussed that there is a two-way movement of contractors in the conceptual boundary of informal/formal sectors shown in Figure 3.4. Successful established informal contractors looking for new formal markets register their company and cross over to the formal side. At the same time, some unsuccessfully registered contractors failing to get jobs in the formal markets decide to become informal.

Since it is the role of the CRB to control and monitor the contracting industry, it is important that it should find ways which would help contractors who are formal not to revert to informality and encourage those that are informal to become formal. It was mentioned previously that the current minimum conditions to register a construction company in class VII are unaffordable to many aspiring contractors. It was also

mentioned that the CRB is of the opinion that the current conditions are on the low side, and lowering them further would lower the standard of the construction services offered.

This thesis does not dispute the CRB's stand of refusing to lower entry requirements for different classes. However, it is strongly recommended that the CRB should introduce a parallel registration system for labour-only contractors operating in a limited location. An example could be borrowed from the Singapore List of Trade Subcontractors (SLOTS). According to Lee (1997), by 1997, there were 500 trade subcontractors (Kepalas) registered with SLOTS since its establishment in 1992. What Lee (ibid.) referred to as trade subcontractors are synonymous with informal contractors, who make up a considerable portion of workers in construction sites.

Using the example of Singapore, a classification system of informal contractors with lowered entry requirements could be established by the CRB based on the categories of informal contractors given in Figure 3.4. Table 9.1 shows the proposed classification system, which divide the informal contractors into four levels. The value of the contracts and description of the contractors are not fixed but rather give an indication of what different levels may consist of.

The proposed classification system borrows the classification system of emerging contractors in South Africa proposed by Milne (1994), Milne and Atkins (1996) and Hodgson and Gwagwa (1997). The limits to the proposed categories of contractors are, however, based on Tanzania situation taking into consideration the results of the informal contractors' survey. The survey established that 73 per cent of the interviewed contractors had executed projects with maximum value not exceeding Tshs. two million and 14 per cent with a maximum values between Tshs. 2 to 5 million (US\$ 2,500 – 6,250). Similarly 4 per cent had executed projects with a maximum value between Tshs. 5 to 10 million (US\$ 6,250 – 12,500), and 4 per cent projects with a maximum value between Tshs. 10 and 20 million (US\$ 12,500 – 25,000). With the proposed classification, contractors in category 1 are equivalent to hawkers or street traders currently issued with trading licences by city and/or municipal councils in Tanzania at

affordable rates and are not liable to payment of taxes (Dar-es-Salaam City Trade Officer, 1999).

Table 9.1 Proposed classification of informal contractors

Contractor Categories		Value of contract in million Tshs	Type of contracts/ Clients	Description
EMERGING INFORMAL CONTRACTORS	CATEGORY 1 Artisan practicing own trade skills without employing workers, capable of working on one project at a time	< 2 (US\$ 2,500)	Labour only contractor to private house developers or subcontractor to registered contractors on small contracts	An individual with skills in one or more of the following trades: bricklaying, carpentry, plastering, tiling, plumbing etc.
	CATEGORY 2 Artisan or artisans practising own trade skills and employing workers not exceeding five and capable of working on a maximum of two projects at a time	2 – 5 (US\$ 2,500-6,250)	Labour only contractor to private house developers or subcontractor to registered contractors on large contracts	Individuals with skills in one or more of the following trades: bricklaying, carpentry, plastering, tiling, plumbing etc., and capable of managing workers.
ESTABLISHED INFORMAL CONTRACTORS	CATEGORY 3 Technician/Artisan employing several workers of different trades and capable of executing up to five projects at a time	5 – 10 (US\$ 6,250-12,500)	Labour only contractor to private house developers or subcontractor to registered contractors on large contracts	Individuals with technical skills to supervise and manage several construction workers of different trades
	CATEGORY 4 Established informal contractor capable of carrying up to ten projects at one time	10 – 20 (US\$ 12,500-25,000)	Full contractor to private house developers or subcontractor to registered contractors on large contracts	Individuals with technical skills and experience to supervise and manage construction workers of different trades.

It is suggested that the fees payable for licences and liability for payment of taxes would increase relative to the category, with category four being regarded as an intermediate level to becoming a fully-fledged formal contractor. Actually, the proposed system is in line with the SMEP, which encourages Small and Micro-enterprises to be registered and developed to become full fledged enterprises to enjoy the benefits which are available in the formal sector.

Such a classification would have the following advantages to the CRB and the construction industry at large:

- It would allow construction personnel to create their own employment within the construction industry. It is proposed that entrants in the informal construction sector must be individuals strictly trained and with experience in construction;
- It would bring control to the construction industry by eliminating the large number of unidentified informal contractors and would promote a higher level of productivity and quality from subcontractors;
- It would enable a large pool of competent trade subcontractors to be known to the industry and to potential workers entering the industry for employment;
- It would bring organisation to the informal construction sector, which is necessary for the purpose of developmental assistance. Currently it would be very difficult to implement programmes aimed at developing the informal construction sector;
- It would eliminate a big jump which aspiring contractors are required to make, from nowhere to a fully-fledged contractor. It would provide a chance to develop gradually, acquiring the experience, skills and resources necessary to run a competitive construction business;
- It would benefit the government through the payment of levies and taxes by the registered informal contractors whose income falls within the taxable range.

However, based on Singapore's experience some trade subcontractors did not register with SLOTS for the following reasons (Lee, 1997:359)

- They disliked being traced for tax and workers' levies;
- Proper organisation set-up meant that they would have to pay higher wages and proper welfare benefits to all workers, thus making them more expensive to clients; and
- Some trade subcontractors still obtained jobs despite non-registration.

To enable the informal contractors to see the benefits of registering, the CRB would be required to encourage and remove any obstacles towards formal contractors subcontracting works to the informal contractors. At the same time clients should be encouraged to use the informal contractors directly where applicable or give preference to formal contractors that are willing to subcontract to informal contractors. This measure would ensure a transfer of technology, skills and resources from the formal to informal contractors, and therefore facilitate growth of the informal construction sector capable of offering high productivity, good quality jobs, and leading to the formation of strong and viable formal construction companies.

In Singapore, for example, the government as the main employer encourages main contractors to use trade subcontractors registered with SLOTS. To facilitate this a special clause is inserted in the contract as shown in Appendix 9.1 (Lee, 1997). The ILO (1987) and the UNCHS (1996) also encourages this kind of subcontracting. The government of Tanzania and other potential clients could extend a similar encouragement to the informal contractors who register with the CRB.

The task of registering the informal contractors may be difficult to implement by the CRB alone given the fact their registration may need to be localised. It is therefore proposed that the District Councils Engineers should carry out registration at a district level. The role the CRB should be to issue guidelines for the registration to be used by all District Councils (Salewi, 1999; Msita, 1999)³⁸. The CRB should also maintain constant liaison with the District Council Engineers Office on the actual list of contractors registered and their performance. The Dar-es-Salaam City Engineer (1999) cited lack of collaboration between the CRB and City/Municipal/Town councils as a problem towards controlling illegal construction in the cities. The City/Municipal/Town Councils are required by law to regulate construction in the cities, and since it is the contractors registered by the CRB who carry out construction works it was expected that there would be a very close working relationship between the two. The CRB, on the one hand, was expected to issue instructions to the City/Municipal/Town Engineers on contractors who are eligible to operate in various categories of projects. The

³⁸ Interview responses

City/Municipal/Town Engineers, on the other hand, were expected to give a report to the CRB on the performance of contractors in their respective cities, and non-adherence to the registration requirements.

The proposal to register informal contractors at district level is in line with the registration and issuing of licences to hawkers or street traders also done at the district level. Actually, many District Council issues licences for welding, carpentry and minor plumbing activities on condition that the owners have premises to operate from. The reason given for not issuing licence to most of construction related activities, was that construction was a skilled trade and that the firms must first register with the CRB before being issued with a licence (Dar-es-Salaam City Trading officer, 1999)³⁹.

Other advantages of mobilising and developing informal contractors at district level would be (Cattell, 1994:12):

- Greater retention of construction profits within communities as the developed informal contractors would be able to execute several projects within their communities;
- Decreased unemployment due to the use of labour intensive construction methods; and
- Prevention of rural urban migration, which normally occurs as a result of lack of development and employment in the rural areas.

9.3.2 The role of the informal contractors towards their own development

In Chapter Three it was discussed that many of the problems that inhibit the growth of entrepreneurs in the informal sector from developing into viable business entities lie outside their influence. However, the owners of informal construction firms must first tackle the owner-related problems mentioned in Section 3.4.4 if they wish to grow and prosper. This calls for willingness on their part to register in the event that the CRB

³⁹ Interview responses

introduces the proposed labour only categories for the informal contractors and to participate in any development programmes including training, which may be offered by the government or its agents. They also need to incorporate knowledgeable and experienced people in their enterprises. This could be best achieved by forming partnerships or co-operatives.

Another problem existing in Tanzania, even with the formal contractors, is the lack of strong associations to act as a pressure group on issues that affect the contractors. The history of associations in Tanzanian construction industry is rather poor. Through the initiative of the NCC the Tanzania Building Contractors Association (TABCA) was established in the late 1980s, but ceased to operate in the early 1990s (BICO, 1996). Currently the Tanzania Civil Engineering Contractors Association (TACECA) established in 1996 is progressing well, but takes care of only civil works contractors (Lemunge, 1998; Sengenge, 2000). Builders and other contractors have no associations representing their interests. The absence of strong associations makes it difficult for the contractors to fight for better terms in the industry. For example, while TACECA on behalf of civil works contractors had the opportunity to participate in the formulation of the proposed CIP, individual contractors were invited to represent building contractors. Their input may not necessarily represent the interest of all contractors.

Obviously, because of the lack of organisation in the informal construction sector it will be difficult for the informal contractors to form an association. One of the advantages of registering informal contractors is to enable them to organise themselves into strong pressure groups through the formation of associations. Actually, some of the interviewed officials expressed the opinion that the only way to assist the informal contractors would be for them to group themselves into trade associations (Bundala, 1999; Salewi, 1999)⁴⁰. The trade associations could be formed even in the absence of any registration. However, such associations could be difficult to establish, and if established in the absence of proper policy framework, they would lack legal identity, which is important to further their interests.

⁴⁰ Interview response

For example, in the current efforts that are underway to develop the SMEP and the CIP the input of informal contractors would have been very useful. Unfortunately, there has been no input due to the absence of associations representing the interest of the members.

It is recommended that the registration of informal contractors could go hand in hand with the promotion of establishing informal contractors' associations at the district, regional and national level. In principle, the initiative to establish such associations should come from the informal contractors themselves. It may be helpful, however, if the government, non-governmental organisations or any other responsible body like the CRB would propagate the need for the informal contractors to form such associations and give assistance for its formation, where necessary. The TACECA, for example, was established by the initiative of the Ministry of Works, which employed a consultant to carry out a feasibility study on the establishment of the Road Contractors Association and to supervise the formation process (BICO, 1996). Of course, where the government or any other external body is involved, its role should strictly be limited to triggering the formation process, otherwise it should be the responsibility of the informal contractors themselves to formulate the constitutions, the organisations and other matters relating to the associations.

9.3.3 Policies towards promoting the informal construction sector

General

The informal construction sector shares the characteristics of the informal sector discussed in Chapter Two and those of the construction industry discussed in Chapter Three. Policy measures to develop the informal construction sector must therefore address what is happening in the wide informal sector and the construction industry in Tanzania.

The role of policy in developing the construction industry was discussed in Section 4.6.1 of this thesis. The mentioned policy intervention measures necessary for these developments are pertinent to both formal and informal construction sectors. Similarly, the role of policy in developing the informal sector was discussed in Section 4.7.1, and

the policy intervention measures discussed therein are also relevant to the informal construction sector.

Policies towards developing the informal construction sector need to be addressed at two levels: the national and the industrial level.

Policies on the informal sector at national level

In Section 4.7.1 of this thesis it was mentioned that the informal sector covers a wide range of industries; therefore no single policy is likely to address all the constraints of the informal sector operators in different industries. At the national level there is a need to have a policy on the informal sector giving clear guidelines on the status of the sector in the country's development agenda. The policy should aim at addressing constraints present in all the informal sector enterprises irrespective of their kind of business. In particular it should create a conducive, legal and institutional framework for the development of the sector.

The national policy for the informal sector needs to address the following issues:

- Regulations concerning registration and business licences⁴¹: The policy should aim to simplify and standardise the procedure for registration and licensing. For example, currently because of lack of standardisation of procedures, the informal construction enterprises can not be issued with licences, while their counterparts in manufacturing or in trading are.
- Eligibility of the informal sector enterprises in payment of national and local taxes: The policy should define who is eligible to pay and structure the taxation system so that it provides an incentive for the eligible informal sector operators to pay. In addressing taxation for the informal sector enterprises it would be important to establish differential taxation systems for different sizes of informal contractors, to introduce tax holidays for the newly registered enterprises and to

⁴¹ The regulations and license fee payable should be able to encourage people to join the formal sector, and at the same time should facilitate those not joining formal sector be identified and perform their business unhindered.

provide tax incentives to large firms that engage in subcontracting to informal enterprises (GOT, 1999d).

- Preparation of a framework for financial institutions, non-governmental organisations and other donor organisation for providing credit, financial and other support to the informal sector enterprises. This framework should be a guiding policy for any institution that wishes to offer financial assistance to the informal sector.
- Preparation of a framework for training of the current and future informal sector entrepreneurs. This should include reviewing school curricula to enable it to produce job creators rather than job seekers.
- Review of governments procurement system to ensure that they do not discriminate against informal sector enterprises.
- Preparation of a framework of giving incentives to big businesses that subcontract to the informal sector.
- Preparation of a framework within which sectoral policies on the informal sector shall be formulated and co-ordinated.
- Identification of responsible body to co-ordinate efforts to develop the informal sector in different industries, and issue and update guidelines whenever required.

The National Policy on the Informal Sector should actually be a guide to be used by different industries like manufacturing, trade, construction, mining and quarrying, etc. for the preparation of industrial policies for the informal sector. Each industry, based on the provided guideline, would be responsible for the preparation of a detailed policy for developing the informal sector in the respective industry which conforms with short and long term development objectives of the industry. In a similar way, each industry should shoulder the development of its informal sector.

