

The Challenges and the Way Forward for the Construction Industry in Mozambique

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Executive Summary

This report discusses the factors behind the limited participation of Mozambican construction firms in the market for civil (housing, office buildings, multipurpose structures) and heavy construction, and the overall limitations of the construction materials industry. In particular, it seeks to address the following questions: i) what restrictions prevent Mozambican firms from entering the market for civil and heavy construction, as well as that of building materials?; ii) what are the determinants of these restrictions?; iii) how best to integrate Mozambican construction firms into the construction sector value chain?; iv) what can be done in terms of government policies to promote a greater participation of Mozambican firms in the market for civil and heavy construction and associated building materials and related inputs?

In line with the terms of reference set for the report, the answers to those questions were gathered based on a literature review, interviews with government officials responsible for procurement in the construction sector, as well as the construction industry association. To validate the available information, 30 local construction firms (mostly contractors and producers of construction materials) were visited, with a structured questionnaire. Due to time constraints the sample was selected for convenience.

The conclusion is that local contractors, producers of building materials as well as project developers are failing to compete with foreign companies in the construction market. Only 5% of local contractors manage to bid for significant construction projects (Lopes, 2006). The failure of local construction firms to compete is due to:

- Weak credibility associated with the time the contractor has been in the market, its dimension, track record and lack of certification;
- The value added tax (VAT) level and the associated reimbursement delays;
- Multiple and long bureaucratic procedures associated to the state ownership of land which raises the costs of access to land in the urban areas, increasing informality and hampers the development of the housing market;

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- An inadequate government procurement code;
- Limited access to credit;
- Lack of qualified manpower;
- Weak use of modern technology;
- Delays and bureaucratic barriers for import of raw materials; and
- Policy and institutional fragmentation (ANEMM, 2000, Lopes, 2006, AIMO, 2010).

Mozambican construction industry operators are dispersed and deficiently connected with other firms (Lopes, 2006). The emerging business association movement within the construction industry has the potential to push for changes in the right direction, but so far it has not been visible. It is weak and lacking in terms of human and financial resources.

Changing the prevailing construction industry landscape requires the introduction of the following measures:

- Encourage the development of certification programs involving all aspects of the construction industry, coupled with the training and capacity building of human resources at all levels, including management. The introduction of this measure has the potential for breaching in part the credibility gap, while contributing to broad based growth.
- Examine, in a structured venue and with the participation of the industry and other stakeholders, the possibility of VAT exemption for construction materials and services. At its current level, VAT acts as one of the major barriers for increased activity within the formal construction sector. For the emerging middle class and for the country as a whole, it acts as a tax on savings as well as on gross domestic capital formation, counter the needs for an increase in domestic savings and investment. Introducing VAT exemption on construction materials and associated services has the potential for expanding the demand for building within the formal construction sector, while stimulating urbanization and higher quality housing. In the short term it is fundamental to

search for mechanisms for simplifying and speeding up the procedures for VAT reimbursement.

- Establish a forum to discuss the introduction of reforms on land rights, including the introduction of marketable land titles for urban land. This has the potential for maximizing the market value for land as an asset with far reaching positive implications. It also has the potential for leading to reductions in land related construction costs, creating more transparency, and removing the monopoly power of government officials, while increasing state revenue, through an efficient property tax. Introducing marketable land titles also has the potential to encourage financial sector innovations in favour of a more competitive formal housing market.
- Reform the government procurement code. The current government procurement code encourages market segmentation and pushes local contractors and other construction industry players towards the low end of the market. Reforming the code requires creating incentives for reducing the time lag which the public sector takes to pay construction sector invoices. It also implies considering the introduction of mandatory requirements for sub-contracting local construction firms and suppliers in view of the disadvantages of local firms. These are acceptable procedures which are also in line with regional and international practices. A good regional example is South Africa.
- Increase the resources available for technical and vocational training for mid level technical and managerial skills in the construction industry. Budgetary provisions must be made to avert a labour shortage crisis in the near future and promote the technological upgrading of the industry.
- Encourage reforms of the financial sector in favour of a more competitive environment. This needs to be supplemented by changes in management practices and corporate governance among the construction industry players.
- Encourage simplification of procedures for importing raw materials and equipment in line with international best practices.

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- Encourage the development and empowerment of the construction industry federation. This federation will have to involve all the construction industry players, building material producers, contractors, hiring firms, and project developers.
- The government should also reflect on the possibility for setting up a construction industry forum, bringing together all the concerned entities from both the public (The Ministry of Public Works, the Labour Ministry, the Ministry of Science and Technology, The Education Ministry, and Universities) and the private sector. If properly run, this public-private cooperative body will have a crucial role on developing management capabilities, skills, standards, certifications, as well as promotion of joint-ventures for procurement and bidding purposes.

