

## Chapter 1

### **Possible Obstacles Impeding the Growth of Construction Related-SMEs in Sub-Saharan Africa: Preliminary study on the impact of infrastructure investment in the construction industry of Burkina Faso**

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#### **Abstract**

This paper examines the situation and characteristics of micro, small and medium-sized enterprises (SMEs) in the construction industry of Burkina Faso. The study is based on the available literature and the findings of a detailed firm-level questionnaire survey, and it aims to identify those crucial factors, both external and internal, that impede the growth of SMEs throughout the construction industry of Sub-Saharan Africa in general and Burkina Faso in particular. The results indicate that many of the constraints found in other African countries are also found in Burkina Faso: 1) lack of qualified engineers and construction-related equipments; 2) high factor costs affecting the business operation; 3) difficulties of starting up a business; 4) highly bureaucratic tender process; 5) delay of payment; 6) requirement of unofficial payment; 7) competition with foreign-owned construction companies; 8) very weak voluntary professional and business associations; 9) lack of available business services provided by either government or non-governmental agencies; and 10) inadequate accessibility to financial services. However, while the adoption of such flexible labor practices as labor-only sub-contracting is considered a constraint owing to poor work habits and low productivity in general, flexible labor practice is nevertheless the only way for smaller construction enterprises who have to deal with such unpredictable and fluctuating construction demands to survive in the industry; this is particularly true of unregistered construction enterprises in Burkina Faso. Furthermore, the legal and regulatory framework is insufficiently supportive of the business environment while administrative barriers to private investment still need to be removed, as is the case in other countries of Sub-Saharan Africa.

**Keywords:** Construction Industry, SMEs' Development, Burkina Faso, Sub-Saharan Africa

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The views expressed in this paper are the authors' own and do not necessarily reflect the views of the institutions with which the author is affiliated.

## 1. Introduction

Since 2002, when the G8 leaders gathered in Kananaskis to approve an African Action Plan (AAP)<sup>2</sup>, to be based on the vision of the New Partnership for Africa's Development (NEPAD), more recent international summits have focused their concern on African issues and have committed themselves to increasing the official Development Assistance (ODA) for Africa to levels not seen before. The AAP objectives are to rehabilitate a comprehensive social infrastructure and to promote the growth and sustainable development of industries throughout Africa. This includes the construction industry, and since 2002 the EC has already provided almost 900 million euros for the Sub-Saharan Africa Transport Policy Program, part of the 2.5 billion euros distributed for transport-associated programs in 27 selected Sub-Saharan African countries (G8 [2005]), a substantial portion of this sum being devoted to physical investment on road building and maintenance. This powerful flow of investment in the infrastructure has not yet begun to ebb and the African countries are still riding of the wave, even during the current global financial crises.<sup>3</sup>

For countries like Burkina Faso, a small landlocked and agriculture-dependent economy, an efficient transport system and its infrastructure are critically important. Since 2000, the government of Burkina Faso has taken the initiative in implementing a transport sector program, under the auspices of the World Bank, so as to systematically upgrade and maintain the network of priority roads and expand the rural feeder roads. By May 2005, 1120 km. of roads had been upgraded or maintained (World Bank [2005]). This Transport Sector program has also facilitated the involvement of small and medium-sized enterprises in road rehabilitation and maintenance. In addition, urban redevelopment, called "Ouga 2000", was undertaken almost simultaneously and subsequently a construction boom has taken place in the city.

While, in the light of these circumstances, local construction enterprises are supposed to benefit from these numerous projects, in reality, however, owing to the absence of any real domestic capability, most of the larger projects are awarded to foreign-based construction firms, and as in other countries in Sub-Saharan Africa, the local SMEs involved in construction activities still face serious difficulties in adequately responding to the expectations of GOBF. Consequently, the NEPAD initiatives of

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<sup>2</sup> AAP progress was reviewed at Evian in 2003 where a commitment was made to review progress again in 2005(G8 [2005]).

<sup>3</sup> It is true that middle income countries in Africa have been hit severely by the crises due to their relative higher integration into the global economy, however, for countries like Burkina Faso, the growth continues but at a slow pace. The detailed study of its impact will be investigated in the future research.

infrastructure renewal and investment will demand urgent capacity-building in African construction industries, in terms of both quality and quantity.

The entire purpose of this research has been to examine the impact of current infrastructure investment (mainly foreign aid) on the SMEs in the Construction Industry in Sub-Saharan Africa in general and Burkina Faso in particular. The author proposes to compare the moment in 2002 when this still continuing wave of infra-investment began to move forward with how the prospects look today for whatever the future may hold in store. This preliminary study, therefore, inspects the first stage of this dramatic upsurge of infra-investment and sets out to examine the situation and characteristics of micro, small and medium-sized enterprises (SMEs) in the construction sector of Burkina Faso. It aims to identify: (1) those external and internal factors that impede the construction industry in Sub-Saharan Africa; and (2) the constraints that may be impeding the growth of SMEs within Burkina Faso itself. The discussion is based mainly on the available literature and upon the findings of a detailed firm-level questionnaire survey that the author carried out in 2004.<sup>4</sup> Since this is an interim report, we have still to uncover the impact of the huge amount of investment and financial aid that has been flowing into the infrastructure sector in Africa, and we intend to pursue this research during the coming fiscal year. We shall ask three questions: 1) how does this huge flow of investment affect the local construction enterprises in Africa and, most particularly, those in Burkina Faso?; 2) have the local construction enterprises benefited or not from this investment?; and 3) what possible interventions to assist SMEs in the construction industry in Burkina Faso are likely in the future?

This chapter is divided into five sections. After the present introductory section, we shall briefly discuss the context of the construction industry in general and its characteristic features in Sub-Saharan Africa in particular. The third section makes use of the available macro-data and literature to look into the role of SMEs in the construction industry of Burkina Faso. The fourth section examines in detail the business conditions of SMEs in the construction industry in Burkina Faso: the data is drawn from a quantitative survey that the author carried out among 66 informal construction enterprises and 57 small and medium-sized enterprises. The concluding section summarizes the possible constraints on effective performance of emerging construction-related SMEs in Burkina Faso.

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<sup>4</sup> This paper is in the main a revision of Tokuori [2006], *Possible Obstacles impeding SMEs Growth in the Construction Industry of Sub-Saharan Africa: Empirical Evidence from Burkina Faso*, Discussion Paper, Series A, No.2006-172, Hokkaido University.

## **2. Aspects of the Construction Industry in Sub-Saharan Africa**

This section offers a broad overview of the construction industry in Sub-Saharan Africa. After a review of the general implications and the importance of the construction industry to the economy, it elaborates the general idea of this study. This section also examines the available literature to discuss the possible constraints that confront the construction industry in Sub-Saharan Africa.

### **2.1 The Significance of the Construction Industry**

Several academic institutes and researchers (The World Bank [1984]; Ebohon [2000]; Edmonds [1980]; Ofori 2000; Mlinga and Wells [2002]) have addressed the importance of the construction industry in developing countries as a contributor to those countries' socio-economic development. Ofori [2000] pointed out that while the implications of many issues facing the construction industry in industrialized countries have, to a significant extent, been discussed already, the problems in the developing countries have mostly been overlooked. Consequently, at present no standard definition for the construction industry exists, and because no measurable targets have been set, the constructive progress of the discussion may have been seriously hindered (Tindiwensi [2000]; Ofori [1998]).

The lines that demarcate industries are not always easy to define, and it is especially difficult to identify the task of the construction industry, which covers both the public and private sector, and is diversified both geographically and by type of work (Edmonds [1980]). In 1984, The World Bank described the construction industry as a crucial contributor to the process of socio-economic development through its practical pursuit of such civil projects as roads, dams, irrigation works, schools, houses, hospitals, factories and other construction works. Ebonon [2000] widened the definition of the construction industry and included in his description firms and individuals involved in planning, design, the supply of building materials, plant, equipment, transport and other services relating to the procurement of physical infrastructure and services. Irurah [2000] felt that something was still missing from these two descriptions, and to compensate he introduced the following very comprehensive definition:

- 1) *Construction as site activities, which lead to the realization of a specific building. In this regard construction is viewed as a specific stage in the project cycle as described below;*
- 2) *Construction as the comprehensive cycle of a building project covering key stages*

- such as feasibility, design, operation, decommissioning, demolition, disposal;*
- 3) *Construction as a sector of the economy, which is in turn linked to allied sectors and industries in material production and distribution, as well as service sectors such as transport and finance;*
  - 4) *Construction as the broad process/mechanism for the realization of human settlements especially the provision of affordable housing, related infrastructure and services. This entails land identification, planning, design and implementation processes of sustainable built environment or human settlements (Irurah [2000:7]).*

While it may be argued that, when compared with Irurah's definition, the two earlier definitions take a fairly narrow view of the impact of the construction industry when we consider its widespread linkages with other sectors of the economy, the application of either a wide or a narrow definition for the construction industry could well depend on the purpose or type of research. For example, when implementing a feasibility study to cover all potential elements involved in the construction industry, our definition is likely to be wider, yet once the purpose of the study or research project moves on to the plan of action, which will be the more practical and manageable part, so the definition has to be much narrower in order to clarify what the target group for the study actually is. It is therefore doubtful that a broad definition such as Irurah's could be used in practice, especially when we are conducting certain types of surveys.

In order to conduct a construction-related firm-level survey, the author of the present study has therefore modified the first two definitions, and in this paper simply divides the construction sector into two sub-sectors (building works and civil engineering works) according to the different types of activity:

- 1) *Building works include production and supply of construction-related material: design, construction, repair and maintenance of buildings such as industrial and commercial structures, schools, hospitals and housing.*
- 2) *Civil engineering works consist of production and supply of construction-related material, and the design, construction, repair and maintenance of overall physical infrastructure including irrigation systems, electricity, roads and bridges.*

We excluded sand and gravel collecting works and quarry works from this study since such kinds of work are mainly conducted in rural areas. Once the above definition for the construction industry has been adopted, we can go on to analyze the importance and possible impact of that industry on the economy.

## **2.2 Importance of the Construction Industry for the Economy**

As we have already noted, the contribution of the construction sector to the processes of economic and social development has been theoretically and empirically acknowledged (United Nations [1969]; World Bank [1984]; GEMINI [1991]; Ebohon [2000]; Ofori [2000]; Mlinga and Wells [2002]).

For instance, Edmonds [1980], Edmonds & Miles [1984], and Wells [1986] all attempted to calculate the correlation between the activities of the construction industry and economic growth through an analysis of statistical evidence<sup>5</sup>. Indeed, their statistical data uncovered a positive relationship between Gross National Product (GNP) per capita and the following criteria related to construction: 1) the percentage of value added in construction; 2) the percentage of Gross Fixed Capital Formation (GFCF) and investment in construction; and 3) the creation of employment in construction.

Their results showed that during construction both the percentage of value added and the GNP per capita increased, though Edmonds and Miles [1984] added that the trend of this increase is not linear. Once GNP per capita reaches a certain level — more than \$2000 GNP per capita — the trend of increase levels off and remains fixed between 7 and 8% of GNP. A similar bias can be seen in the relationship between GFCF and GNP per capita as well as in the creation of employment. The percentage of the GNP to GFCF tends to increase with the increase in GNP per capita. Thus, the percentage investment in construction rises at the same time. When the GNP per capita attains \$ 4,000, however, the amount of investment per capita levels off and becomes stable (Edmonds and Miles [1984]).

Although, as we have just seen, a certain level of GNP per capita stabilizes where the need for massive construction output gradually grows less, various researchers have confirmed positive relationships between economic growth and construction output. Yet what has to be noticed here, however, is that the costs of repair and maintenance, which may amount to as much as one-third of the total output of the construction sector, are not considered as the formation of new capital (Wells [1984]), nor do the figures for above-mentioned contribution include the number of informal employees. We therefore conclude that the contribution of the construction industry to the economy described in early publications was underestimated.

Apart from the correlation between construction output and economic growth, both early and recent statistical data indicate the importance of the construction industry to the economy. According to an early document produced by the United Nations [1969],

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<sup>5</sup> Data are drawn mainly from the United Nations Yearbook of National Account Statistics and the International Labor Office's Yearbook of Labor Statistics

the gross value of construction in most countries accounted for 45-65% of the GFCF, while construction in developing countries and industrialized countries usually accounted, respectively, for 3-5% and 5-9% of the GNP. Likewise, of the total labor force, construction labor averaged 2-6% in developing countries and 6-10% in industrialized countries. The World Bank's results of 1984 fall within the above range.