Policies on informal construction sector at industry level

The informal construction sector shares many characteristics with small formal contractors. Problems faced by the informal contractors like lack of jobs, lack of credit facilities, lack of equipment, etc., are also the problems of small formal contractors. This is of course to be expected since the only dividing line between small formal and informal contractors is the lack of registration and/or licence of the former.

The informal construction sector is an integral part of the construction industry, and therefore its development should aim to achieve the short and long-term objectives of the construction industry. The proposed CIP addresses this, and it is considered that its proposed strategies for the improvement of the informal construction sector are adequate. However, it was mentioned that the policy formulation process was not representative enough, and the input of stakeholders in the CIP was limited. With regard to the informal construction sector, it was difficult to get representation due to the unorganised nature of the sector. However, some sensitisation through media could have ensured that a few informal contractors organise themselves and appoint a representative in the policy formulation process. The beneficiary and other key stakeholders of the informal construction sector services were also not represented. What is lacking, besides this, is who would implement the strategies and the priority attached to their implementation.

The process of the formulation of the CIP is already in an advanced stage; it would therefore be unreasonable to give recommendations which unwind the process. The recommendations given here aim to take on board what has been achieved, but also provides a way forward to the better implementation of the different strategies contained in the proposed policy document.

In Section 4.3.1 it was mentioned that for successful policy implementation there is a need to obtain stakeholders' consensus on the policy issues and to identify the roles that different officials, institutions and other actors must play in the implementation process (CDE, 1999). Normally this is supposed to be done during the policy formulation process. Still it is possible to have consensus and identification of the roles after the

policy is in place; and basically this calls for reviewing the policy process by inviting the stakeholders to discuss different policy issues to reach a consensus. Where agreement is not reached, new agreed proposals are taken into account and used to revise the policy document.

The following is therefore proposed, in line with the process used to formulate the South African Construction Industry Policy (RSA, 1999; Rwelamila, 2000).

- Creation of an inter-ministerial committee, which would oversee the implementation of the construction industry policy. In the case of Tanzania such a committee would be co-ordinated by the Ministry of Works, and may include Ministries of Land; Housing and Urban Development; Communication and Transport; Water; and Regional Administration and Local governments. Other ministries like Energy and Minerals; Agriculture and Co-operatives; Industries and Trade and Science; and Technology and Higher Education can also be included. This would ensure co-ordination of the CIP with other government policies that impact on the construction industry.
- Establishment of an inter-ministerial task team drawn from the public and private sector. The National Construction Council (NCC), with its membership comprising of both public and private sector could fulfil this requirement. More members could be added to the NCC to fulfil the needs of the CIP and not as permanent members of the Council. In South Africa, for example, there is a proposal to establish a Construction Industry Development Board (CIDB) to oversee the development of the South African Construction Industry (RSA, 2000). The NCC already fulfils a similar role in Tanzania. The NCC with its experience and achievements discussed in Section 4.6.2 and its involvement in the process of the formulation of the CIP could best be suited to co-ordinate its implementation. Through proper representation, the NCC has the ability to act as a permanent vehicle for public and private sector co-operation on construction industry development programmes in Tanzania (NCC, 1992).

- The task team should revisit the proposed CIP to verify that it upholds important government values and principles, and to ensure its consistency with other national policies. Grey areas must be identified and dealt with properly before the implementation of the policy starts.
- The task team should identify roles that different officials, institutions and other actors must play in order to implement different policy issues successfully. For each policy issue raised in the CIP, the stakeholders at the implementing and receiving end must be clearly identified. These will form the basis for the selection of members of proposed focus groups discussed below.
- Formulate focus groups consisting of stakeholders that are most affected by the proposed policy issue for different policy issues. For example, a focus group on the improvement of the informal construction sector could include representatives of the Contractors' Registration Board; Engineers Registration Board; Architects and Quantity Surveyors Registration Board; Ministry of Local Governments and Regional Administration; and Ministry of Works. Others could include selected Municipal and Town Engineers; selected Regional Engineers; Ministry of Trade and Industries; Ministry of Science, Technology and Higher Education; Ministry of Labour and Youth Development; representatives from the informal construction sector and non-governmental organisations involved in the development of the informal construction sector.

The organisational arrangement of the proposed measures is shown in Figure 9.1.

The given proposals relate to the successful implementation of the CIP, and not to only a few sections of it. It is expected that the involvement of the stakeholders in the preparation of detailed strategies and resources required for implementing the different policy issues would facilitate stakeholders' identification with the issues, and therefore make the implementation easier.

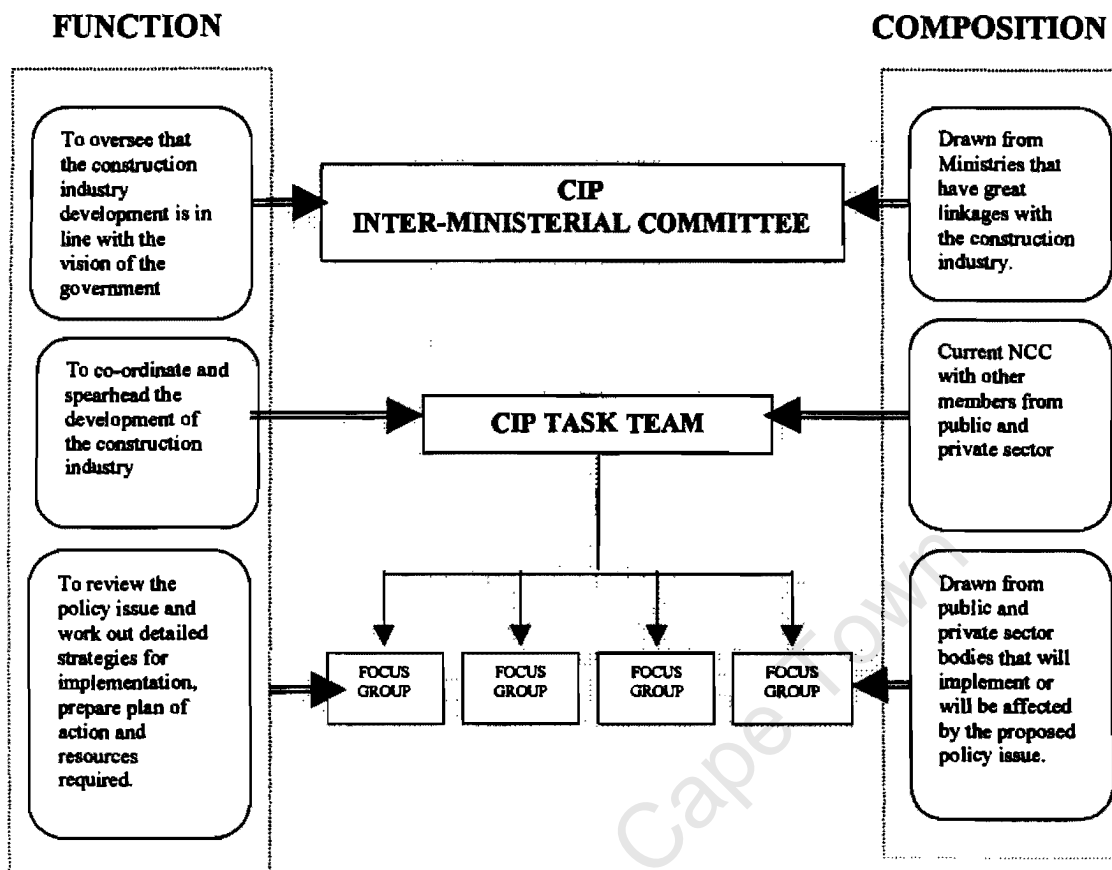


Figure 9.1 Organisational arrangements for the implementation of CIP

9.4 RECOMMENDATIONS FOR FURTHER STUDIES

9.4.1 The informal construction sector's role in the provision of shelter.

It has been concluded that the informal construction sector can provide affordable shelter to most of the rural and urban population, and therefore presents a potential for poverty alleviation. However, there have been queries with regard to the quality of work executed by the informal contractors; and issues of low productivity and non-adherence to the health and safety of construction workers. The comparable costs between the formal and informal contractors at a defined level of quality are still not clear.

It is therefore recommended that further studies be conducted to establish:

- The quality of work executed by the informal contractors and cost comparison between formal and informal contractors for given levels of quality;

- The effect of informal contractors on the health and safety of construction workers in the provision of shelter;
- The technology and skills employed by informal contractors: type of technology and skills, their source, and if they are capable of improvement;
- Comparison of productivity levels achieved by formal and informal contractors in the provision of shelter; and
- The potential of using informal contractors in infrastructural projects, and how the output compares with that of formal contractors in terms of cost, quality and time of completion.

9.4.2 Other forms of informality in the construction industry

This research focussed on the informal construction sector composed of small enterprises and contract labour. Other aspects of informality in construction not covered in this research include:

- Informality in terms of planning and regulations of buildings.
- Informality in relationships between clients, designers and contractors; and
- Informality in construction contracts.

It is therefore recommended that studies that would focus on the above aspects of informality be conducted and in particular they should address the following:

- Establishment of the extent of informal buildings and the reasons leading to such informality.
- Identification and establishment of the extent of informal relationships that exist between the client, designers, and contractors; and the effect they have towards the successful implementation of the projects.

- Identification and establishment of the extent of use of informal contracts between clients and designers, and between clients and contractors; and their effect towards successful implementation of projects.

9.5 CRITICAL ASSESSMENT OF THE RESEARCH METHOD ADOPTED IN THIS STUDY

The research method adopted for this study was discussed in detail in section 5.3; namely deductive qualitative and quantitative research based on archival data and opinion surveys.

The approach adopted in this research can be summarised as follows:

- i) The research problem was advanced which gave rise to research hypotheses which were tested using the data collected.
- ii) The archival strategy was employed to collect appropriate data and information on the Tanzanian construction industry, the informal sector and on policy issues.
- iii) The opinion surveys through face to face interviews, were used to obtain data on formal and informal contractors on their characteristics, working environment and problems affecting their work.
- iv) The collected data was summarised and analysed using exploratory and descriptive statistics methods to give rise to research findings which were used to test hypothesis and for formulation of recommendations on how to develop the informal construction sector in Tanzania.

Given the nature of data which was required in this study, the selected approach proved to be successful in gaining an insight to the Tanzanian informal construction sector and measures to be undertaken to enable it register positively in the development of the construction industry. However, there are several shortcomings with the adopted approach which are discussed below:

- The structured questionnaires, which was the main tool used for data collection, should have been pre-tested to allow for testing interviewees' reaction on the proposed options and also to allow for formulation of a wide range of options based on the outcome of the pre-test. However, this has been acknowledged in section 5.9 as one possible bias in this research.
- Failure to solicit interviewees opinion on the research hypotheses. This could have been achieved by including relevant questions in the questionnaires to solicit opinion on the hypotheses being tested. Despite this omission, the interviewees' opinions were inferred from their responses to other questions in the questionnaires.

9.6 CONTRIBUTION TO KNOWLEDGE MADE BY THIS STUDY

In Section 5.8 it was discussed how this research would make contribution to knowledge. Two areas of contribution to knowledge were identified, namely:

- trying out something in a geographical area that has previously been carried out in that area before; and
- introducing substantial new evidence to an old issue.

The study has managed to establish the role that can be played by the informal construction sector in the development of the Tanzanian construction industry, and how appropriate policies are important for this to be achieved. The study has looked into detail on the existing policies in Tanzania that affect the informal construction sector and has established deficiencies which makes them unsuitable for the development of the sector. Due to the observed deficiencies, the study has recommended measures that can be used to streamline the existing policies and formation of new ones that will take care of the development of the informal construction sector. This detailed study on the development of informal construction sector, with its findings and recommendations is a major contribution to knowledge in as far as the Tanzanian construction industry is concerned.

The study has further provided evidence to the nature of collaboration i.e. subcontracting, that exist between formal and informal construction industry. Through the data collected and its analysis, it was established that labour only subcontracting between large and small formal contractors, and between formal and informal contractors was predominant in the Tanzanian construction industry and that both parties benefited from the relationship. This is another contribution to knowledge made by this study.

9.7 SUMMARY

This chapter gave conclusions of this thesis and recommendations of what could be done to improve the informal construction sector in Tanzania. It recommended the review of CRB's registration procedures to accommodate the informal contractors, particularly the establishment of a special category of labour-only contractors registered at district level based on guidelines that will be issued by CRB. It also recommended that assistance should be given to the informal contractors to enable them to mobilise themselves to form associations that will safeguard their rights and spearhead development of the members.

The chapter further gave recommendations on the informal sector policy and the construction industry policy. It was recommended that the informal sector policy should limit itself to providing guidelines and framework to the different industries for the preparation of sectoral policies on the informal sector. It was also recommended that in order to obtain the stakeholders' commitment in the implementation of the CIP, it was important to formulate a task team involving various stakeholders to co-ordinate and spearhead the implementation of the policy. At the same time it was proposed to establish focus groups on various policy issues. The focus groups, made of representatives from organisations that will largely be affected by the proposed policy issue and strategies, should be involved in charting out modalities for implementation of the policy.

The chapter also critically assessed the research method adopted in this study, and the lack of pre-testing of questionnaires as well as soliciting of interviewees opinion on the research hypotheses were found to be the major shortcomings.

Finally the chapter reviewed the contribution to knowledge made by this study. The study has provided a better understanding of the Tanzanian informal construction sector and how policies can be streamlined to enhance its development. It has also provided evidence on the nature of collaboration existing between the formal and informal construction sectors.