1 Introduction

Mozambique's recent gains in economic and social conditions brought significant opportunities to the country's construction and building materials industries. Mostly driven by rural-urban migration, combined with the emergence of the middle class in urban areas, urbanization is putting additional pressure on housing and construction material imports, as well as on the demand for social infrastructure.

Mozambique has also been experiencing a growing demand for heavy construction works (railways, highways, airports, ports, dams, production plants, etc.) due to the requirements of large investments being undertaken in the country. Those investments, especially the megaprojects operating in the natural resources sector (gas, coal, heavy sands), hold great potential for developing the heavy construction subsector. To the extent that a number of new megaprojects are expected to start operations within the next decade or so, heavy construction will be an important component of growth in Mozambique.

However, while the demand for both civil and heavy construction is strong in Mozambique and is likely to observe a steady growth in the near future, the supply response by domestic construction firms and the overall building materials industry remains weak. The demand for construction services is generally undertaken by foreign construction firms in view of their size and experience in international markets, while construction materials and other related inputs are generally imported. As a result, relatively few Mozambican firms have entered the market, and those that have typically end up performing low value-added works. Thus, despite the potential for Mozambican firms to participate in the current construction boom while capturing part of the value-added chain in an efficient way by contributing to the construction materials industry's growth, as it now stands, the boom may represent a lost opportunity for Mozambique.

This report discusses the factors behind the limited participation of Mozambican construction firms in the construction market, and the overall limitations of the construction materials industry. In particular, it seeks to address the following questions: i) what restrictions prevent Mozambican firms from entering the construction market, as well as that of building materials?;

ii) what are the determinants of those restrictions?; iii) how best to integrate Mozambican construction firms into the construction sector value chain?; iv) what can be done in terms of government policies to promote a greater participation of Mozambican firms in the market for light and heavy construction and associated building materials and related inputs?

These questions were addressed on the basis of a literature review, interviews with government officials responsible for procurement and construction industry associations. To validate the available information, the authors visited 30 local construction firms, with a structured questionnaire. Due to time constraints the sample was selected by convenience. Specifically, of the 30 interviewed firms, 26 (87%) were contractors and the remaining 4 firms were producers of building materials.

The conclusion is that, despite its relevance to the government's efforts to fight poverty and generate employment, the construction industry in Mozambique is not taking advantage of the current economic boom. Mozambique's construction industry lags behind those of neighbouring countries in terms of its ability to compete in a liberalized setting. The reported performance lag is explained by the following factors: (i) weak credibility associated to the time firms have been in the market, their dimension, track record and lack of certification; (ii) the VAT level and associated reimbursement delays; (iii) multiple and long bureaucratic procedures associated with state ownership of land which raises the costs of access to land in urban areas, increasing informality and hampering the development of the housing market; (iv) inadequate government procurement codes; (v) limited access to credit; (vi) lack of qualified manpower; (vii) limited use of modern technology; (viii) delays and bureaucratic barriers for importing raw materials, and (ix) policy and institutional fragmentation (ANEMM, 2000, Lopes, 2006, AIMO, 2010).

The impact of these factors is reinforced and perpetuated by the reduced degree of cooperation and dialogue among construction industry firms. The construction sector associations remain weak at the local level and distant from the decision making centres. This implies low levels of information for government officials about the sector issues and options, reducing the opportunity for fruitful intervention. In the absence of strong bottom-up information flows from industry to government, it is difficult to expect major policy improvements in the near future.