Recent statistics also illustrate the worldwide features and trends of the construction market, which accounts for about 10% of the world economy. Approximately 70% of construction investment is found in the U.S., Western Europe and Japan, while the African continent accounts for only about one percent (CIDB [2004]). Per capita investment in construction in developed countries is about 2500 US\$ per annum compared to 46 US\$ in Africa. Moreover, 91% of the roads in high-income countries are paved compared to 16% in Sub-Saharan Africa (CIDB [2004]). The world construction market is estimated at 3.2 trillion US\$. Over the last two decades, up to 70% of construction business opportunities in the international market, as measured by the size of contracts, were found in developing countries, primarily in infrastructure projects (United Nations [2000]).

The construction industry thus creates numerous employment opportunities; it extracts a large part of the GFCF in any given economy; and it provides the catalyst for developing a national economy. Yet, although a large potential market for construction works exists in developing countries, in reality, the domestic capability of those countries' construction industries has not met the demand, thus making it easy for foreign-owned construction firms to dominate the high value-added end of the industry at the expense of local construction firms (Ofori [2000]).

### **2.3 Problems facing the Construction Industry in Sub-Saharan Africa**

After achieving political independence in the 1960s, many countries in Sub-Saharan Africa started to implement a development policy aimed at a high level of investment, particularly for the basic infrastructure. This required a rapid expansion of activities in the construction industry, both qualitatively and quantitatively, but since, in fact, many African countries had been inactive for a number of years owing to uncertainties surrounding independence, it was not long before observers singled out the inadequate capacity in the construction sector as the major cause of the failure to implement development projects and to meet the targets set out in development plans (Wells [1986]).

Although, ever since the late 1960s, a number of international organizations have pointed out the problems that face the continent's construction industries (UN

[1969]; ILO [1980]; World Bank [1984]), these problems still persist, and there is no blueprint for the development of the construction industry nor a cure-all for solving the problems of developing countries. In 1997, researchers, administrators, and consultants in both developing and developed countries, responding to these circumstances, formed a Task Group (TG 29) on “Construction in Developing Countries” of the International Council for Research and Innovation in Building and Construction (CIB) in order to promote effective studies. So far, three international conferences have been held and the results of 35 studies relating to Sub-Saharan African’s construction industry (only two for West Africa out of a total of 177), have appeared.<sup>6</sup>

Although, as we mentioned above, the number of construction-related studies in Sub-Saharan Africa is much lower than that found in other developing countries, in South Africa in recent years the positive involvement of development agencies in the construction industry has been remarkable, as a number of empirical surveys conducted since 1994 have shown, while in 1999 the government of South Africa itself embodied its own approach to the development of the construction industry in a White Paper entitled “Creating an enabling environment for reconstruction, growth and development in the construction industry” (CIDB [2004]).

Apart from the ongoing initiatives undertaken by South Africa, the development of the construction industry in the rest of Sub-Saharan Africa does not seem to have made great progress over the past couple of decades, and, here, the author will summarize a limited number of surveys that isolate several of the constraints that impede the construction industry in Sub-Saharan Africa.

A number of problems on the demand side arise from the public sector that conducts the tender of large projects. For example: 1) an inappropriate construction procurement system; 2) the inability of the public side to manage the procurement function; 3) inadequate capacity for the planning and design of projects; 4) the lack of efficient project managers; and 5) delays in payment. All of these are common constraints and everyday obstacles for project implementation in Sub-Saharan Africa. Such constraints result from the inherent defect of the public sector, which exhibits strong resistance to change in any public construction-related system (Ofori [2000]; Rwelamila [2000]; Ebohon [2000]; Ebohon and Rwelamila [2000]).

At the same time, the local construction enterprises themselves are responsible for various factors that lead to problems on the supply side: 1) a lack of skilled labor and poor supervision; 2) the poor quality of construction work and low level of

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<sup>6</sup> All CIB-related documents are downloadable at :<http://www.sce.ait.ac.th/cib>



productivity; 3) the absence of financial capacity; 4) the adoption of flexible labor practices (for example, the use of unregistered laborers for subcontracting); 5) technical and managerial difficulties arising from inadequate expertise and capacity; 6) over-dependence on imported construction materials; and 7) over-dependence on government for work (Ofori [2000]; Rwelamila [2000]; Ebohon [2000]; Ebohon and Rwelamila [2000]).

In addition to the above factors, the surrounding business environment also imposes several constraints, such as inadequate access to vocational and management skills training and financial credit. Since many smaller contractors in Sub-Saharan Africa are very often unregistered and unaffiliated to the main employer bodies, they are therefore not in a position to benefit from the training or micro-finance programs to improve their productivity. Besides, the unpredictable and fluctuating nature of construction demand does not allow local enterprises to stabilize their business performance.

These endemic problems are strongly rooted in the construction industry and have seriously affected the development of indigenous construction capacity. This situation foments a dualistic structure in Sub-Saharan Africa's construction sector, uncovering the predominance of local construction firms at the much lower value-added end of construction activities while the high value-added end of the industry is dominated by foreign-owned construction firms (Ofori [2000]).

### **3. The Role of the Construction Industry in Burkina Faso**

Although, as we have previously pointed out, the construction sector consists of two sub-sectors, building works and civil engineering works, the macro-data on the construction sector has normally been calculated for only one sector, not totaled or analyzed separately for each sub-sector. Moreover, the available macro-data and documents for Burkina Faso are also very limited. It is therefore difficult to grasp the historical trend through the time series macro-data, and in this first part, the author tries to gather up the available data and documents and draw a brief picture of the two construction sub-sectors in Burkina Faso. The second part analyzes the role of the construction industry in Burkina Faso, on the basis of the macro-data.

### **3.1 Characteristics of Two Construction Sub-Sectors**

After the liquidation and privatization of several construction-related state enterprises<sup>7</sup>, the construction sector in Burkina Faso came to be totally dominated by the dualistic private sector of local or foreign-owned enterprises and informal or formal enterprises. As is true of other industries, a great number of informal enterprises operate in the construction industry. Despite the almost total lack of supporting institutions, the informal and small-scale enterprises (including such skilled or semi-skilled activities as bricklaying, plumbing and painting) play an important role in the construction industry in Burkina Faso (World Bank [1989]). Yet, while nearly 500 official artisan contractors and construction enterprises are registered in Burkina Faso, only 20 enterprises have a serious and solid reputation (GEMINI [1991]).

Building construction makes use of formal plans, normally prepared by architects or civil engineers, who work either in independent consulting firms called “bureaux d’études” or directly for the developers. Professionals of either type are in short supply in Burkina Faso: there are only 10 independent architectural firms, and some 60 qualified civil engineers, and many of the latter work mainly on roads and other public works projects, not on the construction of buildings (GEMINI [1991]). Hence, many of the larger construction enterprises have been curtailing their building activities, concentrating instead on public works contracts (roads, barrages and so on). The markets offer few new construction projects on a scale large enough to support the overhead costs of these larger firms, which depend on public works spending to remain strong. At present, the largest locally owned construction firm (called “KANAZOE”) undertakes only public works projects, and many other enterprises are attempting to follow this example. Because the demand for construction projects fluctuates and the number of qualified experts is still insufficient, professionals in the construction sector are therefore very often involved either in the two sub-sectors or exclusively in civil engineering works.

#### **3.1.1 Building Works Sub-Sector**

While most of the turnover in civil engineering works in Burkina Faso is currently earned from government contracts, the contracts for the construction of buildings are entered into according to more private arrangements. In 1991, following the industrial sector assessment by the World Bank [1989], USAID and the Chamber of Commerce, Industry and Artisan of Burkina Faso (CCIA) made an in-depth construction sub-sector

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<sup>7</sup> National Office of Wells and Drillings (ONPF) and National Office of Dams and Maintenance(ONBAH)

analysis for building works (GEMINI [1991]). Both reports focus only on the building works sub-sector, rather than seeking to evaluate the construction sector as a whole or making an assessment for both sub-sectors. GEMINI's detailed study analyzes the channels through which small and large firms interact to transform raw materials into products and to deliver products to markets. The results reveal five different market types in the building sub-sector: 1) rural traditional housing; 2) improved housing; 3) villa housing; 4) office/commercial/apartment space; and 5) rural office building. The total value of the first two markets is large, but it consists of many small transactions. The latter three markets are far smaller in value, but consist of a few large transactions. The former depend on individual demand for housing, which is and should remain strong. The latter depend on government and NGO spending on construction projects, which varies greatly from year to year (GEMINI [1991]). When we look at the sub-sector map drawn by GEMINI, we find it difficult to illustrate the structure because there is no straightforward progression from raw materials to products, and thereafter from products to market. Moreover, many of the actors in this system play multiple roles. For example, a developer may at the same time physically execute such an individual task as that of a wholesaler of construction materials. This creates such a vast number of horizontal linkages that it becomes difficult to grasp the main vertical channels that operate within the industrial system.

The owner/developer normally makes a contract with one or more organizations for minimal direct construction work. In many cases, as well, a contractor then hands on tasks through sub-constructors. Virtually all materials and labor are paid for. The number and complexity of contracts and subcontracts depends upon the developer and the size of the project. Different developers adopt different patterns for organizing construction. Government building contracts are administered by the Department of Architecture and Urbanization (DAU), while government civil engineering contracts are controlled by the Department of Roads (DGR). Both of these departments come under the control of the Ministry of Infrastructure, Transport and Housing (MITH).

As long ago as 1989, the World Bank pointed out several reasons for the decrease in building works in Burkina Faso. The central problem is a lack of owner capital, which in turn reduces private investment in this sub-sector. Owing to their very low purchasing power, most people are unable to self-finance the acquisition of modern homes, the building of which would be sufficiently rewarding to attract modern construction companies. They are therefore forced to solve their housing problem by building their homes themselves or by turning to the informal sector. In addition, land

tenure laws and the taxation of land ownership and income contain disincentives for the private investor.<sup>8</sup> As a result, the government has become the biggest builder in the modern sector for housing and public buildings, both of which are mainly financed by external institutions. With regard to the major constraints in the building sub-sector, the World Bank [1989] and GEMINI [1991] concluded as follows:

- 1) There is very strong competition from informal construction enterprises and foreign companies. Regarding informal firms, they have only a comparative advantage on cost, but not on quality. On the other hand, foreign companies have the capability to implement a large-scale project without any support financially and physically. However, there are no regulations favoring local enterprises when they are competitive in terms of price, quality and delivery date;
- 2) There is no system of pre-selection and classification of enterprises to be admitted to bidding. Any enterprise can bid regardless of its competence and financial situation;
- 3) The delay of payment from the government creates cash-flow problems or increased financial costs; and
- 4) Excessive dependence on imported materials has raised construction costs. Particularly, import taxes are too heavy: public works equipment is taxed at 78%. However, there is no tax exemption or abatement to reduce the burden on most industrial operators.

In the same 1989 report, the World Bank also pointed out, however, that, contrary to the results of GEMINI [1991], the problem of access to bank credit does not arise in the same way in the construction sector as in other industries. The construction enterprises finance their operations contract by contract: the signature on the contract gives ready access to credit (the pledging of the contract and an advance of 50% of the contract upon presentation of itemized accounts by the enterprise). They also often use supplier credits for the more expensive equipment.

### 3.1.2 Civil Engineering Works Sub-Sector

While, in Burkina Faso, appropriate data and documentation is available for the building sub-sector, much less information is available for the civil engineering sub-sector. As we note above, most of the turnover in civil engineering works is

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<sup>8</sup> There is a total lack of land ownership, concessions granted by the government without grantees, and very heavy taxation of rental income (World Bank 1989:27).

currently earned from government contracts, and these contracts totally depend on the situation of the transport sector. Given this situation, the formal sector still accounts for most of the activity in the economy. For example, KANAZOE is the dominant enterprise for civil engineering works, and accounts for 25% of the formal sector's turnover. KANAZOE has been involved in this activity for more than 20 years. The owner of this company is totally illiterate, but he is well-known as the richest, most successful and influential person in Burkina Faso. In an interview that the author had with a foreman working with KANAZOE [2007], she learned that the average annual turnover of his company could be around ten times the amount moved by the country's second biggest construction company. The foreman added "my company owns an uncountable number of construction equipment, including trucks, bulldozers, excavators and graders, and is one of two companies which can construct an asphalt pavement. With 20 years accumulated experience, the quality of our company's work on roads is excellent, but it is not yet so on irrigation systems such as bridges, dams, and canals, though we have started to make inroads into this market by using their influence on the government". One of GEMINI's results shows that, as of 1991, some 60 qualified engineers were employed in the public works sub-sectors (GEMINI [1991]). If KANAZOE were to cooperate with local engineers or attempt to use local subcontractors, it could somehow bring about progress in the construction industry as a whole. The problem, however, is that the owner of KANAZOE makes out all his contracts with members of his family, most of whom are not very well qualified.