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Appendix 2.1

Basic data on informal sector as summarised from the Tanzanian National Informal Sector Survey of 1991 (GOT, 1991a)

INFORMAL SECTOR EMPLOYMENT ACCORDING TO SEX (GOT, 1991a:Table 2.1.2)

Sex	Operators	Employees	Total
Male	1,119,578	411,516	1,531,094
Female	623,096	215,190	838,286
TOTAL	1,742,674	626,706	2,369,380

INFORMAL SECTOR EMPLOYMENT ACCORDING TO INDUSTRY GEOGRAPHIC AREA AND SEX (GOT, 1991a:Table 2.2.1)

INDUSTRIAL GROUP	D'Salaam Total	Other Urban Total	Rural Total	TOTAL		
				Male	Female	Total
Agriculture and Fishing	21,835	104,490	110,052	188,063	48,314	236,377
Mining and Quarry	0	17,400	4,351	18,723	2,998	21,721
Manufacture	44,219	77,529	404,501	395,247	131,002	526,249
Construction	22,327	28,785	112,326	162,216	1,222	163,438
Trade/Restaurant and Hotels	203,200	359,325	651,175	575,389	638,311	1,213,700
Transport	4,419	7,758	65,893	75,292	2,778	78,070
Community and Personal services	19,958	38,858	71,009	116,164	13,661	129,825
Total	315,958	634,145	1,419,277	1,531,094	838,286	2,369,380

INFORMAL SECTOR TOTAL GROSS OUTPUT AND VALUE ADDED (RURAL AND URBAN) –FROM THE INDUSTRIAL GROUPS (GOT, 1991a:Table 3.1.1)

INDUSTRIAL GROUP	Share of number of enterprise	Annual Gross Output Tshs. Mill	Annual Value added Tshs. mill	Average Gross Output Tshs.	Average Value Added Tshs.
Agriculture and Fishing	142,109	35,036	20,447	246,542	143,879
Mining and Quarry	17,139	1,665	1,159	97,151	67,634
Manufacture	439,540	59,396	29,800	135,132	67,798
Construction	116,496	14,577	10,864	125,128	93,256
Trade/Restaurant and Hotels	933,915	344,234	104,727	368,592	112,137
Transport	49,379	13,796	6,114	279,399	123,814
Community and Personal services	102,965	18,165	10,307	176,420	100,100
Total	1,801,543	486,869	183,417	270,251	101,811

INFORMAL SECTOR CAPITAL FORMATION EMPLOYMENT ACCORDING TO INDUSTRIAL GROUP AND GEOGRAPHIC AREA (Tshs. ,000)
(GOT, 1991a:Table 3.3)

INDUSTRIAL GROUP	D'Salaam Total	Other Urban Total	Rural Total	TOTAL
Agriculture and Fishing	64,169	255,831	289,126	609,126
Mining and Quarry	0	16,354	2,624	18,978
Manufacture	245,870	305,146	707,812	1,258,828
Construction	44,387	23,857	118,036	186,280
Trade/Restaurant and Hotels	362,172	673,282	1,461,621	2,497,075
Transport	56,285	88,390	819,830	964,505
Community and Personal services	40,739	44,959	101,492	187,190
Total	813,622	1,407,819	3,500,541	5,721,982

Appendix 3.1

CRITERIA FOR REGISTRATION OF BUILDING AND CIVIL WORKS CONTRACTORS

2.0 CRITERIA FOR REGISTRATION OF CONTRACTORS

Any contractor applying for registration or upgrading to a particular class will be evaluated on the basis of the following criteria in accordance with Section 10 of the Contractors Registration Act.

2.1 Basic Requirements

There are three basic requirements for any person or group of persons applying for registration as a contractor, namely

- (a) such a person has a Certificate of Registration from the Registrar of Companies either as a limited liability company, partnership or sole proprietorship,
- (b) in case of a limited liability company the Certificate must be accompanied with certified copy of Memorandum and Articles of Association. Partnership and sole proprietorship firms must submit certified copy of Extract form the Registrar of Companies,
- (c) at least one of the shareholders or partners must have the minimum Technical qualifications stipulated in Table 2 according to Sections 7-1(i) and 10-(1)a of the Act,
- (d) the Board will review the curriculum vitae of each shareholder or partner as the case may be to ensure that they are persons of good professional and general conduct.

2.2 Determination of Appropriate Class

In determination of appropriate class for registration as a contractor, the following criteria shall be used:-

(a)	Staff Qualifications	25pts
(b)	Plant and Equipment	20pts
(c)	Office and Service Facilities	10pts
(d)	Safety Gear	5pts
(e)	Financial Status	30pts
(f)	Experience of the firm	10pts
	Total	100pts

An applicants who scores an aggregate of 60 points and above, but not less than half of the points in any criteria under subparagraphs (a) through (f) shall qualify for registration.

A local contractor applying for first registration in Classes IV, V, VI or VII will not be assessed for experience of the firm. In such cases experiences of the shareholders or partners forming the firm and their employees will be taken onto account.

2.2.1 Staff Qualifications

Any firm applying for registration or upgrading is required to have a minimum number of permanent staff with minimum technical qualifications and skills for the respective type and class as set out in Part A of the Table 3-6 of the Second Schedule.

Marks for staff qualification will further be distributed as follows:

(a)	Adequacy of staff in accordance to Minimum Requirements	10
(b)	Qualifications of Individuals	5
(c)	Experiences of Individuals	<u>10</u>
	Total	<u>25</u>

2.2.2 Plant and Equipment

Plant and Equipment owned by the contractor for execution of the intended works will be assessed against the minimum requirements for the respective type and class as set out in Part B of the Table 3-6 of the Second Schedule. The assessment will take into consideration the age and condition of the equipment based on available records or visual inspection.

The following distribution of the points will apply:

(a)	Adequacy of proposed list of equipment as compared to minimum requirements	15
(b)	Age and Condition of Equipment	5
	Total	<u>20</u>

2.2.3 Office and Service Facilities

Any person or firm applying for registration or upgrading must satisfy minimum requirement for office and service facilities as set out on Part C of Tables 3-6 of the Second Schedule, as may be reviewed by the Board from time to time.

Contractors in the higher Classes I, II, and III are required to have a well established workshop and open yard for storage of materials and equipment.

Marks for Office and Service facilities shall be distributed as follows-

(a)	Office building	3
(b)	Communication facilities	1
(c)	Yard/workshop	2
(d)	Furniture/office equipment	2
(e)	Hygiene facilities	2
	Total	<u>10</u>

2.2.4 Safety Gear

Safety of workmen in the workplace is one of the most important responsibility of any contractor. In order to promote industrial safety all contractors are required to maintain and provide to their workmen a minimum set of safety gear as shown on Part D of Tables 3-6 of the Second Schedule. The quantities shown here are minimum requirements, but as a general rule, every person on a construction site must be provided with a helmets and other appropriate safety gear.

Marks for safety gear shall be distributed as follows-

(a) Helmets	1
(b) Boots	1
(c) Jackets	1
(d) Gloves.....	1
(e) Dust Masks and others	1
Total	<u>5</u>

2.2.5 *Financial Status*

Financial standing of any firm applying for registration will be assessed in terms of Average Annual Turnover, Liquidity and Value of Fixed Assets. Minimum financial requirements for any firm applying for upgrading or first registration are shown on Table 7 of the Second Schedule

Marks for financial requirements shall be distributed as follows-

(a) Average annual turnover	10
(b) Liquidity	10
(c) Fixed assets	<u>10</u>
Total	<u>30</u>

In case of new applicants, the annual turnover shall not be assessed and the allocation of marks shall be as follows-

(a) Liquidity	15
(b) Fixed assets	<u>15</u>
Total	<u>30</u>

2.2.6 *Experience of the firm*

The experience of any firm applying for upgrading or registration in any class other than 7, will be judged against minimum requirements stipulated in Table 8 of the Second Schedule, and as may be reviewed by the Board from time to time.

The marks for experience requirement shall be distributed as follows-

(a) Years of practice in the field of application	2
(b) Average size of at least three projects	5
(c) Maximum size of any single project	3
Total	<u>10</u>

2.2.7 *Experience of Individual*

In the case of first registration in classes IV through VI experience of individual technical staff shall be assessed as follows-

(a) Years of practice in the field of application	2
(b) Average size of at least 3 projects supervised ...	5
(c) Maximum size of any single project supervised	3
Total	<u>10</u>

3.0 REGISTRATION

Applicants whose applications have been approved by the Board will be notified immediately by post and asked to pay, within sixty days, Registration fees and Annual Subscription fees commensurate with the Class, Type and Category of Registration as set out in Tables 9, 10 and 11 of the Second Schedule, and as may be reviewed by the Board from time to time.

Payments shall be made in Cash or by Bank Draft, Telegraphic Transfer, Postal Order or Local Bank cheque. Payment by Bank cheques will only become effective after it has been cleared by the bank and money credited to the account of the Board.

An applicant who fails to pay the prescribed registration fees and annual subscription within sixty (60) days shall have his approval revoked.

Registered Contractor will be issued with a Registration Certificate within two weeks after making payment.

4.0 PROCEDURES FOR GRANTING DISPENSATIONS

The Board, may on exceptional circumstances, grant dispensation in respect of performance of contractors beyond class limits upon being satisfied that a particular contractor deserves to be granted such dispensation. Applications under this part shall be made for bona fide contractors by clients and shall contain the following information.

- (a) A summary of the nature and scope of the works
- (b) Consultant's estimates prior to tendering.
- (c) Consultant's written recommendation to the client on short-listing of contractors. This shall include the names, addresses and classes of registration of the recommended contractors.
- (d) Final decision of the client on the recommended shortlist
- (e) Written proof of invitation to tender as sent to short-listed tenderers.
- (f) Results of tender opening, showing who were present at opening, their representations, tabulated tender figures and any other special conditions accompanying the tenders.
- (g) Consultant's evaluation results and recommendation to client.
- (h) Client's provisional decision to award the tender to the contractor who needs dispensation.

SECOND SCHEDULE

Table 1: Class Limits for Various Types of Contractors

CLASS LIMIT FOR ANY SINGLE CONTRACT (<i>In Million Tshs.</i>)					
CLASS	Civil	Building	Mechanical	Electrical	Specialist
ONE	<i>Unlimited</i>	<i>Unlimited</i>	<i>Unlimited</i>	<i>Unlimited</i>	<i>Unlimited</i>
TWO	3,000	800	500	500	100
THREE	1,000	600	300	300	50
FOUR	500	400	200	200	—
FIVE	300	200	100	100	—
SIX	100	100	50	50	—
SEVEN	50	50	20	20	—

TABLE 2: Minimum Technical Qualifications of a Technical Director

Type of Contractor	Minimum Qualifications
Civil	FTC in Civil Engineering
Building	Trade Test Grade I in relevant field
Mechanical	Trade Test Grade I in relevant field
Electrical	Trade Test Grade I in relevant field
Specialist	Trade Test Grade I in relevant field.

Table J: CRITERIA FOR REGISTRATION OF CIVIL WORKS CONTRACTORS
REGISTRATION REQUIREMENTS FOR PERMANENT PERSONNEL, PLANT, EQUIPMENT AND TOOLS, SAFETY GEAR, OFFICE SERVICE FACILITIES

RESOURCES	CLASS ONE	CLASS TWO	CLASS THREE	CLASS FOUR	CLASS FIVE	CLASS SIX	CLASS SEVEN	REMARKS
A. KEY STAFF (Attach CV's)								
1. Head of Organisation	1 ^{***}	1 ^{***}	1 ^{***}	1 ^{***}	1 ^{***}	1 ^{***}	1 ^{***}	
2. Accountant*								
3. Structural/Civil engineers*	2	2			1 ^{****}	-	-	
4. Civil Engineering Technicians	2	1	1	1	1	1	1	Holder of FTC or equivalent
5. Quantity Surveyor						-	-	Holder of Diploma or Degree
6. Land Surveyor						-	-	Holder of Diploma or Degree
7. Artisans	3	2	2	1	1	1	1	At least Trade Test Grade 1 and not less than 2 years practical experience.
8. Workshop Mechanics								
9. Workshop Engineer*								
10. Electrical Technician**								
B. PLANT AND EQUIPMENT								
1. Bull Dozers (Min capacity 120)				1	-	-	-	
2. Graders (Min. capacity 100 HP)			1		-	-	-	
3. Loaders (Min. Capacity 100 HP)	2				-	-	-	
4. Vibrating Rollers (Min. capacity 10 T)	3	2			-	-	-	
5. Tandem Rollers (Min. capacity 10T)	2				-	-	-	
6. Pneumatic Tyre Rollers	2				-	-	-	
7. Pedestrian Rollers/Pipe Compactors	3		2	2				
8. Hand Compactors	2		1	1		1	1	
9. Water Bowers/Trailer	2	1	1		-	-	-	
10. Tipper	6	4	3	2	1	1 ^{**}	-	
11. Backhoes	3	2	1					
12. Agricultural Tractor W/Loaders	1 ^{**}	1 ^{**}	1 ^{**}	1	1	-	-	
13. Low Loader	1	1	1		-	-	-	
14. Non-tipping Truck	2	1	1	1	1 ^{**}	1 ^{**}	-	Min capacity 3T
15. Concrete Mixers	4	2	1	1	1	1 ^{**}	1 ^{**}	
16. Compressors	3	2	1	1	1 ^{**}	-	-	
17. Water Pumps	3	3	2	1		-	-	
18. Polder Vibrator	3	2	1	1	1 ^{**}	-	-	
19. Hoisting Equipment	2	1	-	-	-	-	-	
20. Light Duty Vehicles (Pick-ups)	4	4	2	2	1	1	1	
21. Generator Set	2	2	1	1	-	-	-	
22. Welding Set	2	1	1	1	-	-	-	
23. Mechanical Broom	1		-	-	-	-	-	
24. Asphalt Plant	1 ^{**}	1 ^{**}	-	-	-	-	-	
25. Asphalt Paver	1 ^{**}	1 ^{**}	-	-	-	-	-	
26. Chip Spreader	1	1 ^{**}	1 ^{**}	-	-	-	-	
27. Stone Crusher	1 ^{**}	1 ^{**}	-	-	-	-	-	
28. Bitumen Distributor or Sprayer	1	1 ^{**}	1 ^{**}	-	-	-	-	
29. Levelling Instrument (e.g.; Dumpy Level)	2	1	1	1 ^{**}	1 ^{**}			
30. Theodolite/Total Station	1	1	1 ^{**}					
31. Assortment of Hand Tools (Set of shovels, pans, pick axes, hoes, wheel barrows etc.)	30	30	20	20	15	15	15	
C. LAND & SERVICE FACILITIES								
1. Storage Yard m ²	1000	800	500	300 ^{**}	100 ^{**}	100 ^{**}	-	
2. Service W/Shop m ²	200	150	100	100 ^{**}	50 ^{**}	-	-	
3. Office m ²	100	50	50	20	20	10	10	
D. SAFETY GEAR (Every person on a construction site should be provided with safety gear, especially helmets).								
1. Helmets	50	20	10	5	5	3	2	These are minimum stocks
2. Boots (pairs)	50	20	10	5	5	3	2	Additional requirements
3. Gloves (pairs)	50	20	10	5	5	3	2	to be procured on project
4. Reflective Jackets (pairs)	50	20	10	5	5	3	2	

* Must be Registered with Professional Board; Engineers must be in the professional category or above.