The development of the transport sector normally begins with such road infrastructure projects as the construction of roads, their maintenance and rehabilitation. From 1992 to 1998, substantial progress was made in providing routine maintenance, but owing to lengthy resource mobilization periodic maintenance was delayed. In 2000, the government adopted a new transport sector strategy to systematically upgrade and maintain the priority road network and expand rural feeder roads. By 2005, 1,120km of road had been upgraded or maintained (World Bank [2005]). The transport sector program has also facilitated the involvement of small and medium-sized enterprises in road rehabilitation and maintenance. Although considerable progress has been made in privatizing road maintenance, SMEs still face difficulties in adequately responding to the GOBF's expectations for maintenance activities. Apart from certain technical limitations, SMEs also have trouble adhering to bidding procedures. Although, within this framework, the DGR is supposed to take the initiative in offering to assist the private sector and become a supportive counterpart of emerging construction-related enterprises, no constructive measures have until now been taken in matters facing

construction enterprises.

### 3.2 The Role of the Construction Industry in Burkina Faso: from Macro-Data

“Housing for all” has been a major slogan of the Burkina Faso government’s development policy since the 1983 revolution, and the development of a strong construction industry is a major national priority (GEMINI [1991]). During the implementation of the 1986-1990 five-year plan, construction projects alone accounted for over 20% of all government spending, an investment of over 80 billion CFA (GEMINI [1991]).<sup>9</sup> In this present section, the author has attempted, on the basis of the available primary data, to trace the influence that the construction industry has recently had on the economy and the labor market.

After the devaluation of the CFA franc, the construction industry contributed significantly to GDP growth: the average growth rate of the construction and public works before devaluation (1990-1993) was -4%; following devaluation, it increased to 10.2% (1994-1999). **Figure 1**, however, demonstrates that the line greatly fluctuated between 1990 and 1999, a steep rise alternating with a rapid drop. **Table 1** clearly indicates a low demand for construction in Burkina Faso. For the financial years 1989-1999, the average contribution to the GDP from the construction sector, which is comprised of both the building and the civil engineering sub-sectors, was only 5.7% before the devaluation of the CFA franc (1989-1993) and 4.7% after the currency reform (1994-1999) (INSD 1998/ 2003). This contribution of the construction industry to the GDP in Burkina Faso falls within the range that the World Bank has identified as typical of most developing countries, notably 3-8 per cent (World Bank [1984]). Even when viewed within the context of a developing country’s economy, however, the Burkina Faso construction industry remains underdeveloped.

**Figure 2** shows the breakdown of the GFCF from 1992 to 2003, while also showing the trends in investment activity for both private and public operations. The line indicates that after the devaluation of the currency, the GFCF increased continuously with the growth of private investment, except for a sudden dip between 1998 and 1999. This one-year hiatus might have been caused by the events in Côte d’Ivoire. Its overall upward trend, however, reflects: 1) important investments in infrastructure in preparation for the African Football Cup of Nationals (CAN) with the renovation for two sports stadiums in Ouagadougou, the construction of a new stadium in Bobo-Dioulasso, and the construction of new hotels; 2) the initiation of work at the

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<sup>9</sup> 1USD=612.2CFCA(1998)

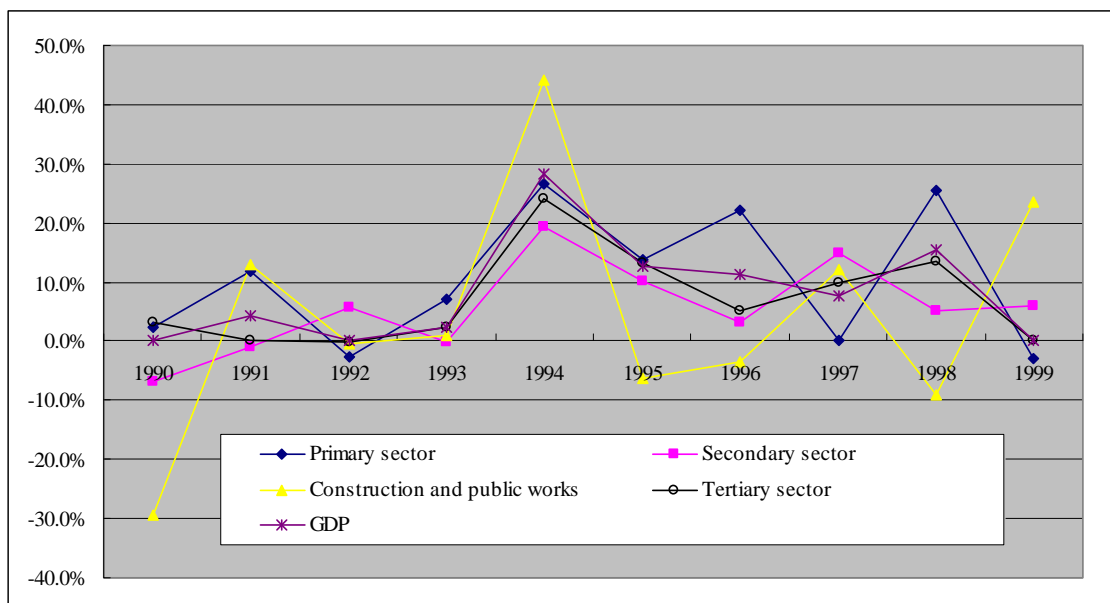
Ziga Dam; and (3) the implementation of large projects in agricultural development, health, and education. Urban redevelopment and large transport projects will follow in their turn. One further fact to note is that from 2002 to 2003, public investment decreased slightly. This was due to the worsening situation in Côte d'Ivoire, which led to a sharp rise in the inflation rate and had an especial influence on costs. We must note in addition that between 1992 and 2003 an average of 80 percent of public investment was externally financed, and there is no doubt that in the construction sector of Burkina Faso the public works (the equivalent for civil engineering works elsewhere) is highly dependent on external capital. Although we need to analyze the structure of foreign investment in much more detail, only limited data is available for either direct or indirect investment of foreign capital in Burkina Faso. This matter therefore remains of vital concern for future study.

**Table 1 Contribution of GDP (% and in billions of CFA francs)/ growth rate (%)  
1989-1999**

|                                      | 1989   | 1990   | 1991   | 1992   | 1993    | 1994   | 1995    | 1996    | 1997    | 1998    | 1999    |
|--------------------------------------|--------|--------|--------|--------|---------|--------|---------|---------|---------|---------|---------|
| <b>Primary sector</b>                | 230.5  | 236.0  | 263.5  | 256.0  | 273.9   | 346.7  | 394.5   | 481.4   | 482.0   | 605.0   | 587.5   |
| <b>Growth rate(%)</b>                |        | 2.4%   | 11.7%  | -2.8%  | 7.0%    | 26.6%  | 13.8%   | 22.0%   | 0.1%    | 25.5%   | -2.9%   |
| <b>In percent of GDP (%)</b>         | 29.6   | 30.3   | 32.5   | 31.5   | 32.9    | 32.4   | 32.8    | 35.9    | 33.4    | 36.3    | 35.2    |
| <b>Secondary sector</b>              | 184.6  | 172.0  | 170.3  | 180.0  | 179.9   | 214.8  | 236.9   | 244.7   | 281.2   | 295.5   | 312.9   |
| <b>Growth rate(%)</b>                |        | -6.8%  | -1.0%  | 5.7%   | -0.1%   | 19.4%  | 10.3%   | 3.3%    | 14.9%   | 5.1%    | 5.9%    |
| <b>In percent of GDP (%)</b>         | 23.7   | 22.1   | 21.0   | 22.2   | 21.6    | 20.1   | 19.7    | 18.2    | 19.5    | 17.7    | 18.8    |
| <b>Construction and public works</b> | 56.0   | 39.6   | 44.7   | 44.5   | 44.9    | 64.7   | 60.7    | 58.6    | 65.7    | 59.7    | 73.8    |
| <b>Growth rate(%)</b>                |        | -29.3% | 12.9%  | -0.4%  | 0.9%    | 44.1%  | -6.2%   | -3.5%   | 12.1%   | -9.1%   | 23.6%   |
| <b>In percent of GDP (%)</b>         | 7.2    | 5.1    | 5.5    | 5.5    | 5.4     | 6.1    | 5.0     | 4.4     | 4.6     | 3.6     | 4.4     |
| <b>Tertiary sector</b>               | 335.3  | 346.0  | 346.7  | 346.6  | 354.7   | 440.0  | 498.7   | 524.3   | 576.2   | 654.2   | 654.2   |
| <b>Growth rate(%)</b>                |        | 3.2%   | 0.2%   | 0.0%   | 2.3%    | 24.0%  | 13.3%   | 5.1%    | 9.9%    | 13.5%   | 0.0%    |
| <b>In percent of GDP (%)</b>         | 43.1   | 44.5   | 42.7   | 42.7   | 42.6    | 41.2   | 41.4    | 39.1    | 39.9    | 39.3    | 39.3    |
| <b>GDP at market prices</b>          | 777.8  | 778.4  | 811.7  | 812.6  | 832.3   | 1068.7 | 1204.4  | 1340.8  | 1442.6  | 1666.1  | 1666.6  |
| <b>Growth rate(%)</b>                |        | 6.7%   | 0.1%   | 4.3%   | 0.1%    | 2.4%   | 28.4%   | 12.7%   | 11.3%   | 7.6%    | 15.5%   |
| <b>Population (thousand)</b>         | 9034.1 | 9323.2 | 9621.5 | 9929.4 | 10247.2 | 9839.4 | 10076.8 | 10316.6 | 10562.7 | 10815.3 | 11070.9 |
| <b>GDP per capita</b>                | 86.1   | 83.5   | 84.4   | 81.8   | 81.2    | 108.6  | 119.5   | 130.0   | 136.6   | 154.0   | 150.5   |
| <b>Growth rate(%)</b>                |        | 3.4%   | -3.0%  | 1.0%   | -3.0%   | -0.7%  | 25.7%   | 10.0%   | 8.7%    | 5.1%    | 12.8%   |

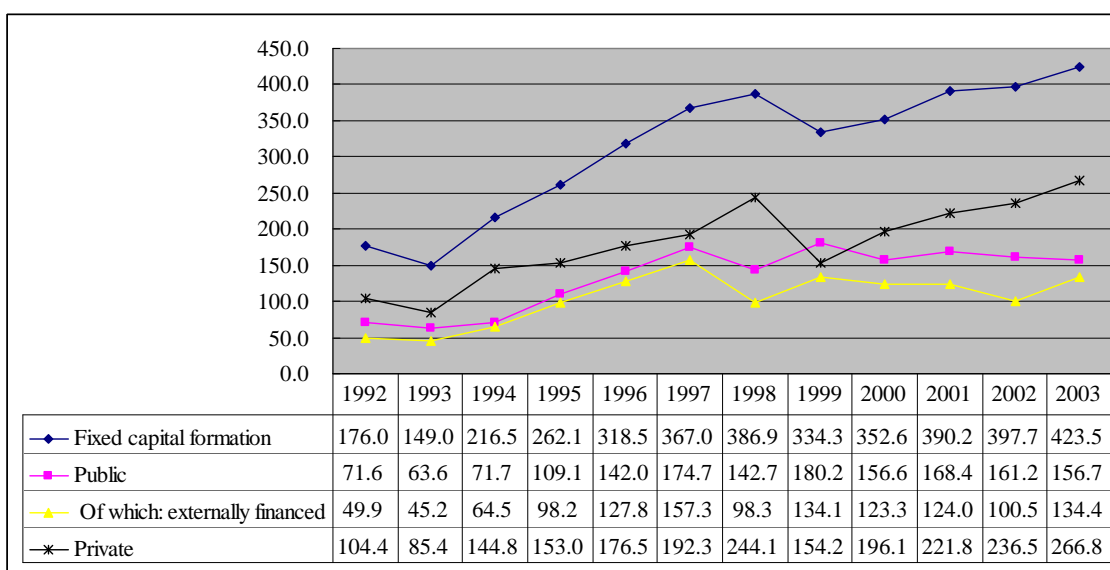
Sources: Calculated from INSD [1998 :18] and [2003 :18]

**Figure 1 Growth Rate (%) of Industries (including construction and public works)**



Sources: Calculated from INSD (1998:18) and (2003:18)

**Figure 2 Breakdown of Gross Fixed Capital Formation (in billions of CFA francs)**



Sources: IMF country report (1999:6; 2003:7; 2005:50)