** Recommended but not Mandatory.

*** Accountant need not be a permanent employee.

**** Need not be registered engineers

Table 4: CRITERIA FOR REGISTRATION OF BUILDING CONTRACTORS

REGISTRATION REQUIREMENTS FOR TECHNICAL PERSONNEL, PLANT, EQUIPMENT AND TOOLS, SAFETY GEAR AND OFFICE SERVICE FACILITIES

RESOURCES	CLASS ONE	CLASS TWO	CLASS THREE	CLASS FOUR	CLASS FIVE	CLASS SIX	CLASS SEVEN	REMARKS
A: KEY STAFF (ATTACH CVs)								
1. Head of Organisation	1	1	1	1	1	1	1	
2. Accountant*	1**	1**	1**	1**	1**	1**	1**	
3. Structural/Civil Engineers*	2	1	1	1	1****	1****	-	
4. Quantity Surveyor	1	1	1	-	-	-	-	Holder of Diploma or Degree
5. Mechanical Engineering Technicians	2	1	1	-	-	-	-	Holder of FTC or equivalent
6. Civil Engineering Technicians	4	3	2	1	1	1	1	Holder of FTC or equivalent
7. Electrical Engineering Technician	2	2	1	1	-	-	-	Holder of FTC or equivalent
8. Artisans	3	2	1	1	1	1	1	At least trade Test 1 and 2 years experience
B: PLANT AND EQUIPMENT								
1. Tower (Building) Crane	1	1	-	-	-	-	-	
2. Concrete Batching Machine	1**	-	-	-	-	-	-	
3. Concrete Mixers	3	2	1	1	1	1	1	
4. Concrete Vibrators	2	1	1	1	1	1	1	
5. Block Making Machines	3	2	1	1	1	1	1	
6. Steel Bending Machines (Set)	1	1	1	-	-	-	-	
7. Light Duty Vehicles	3	2	2	1	1	1	1	
8. Water Pumps	2	1	1	-	-	-	-	
9. Concrete Dumpers	2	1	-	-	-	-	-	
10. Trucks or Tipper	4	3	2	1	1	-	-	
11. Hand Compactors	2	1	1	1	1	1	1	
12. Compressors	1	1	-	-	-	-	-	
13. Steel Scaffolding (metres)	800	400	400**	-	-	-	-	
14. Levelling Instrument (e.g. Dumpy Level)	2	1	1	1**	1**	-	-	
15. Assortment of Handtools (shovels, pans, etc).	20	20	15	15	10	10	5	
C: LAND & SERVICE FACILITIES								
1. Storage Yard m ²	500	300	200	100	-	-	-	
2. Service W/Shop m ²	100	100**						
3. Office m ²	60	40	40	20	20	10	10	
D. SAFETY GEAR (Every person on a construction site should be provided with safety gear, especially helmets).								
1. Helmets	50	20	10	5	3	2	2	
2. Boots (pairs)	50	20	10	5	3	2	2	
3. Gloves (pairs)	50	20	10	5	3	2	2	
4. Reflective Jackets (pairs)	50	20	10	5	3	2	2	

* Must be Registered with Professional Board; Engineers must be in the professional category or above.
 ** Recommended but not Mandatory.
 *** Accountant need not be a permanent employee.
 **** Need not be registered engineers

Table 7: Financial Requirements

	Classes I-III	Class IV-VI	Classes VII
Average Annual Turnover	15% Of Class limit	15% of Class limit	N.A.
Liquidity (Cash in Bank, Redeemable Financial Securities)	5% Of Class limit	2% of Class limit	N.A.
Fixed Assets	20% Of Class limit	10% of class limit	N.A.

The limit of Class I is hereby assumed to be twice the limit of Class II for all types of contractors

Table 8: Experience Requirements

	Experience	Minimum Requirements
1.	Years of practice in the field of application	Class I — 10 years Class II — 8 years Class III — 6 years Class IV — 4 years
2.	Average size of at least 3 projects executed in the years of practice or since last upgrading	At least 30% for Classes I-III, and 15% for Classes IV-VII of the Present Class Limit
3.	Maximum size of any single project executed in years of practice or since last upgrading.	At least 80% of present Class Limit

The limit of Class I is hereby assumed to be twice the limit of Class II for all types of contractors.

Table 9: Registration Fees for Local contractors (TSBs)

Class	Registration Fee				
	Building	Civil Works	Mechanical	Electrical	Specialist
I	250,000	300,000	150,000	150,000	60,000
II	200,000	250,000	90,000	90,000	40,000
III	150,000	200,000	60,000	60,000	30,000
IV	90,000	150,000	50,000	50,000	
V	60,000	90,000	40,000	40,000	
VI	50,000	60,000	30,000	30,000	
VII	40,000	50,000	25,000	25,000	

Table 10: Annual subscription Fees for Local Contractors (TShs.)

Class	Annual Subscription				
	Building	Civil Works	Mechanical	Electrical	Specialist
I	1,000,000	1,500,000	500,000	500,000	50,000
II	650,000	800,000	330,000	330,000	40,000
III	420,000	650,000	210,000	210,000	30,000
IV	280,000	330,000	140,000	140,000	-
V	140,000	200,000	70,000	70,000	-
VI	70,000	70,000	50,000	50,000	-
VII	40,000	40,000	30,000	30,000	-

Table 11: Fees for All Types of Foreign Contractors (US\$)

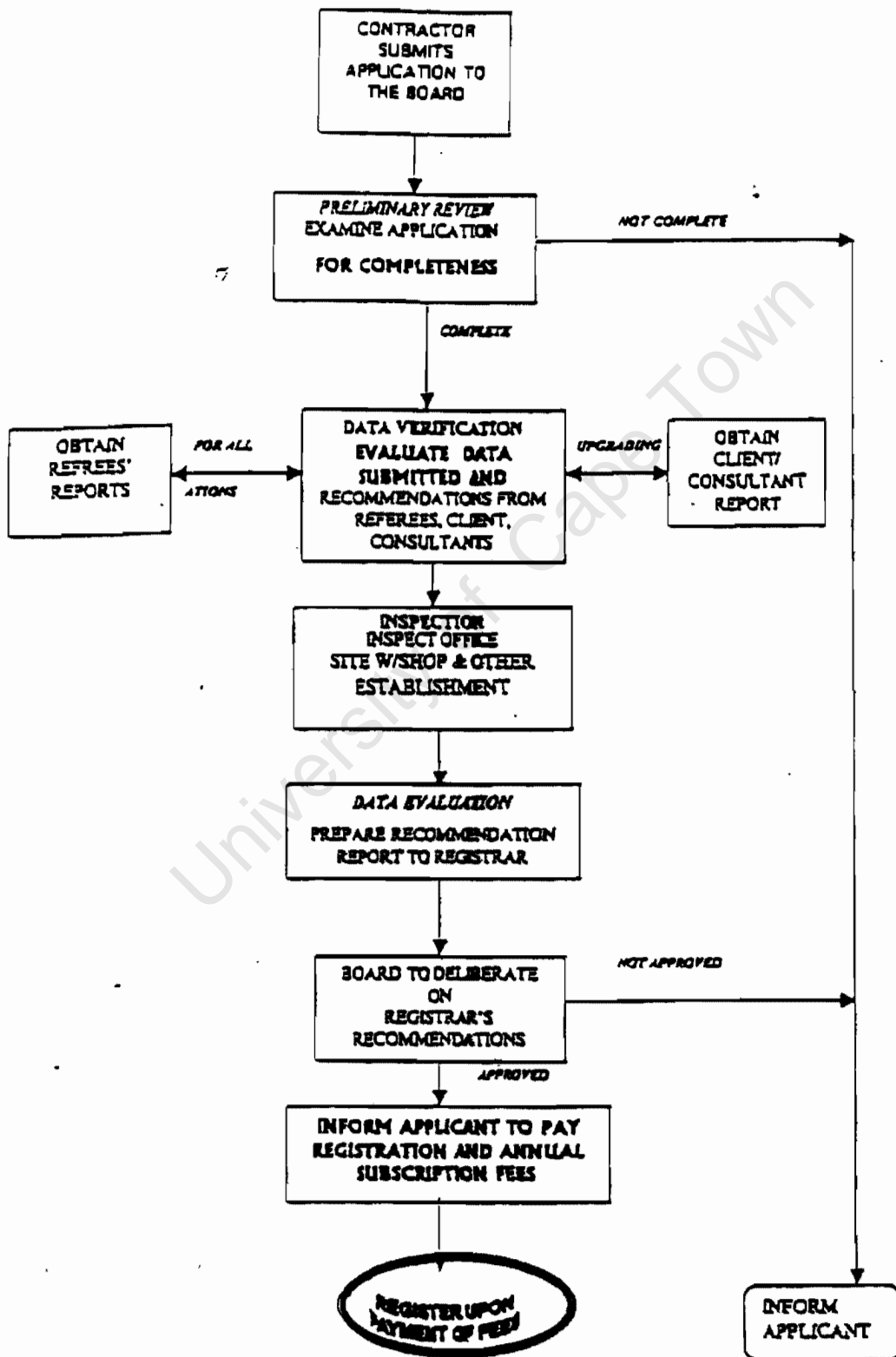
Class	Building/Civil/Electrical/Mechanical		Specialist Contractors	
	Registration	Annual Subscription	Registration	Specialist
I	20,000	10,000	15,000	6,000
II	18,000	8,000	10,000	4,000
III	-	-	5,000	2,000

Table 12: Application of Fees for All types of Contractors (TShs.)

	TYPE OF APPLICATION	FEES (TSHS)
1.	First application	10,000
2.	Upgrading	15,000
3.	Temporary Registration	20,000
4.	Dispensation	20,000

Appendix 3.2

Flow chart for processing contractors application for registration
With Contractors Registration Board (CRB)



Appendix 5.1

Projected urban population in Tanzania in 2000 and the estimated informal construction sector enterprises in 1991

Regional centre	Population Census Data - 1988	Projected Population		Estimated ICSE	
		1991	2000	1991	2000
<i>Dar-es-Salaam</i>	1,360,850	1,762,301	3,827,663	10,762	25,398
<i>Mwanza</i>	223,013	288,802	627,269	1,972	4,654
<i>Dodoma</i>	203,813	263,938	573,265	1,802	4,254
Tanga	187,155	242,366	526,411	1,655	3,906
Morogoro	117,760	152,499	331,224	1,041	2,458
Mbeya	152,844	197,933	429,904	1,352	3,190
<i>Arusha</i>	134,708	174,447	378,893	1,191	2,811
Shinyanga	100,724	130,438	283,306	891	2,102
Moshi	96,838	125,405	272,376	856	2,021
Tabora	93,504	121,088	262,999	827	1,951
Sumbawanga	91,972	119,104	258,690	813	1,920
Songea	86,880	112,510	244,367	768	1,813
Iringa	84,860	109,894	238,686	750	1,771
Kigoma	84,647	109,618	238,087	749	1,767
Singida	80,087	103,713	225,261	708	1,671
Mtwara	76,732	99,368	215,824	679	1,601
Musoma	68,536	88,754	192,771	606	1,430
Bukoba	60,830	78,775	171,097	538	1,270
Lindi	68,235	88,364	191,925	603	1,424
Kibaha	37,638	48,741	105,864	333	786
Total	3,411,626	4,418,056	9,595,880	28,898	62,766
Total Urban population excluding Dar-es-salaam in 1991				2,655,755	
Total Urban IS excluding Dar-es-salaam				18,136	

Note: ICSE - Informal Construction Sector Enterprises

Appendix 5.2
Generated random numbers between 1 and 150

70	65	105	108	8	2	127	11	3	88	66	77
83	102	93	4	75	101	109	110	43	66	69	33
56	103	68	101	64	145	69	35	18	149	76	45
44	18	129	104	131	66	36	51	76	67	88	128
94	73	129	26	29	58	59	104	127	16	6	35
87	22	44	113	143	50	130	56	149	101	43	119
24	19	81	46	136	84	72	21	98	125	46	30
111	139	49	25	121	48	57	108	68	39	46	52
100	6	32	34	123	41	72	99	122	25	89	42
72	92	16	102	39	34	97	48	97	140	68	86
44	90	131	86	106	113	82	69	84	39	80	147
26	15	5	111	71	108	97	117	49	107	100	42
131	131	96	29	98	138	42	37	34	9	91	10
130	54	115	75	69	102	147	6	25	62	70	48
48	132	14	108	44	102	72	53	11	102	8	37
86	40	149	94	111	144	97	116	79	84	6	150
114	137	2	113	92	56	7	121	51	45	98	136
129	57	4	86	81	100	6	109	6	78	69	38
77	97	109	99	90	58	84	20	73	17	86	100
47	103	83	137	25	49	137	42	58	112	17	80