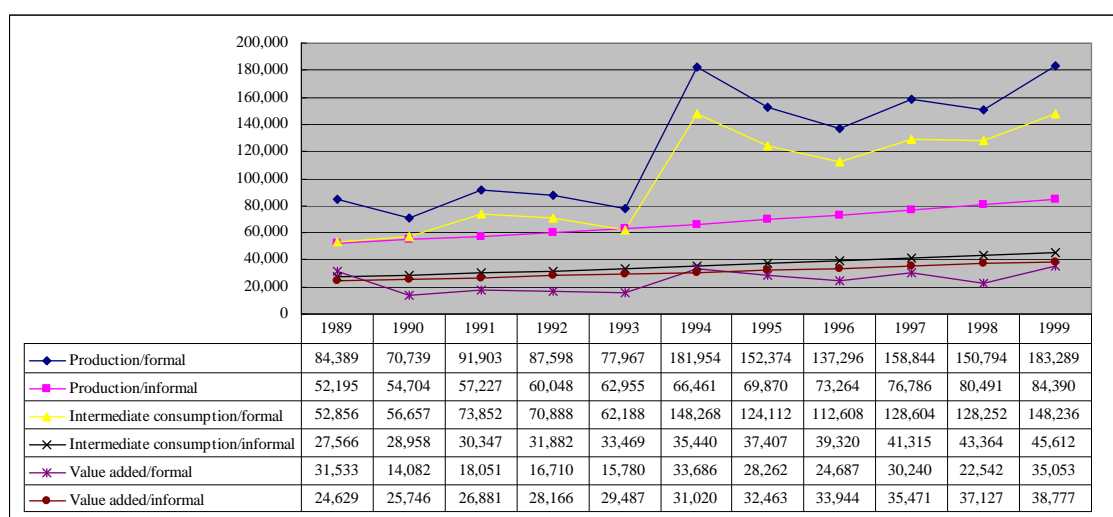
Figure 3 also shows that the total production of the formal sector of building and construction works has sharply increased in value from 78 billion CFA in 1993 and 183 billion CFA in 1999. This contribution plays an important role in the secondary sector, where an average growth rate of -0.4% between 1989 and 1993 increased to 10% between 1994 and 1999. This dynamism has been sustained by events such as those



mentioned above, and it ought to be boosted in 2006 and 2007 by major infrastructure projects funded by the government and aid donors.

Nevertheless, we should not fail to notice that, as a result of the high intermediate consumption, the added value of the formal sector does not fluctuate as does the total production. As a percent of GDP, the intermediate consumption of the formal sector goes up and down in step with the growth rate of construction and public works (see **Figure1**). This means that the intermediate consumption of the formal sector has a great impact on the contribution of the construction sector to the GDP. In contrast, both the total production and the value added of the informal sector are leveling out and are seldom affected by external factors. This is because the countries normally use local resources. In general, the devaluation of the CFA franc has stimulated both capital investment and export; it has also heightened import demand, especially in a country like Burkina Faso, which has to import a large portion of its construction materials,<sup>10</sup> although excessive dependence on imported materials can be seen only in the formal sector, not particularly in the informal sector; but we must add that we have only limited amount of information about the availability of construction-related materials in Burkina Faso, and we shall need to carry out further investigations to find the best way to utilize local resources and reduce dependence on imported materials.

**Figure 3 Total Production of Construction Works (formal and informal sector/ in billion of CFA francs)**



**Sources:** INSD(1998:64-5) and (2003:65-6)

<sup>10</sup> Such construction-related primary materials as sand, gravel, clay, stone, straw, and some types of wood are obtained locally. Cement, iron bar, galvanized iron, and building timber are all imported. Especially, cement is by far the most important import, brought in from Togo and the Côte d'Ivoire (GEMINI [1991:D-9])

**Table 2 Contribution to Labor Market**

|                             | 1985           |                | 1994-95        |                | △ 85/95       |
|-----------------------------|----------------|----------------|----------------|----------------|---------------|
| Industry                    | 52,524         | 22.10%         | 119,007        | 29.60%         | 126.60%       |
| Construction & Public works | 10,682         | 4.50%          | 13,830         | 3.40%          | 29.50%        |
| Trade                       | 111,429        | 46.90%         | 177,448        | 44.20%         | 59.20%        |
| Service                     | 62,823         | 26.50%         | 91,381         | 22.80%         | 45.50%        |
| Household enterprises       | 193,588        | 81.50%         | 348,936        | 86.90%         | 80.20%        |
| Micro enterprises           | 43,870         | 18.50%         | 52,370         | 13.10%         | 20.20%        |
| <b>Total</b>                | <b>237,458</b> | <b>100.00%</b> | <b>401,666</b> | <b>100.00%</b> | <b>69.20%</b> |
| Formal sector               | 71,161         |                | 101,807        |                | 43.10%        |
| Agriculture sector          | 3,707,492      |                | 4,129,730      |                | 11.40%        |

**Source:** Calculated from *Le Secteur Informel au Burkina Faso: Evolution sur Longue Periode et Suivi Conjoncturel*, Ministere de l'Economie et des Finances, GOBF

It is not easy to trace the number of laborers in the construction sector in any set time series. According to the available data from GOBF, the construction sector in Burkina Faso has seen an increase in informal employment opportunities from 10,682 in 1985 to 13,836 in 1995 (**Table 2**). While some of the employment shedding could be attributed to the shift towards flexible production strategies such as labor-only subcontracting, a practice that counteracts the unevenness of construction demand, this cannot disguise the fact that the industry has, over the past decade, cut back significantly on opportunities for formal employment. Even so, recent statistical data has indicated that the construction industry creates the third largest number of enterprises, with 2,056 registered enterprises between 2000 and 2005 and 343 enterprises every year (CCIA-BF Chambre de Commerce, d'Industrie et d'Artisanat du Burkina Faso [2006])(**Table 3**). Since the authorities advocate the construction industry as an important means of generating employment, recent numbers show that the construction industry as a whole plays a vital role in the labor market of Burkina Faso, not only for informal employment but also for formal employment.

**Table 3 Number of Registered Enterprises**

| Category                          | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006         |
|-----------------------------------|-------|-------|-------|-------|-------|-------|--------------|
| Artisan                           | 77    | 82    | 93    | 95    | 139   | 223   | 709          |
| Commerce                          | 1,253 | 1,866 | 2,283 | 1,785 | 2,518 | 2,228 | 11,933       |
| Industry                          | 357   | 352   | 399   | 453   | 555   | 494   | 2,610        |
| <i>Buildings and Public works</i> | 296   | 278   | 326   | 353   | 421   | 382   | <b>2,056</b> |
| Service                           | 636   | 848   | 1,161 | 1,360 | 1,517 | 1,510 | 7,032        |
| Total                             | 2,323 | 3,148 | 3,936 | 3,693 | 4,729 | 4,455 | 22,284       |

**Source:** Chambre de Commerce, d'Industrie et d'Artisanat du Burkina Faso (CCIA-BF), unpublished data, 2006

The construction industry has been growing rapidly since the devaluation of the CFA franc and has generated employment in both the formal and informal sectors. In the meantime, however, the primary data given above and the accounts in the literature clearly reveal that because of external factors and consequent and constant fluctuations in demands for construction, this sector is very fragile. The construction industry in Burkina Faso has an extremely high import-dependent structure, and an increase in demand induces a large increase in imported intermediate goods, which, in particular, reduces the value added of the formal construction-related sector. This implies a lack of sufficient supporting industries capable of supplying raw materials and intermediate inputs to the construction industry in Burkina Faso.

Owing to a lack of literature and data on the civil engineering works sub-sector in Burkina Faso, we needed to obtain primary data and information on this sub-sector for ourselves, and the following section aims to present an overview of the entire construction industry in Burkina Faso on the basis of the results of a detailed firm-level survey. While the author obtained the list of civil engineering enterprises from DGR, it should be noted that there is no clear-cut distinction among construction-related works between the building and engineering sub-sectors, as the first part of this chapter indicated. The works of these sub-sectors always overlap each other.

#### **4. Findings from Quantitative Survey**

The previous sections have sought to clarify in general the several constraints that impede construction related-SMEs. This section will examine the present situation and the characteristics of SMEs in the construction industry of Burkina Faso in order to uncover the crucial constraints that impede the growth of the SMEs. The aims are to identify: 1) external and internal factors that impede the construction industry in Burkina Faso; 2) the possible constraints that impede growth of SMEs in Burkina Faso;

and 3) the existing inter-firm relationships in the country's construction industry. Our discussion is based in the main on the findings of a detailed firm-level questionnaire survey carried out in 2004 and from the available literature. It should be noted that the role of this section is to offer a baseline survey for the in-depth inter-firm linkage analysis, which can be found elsewhere.

## **4.1 Background and Method of Survey**

### **4.1.1 Survey Site**

We carried out the collection of data in Ouagadougou, the capital city, which has a population of 1,200,000 (2005) and enjoys a rapid growth rate of 9.8% per annum<sup>11</sup>. For the past couple of years, construction and public works projects have been visibly active in Ouagadougou, and recently, the informal sector has been a remarkable presence, owing to the crisis in Côte d'Ivoire and opportunities created by new city planning regulations, while local construction material producers have profited from the decline of imported construction materials from Côte d'Ivoire. Consequently, in 2002 the activities of construction and public works increased at a rate of 9.6%<sup>12</sup>. Additionally, the business district recently moved to a new area, "Ouaga 2000", which is part of an urban development project. Many heavy construction projects were carried out in order to prepare for the Francophone Conference held in November 2004.

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<sup>11</sup> Available at the site of Mairie de Ouagadougou: <http://www.mairie-ouaga.bf>

<sup>12</sup> Direction Générale de l'Économie et de la Planification. *Rapport sur l'Économie [2002]: Commerce Extérieur, Croissance Économique et Lutte contre la Pauvreté*. Ministère de l'Économie et du Développement. Ouagadougou [2002:18].

**Figure 4 Map of Burkina Faso**



**Source:** Author

#### 4.1.2 Classification of Samples

Because of a lack of any clear-cut definition of micro, small and medium-sized construction enterprises, the Department of Roads (DGR) and the Ministry of Infrastructure, Transport and Housing (MITH) recently published a new method of classification according to the quality and quantity of human resources, the materials and the financial capacity of the various enterprises. Owing to a lack of the efficient evaluation tools that are needed to verify each applicant, however, this classification has still not yet been applied for practical use. Therefore, as **Table 4** indicates, the author simply classified enterprises that suit the purpose of this study on the basis of how they were taxed and registered, and on their annual turnover. Samples were divided into two groups, formal construction-related enterprises (FCE) and informal construction-related enterprises (ICE).

**Table 4 Classification of Enterprises**

| Classification of Enterprises                  |                  | Characteristics  | Legal Status  | Turnover                        |
|--|------------------|--|---|---------------------------------|
| Informal Construction-Related Enterprises(ICE) | Unregistered ICE | Main purpose of doing business is to acquire subsistence income or complementary income for surviving. Normally self-employment like daily labor and no technical or professional competence | No legal status and does not pay any tax  | Less than 15 million CFA Francs |
|  | Registered ICE   | Purposes of doing business is to acquire income and improve their business. Normally self-employment or with family members, friends, and apprentices and elementary technical competences   | No well-defined legal status, but pays taxes(CIS)<br>Registered with the tax office | Less than 15 million CFA Francs |
| Formal Construction-Related Enterprises(FCE)   |                  | Entrepreneurial spirit with medium- and long-term vision. Owner, manager, and staff (including family, apprentices and so on) and a certain level of technical and managerial competencies   | Well-defined legal status and activities with full-time basis                       | More than 15million CFA Francs  |

**Source:** Author

The FCE are those enterprises that display an entrepreneurial spirit and accumulated experience in their domain with sound legal status<sup>13</sup> and medium- and long-term vision. On the other hand, the ICE group was further subdivided into registered and unregistered ICE: the registered ICE are those enterprises registered with the taxation office as belonging to the informal sector and as having paid a lump sum tax called the CIS (Contribution of Informal Sector) while unregistered ICE were those who ignored these conditions. This taxation plan allows the informal sector enterprises to have a maximum annual turnover of up to 15 million CFA Francs. Yet since, as we saw in the preceding sections, only one large-sized construction enterprise, KANAZOE, has operated in Burkina Faso following the liquidation of two public construction companies, we excluded large-sized enterprises from this study.

#### 4.1.3 Method

The data collection took the form of structured questionnaires and was carried out between July and August of 2004, with the assistance of two students from the University of Ouagadougou. A total of 66 informal construction-related enterprises (ICE), of which 57 were formal construction-related enterprises (FCE), were interviewed for this study (**Figure 5**). As we mentioned above, we obtained the population data of FCE from the DGR. The ICEs were identified and interviewed at the construction site of Ouaga 2000.

The questionnaire was divided into six parts: 1) Attributes; 2) Business background; 3) Financial situation; 4) Business environment; 5) Business service; and 6) Business relations. The first and the second parts of the questionnaire covered each

<sup>13</sup> In order to obtain such a sound legal status, entrepreneurs will have to go through numerous steps, which takes three to four weeks, and pay duties of at least 50,000CFA francs before he can even start activities(Ouedrago [1996:46]).

respondent's background characteristics (age, sex, birthplace, tribe, religion, marital status, number of children, level of education, number of employees) and facts about their company (number of employees and turnover). In addition, the results drawn from the remaining questions, which ascertain characteristics and the present situation of the construction industry in Burkina Faso, are summarized in **Appendices 1 and 2**.

#### 4.1.4 Characteristics of Samples

**Appendix 1** indicates the characteristics of the samples successfully gathered in Burkina Faso, the data coming from 123 construction enterprises, including 66 of the ICEs and 57 of the FCEs. The respondents' median age was about 36 for the ICEs and 45 for the FCEs, while 64% of the ICE staff and 91% of the FCE staff were married with a mean of 2 and 4 children, respectively. Given that most of the enterprises selected for this study were male-dominant, 95% of both the ICE and FCE staff were male. These numbers are possibly attributable to socio-cultural barriers that block the advance of women in the profitable areas (GEMINI [1991])<sup>14</sup>. 44% of the ICE staff and 32% of the FCE staff were born and grew up in Ouagadougou where this survey was carried out. Around 70% of both ICE and FCE staff members were Mossi, the main tribal group in Burkina Faso, while the ratio of Christian and Muslim was about equal. Only 10% of the ICE staff had completed higher education, including both domestic and foreign universities and technical colleges, while 40% of the FCE staff had completed studies at this level. Interestingly, the number of illiterate ICE respondents (11%) was surprisingly low, compared to the average level for the urban informal sector in Burkina Faso where more than 50% are illiterate (Ouedrago [1996]). It seems reasonable to suppose that those who became unemployed owing to the liquidation of two state-owned companies flowed into the informal sector and pushed up the education level of the ICE staff. In terms of educational levels by age, middle-aged entrepreneurs (30s and 40s) of both ICE and FCE have a markedly higher level of educational attainment than the rest of the age groups and play an important role in the construction sector. About 40% of ICE and 50% of FCE staff used to be engaged in construction-related works before they took up their present job, and around 10% of both ICE's and FCE's respondents grew up in a family headed by a construction-related worker, while only 5% of ICE and 7% of FCE entrepreneurs took over their family's business. In passing, 32% of the ICE and 23% of FCE members had a farming family

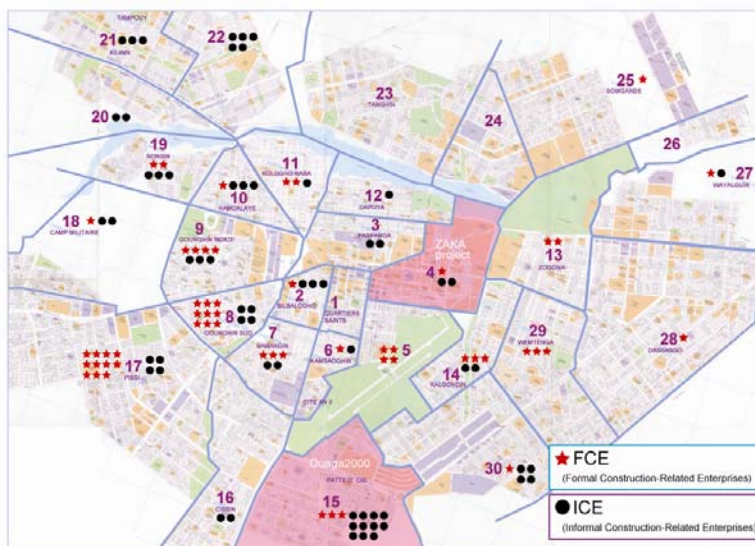
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<sup>14</sup> Even though several legal barriers that prevented women from entering business have been lifted, banks generally do not provide a loan to women without their husband's or father's consent. The basic obstacle facing women, however, is the conception held by all Burkinabé that houses and construction belong to men (GEMINI [1991:D6-7]).

background. One can therefore state fairly confidently that there is no direct correlation between family background and an entrepreneur's present job.

In terms of business background, the sample of ICE staff consisted of three full-time workers and 20 part-time workers, compared with the sample for FCE, which consisted of eight full-time workers (including one qualified full-time engineer) and 30 part-time workers, plus 2 apprentices. There is a considerable shortage of qualified engineers in Burkina Faso, and thus, in most cases, qualified engineers are the people who own the FCEs. ICE and FCE enterprises have been in existence for a median of 7 years and 10 years, respectively, and most of them were started either in the 1990s or 2000s. Both groups have had similar years of experience in the construction sector and these correspond to the time during which their respective companies have existed.

**Figure 5 Distribution Map of Samples (location of workshop or office of entrepreneurs)**



**Source:** Based on the Author's questionnaire survey in 2004

FCE's primary activities in the construction sector in order of importance are: 1) civil engineering works; 2) building works; and 3) other related construction works. For ICE, they are: 1) other related construction works; 2) building works; and 3) civil engineering works. In many cases, the two groups work at similar tasks, and cope with both building works and civil engineering works flexibly according to the demand for construction work. Additionally, 42% of the FCE entrepreneurs are involved in other activities, such as trading, transport, leasing of construction equipment, and real estate,



while 23% of the ICE entrepreneurs are involved in animal breeding, trading, restaurants, shops and so on. Although this research did not consider the amount of income from such side businesses, such side income should be included in a future study. On average, both ICEs and FCEs work eight hours per day and six days per week. Amongst the samples, only two entrepreneurs of FCEs had ISO 9000-9005<sup>15</sup>.

## **4.2 Result I: Surrounding Business Environment**

### **4.2.1 Financial Situation**

As **Table 5** shows, the initial capital for establishing a new enterprise is invariably acquired by the entrepreneur's own means (73% of ICEs and 79% of FCEs) or from their family members (21% of ICEs and 12% of FCEs). The mean amount of start-up capital is 500,000 CFA Francs for an ICE and 2,000,000 CFA Francs for an FCE. In general, inaccessibility to formal financial institutions is one of the constraints on local enterprises in Africa. In this survey, only 3% of ICEs and 9% of FCEs had access to a formal financial institution of a kind similar to conditions in other African countries.

For the fiscal year 2003, the mean yearly turnover of the FCEs was nearly 100,000,000 CFA Francs (approximately 8,300,000 CFA per month) and the mean yearly profit was about 8,000,000 CFA Francs (approximately 670,000 CFA per month), which amounts to just 8% of turnover. While 65% of the FCE entrepreneurs felt that their business performance in 2003 had improved either notably or moderately when compared with the fiscal year 2002, around 20% of the FCE respondents witnessed a deterioration of their activities over the same period owing to a lack of contracts, unfair competition and inadequate access to financial resources. In such situations, they paid 4,200,000 CFA Francs in tax in 2003, or 4% of their total turnover. The vast majority of the entrepreneurs felt that the tax burden was too high.

To gauge the financial situation of the ICEs, the author questioned respondents in different ways in an effort to obtain their most accurate recollections. In 2003, the highest mean monthly turnover was 1,650,000 CFA Francs, and the lowest was 200,000 CFA Francs, while for same period, the average monthly turnover was 350,000 CFA Francs, or an annual turnover of 4,200,000 CFA Francs, which amounts to only 3.5% of the mean annual turnover of the FCEs.

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<sup>15</sup> ISO 9000 is a family of ISO (International Organization for Standardization) standards for quality management systems.

**Table 5 Summary of Financial Situation (CFA francs)**

|                         | ICE        |           | FCE        |           |
|-------------------------|------------|-----------|------------|-----------|
|                         | Yearly     | Monthly   | Yearly     | Monthly   |
| Start-up capital        | 500,000    |           | 2,000,000  |           |
| Firm's Debt(as of 2003) | 635,000    |           | 5,000,000  |           |
| Turnover (2003)         |            |           | 99,603,060 | 8,300,255 |
| Highest                 | 19,800,000 | 1,650,000 |            |           |
| Lowest                  | 2,400,000  | 200,000   |            |           |
| Average                 | 4,200,000  | 350,000   |            |           |
| Profit(2003)            |            |           | 8,000,000  | 672,659   |
| Tax(2003)               | 125,000    |           | 4,200,000  |           |
| Operation costs(2004)   | 649,000    | 54,083    | 2,453,333  | 204,444   |
| Personal expenses(2004) | 277,875    | 23,156    | 624,833    | 52,069    |

**Source:** Based on the Author's questionnaire survey in 2004

While nearly 60% of the ICE respondents thought that compared with 2002 sales had increased somewhat, one-fourth of the entrepreneurs felt there had been a deterioration in their business performance owing to a lack of contracts. Half of the ICE entrepreneurs paid the CIS (Contribution of Informal Sector) Tax, a mean amount of 125,000 CFA Francs; around 70% agreed with the FCEs that the tax was too high.

**Table 6** offers a breakdown of the operation costs of both the ICEs and the FCEs, and the expenses of the ICEs in order of importance are: 1) Payroll (28%); 2), Salary for owner (27%); 3) Overheads, including rent, electricity and insurance (19%); 4) Fuel (17%), Technical expenses (6%), and Taxes (3%). FCE expenses are: 1) Fuel (28%); 2) Payroll (27%); 3) Salary for owner (22%); 4) Overhead (10%); 5) Taxes (9%); and 6) Technical expenses (4%).

**Table 6 Breakdown of Operation Costs**

| Operation costs           | ICE              |         | FCE                |           |
|---------------------------|------------------|---------|--------------------|-----------|
|                           | Range            | Mean    | Range              | Mean      |
| 1.Fuel expense            | 20,000-3,875,000 | 93,000  | 15,000-500,000,000 | 600,000   |
| 2.Operation cost          |                  | 102,000 |                    | 215,000   |
| a.rent                    | 5,000-125,000    | 20,000  | 0-800,000          | 40,000    |
| b.electricity             | 2,000-310,000    | 20,000  | 5,000-1,250,000    | 50,000    |
| c.insurance fee           | 2,000-1,000,000  | 62,000  | 8,333-3,910,000    | 125,000   |
| 3.Technical expense       | 833-500,000      | 34,000  | 3,333-8,333,333    | 100,000   |
| 4.Tax fee                 | 417-260,000      | 18,000  | 5,917-9,166,667    | 208,333   |
| 5.Payroll cost            | 5,000-5,760,000  | 150,000 | 5,000-19,000,000   | 615,000   |
| 6.Wage for owner          | 15,000-500,000   | 150,000 | 60,000-1,000,000   | 500,000   |
| Total mean operation cost |                  | 649,000 |                    | 2,453,333 |

**Source:** Based on the Author's questionnaire survey in 2004

**Table 7** shows how much they spend for their personal expenses. For the ICEs, such expenses consist of: 1) Mobile phone (18%); 2) Food (17%); 3) Transportation (13%); 4) Savings (9%); 5) Phone, Leisure, Education (7%); 6) Rent (5%); 7) Clothing, Electricity, Health care, and Aid to parents (4% for each); and 8) Social ceremonies (1%). The FCEs present a similar pattern of expenditure: 1) Mobile phone, Food (15%); 2) Transportation (13%); 3) Savings (11%); 4) Rent (8%); 5) Aid to parents and Phone (5% for each); 6) Clothing, Electricity, Health care, and Education (4% for each); 7) Leisure (3%); 8) Water (2%); and 9) Social ceremonies (1%).