Appendix 5.3
Generated random numbers between 1 and 500

350	316	329	187	227	101	80	122	128	339	124	59	108	387
425	456	245	141	263	332	19	175	403	308	202	482	132	124
249	154	448	436	493	215	311	95	409	35	398	271	301	397
466	436	229	421	180	136	290	295	158	247	3	27	228	300
245	98	36	359	174	403	419	311	271	161	380	289	255	199
383	428	132	319	114	417	337	214	223	372	430	248	359	365
265	486	434	263	480	461	396	431	132	448	242	347	379	218
457	126	65	240	474	340	335	48	447	98	209	157	478	377
255	387	102	224	349	4	304	295	195	455	388	180	296	70
493	171	298	198	261	88	126	469	217	254	178	356	2	58
60	11	136	265	83	105	124	168	472	454	240	170	406	102
300	100	378	469	492	18	163	133	436	97	89	119	369	202
415	132	424	320	272	245	454	144	247	173	471	330	301	71
44	374	154	215	170	168	340	101	487	158	198	164	272	66
110	190	179	245	113	184	470	239	146	386	349	157	16	354
16	492	474	253	267	125	97	249	33	2	329	97	40	89
183	52	316	316	46	154	368	122	206	494	40	83	250	163
243	232	73	245	198	214	63	405	355	49	461	343	156	404
208	78	256	194	57	368	277	18	295	425	328	69	413	183
283	323	215	228	80	148	170	284	187	496	37	200	373	371
46	290	412	28	222	330	100	276	498	409	225	294	100	26
240	287	322	194	122	492	461	391	94	246	446	455	67	75
192	401	377	124	222	215	129	370	165	439	448	446	231	117
398	325	339	379	392	355	300	237	325	354	494	307	272	169
224	275	154	87	199	240	440	333	444	56	236	225	489	307
67	307	362	398	483	67	497	396	221	188	446	85	473	423
197	81	78	188	73	450	211	92	97	282	272	361	307	58
102	292	489	21	400	389	78	311	33	489	234	483	43	399
479	261	478	36	2	42	195	217	189	147	255	5	370	323
460	200	6	426	151	270	399	368	109	335	363	88	460	162
381	292	283	295	331	448	467	174	340	380	450	315	484	195
489	37	410	42	178	117	320	423	76	367	148	415	430	399
279	351	85	482	214	305	72	302	60	133	320	496	35	64
93	354	102	256	48	301	115	457	468	81	218	167	215	283
30	400	102	215	36	249	69	76	49	145	425	96	4	80
355	263	431	473	45	57	116	122	311	38	430	19	340	44
237	101	350	406	470	342	386	283	341	350	349	210	475	146
148	450	79	372	275	298	139	192	289	122	421	142	106	33

APPENDIX 5.4

INTERVIEWED GOVERNMENT INSTITUTIONS AND MAJOR ISSUES ADDRESSED IN THE INTERVIEW

Ministry of Works

- i) Trace existing policies, if any, for the control of the construction Industry.
- ii) Obtain and review acts of parliament establishing various organizations under the Ministry responsible for the regulation and development of the construction industry. Acts establishing
 - National Construction Council
 - Contractors Registration Board
 - Engineers Registration Board
 - Architects and Quantity surveyors Registration Board
- iii) Trace, if any, the existence of (within the last ten years) development programmes for the construction industry particularly their success/failure stories in developing the informal construction industry.
- iv) Solicit views on what needs to be done to promote collaboration between formal and informal construction sectors

Ministry of Labour and Youth Development

- i) Trace existing policies, IF ANY, for the control of the informal sector.
- ii) Obtain and review acts of parliament establishing various organizations under the Ministry responsible for the regulation and development of the informal sector.
- iii) Establish the existence (and review) of any studies carried out to establish the size and impact of the informal sector on the national economy.
- iv) Trace, if any, the existence of (within the last ten years) development programmes for the informal sector particularly their success/failure stories in developing the informal construction industry.
- v) Obtain data, if any, of the employment pattern in the country, particularly in the informal sector.

Planning Commission

- i) Obtain and review past development programmes (within the last ten years) for the country, particularly those that have impacted on the formal and informal construction sectors in order to establish what their impact has been.
- ii) Obtain and review future development programmes to establish their likely impact on the formal and informal construction sectors.

Central Statistical Bureau

- i) Obtain data on the construction industry (Both formal and informal) on employment, contribution to the national economy etc.
- ii) Establish methods to measure the size and contribution of construction sector to the national economy.
- iii) Establish methods used to measure the size and contribution of the informal sector to the national economy.

National Construction Council

- i) Obtain information on programmes to develop the Tanzanian construction industry.
- ii) Obtain information on plans and/or programmes to develop the informal sector
- iii) Solicit comments on existing policy documents for the construction industry and informal sector.
- iv) Solicit comments on the possible collaboration between the formal and informal construction industry.
- v) Discuss the construction industry policy, particularly the contents with regard to the formal and informal construction sectors.
- vi) Discuss a checklist of items to be included in the policy formulation.
- vii) Solicit views on what needs to be done to promote the collaboration between the formal and informal construction sectors

Contractors Registration board

- i) Discuss the Contractor's Registration Act and its effectiveness in controlling the construction industry in Tanzania.
- ii) Obtain information on the number of registered contractors, particularly in the regions where the study will be conducted.
- iii) Obtain information on the type of projects that by statute need to be carried out by formal contractors and those which can not and therefore available for the informal contractors.
- iv) Discuss the growing trend of informal builders and solicit views on the possible reasons for this.
- v) Solicit views of the board on the desirability of promoting the informal sector and how it can be done.
- vi) Solicit views on what needs to be done to promote collaboration between formal and informal construction sectors

National Income Generation Programme

- i) Obtain information of current and future programmes, IF ANY carried out to generate income in the construction industry, both formal and informal.
- ii) Solicit views on the existing policy documents which affect the construction industry
- iii) Solicit views on the desirability of promoting the informal sector and how it can be done.
- iv) Solicit views on what needs to be done to promote collaboration between the formal and informal construction sectors

Regional Engineers and Municipal/City Council authorities in Dar-es-Salaam, Mwanza, Arusha and Dodoma.

- i) Obtain information on surveyed areas for housing with construction activities.
- ii) Obtain information on construction projects undertaken in the regions by formal contractors.
- iii) Discuss city regulations on construction and how they affect both formal and informal contractors.

University of Cape Town

Appendix 5.5

Letter of introduction to formal contractors

**R.S. Mlinga
Department of Civil Engineering
University of Dar-es-Salaam
P.O. Box 35131, Tel. 410752
Dar-es-Salaam**

Date

**Address line 1
Address line 2
Address line 3**

Dear Contractor,

**RESEARCH ON THE COLLABORATION BETWEEN FORMAL
AND INFORMAL CONTRACTORS**

I am an academic staff member of the University of Dar-es-Salaam currently undertaking my Ph.D. studies at the University of Cape Town, South Africa. As part of Ph.D. research, I am investigating the existing and future areas of collaboration between formal and informal contractors. This will assist to establish whether or not there is a need to develop the informal contractors.

I am therefore requesting you to spare your time and respond to my questionnaire.

The results of this survey will be used solely for this research, and no identity of the respondents will be exposed.

Thanking you in advance,

Yours sincerely,

**R.S. Mlinga
Assistant Lecturer
University of Dar-es-Salaam**

Appendix 5.6

Questionnaire for the informal contractors and summary of responses.

Question A1

Question	Response of contractors		
	Category		
	Sole ownership	Partnership	Cooperative
<i>Description of the informal contractors</i>	308	97	

Question A2

Question	Response of contractors								
	Employees	No employed as							
		Partners			Part-time				
		<2	2-5	>5	<2	2-5	5-10	10-20	>20
<i>Please give the number of persons working in your enterprise under the given categories.</i>	Administrative staff	37							
	Structural/civil engineers								
	Civil/building engineering Technicians	53	20		6	10			
	Quantity surveyors								
	Artisans	211	59		13	111			
	Skilled labourers	7	18		31	255	15		
	Unskilled labourers				7	290	66	75	34

Question A3

Question	Response of contractors					
	Equipment	Numbers owned.				
		1	2	3	4	5
<i>Please give the number of kinds of equipment owned by your enterprise under the given categories?</i>	Concrete mixers	21				
	Concrete vibrators	16				
	Dumper					
	Tipper trucks	6				
	Pickups	51				
	Block making machine	57				
	Grinding machine	16				
	Welding machine	56	5			
	Carpentry tools (sets)		10			

Question A4

Question	Response of contractors			
	Number of projects			
	<2	2-5	5-10	>10
<i>How many projects were carried out by your enterprise in the last two years?</i>		43	226	136

Question A5

Question	Response of contractors											
	Smallest Project (value in ,000 Tshs.)				Largest project (value in ,000 Tshs)							
	< 50	50-100	100-500	> 500	<100	100-500	500-1000	1000-2000	2000-5000	5000-10000	10000-20000	> 20000
<i>What was the largest and smallest project executed in the last two years?</i>	94	125	141	37		57	146	87	57	16	16	18

Question A6

Question	Response of contractors						
	Annual turnover (million Tshs.)						
	<1	1-2	2-5	5-10	10-20	20-50	>50
<i>What is the average annual turnover of your enterprise for the past two years?</i>	12	72	219	53	10	31	

Question A7

Question	Response of contractors								
	Areas in square metres for								
	Office			Service workshop			Storage yard		
	<10	10-20	>20	<10	10-20	>20	<10	10-20	>20
<i>Does your enterprise have the following facilities? Give the approximate area.</i>		3	7		21	33		5	

Question A8

Question	Response of contractors	
	YES	NO
<i>Do you have a trading license?</i>	16	389

Question A9

Question	Problem	Response of contractors		
		Scale		
		Most important	Important	Least important
<i>What problems did you encounter when processing a trading license?</i>	Unclear procedures	16		
	Long procedure	13	3	
	Corruption		16	
	Difficulties in meeting requirements	13	3	

Question A10

Question	Reason	Response of contractors		
		Scale		
		Most important	Important	Least important
<i>What are the reasons for your enterprise not obtaining a business license?</i>	Costs involved are too high	78	106	222
	Cumbersome procedures	43	151	204
	Difficult requirements	73	113	207
	Can operate without a licence	295	18	74

Question A11

Question	Response of contractors	
	YES	NO
<i>Are you aware that it is illegal to operate a construction business without registering with the Contractors Registration Board</i>	191	212

Question A12

Question	Response of contractors			
	Reason	Scale		
		Most important	Important	Least important
<i>What are the reasons for not registering your enterprise with the Contractors Registration Board?</i>	Costs involved are too high	75	78	39
	Cumbersome procedures	63	90	39
	Difficult requirements	104	46	42
	Can operate without registering	117	41	34

Question A13

Question	Response of contractors			
	Client	Frequency Scale		
		Always	Sometimes	Never
<i>Who are your major clients?</i>	Private house developers	198	201	17
	Big registered contractors		210	186
	Small registered contractors	9	208	189

Question A14

Question	Number of responses from contractors			
	Services	Frequency Scale		
		Always	Sometimes	Never
<i>What kind of services do you provide to private clients</i>	Labour only	335	43	10
	Labour and materials	10	43	335

Question A15

Question	Response of contractors		
	Activities	Type of contract	
		Labour only	Labour and material
<i>What jobs/activities do you normally carry out for private clients under labour contract only or material and labour contracts?</i>	Complete building	90	45
	Excavation	129	
	Concreting	137	
	Steel fixing	49	
	Formwork fixing	49	
	Block-walling	90	
	Plastering	90	
	Screeding	90	
	Tiling	83	
	Roofing	38	
	Welding works	35	13
	Ceiling + joinery works	38	
	Painting	18	
Plumbing works	17		

Question A16

Question	Number of responses from contractors			
	Problems	Frequency scale		
		Always	Sometimes	Never
<i>What problems did you experience while working with private clients?</i>	Delayed payments by the client		381	7
	Postponement by the client on execution of agreed works		235	153
	Frequent stoppage of works by the client		88	300
	Poor quality of materials supplied by the client		351	37
	Late delivery of materials by the client	7	363	18

Question A17

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>What benefits have you gained by working for private clients?</i>	Continued work load	345	43	
	Improving cash flow	290	98	
	Gaining skills	184	168	36

Question A18

Question	Number of responses from contractors			
	Services	Frequency Scale		
		Always	Sometimes	Never
<i>What kind of services do you provide to big contractors?</i>	Labour only	222		
	Labour and materials			222

Question A19

Question	Response of contractors		
	Activities	Type of contract	
		Labour only	Labour and material
<i>What jobs/activities do you normally carry out for big contractors under labour contract only or material and labour contracts?</i>	Complete building		
	Excavation	100	
	Concreting	111	
	Steel fixing	75	
	Formwork fixing	64	
	Block-walling	78	
	Plastering	78	
	Screeding	78	
	Tiling	87	
	Roofing	57	
	Welding works	25	
	Ceiling + joinery works	40	
	Painting	10	
Plumbing works			

Question A20

Question	Number of responses from contractors			
	Problems	Frequency scale		
		Always	Sometimes	Never
<i>What problems did you experience while working with big contractors?</i>	Delayed payments by the client		191	31
	Postponement by the client on execution of agreed works		126	96
	Frequent stoppage of works by the client		38	195
	Poor quality of materials supplied by the client		155	67
	Late delivery of materials by the client		187	35

Question A21

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>What benefits have you gained by working for big contractors?</i>	Continued work load	177	45	
	Improving cash flow	120	102	
	Gaining skills	155	59	8

Question A22

Question	Number of responses from contractors			
	Services	Frequency Scale		
		Always	Sometimes	Never
<i>What kind of services do you provide to small contractors?</i>	Labour only	195		
	Labour and materials			195

Question A23

Question	Response of contractors		
	Activities	Type of contract	
		Labour only	Labour and material
<i>What jobs/activities do you normally carry out for small contractors under labour contract only or material and labour contracts?</i>	Complete building		
	Excavation	48	
	Concreting	73	
	Steel fixing	62	
	Formwork fixing	46	
	Block-walling	40	
	Plastering	40	
	Screeding	40	
	Tiling	42	
	Roofing	46	
	Welding works	13	
	Ceiling + joinery works	38	
	Painting	10	
Plumbing works	5		

Question A24

Question	Number of responses from contractors			
	Problems	Frequency scale		
		Always	Sometimes	Never
<i>What problems did you experience while working with small contractors?</i>	Delayed payments by the client		181	14
	Postponement by the client on execution of agreed works		104	91
	Frequent stoppage of works by the client		16	179
	Poor quality of materials supplied by the client		136	59
	Late delivery of materials by the client		172	23

Question A25

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>What benefits have you gained by working for small contractors?</i>	Continued work load	156	39	
	Improving cash flow	118	77	
	Gaining skills	99	83	13

Question A26

Question	Number of responses from contractors			
	Building material	Frequency Scale		
		Always	Sometimes	Never
<i>Please indicate the frequency with which your company obtains the following building materials from the informal material suppliers.</i>	Concrete blocks	33	35	
	Precast concrete products	33	35	
	Soft wood timber	8	62	
	Hardwood timber	8	62	
	Timber products	8	62	
	Timber props	8	62	
	Aggregate	51	24	
	Sand	51	24	
	Cement	7	22	
Steel + welding materials				

Question A27

Question	Material	Number of responses from contractors											
		Reasons											
		Cheap			Available when required			Good quality			Supplement other sources		
		1	2	3	1	2	3	1	2	3	1	2	3
<i>What were the reasons for using the materials from informal material suppliers? (rank 1 to 3 in order of importance)</i>	Concrete blocks	30	5	33		47	12		16	23	40		
	Precast concrete products	30	5	33		47	12		16	23	40		
	Soft wood timber	8	12	38	15	50	5		9	27	63		
	Hardwood timber	8	12	38	15	50	5		9	27	63		
	Timber products	8	12	38	15	50	5		9	27	63		
	Timber props	8	12	38	15	50	5		9	27	63		
	Aggregate	48	5	22		54	12		16	40	63		
	Sand	48	5	22		54	12		16	40	35		
	Cement	10				23				10	35		
Steel + welding materials													

Question A28

Question	Number of responses from contractors			
	Equipment	Frequency scale		
		Always	Sometimes	Never
<i>Please indicate the frequency with which your company obtains the following equipment from informal equipment suppliers?</i>	Concrete mixers	145		
	Concrete vibrators	145		
	Wheel loaders			
	Dumpers			
	Excavators			
	Tipper trucks	70	10	
	Pickups	52	13	
	Theodolite	21	13	
	Leveling instruments	21	13	
	Welding equipments			

Question A29

Question	Number of responses from contractors															
	Equipment	Reasons														
		Cheap			Available when required			Good Working condition			Efficiency			Complement other sources		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
<i>What were the reasons for using the equipment from informal equipment suppliers? (rank 1 to 3 in order of importance)</i>	Concrete mixers	77	36	18	29	94	15		7	56			54	44		8
	Concrete vibrators	77	36	18	29	94	15		7	56			54	44		8
	Wheel loaders															
	Dumpers															
	Excavators															
	Tipper trucks	52	15	3	16	33	26		18	17			26	28		8
	Pickups	42	10	3	16	23	26		18	17			11	28		8
	Theodolite	16	5	3	11	15	8			12			11	28		
	Leveling instruments	16	5	3	11	15	8			12			11	28		
Welding equipment																

Question A30

Question	Number of responses from contractors			
	Problems	Scale		
		Very important	Important	Least important
<i>Mention general problems which your company faces in running its day to day business.</i>	Lack of financing	368	22	15
	Lack of equipment	90	238	69
	Lack of skilled labour	21	302	82
	Difficulties in obtaining projects	342	63	

Appendix 5.7

Questionnaire for the small formal contractors and summary of responses.

Question B1

Name and address of the company (optional)

.....

Question B2

QUESTION <i>Please give your company registration particulars as a contractor</i>	Number of responding contractors		
	Class	Building	Civil
	VI	42	12
VII	123	58	

Question B3

Question	Number of responses from contractors			
	Amount in Million Tshs.	Source		Total
		Public Sector	Private Sector	
<i>What is the average annual turnover of your company for the past five years from public and private sector clients?</i>	Below 50		82	9
	50 – 100	43	54	12
	100 – 500	90		123
	Above 500	7	9	7

Question B4

Question	Staff Category	Number of responses from contractors					
		Number employed					
		Below 2	2 – 5	5 – 10	10 – 20	20-50	Above 50
<i>What is the average number of workers employed by your company in the last five years under the following categories</i>	Administrative staff	108	14				
	Structural/civil engineers	77	9				
	Civil/building engineering Technicians	108	57				
	Quantity surveyors	12					
	Artisans	18	123			9	
	Skilled labourers		65	85	6	9	
	Unskilled labourers			67	71	27	10

Question B5

Question	Value of projects in million Tshs.	Number of responses from contractors							
		Number of Projects							
		Public Clients				Private Clients			
		< 2	2 – 5	5 – 10	>10	< 2	2 - 5	5 – 10	>10
<i>What is the average number of projects carried out by your company in the last five years with contract values in the following ranges for public and private clients</i>	Below 50		19	89	25	5	80	60	
	50 – 100	61	60	6		47	5	9	
	100 – 200	28				9			
	Above 200					9			

Question B6

Question	Number of responses from contractors	
	YES	NO
<i>Has your company ever worked for a private client?</i>	138	27

Question B7

Question	Reason	Number of responses from contractors		
		Frequency Scale		
		Always	Sometimes	Never
<i>What were the reasons for working for a private client?</i>	Unable to get jobs in public sector	25	18	95
	Timely payment by private sector clients	17	76	45
	Less bureaucracy when working with private sector clients	17	105	16
	Uncomplicated documentation	17	105	16
	Good profit to be obtained		122	16
	Another source of job	82	56	

Question B8

Question	Services	Number of responses from contractors		
		Frequency Scale		
		Always	Sometimes	Never
<i>What kind of services do you provide to private Clients?</i>	Labour only	23	115	
	Labour and materials		115	23

Question B9

Question	Problems	Number of responses from contractors		
		Frequency scale		
		Always	Sometimes	Never
<i>What problems did you experience while working with private clients?</i>	Delayed payments by the client		124	14
	Postponement by the client on execution of agreed works		104	34
	Frequent stoppage of works by the client		58	80
	Poor quality of materials supplied by the client		124	14
	Late delivery of materials by the client		131	7

Question B10

Question	Reason	Number of responses from contractors		
		Scale		
		Very important	Important	Least important
<i>What are your reasons for not working with private clients?</i>	The value of projects is small		12	15
	Projects do not have proper contract documents		11	16
	Possibility of non payment by the Client	7	20	
	Long execution period for the projects	7	20	
	Not offered any job from private clients	15	5	7
	Small profit expected		13	14

Question B11

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>In your opinion, what are the benefits to be gained by small contractors by working for private clients?</i>	Continued work load	132	33	
	Improving cash flow	115	50	
	Gaining skills	133	32	

Question B12

Question	Number of responses from contractors	
	YES	NO
<i>Has your company ever worked for a big contractor?</i>	84	81

Question B13

Question	Number of responses from contractors			
	Reasons	Frequency Scale		
		Always	Sometimes	Never
<i>What were the reasons for working for big contractors?</i>	Unable to get jobs from other sources	7	11	66
	Good pay by big contractor		29	55
	Less bureaucracy when working with big contractors		54	30
	To gain technical skills		84	
	To gain managerial skills		84	
	Another source of job	58	20	6

Question B14

Question	Number of responses from contractors			
	Services	Frequency Scale		
		Always	Sometimes	Never
<i>What kind of services do you provide to big contractors?</i>	Labour only	84		
	Labour and materials			84

Question B15

Question	Number of responses from contractors			
	Reason	Scale		
		Very important	Important	Least important
<i>What are your reasons for not working with big contractors?</i>	The value of projects is small			81
	Projects do not have proper contract documents		28	53
	Possibility of non-payment by the big contractors.		51	30
	Long execution period for the projects		6	75
	Not offered job/never explored that possibility	81		

Question B16

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>In your opinion, what are the benefits to be gained by small contractors by working for big contractors?</i>	Continued work load	80	85	
	Improving cash flow	59	106	
	Gaining technical experience	129	36	
	Gaining managerial experience	114	51	

Question B17

Question	Number of responses from contractors			
	Building material	Frequency Scale		
		Always	Sometimes	Never
<i>Please indicate the frequency with which your company obtains the following building material from the informal materials suppliers.</i>	Concrete blocks	16	113	27
	Precast concrete products	7	122	27
	Soft wood timber	38	106	12
	Hardwood timber	38	106	12
	Timber products	38	106	12
	Timber props	38	106	12
	Aggregate	85	59	12
	Sand	85	59	12
Cement	9		147	

Question B18

Question	Material	Number of responses from contractors											
		Reasons											
		Cheap			Available when required			Good quality			Supplement other sources		
		1	2	3	1	2	3	1	2	3	1	2	3
<i>What were the reasons for using the materials from informal material suppliers?</i>	Concrete blocks	7	5	101		124	5			23	137		
	Precast concrete products	7	5	101		124	5			23	137		
	Soft wood timber	14	20	94	15	124	5			45	115		
	Hardwood timber	14	20	94	15	124	5			45	115		
	Timber products	14	20	94	15	124	5			45	115		
	Timber props	14	20	94	15	124	5			45	115		
	Aggregate	46	25	57	20	108	5			82	78		
	Sand	46	25	57	20	108	5			82	78		
Cement					9				9	9			

Question B19

Question	Number of responses from contractors			
	Equipment	Frequency scale		
		Always	Sometimes	Never
<i>Please indicate the frequency with which your company obtains the following equipment from informal equipment suppliers?</i>	Concrete mixers	92	32	37
	Concrete vibrators	92	32	37
	Wheel loaders		29	132
	Dumpers		29	132
	Excavators		38	119
	Tipper trucks	31	77	53
	Pickups	24	84	53
	Theodolite	14	72	75
Leveling instruments	14	70	77	

Question B20

Question	Number of responses from contractors															
	Equipment	Reasons														
		Cheap			Available when required			Good Working condition			Efficiency			Complement other sources		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
<i>What were the reasons for using the equipment from informal equipment suppliers?</i>	Concrete mixers	29	30	16	34	85	5		9	92			11	61		
	Concrete vibrators	29	30	16	34	85	5		9	92			11	61		
	Wheel loaders			7		29				22				29		
	Dumpers			7		29				22				29		
	Excavators			16		38				22				38		
	Tipper trucks	14	10	35	12	91	5			57			11	89		
	Pickups	7	10	42	12	91	5			50			11	96		
	Theodolite	14	8	37	7	71				41			8	64		
Leveling instruments	14	8	35	7	69				41			8	64			

Question B21

Question	Number of responses from contractors			
	Labour category	Frequency scale		
		Always	Sometimes	Never
<i>Please indicate the frequency with which your company uses the following categories of sub-contracted labour in your projects</i>	Specialized unskilled gangs	16	138	7
	Plumbers	31	125	5
	Electricians	31	120	10
	Steel fixers	16	140	5
	Carpenters	16	140	5
	Masons	9	140	12
	Tile fixers	24	132	5
	Painters		141	12
Land surveyors	8	131	22	

Question B22

Question	Number of responses from contractors												
	Labour Category	Reasons											
		Cheap			Available when required			Quality job			Supplement own labour		
	1	2	3	1	2	3	1	2	3	1	2	3	
<i>What were the reasons for using sub-contracted labour?</i>	Specialized unskilled gangs	5	13	126		140	13			10	144		
	Plumbers		13	126		142	13			17	146		
	Electricians		13	126		142	13			17	146		
	Steel fixers		13	117		142	13			17	146		
	Carpenters		13	126		142	13			17	146		
	Masons		6	126		142	6			17	139		
	Tile fixers		6	126		149	6			17	146		
	Painters		6	126		142	6			17	139		
Land surveyors		6	116		132	6			17	129			

Question B23

Question	Number of responses from contractors			
	Problem	Scale		
		Very important	Important	Least important
<i>Mention problems which your company faced during its start up.</i>	High fees	82	74	5
	Cumbersome procedure to obtain business licence	53	102	6
	Cumbersome procedure to register	24	137	
	Difficult entry requirements	151	10	

Question B24

Question	Number of responses from contractors			
	Problems	Scale		
		Very important	Important	Least important
<i>Mention general problems which your company faces in running its day to day business.</i>	Lack of financing	161		
	Lack of equipment	47	104	
	Lack of skilled labour	14	147	
	Difficulties in obtaining projects	152	8	

Appendix 5.8

Questionnaire for medium and big formal contractors and summary of responses.

Question C1

Name and address of the company (optional)

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Question C2

Question	Number of responses from contractors		
	Class	Building	Civil
<i>Please give your company registration particulars as a contractor</i>	I	14	4
	II	5	5
	III	10	3
	IV	12	4
	V	14	2

Question C3

Question	Number of responses from contractors			Total
	Amount in Million Tshs.	Source		
		Public Sector	Private Sector	
<i>What is the average annual turnover of your company for the past five years from public and private sector clients?</i>	Below 100		12	1
	100 – 500	21	37	7
	500 – 1,000	12	3	21
	1,000 – 2,000	7		6
	2,000 – 5,000	10		10
	5,000 – 10,000	4		6
	Above 10,000			

Question C4

Question	Number of responses from contractors						
	Staff Category	Number employed					
		<2	2–5	5–10	10–20	20–50	50–100
<i>What is the average number of workers employed by your company in the last five years under the following categories</i>	Administrative staff	28	24	3			
	Structural/civil engineers	35	15	2			
	Civil/building engineering Technicians	5	36	13			
	Quantity surveyors	24	2				
	Artisans		15	35	6		
	Skilled labourers			15	30	10	
	Unskilled labourers				10	30	10

Question C5

Question	Number of responses from contractors								
	Value of projects in million Tshs.	Number of Projects							
		Public Clients				Private Clients			
		<2	2–5	5–10	>10	<2	2–5	5–10	>10
<i>What is the average number of projects carried out by your company in the last five years with contract values in the following ranges for public and private clients:</i>	Below 100	5	10	5	15	8	25	7	9
	100 – 300	5	19	10		4	4	2	
	300 – 500	3	7	3		1	1		
	500 – 1000	6	8	2					
	1,000 – 3,000	7	1						
	Above 3,000	1							

Question C6

Question	Number of responses from contractors		
	Frequency scale		
	Always	Sometimes	Never
<i>Does your company buy building materials from informal material suppliers?</i>		45	10

Question C7

Question	Number of responses from contractors			
	Building material	Frequency Scale		
		Always	Sometimes	Never
<i>Specify the main materials purchased and the frequency over the last two years.</i>	Concrete blocks	1	41	13
	Precast concrete products	1	41	13
	Soft wood timber	2	42	12
	Hardwood timber	2	42	12
	Timber products	1	43	11
	Timber props	3	41	11
	Aggregate	6	38	11
	Sand	6	38	11
	Cement			55