**Table 7 Breakdown of Personal Expenses**

| Personal expenses    | ICE            |         | FCE             |         |
|----------------------|----------------|---------|-----------------|---------|
|                      | Range          | Mean    | Range           | Mean    |
| 1.Food               | 10,000-200,000 | 50,000  | 25,000-310,000  | 100,000 |
| 2.Clothing           | 1,000-80,000   | 10,000  | 3,333-125,000   | 25,000  |
| 3.Rent               | 5,000-30,000   | 15,000  | 20,000-125,000  | 50,000  |
| 4.Electricity        | 2,000-45,000   | 10,000  | 2,000-324,008   | 26,000  |
| 5.Water              | 1,500-25,000   | 500     | 1,000-300,000   | 15,000  |
| 6.Health care        | 2,000-50,000   | 10,000  | 2,083-150,000   | 25,000  |
| 7.Education          | 250-450,000    | 18,750  | 1,250-800,000   | 25,000  |
| 8.Leisure            | 2,083-50,000   | 20,000  | 5,000-200,000   | 22,500  |
| 9.Transportation     | 3,333-300,000  | 35,500  | 8,333-2,100,000 | 87,500  |
| 10.Aid to parents    | 417-100,000    | 10,000  | 5,000-155,000   | 35,500  |
| 11.Social ceremonies | 208-100,000    | 3,125   | 1,500-250,000   | 8,333   |
| 12.Saving            | 0-260,000      | 25,000  | 10,000-500,000  | 75,000  |
| 13.Phone             | 4,000-80,000   | 20,000  | 5,000-742,926   | 30,000  |
| 14.Mobile Phone      | 5,000-775,000  | 50,000  | 5,000-400,000   | 100,000 |
| expenses             |                | 277,875 |                 | 624,833 |

**Source:** Based on the Author's questionnaire survey in 2004

The monthly operation costs for the FCEs (2,200,000 CFA Francs) amount to 27% of their turnover, four times those of the ICEs (547,000 CFA Francs). While the former figure may amount to one-fourth of ICE's highest monthly turnover, it exceeds their lowest average monthly turnover. Additionally, the personal costs of both FCEs and ICEs exceed their mean monthly wages, which are, respectively, 500,000CFA and 150,000CFA. The amount of ICE debt is about the same as their mean monthly operation costs while FCE debt is double the amount of their operation costs.

#### 4.2.2 Business Environment

The first (multiple-choice format) question asked respondents how often they have to deal with unpredicted changes in economic and financial policies that affect their

business. Nearly 40 % of the ICEs and 67% of the FCEs answered either “Frequently” or “Always”. The approximate cost of registration is 15,000 CFA Francs for both ICE and FCE, requiring respectively 10 days and 14 days for processing. As we noted in the previous chapter, applicants wanting to start up a business have to go through 10 steps, and even if everything goes smoothly, it takes three to four weeks to complete all the procedures, with fees ranging from 50,000 CFA Francs to 100,000 CFA Francs (Ouedraogo [1996]). The registration procedure covered in this survey is just one step out of the ten required for registration with the Chamber of Commerce.<sup>16</sup> When asked about the accessibility of information on laws and regulations, 44% of the ICE and 61% of the FCE answered that it is easy. Problems arise, however, since different regional areas impose different regulations (business registration, business licensing, regulations on tax, regulations on tariffs and trade, foreign exchange regulations, environmental regulations, safety regulations, and regulations on real estate), and there are always minor problems in all areas: about 60% of FCE very often have a problem with tax regulations, which constitute a real burden for their businesses. As more than half of the ICEs have not paid CIS, one can therefore assume that they are not exposed to certain tax regulations that do not affect their business (see **Figure 6**).

#### 4.2.3 Business Service and Others

Construction entrepreneurs seek to improve their business and the types of services that ICEs say that they require for this are as follows: 1) engineering (73%); 2) business strategies (55%); 3) information technology (44%); 4) accounting (41%); and 5) insurance and social security (36%). For FCEs they are: 1) engineering (72%); 2) information technology (49%); 3) accounting (46%); 4) business strategies (39%); and 5) legal services. Only 2% of either ICEs or FCEs have received business services or subsidies from the public sector. In addition, the majority of both ICE and FCE entrepreneurs feel that “accessibility of finance” and “government tax regulations” are the main constraints for the operation and growth of their business.

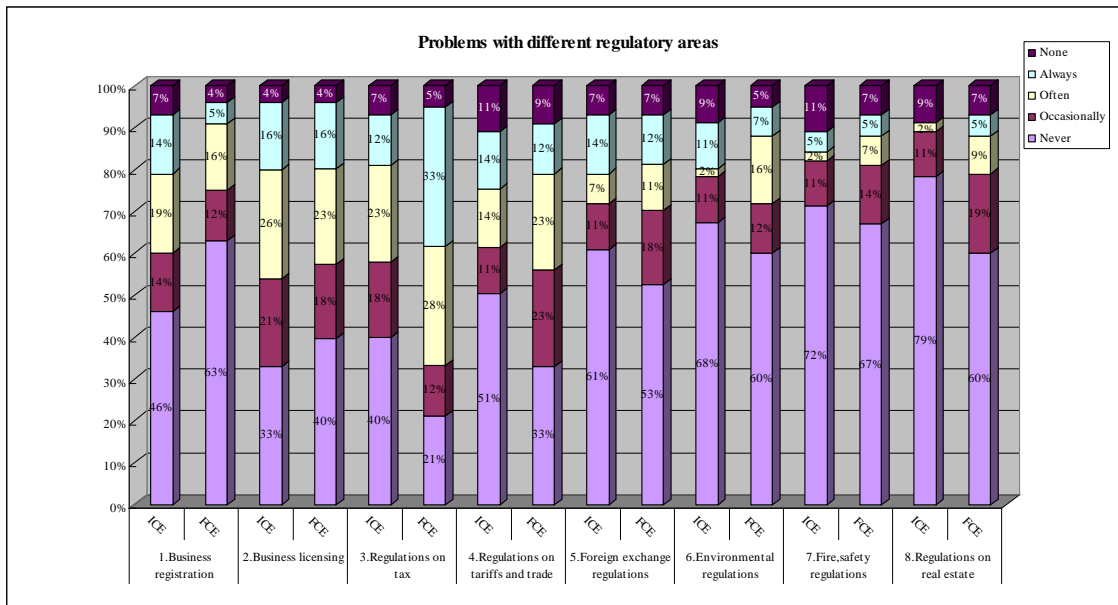
Local companies compete with each other either through their subcontractor or local partner, and half the ICEs feel that their major competitors are domestic small and medium-sized enterprises and micro-enterprises (or informal enterprises), while the FCEs feel that domestic small, medium-sized and large enterprises threaten their business. In reality, however, most major projects are taken over by foreign-owned

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<sup>16</sup> Since the procedures for the registration are too complicated and need a considerable number of documents, in many cases FCE just ask their lawyer to do all the paper work. Therefore, most entrepreneurs are not really familiar with the details of registration and its cost. In addition, the ICEs consider the first fee they paid for the CIS to be their registration fee.

construction companies. **Figure 7** indicates the main problems that both ICE and FCE believe that they are facing in order to operate their business: 1) financing; 2) corruption<sup>17</sup>; and 3) taxes and regulations.

**Figure 6 Problems with Different Regulatory Areas**



Source: Based on the Author's questionnaire survey in 2004

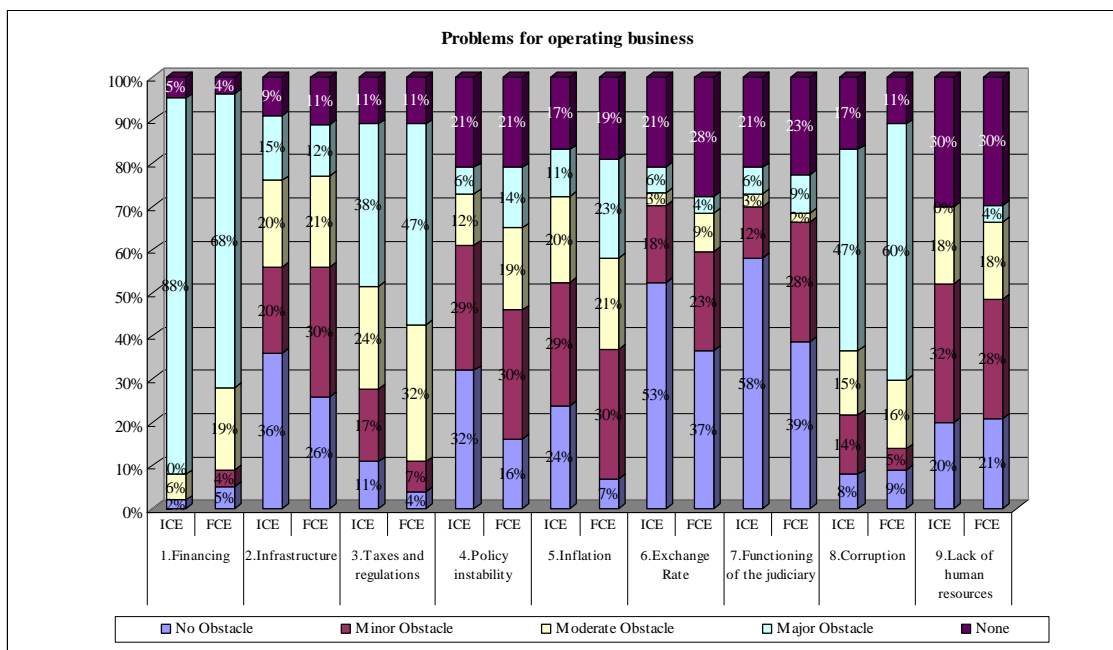
### 4.3 Result II: Business Relations

#### 4.3.1 Relationships with Business Associations

Only 2% of the ICE respondents belong to a business association, while half of the FCE respondents are involved with some association or other. Yet the FCE business association members said that they do not receive much benefit from their business association and they feel that insufficient help is given to them: they fault a lack of publications and bulletins, courses offered, advice on legal matters, information provided about other enterprises, information about government regulations, information about markets, information about new products and technology, ways and means to resolve labor problems, or to lobby or resolve grievances, or on how to acquire government assistance. Owing to what they consider such an inadequate service, half of the FCE respondents are not satisfied with their affiliated associations.

<sup>17</sup> Opaque processes of tender and tacit consent of unofficial payment are still deeply rooted in the construction industry of Burkina Faso. According to some respondents, the most serious problem is that Kanazoe, the owner of the biggest construction company, is the most influential man in this country, even more than the president.

**Figure 7 Problems for Operating Business**



**Source:** Based on the Author's questionnaire survey in 2004

#### 4.3.2 Governmental Sector

The companies' relationship with governmental organizations (ministries, municipal and provincial governments, state agencies, state-owned enterprises and so on) seems patchy: only 58% of the FCEs and 14% of the ICEs had formal contracts with a governmental organization during the last two years. Most of the contracts were signed with ministries and involved the construction or maintenance of physical infrastructure such as roads, irrigation systems, schools, governmental buildings and so on. **Table 8** indicates that when the companies do business with the governmental sector, the size of contracts as opposed to the respondents' capacity and ability to obtain information on public tenders does not seem to be a major problem for either the ICEs or the FCEs. Nevertheless, both groups consider that delay of payment, the nature of the tender process and the requirement for unofficial payments and local competition do constitute major problems. The ICEs also experience difficulty in pre-qualifying for the short-list. This "short-list" is a list of the final selected participants (normally five candidates) for the tender, and they must be technically qualified and propose a compatible price for the project. Yet while the participating candidates need, of course, to have a certain degree of experience in the particular field, the criteria for being on the list are not really transparent, for to be included on this list or to acquire a favor from the government, the majority of respondents offer 10-15% of the total value of the contract as a tacit

unofficial payment. Consequently, 47 % of the FCEs emphasized that the way in which the short-lists are made up is not at all fair.

**Table 8 Difficulties of Dealing with Public Sector**

| Difficulties of dealing with public sector               |     | No problem | Minor | Moderate | Major | None |
|--|-----|------------|-------|----------|-------|------|
| 1.Obtaining information on public tenders                | ICE | 15%        | 8%    | 11%      | 8%    | 59%  |
|  | FCE | 35%        | 23%   | 11%      | 5%    | 26%  |
| 2.Pre-qualifying to be in the short-lists                | ICE | 11%        | 2%    | 6%       | 21%   | 61%  |
|  | FCE | 16%        | 18%   | 19%      | 21%   | 26%  |
| 3.The tender process:transparency,fairness               | ICE | 9%         | 2%    | 8%       | 24%   | 58%  |
|  | FCE | 14%        | 9%    | 21%      | 28%   | 28%  |
| 4.The delay of payment                                   | ICE | 8%         | 6%    | 12%      | 15%   | 59%  |
|  | FCE | 2%         | 11%   | 11%      | 51%   | 26%  |
| 5.The size of contracts as opposed to your capacity      | ICE | 26%        | 8%    | 2%       | 5%    | 61%  |
|  | FCE | 47%        | 12%   | 7%       | 7%    | 26%  |
| 6.Competition(with foreign company,private company,etc.) | ICE | 9%         | 5%    | 12%      | 17%   | 58%  |
|  | FCE | 5%         | 19%   | 26%      | 21%   | 28%  |
| 7.Requirement of unofficial payment                      | ICE | 9%         | 2%    | 6%       | 21%   | 62%  |
|  | FCE | 7%         | 16%   | 12%      | 39%   | 26%  |

**Source:** Based on the Author's questionnaire survey in 2004

#### 4.3.3 Private Sector

A little more than 70% of both ICE and FCE have a cooperative relationship with other enterprises in their industry, in such matters as lending or borrowing machinery, equipment, automobiles, skilled workers and so on. Moreover, half the respondents often exchange ideas or discuss problems or strategies with other local enterprises in their industry. Besides these obvious cooperative relationships, we also discovered other contracting relationships. The major problem for both groups when working with contractors, government or larger construction enterprises, is the delay of payment. With subcontractors, late delivery of material and poor quality of work constitute minor problems for both FCEs and ICEs, while the FCEs feel that irrespective of the contract and poor quality of material are also minor problems. The detailed analysis of contracting relationships will be shown elsewhere.