Question C8

Question	Material	Number of responses from contractors											
		Reasons											
		Cheap			Available when required			Good quality			Supplement other sources		
		1	2	3	1	2	3	1	2	3	1	2	3
<i>What were the reasons for using the materials from informal material suppliers? (rank 1 to 3 in order of importance)</i>	Concrete blocks		3	26		38	4		1	13	42		
	Precast concrete products		3	26		38	4		1	13	42		
	Soft wood timber	1	2	27		39	3		1	13	43		1
	Hardwood timber	1	2	27		41	3		1	13	43		1
	Timber products	1	2	27		41	3		1	13	43		1
	Timber props	1	2	27		41	3		1	13	43		1
	Aggregate	1	2	26	1	40	3		1	14	42	1	1
	Sand	1	2	26	1	40	3		1	14	42	1	1
	Cement												

Question C9

Question	Number of responses from contractors		
	Frequency scale		
	Always	Sometimes	Never
<i>Does your company hire equipment from informal equipment suppliers?</i>		11	44

Question C10

	Equipment	Frequency scale		
		Always	Sometimes	Never
	<i>Specify the main equipment hired and the frequency over the last two years.</i>	Concrete mixers		9
Concrete vibrators			9	46
Wheel loaders			8	47
Dumpers			7	48
Excavators			5	50
Tipper trucks			9	46
Pickups			5	50
Theodolite			4	51
Leveling instruments			3	52

Question C11

Question	Number of responses from contractors															
	Equipment	Reasons														
		Cheap			Available when required			Good Working condition			Efficiency			Complement other sources		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
<i>What were the reasons for using the equipment from informal equipment suppliers? (rank 1 to 3 in order of importance)</i>	Concrete mixers			9		24	9		10	12			2	33		
	Concrete vibrators			9		24	9		10	12			2	33		
	Wheel loaders			12		29	9		11	12			3	37		
	Dumpers			11		26	9		10	12			2	35		
	Excavators			12		28	9		11	12			2	37		
	Tipper trucks			12		27	9		10	12			2	36		
	Pickups			9		24	9		10	12			2	32		
	Theodolite			9		24	9		10	12			2	33		
Leveling instruments			9		24	9		9	12			2	33			

Question C12

Question	Number of responses from contractors		
	Frequency scale		
	Always	Sometimes	Never
<i>Does your company sub-contract works to small registered contractors?</i>		51	4

Question C13

Question	Number of responses from contractors			
	Reasons	Frequency Scale		
		Always	Sometimes	Never
<i>What were the reasons for subcontracting work to small contractors</i>	To supplement own labour	39	12	
	To supplement skills available in the company	36	14	1
	To keep company labour force to the minimum	30	20	1
	To offer work opportunities to small contractors	1	11	27

Question C14

Question	Number of responses from contractors		
	Activities	Type of contract	
		Labour only	Labour and material
<i>What jobs/activities do you normally sub-contract out to small contractors under labour contract only or material and labour contracts:</i>	Excavation	50	
	Concreting	51	
	Steel fixing	51	
	Formwork fixing	51	
	Block-walling	49	
	Plastering	48	
	Screeding	48	
	Tiling	48	
	Roofing	49	

Question C15

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>In your opinion, what are the benefits to be gained by big contractors working with small contractors?</i>	Act as a buffer for fluctuating work load	44	11	
	Obtaining expertise not within the company	36	18	1
	Relieving the company from training costs	18	27	10

Question C16

Question	Number of responses from contractors		
	Frequency scale		
	Always	Sometimes	Never
<i>Deso your company sub-contract works to informal contractors or individuals?</i>		51	4

Question C18

Question	Number of responses from contractors			
	Reasons	Frequency Scale		
		Always	Sometimes	Never
<i>What were the reasons for subcontracting work to informal contractors or individuals?</i>	To supplement own labour	37	14	
	To supplement skills available in the company	32	17	2
	To keep company labour force to the minimum	25	24	2
	To offer work opportunities to informal contractors	2	8	41

Question C19

Question	Number of responses from contractors		
	Activities	Type of contract	
		Labour only	Labour and material
<i>What jobs/activities do you normally sub-contract out to informal contractors or individuals under labour contract only or material and labour contracts?</i>	Excavation	49	
	Concreting	49	
	Steel fixing	49	
	Formwork fixing	49	
	Block-walling	48	
	Plastering	46	
	Screeding	46	
	Tiling	47	
	Roofing	48	

Question C20

Question	Number of responses from contractors			
	Benefits	Scale		
		Very important	Important	Least important
<i>In your opinion, what are the benefits to be gained by big contractors by working with informal contractors or individuals?</i>	Act as a buffer for fluctuating work load	39	13	
	Obtaining expertise not within the company	32	18	2
	Relieving the company from training costs	16	28	8

Appendix 6.1

Data on informal construction sector as summarised from the Tanzania National Informal Sector Survey of 1991 (GOT, 1991a)

TABLE D1
INFORMAL CONSTRUCTION SECTOR
EMPLOYMENT ACCORDING TO SEX
(GOT, 1991a:Table 2.2.1)

Geographic area	Male	Female	Total
Dar-es-salaam	22,327	0	22,327
Other urban	28,569	216	28,785
Rural	111,320	1,006	112,326
TOTAL	162,216	1,222	163,438

TABLE D2
INFORMAL CONSTRUCTION SECTOR EMPLOYMENT-
AGE ACCORDING TO SEX
(GOT, 1991a:Table TOT 1)

AGE GROUP	Male	FEMALE	TOTAL
0-9	0	0	0
10-14	2,517	0	2,517
15-19	10,789	0	10,789
20-24	26,260	0	26,260
25-29	37,422	0	37,422
30-39	40,056	346	40,402
40-49	20,683	330	21,013
50-59	16,960	330	17,290
60+	7,444	0	7,444
Not stated	85	0	85
TOTAL	162,216	1,006	163,222

TABLE D3
INFORMAL CONSTRUCTION SECTOR EMPLOYMENT
-AGE ACCORDING TO GEORAPHIC AREA (GOT,
1991a:TableTOT 6)

AGE GROUP	Rural	Urban	TOTAL
0-9	0	0	0
10-14	114	2,403	2,517
15-19	3,021	7,768	10,789
20-24	10,284	16,192	26,476
25-29	15,294	22,128	37,422
30-39	13,748	26,654	40,402
40-49	5,506	15,507	21,013
50-59	2,647	14,643	17,290
60+	413	7,031	7,444
Not stated	85	0	85
TOTAL	51,112	112,326	163,438

TABLE D4
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- OWNERSHIP ACCORDING TO GEOGRAPHIC AREA
(GOT, 1991a:Table ENT 2)

Geographic area	Sole ownership	Partnership	Total
Dar-es-salaam	10,670	92	10,762
Other urban	17,981	155	18,136
Rural	86,989	609	87,598
TOTAL	115,640	856	116,496

TABLE D5
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- OPERATING LOCATION (GOT, 1991a:Table ENT 4)

Location	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
Temporary structure	1,009	100	8,778	9,887
Open space/street	154	876	699	1,729
No fixed location	8,231	6,233	72,456	96,920
Within home	350	43	-	393
Structure to house	49	27	1,242	1,318
Another building	456	65	60	581
Market	-	118	693	811
Other	513	674	3,670	4,857
TOTAL	10,762	18,136	87,598	116,496

TABLE D6
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- AGE OF ENTERPRISES (GOT, 1991a:Table ENT 5)

Age (years)	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
Up to 1	696	682	5,943	7,321
1-3	981	2,006	14,302	17,289
3-5	2,654	4,380	18,368	25,402
5-10	2,398	5,125	19,432	26,955
10-20	3,128	4,953	13,836	21,917
Above 20	905	1,842	15,258	18,005
Not stated	-	48	459	507
TOTAL	10,762	19,036	87,598	117,396

TABLE D7
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- INITIAL CAPITAL (GOT, 1991a:ENT 6)

Initial capital	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-999	1,252	3,606	36,969	41,827
1,000-4,999	3,855	6,370	34,463	44,688
5,000-9,999	1,969	5,106	8,320	15,395
10,000-19,999	2,203	1,988	2,185	6,376
20,000-49,999	570	437	377	1,384
50,000-99,999	445	94	499	1,038
+100,000	359	158	-	517
Not stated	109	377	4,785	5,271
TOTAL	10,762	18,136	87,598	116,496

TABLE D8
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- SOURCE OF CAPITAL (GOT, 1991a:ENT 7)

Source of capital	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
Own saving	7,788	13,886	61,746	83,420
Borrow from friends/relatives	1,169	1,054	5,680	7,903
Assistance from friends/relatives	1,709	2,510	10,670	14,889
Funds from credit society	-	-	-	-
Loan from informal lenders	-	-	988	988
Loan from govt. and banks	-	-	627	627
Co-financing	-	-	395	395
Other	36	388	4,398	4,822
Not stated	60	298	3,094	3,452
TOTAL	10,762	18,136	87,598	116,496

TABLE D9
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- FIXED CAPITAL (GOT, 1991a:Table ENT 11)

Fixed capital	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-1,000	82	2,145	27,578	29,805
2,000-4,000	1,777	3,425	22,246	27,448
5,000-9,000	2,180	5,770	20,703	28,653
10,000-19,000	1,715	4,516	11,174	17,405
20,000-49,000	2,995	1,776	5,304	10,075
50,000-99,000	781	315	444	1,540
+100,000	1,232	189	149	1,570
TOTAL	10,762	18,136	87,598	116,496

TABLE D10
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- WORKING CAPITAL (GOT, 1991a:Table ENT 12)

Working capital	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-1,000	10,445	18,136	87,598	116,179
2,000-4,000	-	-	-	-
5,000-9,000	-	-	-	-
10,000-19,000	162	-	-	162
20,000-49,000	-	-	-	-
50,000-99,000	-	-	-	-
+100,000	155	-	-	155
TOTAL	10,762	18,136	87,598	116,496

TABLE D11
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- TOTAL CAPITAL (GOT, 1991a:Table ENT 13)

TOTAL CAPITAL	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-1,000	82	2,145	27,578	29,805
2,000-4,000	1,777	3,425	22,246	27,448
5,000-9,000	2,180	5,770	20,703	28,653
10,000-19,000	1,715	4,516	11,174	17,405
20,000-49,000	2,995	1,776	5,304	10,075
50,000-99,000	781	315	444	1,540
+100,000	1,232	189	149	1,570
TOTAL	10,762	18,136	87,598	116,496

TABLE D12
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- ANNUAL INPUTS (GOT, 1991a:Table ENT 23)

Annual Inputs	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-9,000	2,797	7,802	55,349	65,948
10,000-29,000	723	2,306	17,314	20,343
30,000-49,000	990	1,371	8,340	10,701
50,000-99,000	1,152	2,933	4,636	8,721
100,000-199,000	1,751	2,625	846	5,222
200,000-499,000	1,924	880	1,113	3,917
+500,000	1,425	219	-	1,644
TOTAL	10,762	18,136	87,598	116,496

TABLE D13
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- ANNUAL REVENUE (GOT, 1991a:Table ENT 24)

Annual Revenue	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-9,000	46	508	12,864	13,418
10,000-29,000	170	1,637	25,360	27,167
30,000-49,000	53	758	15,352	16,163
50,000-99,000	2,145	3,414	19,331	24,890
100,000-199,000	2,142	5,039	9,044	16,225
200,000-499,000	2,996	5,029	5,413	13,438
+500,000	3,210	1,751	234	5,195
TOTAL	10,762	18,136	87,598	116,496

TABLE D14
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- ANNUAL PROFITS (GOT, 1991a:Table ENT 25)

Annual profits	Number of enterprises			
	Dar-es-Salaam	Other urban	Rural	Total
0-9,000	46	538	20,597	21,181
10,000-29,000	455	1,914	29,700	32,069
30,000-49,000	946	2,227	13,762	16,935
50,000-99,000	2,579	3,896	12,796	19,271
100,000-199,000	3,185	5,196	7,875	16,256
200,000-499,000	2,867	3,120	2,634	8,621
+500,000	684	1,245	234	2,163
TOTAL	10,762	18,136	87,598	116,496

TABLE D15
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- ANNUAL INPUTS, REVENUE AND PROFIT (GOT, 1991a:Table ENT 26, 27 & 28)

	Amount in ('000 Tshs.)			
	Dar-es-Salaam	Other urban	Rural	Total
Total annual value of inputs	2,773,029	1,327,338	1,398,385	5,498,752
Total annual value of revenues	5,187,019	4,132,990	5,256,846	14,576,855
Total annual value of profits	2,413,845	2,806,051	3,861,556	9,081,452

TABLE D16

INFORMAL CONSTRUCTION SECTOR ENTERPRISES

- MAJOR DIFFICULTIES WHEN ESTABLISHING (GOT, 1991a:Table PROB 1, 2 & 3)

Difficulties	Number of enterprises											
	Dar-es-Salaam			Other urban			Rural			Total		
	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
Government Regulations	271	199	-	214	149	124	198	311	180	683	659	304
Finding Premises	528	555	342	1,312	1,181	247	8,358	2,467	3,436	10,198	4,203	4,025
Lack of adequate capital	5,476	1,512	437	4,913	1,736	490	13,676	10,161	2,398	24,065	13,409	3,325
Skilled workers	-	-	49	-	1,273	60	3,137	3,257	1,781	3,137	4,530	1,890
Access to equipment and spare parts	2,366	2,270	609	5,463	1,928	296	34,961	13,041	4,536	42,790	17,239	5,441
Access to raw materials	96	203	113	-	191	114	996	4,118	698	1,092	4,512	925
Getting market/customers	1,224	1,909	1,123	3,552	1,438	1,508	4,735	7,653	8,842	9,511	11,000	11,473
Transport problems	-	248	308	52	153	193	692	2,454	2,956	744	2,855	3,457
Access to services i.e. water/electricity	-	-	106	-	16	38	952	745	745	952	761	889
Other	455	194	114	771	929	392	2,338	1,707	442	3,564	2,830	948
No difficulty at all	346	3,672	7,561	1,859	9,142	14,674	17,555	41,684	61,584	19,760	54,498	83,819
TOTAL	10,762	10,762	10,762	18,136	18,136	18,136	87,598	87,598	87,598	116,496	116,496	116,496

TABLE D17

INFORMAL CONSTRUCTION SECTOR ENTERPRISES

- MAJOR OPERATING DIFFICULTIES (GOT, 1991a:Table PROB 4, 5 & 6)