## 5. Conclusion

Finally, the author will here attempt to offer a broad assessment of the constraints that impede growth of SMEs in the construction industry of Burkina Faso. The catalogue of these constraints is mainly abstracted from the findings of the questionnaire and the supplementary interview analyzed above:

### *1) Lack of qualified engineers and construction-related equipment*

As elsewhere in other Sub-Saharan countries, the lack of qualified engineers and construction equipment is one of the crucial problems facing the construction industry. As the findings reported in the previous chapter reveal, the mean number of qualified engineers for the FCEs is only one, and is zero for the ICEs. In fact, most of the local construction-related enterprises, even the medium-sized enterprises, have to lend or borrow qualified engineers or construction equipment to be qualified to apply for the governmental tender. This gives rise to related problems such as inadequate labor supervision, deterioration of working quality and insufficient turnover.

### *2) High factor cost affecting the business operation*

A mobile phone is the most costly personal item for both types of entrepreneurs. In fact, owing to its underdeveloped infrastructure in most areas and the poor quality of service, Burkina Faso has the highest unit cost of production amongst all the WAEMU region countries. These high factor costs are translated into high transaction costs in a non-competitive environment, and have been conducive neither to foreign investment nor to the expansion of the private sector in general.

### *3) Difficulties in starting up a business*

If a small entrepreneur in Burkina Faso wishes to start up a formal sector business, he will have to go through numerous steps and pay a large amount of duties before he can even begin operations. A moderate number of respondents feel that the cost is too high and the steps are too many even to register. This situation seems ready to improve greatly in the near future, however, since the GOBF has recently simplified registration procedures and the CCIA has just begun to assist local enterprises by enabling them to complete all procedures at one place called “Maison d’Entreprise “.

### *4) Highly bureaucratic tender process*

The problems of the tender process arise from the government’s capacity constraint and general corruption: objective criteria are not always the means for getting on to the “short list” nor for obtaining a contract: no appropriate system of pre-selection and classification of enterprises exists that will allow qualified companies to bid for selection on the basis of works to be executed.

### *5) Delay of payments*

The most serious problem for construction enterprises in Burkina Faso is the delay of



payments. The delay of payment from the government creates cash-flow problems in the construction industry on a vertical progression. Owing to their lack of capital local subcontractors especially are unable to start to work without an advance payment, and this delay of payment consequently gives rise to delay in the commencement and completion of work and deterioration in the quality of the final product.

*6) Requirement of unofficial payment*

Our findings reveal that the majority of respondents have to offer 10-15% of the total value of the contract as a tacit unofficial payment. This common habit is too heavy a burden, especially for the SMEs.

*7) Competition with foreign-owned construction companies*

Although our survey did not actually bring this problem into the open, local companies do not in most cases have the capability to implement a large-scale project without external support financially and physically. The only way they can deal with public tenders is either to make a subcontract with a foreign-owned company or become its local junior partner, and no regulations exist that favor local enterprises when they are competitive in terms of price, quality and delivery date.

*8) Very weak voluntary professional and business associations*

Since, in Burkina Faso, as elsewhere in Sub-Saharan Africa, formal business services do not function effectively, voluntary professional and business associations have naturally formed as substitutes. By 2001, there were 28 construction-related professional groups<sup>18</sup> in Burkina Faso, but no strong incentives to organize local construction-related SMEs in order to alleviate local enterprises' constraints appear to drive such groups.

*9) Lack of available business services provided by either government or non-governmental agencies*

A primary constraint facing the SMEs is lack of access to training to improve their managerial capacity and technical skill. Our findings show that only half of the SMCEs and 2% of the ICEs belong to a business association of any kind. In fact, smaller contractors are often unregistered and unaffiliated even with the main employer bodies. Since they dodge taxation they are denied access to whatever training programs that the government or non-governmental agencies offer. They are therefore not in any position

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<sup>18</sup> Data was obtained from Repertoire Professionnel Burkinabé du BTP Edition 2001-2002

of improve their productivity.

*10) Inadequate accessibility to financial services*

An endemic lack of capital is the crucial constraint that holds back emerging construction-related SMEs. As a previous chapter explained, only 4% of the population of Burkina Faso has a bank account and only about the same proportion has access to microfinance services (World Bank [2003]). As a result, a substantial share of their investments and working capital is still self-financed.

The central tenet of this paper has been that certain internal and external constraints hinder the work of SMEs in Sub-Saharan Africa. Many of these constraints can be seen in Burkina Faso, where the high factor cost is remarkable even by African standards and definitely reduces competitiveness in the construction industry. Besides which, the adoption of flexible labor practices such as labor-only sub-contracting is normally considered to be another constraint upon the construction industry because of the resultant poor work and low productivity. Nevertheless, in order to deal with the unpredictable and fluctuating construction demands that the smaller construction companies face, the practice of flexible labor is the only way for such enterprises, in particular the unregistered construction enterprises, to survive. At the same time, the insufficiently conducive business environment in Burkina Faso, such as the legal and regulatory framework and administrative barriers to private investment, constitute additional constraints, and very little progress will be made until these issues are dealt with.

Although, as I have previously mentioned, many researchers and policy makers acknowledge the important role of the construction industry in stimulating a country's economic growth, only limited work has been done in analyzing the construction industry in the state of Burkina Faso. Nevertheless, the current trend of international aid has already started to bring in a great deal of financial aid to assist in developing the infrastructure of Burkina Faso and we can assume that this assistance will continue to contribute to Burkina Faso's economy at least over the next five years or more. The demand and chances for the growth of the construction industry and the economy as a whole are there, but the local actors, especially the emerging construction-related SMEs, who are supposed to respond to this demand, are not yet capable enough to do so effectively. If we hope to create the required industrial capacity, it is therefore critical to promote the participation and growth of the SMEs through positive action in support of historically disadvantaged areas of Burkina Faso.

The next stage of this study will, therefore, aim to identify the impact of current infrastructure investment on the construction-related SMEs in Sub-Saharan Africa with particular emphasis upon Burkina Faso. Thereupon, the study will propose possible interventions that are likely to have the greatest impact upon the improvement of SMEs in the construction industry in Burkina Faso.

## References

- Construction Industry Development Board (CIDB) [2004] *SA Construction Industry: Status Report-2004*, Brooklyn: CIDB.
- Ebohon, Obas. John [2000] “Institutional Aspects of Construction Industry Development: A Poignant Dilemma for Sub-Sahara Africa,” CIB W107 1<sup>st</sup> International Conference Proceeding Paper, ([http://buildnet.csir.co.za/cdcproc/3rd\\_proceedings.html](http://buildnet.csir.co.za/cdcproc/3rd_proceedings.html), accessed on October 1, 2005).
- Ebohon, Obas John, and Rwelamila, P.M.D. [2000] “Sustainable Construction in Sub-Saharan Africa: Relevance, Rhetoric, and the Reality,” Agenda 21 for Sustainable Construction in Developing Countries Africa Position Paper. ([http://www.sustainablesettlement.co.za/docs/a21\\_ebohon.pdf](http://www.sustainablesettlement.co.za/docs/a21_ebohon.pdf), accessed on 1<sup>st</sup> of October 2005).
- Edmonds, G.A. [1980] “Technology and Employment Programme: Institutional Aspects of the Construction Industry in Developing Countries,” World Employment Programme Research Working Paper WEP2-22/WP70, Geneva: International Labour Organization(ILO).
- Edmonds, G.A., and Miles, D.W. [1984] *Foundations for Change: Aspects of Construction Industry in Developing Countries*, London: Intermediate Technology Publications.
- Growth and Equity through Microenterprise Investments and Institutions(GEMINI) [1991a] “Burkina Faso Microenterprise Sector Assessment and Strategy,” *GEMINI Technical Report No.18.*, Volume Two: Annexes, Maryland: GEMINI.
- [1991b] “Burkina Faso Microenterprise Sector Assessment and Strategy,” *GEMINI Technical Report No.18.*, Volume One: Main Report, Maryland: GEMINI.
- G8. [2005] *Progress Report by the G8 Africa Personal Representatives on Implementation of the Africa Action Plan*, G8.
- International Monetary Fund(IMF) [2003] “Burkina Faso: Statistical Annex,” IMF Country Report No.03/198, Washington, D.C.: IMF.
- Institut National de la Statistique et de la Démographie(INSD) [1996] *Analyse des Resultats de l'Enquete Prioritaire sur les Conditions de Vie des Menages*, Ouagadougou: Direction des Statistiques Generales.
- [1998] *Annuaire Series Longues du Burkina Faso: 1989-1993*, Ouagadougou: Direction des Statistiques Generales.
- [2003] *Annuaire Series Longues du Burkina Faso: 1994-1999*, Ouagadougou: Direction des Statistiques Generales.
- Irurah, Daniel K. [2000] “Agenda for Sustainable Construction in Africa,” Agenda 21 for Sustainable Construction in Developing Countries Africa Position Paper, ([http://www.sustainablesettlement.co.za/docs/a21\\_irurah.pdf](http://www.sustainablesettlement.co.za/docs/a21_irurah.pdf), accessed on 1<sup>st</sup> of October 2005).
- Ministere de L'economie et des Finances Burkina Faso [1996] *Le Secteur Informel au Burkina Faso:*

- Evolution sur Longue Periode et Suivi Conjoncturel*, Ouagadougou: GTZ.
- Mliminga, R.S. and Wells, J. [2002] "Collaboration between formal and informal enterprises in the construction sector in Tanzania," *Habitat International* 26, pp.269-280.
- Ofori, George [2000a] "The Knowledge-Based Economy and Construction Industries in Developing Countries," 2nd International Conference on Construction in Developing countries Proceeding Paper, ([http://buildnet.csir.co.za/cdcproc/2nd\\_proceedings.html](http://buildnet.csir.co.za/cdcproc/2nd_proceedings.html), accessed on 1<sup>st</sup> of October 2005).
- [2000b] "Challenges of Construction Industries in Developing Countries: Lessons from Various Countries," CIB W107 1<sup>st</sup> International Conference Proceeding Paper, ([http://buildnet.csir.co.za/cdcproc/3rd\\_proceedings.html](http://buildnet.csir.co.za/cdcproc/3rd_proceedings.html), accessed on 1<sup>st</sup> of October 2005).
- Ouédraogo, Idrissa Mohamed [1996] "The Urban Informal Sector in Burkina Faso," Ph.D. Dissertation, The University of Tennessee.
- Ruelamila, P.D. [2000] "African Construction Industries In Turmoil? The Implications for NEPAD," CIB W107 1<sup>st</sup> International Conference Proceeding Paper, ([http://buildnet.csir.co.za/cdcproc/3rd\\_proceedings.html](http://buildnet.csir.co.za/cdcproc/3rd_proceedings.html), accessed on 1<sup>st</sup> of October 2005).
- Tindiwensi, D. [2000] "Towards a Theory for Construction Industry Development: The Case of Donor Dependent Economies," CIB W107 1<sup>st</sup> International Conference Proceeding Paper, ([http://buildnet.csir.co.za/cdcproc/3rd\\_proceedings.html](http://buildnet.csir.co.za/cdcproc/3rd_proceedings.html), accessed on 1<sup>st</sup> of October 2005).
- Tokuori, Tomomi [2006] "Possible Obstacles Impeding SMEs' Growth in the Construction Industry of Sub-Saharan Africa: Empirical Evidence from Burkina Faso, Discussion Paper of Hokkaido University, Series A, No.2006-172. Sapporo: Hokkaido University.
- United Nations [1969] *Construction Industry*, UNIDO Monographs on Industrial Development, New York: United Nations.
- [2000] "Regulation and Liberalization in the Construction Services Sector and Its Contribution to the Development of Developing Countries," United Nations Conference on Trade and Development TD/B/COM.1/EM.12/2.
- World Bank [1984] *The Construction Industry: Issues and Strategies in Developing Countries*, Washington, D.C.: The World Bank.
- [1989] *Burkina Faso Economic Memorandum*, Volume II, Washington, D.C.: The World Bank.
- [2005a] *Meeting the Challenge of Africa's Development: A World Bank Group Action Plan*, Washington, D.C.: The World Bank.
- [2005b] "International Development Association Country Assistance Strategy for Burkina Faso," Report No.32187, Washington, D.C.: The World Bank.
- Wells, Jill [1986] *The Construction Industry in Developing Countries: Alternative Strategies for Development*, New Hampshire: Croom Helm.