Difficulties	Number of enterprises											
	Dar-es-Salaam			Other urban			Rural			Total		
	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
Non-payment of debts	1,166	694	551	1,342	694	160	12,159	3,142	2,288	14,667	4,530	2,999
Unavailability of credit facilities	4,706	1,468	451	5,363	1,180	611	14,437	6,866	3,578	24,506	9,514	4,640
Lack of management skills	98	61	117	970	935	282	6,978	4,654	1,391	8,046	5,650	1,790
Lack of capital equipment	1,214	1,697	382	4,027	3,357	750	28,693	13,878	3,466	33,934	18,932	4,598
Lack of skilled personnel	-	37	-	15	774	194	-	4,419	845	15	5,230	1,039
Difficulties with existing regulations/law	215	154	168	34	13	254	1,506	576	151	1,755	743	573
Heavy taxes & licence fees	-	26	106	214	93	34	-	375	718	214	494	858
Lack/irregular supply of raw materials	135	589	176	286	624	30	2,368	4,191	3,583	2,789	5,404	3,789
Transport problems	82	487	309	43	73	144	1,023	3,537	2,502	1,148	4,097	2,955
Lack of space	926	682	590	579	922	1,095	3,740	3,108	3,580	5,245	4,712	5,265
Lack of spare parts	144	108	-	-	16	50	-	836	700	144	960	750
Thieves	37	289	-	641	480	13	969	729	1,410	1,647	1,498	1,423
No difficulty at all	1,038	872	731	3,219	1,025	358	5,481	3,673	1937	9,738	5,570	3,026
Other	1,001	3,618	7,181	1,403	7,950	14,161	10,244	37,594	61,449	12,648	49,162	82,791
TOTAL	10,762	10,762	10,762	18,136	18,136	18,136	87,598	87,598	87,598	116,496	116,496	116,496

TABLE D18
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- MAJOR ASSISTANCE NEEDED (GOT, 1991a:Table PROB 7, 8 & 9)

Difficulties	Number of enterprises											
	Dar-es-Salaam			Other urban			Rural			Total		
	First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
Provision of a permanent site	925	821	383	1,554	2,177	198	6,985	3,528	2,056	9,464	6,526	2,637
Better access to loans	6,855	1,621	687	9,435	2,782	834	34,591	16,282	1,637	50,881	20,685	3,158
Easing in government regulations	-	170	67	-	543	223	-	693	1,493	-	1,506	1,782
Better access to raw materials	771	985	248	866	893	64	5,360	3,641	1,892	6,997	5,519	2,204
Better transport facilities	135	381	-	13	199	351	2,882	5,630	579	3,030	6,210	930
Training for self	297	433	725	1,388	8,616	784	11,042	7,685	5,098	12,727	9,734	6,607
Training for workers	-	98	881	310	57	73	519	745	294	829	900	1,248
Assistance with marketing	898	1,523	752	827	584	334	3,612	3,316	4,030	5,337	5,523	5,116
Access to modern technology	303	775	230	929	795	753	6,585	10,925	5,237	7,817	12,495	6,220
Other	-	-	-	-	-	-	330	679	0	330	679	-
No need for assistance	578	3,955	6,789	2,814	6,290	14,523	15,692	34,474	65,282	19,084	46,719	86,594
TOTAL	10,762	10,762	10,762	18,136	18,136	18,136	87,598	87,598	87,598	116,496	116,496	116,496

TABLE D19
INFORMAL CONSTRUCTION SECTOR GROSS OUTPUT, VALUE ADDED AND OFFICIAL FORMAL ECONOMY VALUE ADDED (GOT, 1991a:Table 3.1.1)

	Construction	Total Informal
No. of enterprises	116,496	1,801,543
Annual Gross Output	14,577	486,869
Annual Value Added	10,864	183,418
Official Formal economy value added	42,519	952,018

TABLE D20
INFORMAL CONSTRUCTION SECTOR GROSS OUTPUT, CAPITAL AND GROSS OUTPUT PER UNIT OF INVESTMENT (GOT, 1991a:Table 3.2.3)

	Construction	Total Informal
Gross Output (million Shs.)	14,577	486,869
Total Capital (million Shs.)	1,316	55,880
Gross output per unit of investment (shs.)	11	8.7

TABLE D21
INFORMAL CONSTRUCTION SECTOR - VALUE ADDED, CAPITAL AND
VALUE ADDED PER UNIT OF INVESTMENT (GOT, 1991a:Table 3.2.4)

	Construction	Total Informal
Total value added (shs. Million)	10,864	183,417
Total Capital (million Shs.)	1,316	55,880
Value added per unit of investment (shs.)	8.3	3.3

TABLE D22
INFORMAL CONSTRUCTION SECTOR - CAPITAL
FORMATION
(GOT, 1991a:Table 3.3)

	Construction	Total Informal
Capital formation (shs. "000")	186,280	5,721,982

TABLE D23
INFORMAL CONSTRUCTION SECTOR - SUPPLIERS OF RAW
MATERIALS
(GOT, 1991a:Table ENT 35)

	D'Salaam	Other urban	Rural	Total
Individuals	4,484	9,118	38,619	52,221
Small enterprises	1,239	990	4,964	7,193
Large enterprises	775	769	2,661	4,205
Government/parastatals	264	104	454	822
Other	34	-	1,654	1,688
No raw materials	3,966	7,155	39,264	50,385
	10,762	18,136	87,616	116,514

TABLE D24
INFORMAL CONSTRUCTION SECTOR - MAJOR CUSTOMERS
(GOT, 1991a:Table 37)

Major customers	Geographic area			Total
	D'Salaam	Other urban	Rural	
Individuals	10,282	17,335	78,594	106,211
Small enterprises	60	9	551	620
Large enterprises	247	394	738	1,379
Government/parastatals	38	398	3,052	3,488
Other	135	-	3,798	3,933
Not stated	-	-	865	865
Total	10,762	18,136	87,598	116,496

TABLE D25
INFORMAL CONSTRUCTION SECTOR - AVERAGE ANNUAL INPUTS,
REVENUE AND PROFITS
 (GOT, 1991a:Table ENT 31, 32 & 33)

	D'Salaam	Other Urban	Rural
Inputs	258,000	73,000	16,000
Revenue	482,000	228,000	60,100
Profits	224,000	155,000	44,000

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Appendix 6.2

Data on informal construction sector as summarised from the Dar-es-Salaam Informal Sector Survey of 1995 (GOT, 1995)

TABLE E1
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- OWNERSHIP (GOT, 1995:Table A8)

Type of ownership	Total
Formerly registered co-op	57
Another co-op	138
Sole ownership	14,711
Partnership / unincorporated	103
TOTAL	14,906

TABLE E2
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- BUSINESS REGISTRATION (GOT, 1995:Table A7)

Business status	Total
No Licence	14,566
Trade Licence	323
Licence with certificate of registration	119
TOTAL	15,008

TABLE E3
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
AGE OF ENTERPRISES (GOT, 1995:Table A5)

Age (years)	Number of enterprises		
	Male	Female	Total
0- 1 month	113	-	113
1 - 3 months	33	-	33
3 - 6 months	161	-	161
6 - 12 months	484	-	484
1- 2 years	943	-	943
2- 3 years	1,487	283	1,770
3- 4 years	1,278	-	1,278
4- 5 years	1,088	-	1,088
5- 10 years	3,677	194	3,871
+ 10 years	5,129	103	5,232
Not stated	38	-	38
TOTAL	14,431	580	15,011

TABLE E4
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- INITIAL CAPITAL (GOT, 1995:Table A6)

Initial capital	Number of enterprises		
	Male	Female	Total
1,000 - 4,000	565	-	565
5,000 - 9,000	4,815	140	4,955
10,000 - 14,000	2,476	-	2,476
15,000 - 19,000	95	-	95
20,000 - 24,000	760	150	910
25,000 - 49,000	657	-	657
50,000 - 99,000	391	54	445
+100,000	484	-	484
Not stated	-	-	-
TOTAL	10,243	344	10,587

TABLE E5
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- MAIN PROBLEMS OF BUSINESS OPERATION (GOT, 1995:Table F1)

PROBLEMS	Total	PROBLEMS (cont'd)	TOTAL
Lack of investment capital	4,935	High competition	3,560
Lack of working capital	6,603	High cost/lack/ poor quality of raw materials	1,042
Lack/high cost of financing	2,957	Inadequate own skill	822
Problem of premises	1,838	High salary/lack of skilled workers	153
Poor infrastructure/utilities	805	Other problems with workers	210
Transport	750	High taxes & licence fees	255
Lack of information on new technologies	1,003	Difficulty to comply with regulation	296
High cost of machinery and equipment	1,907	Abuse of regulations by officials	341
Lack of machinery and equipment	1,140	Land occupancy/expulsion	445
Lack/high cost of spares	1,642	Exortion/prote payments	210
Lack of customers	5,717	Theft/violence	124
Low profit	3,265	Claim of income by family members	509
Bad pay by customers	2,190	Lack of time or mobility	523
Rejection of products	1,338	Other problems	266
TOTAL			44,846

TABLE E6
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- SOURCE OF RAW MATERIALS (GOT, 1995:Table C1)

Source of raw materials	Total
Government agency	203
Large shop	376
Customer/contractor	305
Small shops	895
Farmers	120
Not stated	17,604
TOTAL	19,503

TABLE E7
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- CUSTOMERS (GOT, 1995:Table C3)

Customers	Total
Private individuals	14,955
Small business men	8,173
Middle man, agents	-
Large shops	123
Govt agencies	-
Not stated	-

TABLE E8
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- MAIN MOTIVE FOR ESTABLISHING THE BUSINESS (GOT, 1995:Table A1)

MAIN MOTIVE	Total		
	Male	Female	Total
Can't find other work	5,117	70	5,187
Released from other work	1,691	124	1,815
Retirement	752	150	902
Family needs additional income	2,298	-	2,298
Business provides good income	904	235	1,139
No much capital required	504	-	504
Keep production cost low	93	-	93
Can do away with legal constraints	33	-	33
Wants to be independent	624	-	624
Can choose hours/place of work	223	-	223
Can combine business with household	140	-	140
Traditional line of business	410	-	410
Other reason	1,607	-	1,607
Not stated	33	-	33
TOTAL			15,008

TABLE E9
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- BUSINESS LOCATION (GOT, 1995:Table A2)

Location	Total		
	Male	Female	Total
Within own home	870	54	924
Structure attached to house	-	-	-
Permanent building other than home	132	-	132
Fixed stall/jiosk/market	-	-	-
Vehicle, cart, temporary structure	69	-	69
Street	183	-	183
Other temporary structure	561	-	561
Construction sites	3,365	140	3,505
Customers/employee house	937	-	937
No fixed location	8,312	386	8,698
TOTAL	14,429	580	15,009

TABLE E10
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- GROSS OUTPUT LAST YEAR (GOT, 1995:Table B2)

Gross output	Total		
	Male	Female	Total
Less than 50,000	25	-	25
50,000-99,999	454	-	454
100,000-199,999	1,672	70	1,742
200,000-299,999	1,574	70	1,644
300,000-499,999	3,119	124	3,243
Above 500,000	7,350	316	7,666
Not stated	235	0	235
TOTAL	14,429	580	15,009

TABLE E11
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- VALUE ADDED LAST YEAR (GOT, 1995:Table B4)

Value added	Total		
	Male	Female	Total
Less than 50,000	1,237	-	1,237
50,000-99,999	836	70	906
100,000-199,999	1,262	70	1,332
200,000-299,999	1,733	70	1,803
300,000-499,999	3,032	54	3,086
Above 500,000	6,329	316	6,645
Not stated	0	0	-
TOTAL	14,429	580	15,009

TABLE E12
INFORMAL CONSTRUCTION SECTOR ENTERPRISES
- OPERATING SURPLUS LAST YEAR (GOT, 1995:Table B6)

Operating surplus	Total		
	Male	Female	Total
Less than 50,000	1,383	70	1,453
50,000-99,999	806	70	876
100,000-199,999	1,351	-	1,351
200,000-299,999	1,759	70	1,829
300,000-499,999	2,884	204	3,088
Above 500,000	6,246	165	6,411
Not stated	0	0	-
TOTAL	14,429	579	15,008

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Appendix 6.3

Contribution of rural-own construction to the construction industry

YEAR	CAPITAL FORMATION AT 1992 PRICES			GDP CONSTRUCTION AT 1992 PRICES		
	GCF	Rural Own account Construction	% of Rural own construction to GCF	Total GDP	Non- monetary GDP	% of non-monetary GDP to total GDP
1987	328,948	34,377	10	54,061	10,414	19
1988	254,116	38,962	15	68,573	10,640	16
1989	253,145	38,707	15	59,327	10,869	18
1990	340,256	37,837	11	77,736	11,100	14
1991	380,107	41,291	11	72,366	11,332	16
1992	373,043	41,620	11	77,330	11,567	15
1993	330,795	44,007	13	66,657	11,802	18
1994	334,829	45,802	14	67,614	12,039	18
1995	285,558	46,581	16	56,883	12,277	22
1996	272,215	49,259	18	58,718	12,515	21
1997	263,514	43,465	16	59,608	12,753	21
1998	301,073	46,990	16	67,916	12,993	19
Average %			14			18
Standard Deviation			2.6			2.5

Appendix 9.1

Sample contract clause to be used for subcontracting to trade subcontractors

The Contractor with the exception of their own directly employed workers shall engage only CIDB's CW01 registered contractors or Slots (Singapore List of Trade Subcontractors) in the following registration heads or trades :-

A Civil and Structural

1. Formwork
2. Metal forms worker (Erector)
3. Reinforcement fixer/steel bender
4. Structural Steelworker

B Architectural and Finishing

1. Bricklayer
2. Joiner
3. Painter
4. Plasterer
5. Roofer
6. Tiler

The Contractor shall submit to Director (Manpower Development Division) of CIDB, c/o Head of Work Permit Section and SO, a list of trade subcontractors at the commencement of the project. He shall also maintain and update this list using the attached form and forward the same to the above said.

Two weeks before the commencement of each relevant trade, the Contractor shall submit to CIDB the Slots or CIDB certificate of the trade subcontractor engaged.

The Contractor shall be responsible for any eventual delay in the progress of the works owing to his failure to ensure the required on-time registration of his subcontractors and no extension of time shall be granted on the account of such delays.

Appropriate action will be taken by CIDB should the Contractor fail to comply with the requirements of this clause.