**APPENDIX 1**

| <b>I&amp;II Attribute &amp; business background/Burkina Faso</b> |   | <b>ICE</b> | <b>SMCE</b> |
|--|---|------------|-------------|
|  | <b># of samples</b>                                   | <b>66</b>  | <b>57</b>   |
|  | <b>Mean no. of full-time employees</b>                | 3          | 8           |
|  | <b>Mean no. of part-time employees</b>                | 20         | 30          |
|  | <b>Mean no. of qualified engineers</b>                | 0          | 1           |
| <b>I. Attribute:</b>   |   |            |             |
|  | • Mean age(range15-75)                                | 36         | 45          |
|  | •% sex 1)Male   | 100%       | 95%         |
|  | 2)Female  | 0%         | 5%          |
|  | •% tribe 1)Mossi                                      | 70%        | 70%         |
|  | 2)Other   | 24%        | 28%         |
|  | •% religion 1)Christian                               | 48%        | 49%         |
|  | 2)Muslim  | 48%        | 46%         |
|  | •% married  | 64%        | 91%         |
|  | • Mean no. of children(range 0-20)                    | 2          | 4           |
|  | •% Birthplace 1) Ouagadougou                          | 44%        | 32%         |
|  | 2) Other  | 56%        | 68%         |
|  | •% Past occupations (construction related works:CRW)  | 41%        | 51%         |
|  | •% Father's occupation(CRW)                           | 9%         | 9%          |
|  | •% by level of education                              |            |             |
| 1  | Elementary School                                     | 18%        | 7%          |
| 2  | General secondary school                              | 33%        | 16%         |
| 3  | Technical secondary school                            | 20%        | 9%          |
| 4  | University in BF                                      | 5%         | 19%         |
| 5  | University abroad                                     | 0%         | 11%         |
| 6  | Technical College                                     | 3%         | 9%          |
| 7  | Muslim school   | 8%         | 9%          |
| 8  | Illiterate  | 11%        | 12%         |
| <b>II. Business Background:</b>                                  |   |            |             |
|  | <b>Operating years of their company (range 3-44)</b>  | 7 years    | 10 years    |
|  | <b>What is your leading activities?</b>               |            |             |
| 1  | Building works  | 64%        | 63%         |
| 2  | Civil works   | 48%        | 100%        |
| 3  | Other construction related works                      | 88%        | 49%         |
|  | <b>Are you involved in other types of activities?</b> |            |             |
| 1  | Yes   | 23%        | 42%         |
| 2  | No  | 74%        | 53%         |
|  | <b>How was your enterprise started?</b>               |            |             |
| 1  | Established new company                               | 92%        | 89%         |
| 2  | Took over my family's company                         | 5%         | 7%          |
| 3  | Bought privatized state-owned company                 | 0%         | 0%          |
| 4  | Bought existed private company                        | 0%         | 0%          |
| 5  | Others  | 0%         | 0%          |
| 6  | None  | 3%         | 4%          |
|  | <b>Mean working hours par day</b>                     | 8hours     | 8hours      |
|  | <b>Mean working days par week</b>                     | 6days      | 6days       |

**APPENDIX 2-1**

| <b>III. Financial Situation/ Burkina Faso</b> |   | <b>ICE</b> | <b>FCE</b> |
|---|---|------------|------------|
|   | <b># of samples</b>   | 66         | 57         |
|   | <b>The way of acquiring the first capital</b>                           |            |            |
| 1   | Formal financial institution  | 3%         | 9%         |
| 2   | Informal financial institution  | 5%         | 0%         |
| 3   | Friends   | 5%         | 0%         |
| 4   | Parents or other relatives  | 21%        | 12%        |
| 5   | Own means   | 73%        | 79%        |
| 6   | Others  | 0%         | 0%         |
|   | <b>Mean amount of the first capital(Range 0-100,000,000)</b>            | 500,000    | 2,000,000  |
|   | <b>Mean total turnover in 2003(Range 200,000-1,500,000,000)</b>         |            | 99,603,065 |
|   | <b>Monthly turnover in 2003</b>   |            | 8,300,255  |
|   | <b>Mean highest monthly turnover in 2003(Range 100,000-118,000,000)</b> | 1,650,000  |            |
|   | <b>Mean lowest monthly turnover in 2003(Range 10,000-48,000,000)</b>    | 200,000    |            |
|   | <b>Mean average monthly turnover in 2003(Range 10,000-7,666,667)</b>    | 350,000    |            |
|   | <b>How do you feel your business performance in 2003?</b>               |            |            |
| 1   | Increased notably   | 11%        | 21%        |
| 2   | Increased fairly  | 47%        | 44%        |
| 3   | Same  | 8%         | 12%        |
| 4   | Decreased fairly  | 18%        | 9%         |
| 5   | Decreased notably   | 8%         | 11%        |
| 6   | None  | 9%         | 4%         |
|   | <b>Mean amount of total tax paid in 2003(Range 0-110,000,000)</b>       | 125,000    | 4,200,000  |
|   | <b>Do you have another source of income?</b>                            |            |            |
| 1   | Yes   | 21%        | 25%        |
| 2   | No  | 68%        | 58%        |
|   | <b>Mean value of firm's debt(Range 0-400,000,000)</b>                   | 635,000    | 5,000,000  |

**APPENDIX 2-2**

| <b>IV. Business Environment/ Burkina Faso</b> |   | <b>ICE</b> | <b>SMCE</b> |
|---|---|------------|-------------|
|   | <b># of samples</b>   | 66         | 57          |
|   | <b>Do you have to deal with unpredicted changes in economic and financial policies?</b> |            |             |
| 1   | Never   | 29%        | 12%         |
| 2   | Occasionally  | 30%        | 18%         |
| 3   | Frequently  | 27%        | 44%         |
| 4   | Always  | 12%        | 23%         |
| 5   | None  | 2%         | 4%          |
|   | <b>Did you register to the chamber of commerce?</b>                                     | 77%        |             |
|   | <b>Are you listed in the municipal register?</b>  | 64%        |             |
|   | <b>Mean total cost of registration(Range 1,600-500,000)</b>                             | 15,000     | 15,000      |
|   | <b>Mean total duration of completing registration(Range 1-124)</b>                      | 10days     | 14days      |
|   | <b>What are difficulties of registration?</b>   |            |             |
| 1   | Obtaining information on registration is hard   | 8%         | 14%         |
| 2   | Requirements are too restrict   | 18%        | 25%         |
| 3   | Steps on registration are too many  | 15%        | 30%         |
| 4   | Registration cost is too high   | 21%        | 26%         |
| 5   | It takes too much time  | 23%        | 46%         |
| 6   | Others  | 3%         | 12%         |
|   | <b>regulation?</b>  |            |             |
| 1   | Yes   | 44%        | 61%         |
| 2   | No  | 47%        | 28%         |



**APPENDIX 2-3**

| <b>V.Business Relations/ Burkina Faso</b> |  | <b>ICE</b> | <b>SMCE</b> |
|---|--|------------|-------------|
|   | <b># of samples</b>  | 66         | 57          |
| <b>Public sector:</b>                     | <b>Have you contracted with public sector over the past two years?</b> |            |             |
| 1   | Yes  | 14%        | 58%         |
| 2   | No   | 80%        | 33%         |
|   | <b>The way of making the "short-list" is fair?</b>                     |            |             |
| 1   | Yes  | 8%         | 42%         |
| 2   | No   | 38%        | 47%         |
|   | <b>What is the amount of unofficial payment?</b>                       |            |             |
| 1   | 0%   | 0%         | 4%          |
| 2   | 1-5%   | 11%        | 25%         |
| 3   | 6-10%  | 2%         | 25%         |
| 4   | 11-15%   | 6%         | 14%         |
| 5   | 16-20%   | 12%        | 9%          |
| 6   | More than 20%  | 14%        | 11%         |
| 7   | Others   | 0%         | 4%          |
| 8   | None   | 56%        | 11%         |
| <b>Private sector:</b>                    | <b>Do you cooperate with other local construction enterprises?</b>     |            |             |
| 1   | Yes  | 73%        | 74%         |
| 2   | No   | 23%        | 16%         |
|   | <b>How?</b>  |            |             |
| 1   | Lending/borrowing machinery  | 38%        | 56%         |
| 2   | Lending/borrowing equipment  | 30%        | 40%         |
| 3   | Lending/borrowing automobile   | 36%        | 37%         |
| 4   | Lending/borrowing skilled worker                                       | 20%        | 32%         |
| 5   | Product development  | 3%         | 7%          |
| 6   | Marketing Research   | 42%        | 39%         |
| 7   | Purchase of inputs(ex.joint procurement)                               | 11%        | 21%         |
| 8   | Others   | 0%         | 11%         |
|   | <b>Frequency of exchanging ideas with other enterprises</b>            |            |             |
| 1   | All the time   | 26%        | 14%         |
| 2   | Often  | 30%        | 37%         |
| 3   | Occasionally   | 30%        | 26%         |
| 4   | Rarely   | 2%         | 16%         |
| 5   | Never  | 5%         | 2%          |
| 6   | None   | 8%         | 5%          |
| <b>Business association:</b>              | <b>Do you belong to any business associations?</b>                     | 1          | 0           |
| 1   | Yes  | 3%(2)      | 42%(24)     |
| 2   | No   | 91%(60)    | 51%(29)     |
|   | <b>Services of business association</b>                                |            |             |
| 1   | Distribution of publications and bulletins                             | 0          | 3           |
| 2   | Offering courses matters   | 0          | 13          |
| 3   | Advice on legal matters  | 0          | 10          |
| 4   | Obtaining information on other enterprises                             | 0          | 6           |
| 5   | Obtaining information on government regulation                         | 1          | 17          |
| 6   | Obtaining information on markets                                       | 0          | 8           |
| 7   | Obtaining information on new products and technology                   | 1          | 9           |
| 8   | Resolving labor problems   | 2          | 12          |
| 9   | Lobbying or resolving grievances                                       | 0          | 5           |
| 10  | Getting government assistance  | 0          | 6           |
| 11  | Others   | 1          | 1           |
|   | <b>Satisfied with your business association?</b>                       |            |             |
| 1   | Yes  | 2          | 16          |
| 2   | No   | 1          | 12          |

**APPENDIX 2-4**

| <b>VI&amp;VII. Business Service and others/ Burkina Faso</b> |   | <b>ICE</b> | <b>SMCE</b> |
|--|---|------------|-------------|
|  | <b># of samples</b>   | 66         | 57          |
|  | <b>What types of business services do you need</b>  |            |             |
| 1  | Engineering   | 73%        | 72%         |
| 2  | Business strategy   | 55%        | 39%         |
| 3  | Management consulting skills  | 33%        | 32%         |
| 4  | Marketing   | 30%        | 28%         |
| 5  | Accounting function   | 41%        | 46%         |
| 6  | Legal services  | 20%        | 35%         |
| 7  | Insurance and social security   | 36%        | 33%         |
| 8  | Business Transaction  | 26%        | 23%         |
| 9  | Information Technology  | 44%        | 49%         |
| 10   | Others  | 2%         | 9%          |
|  | <b>Has your enterprise received any business services from government or non-governmental agencies?</b> |            |             |
| 1  | Yes   | 2%         | 4%          |
| 2  | No  | 94%        | 95%         |
|  | <b>What are your potential constraints for the operation and growth of your business?</b>               |            |             |
| 1  | Lack of high quality local suppliers  | 15%        | 26%         |
| 2  | Lack of machinery and equipment suppliers   | 12%        | 23%         |
| 3  | Quality of infrastructure services(power,telecom,roads,etc)   | 17%        | 32%         |
| 4  | Lack of skilled worker  | 20%        | 14%         |
| 5  | High cost of labor  | 27%        | 9%          |
| 6  | Accessibility of finance  | 88%        | 74%         |
| 7  | Government regulation on taxes  | 68%        | 75%         |
| 8  | Barriers imposed by foreign governments   | 11%        | 18%         |
| 9  | Functioning of system of export incentive   | 0%         | 12%         |
| 10   | Lack of high quality business services  | 2%         | 9%          |
| 11   | Lack of social connection with role-player(administrative officials, entrepreneurs,etc)                 | 27%        | 18%         |
| 12   | Others  | 11%        | 4%          |