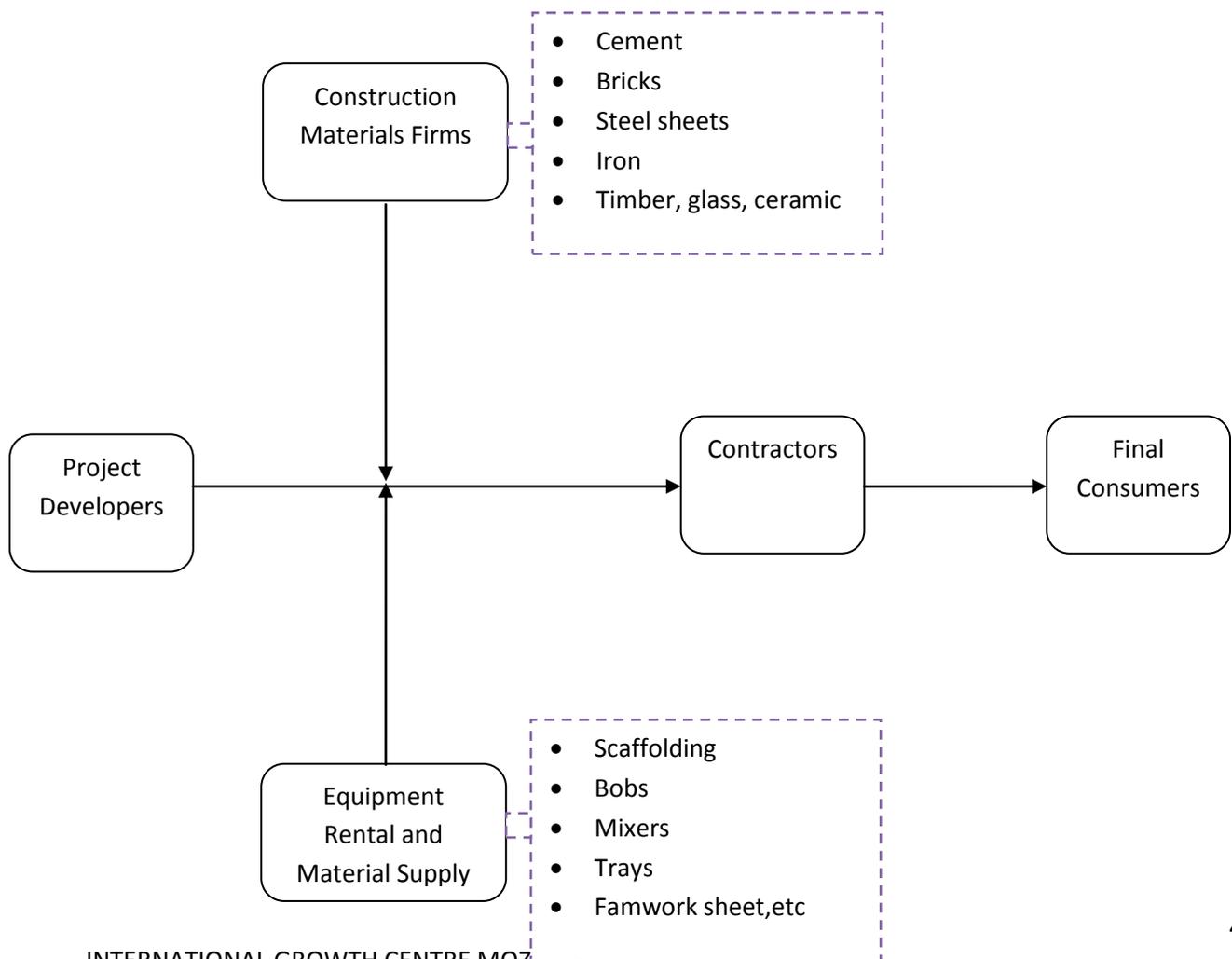
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The second section of the paper presents a literature review of the role played by the construction industry worldwide and the reasons behind the poor performance of construction industries in developing countries. The third describes the state of the construction sector in Mozambique. This is followed by a discussion of the factors behind the poor performance of construction industries. Finally, section 5 provides a conclusion and a set of recommendations to move the industry forward.

2 Literature Review

The construction industry is one of the most complex and multipurpose economic sectors. Its value added chain encompasses activities which include the production of raw materials and processed goods (ranging from simple sand extraction, wood processing and woodworking, to the manufacture of cement and steel, to metal products, such as fixtures), civil and heavy construction works, as well as project engineering, development and management. Figure 1 below presents a simplified standard model of interactions among the main players in the construction industry. Value creation within the sector involves project developers, building material suppliers, construction equipment rental firms and contractors.

Figure 1: Construction Industry Players



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The construction industry holds great potential for broad based growth, employment generation, capital formation and technological development. Through its strong dependence on backward and forward linkages, it stands as a foundation for stimulating structural changes and sustaining the development of other sectors, including agriculture and forestry, among others. According to the World Bank's 1984 report entitled "The Construction Industry: Issues and Strategy in Developing Countries", the industry is also crucial for aggregate savings as a result of its contribution to the building of the physical stock of capital.

The construction industry contribution to structural changes is well acknowledged in the literature (Bakar, 2009, Wells, 1986, The World Bank, 2004, Ofori, 2005). A growing industry yields increased fiscal resources to the government and influences the trend of technology absorption and development (Bakar, 2009). Empirical work shows that rising construction investments are associated with the expansion of gross domestic fixed capital formation and rising per capita income (Bakar, 2009, Ofori, 2005).

Successful construction sector experiences are encountered in countries such as the United States (U.S.), Brazil, and China. In the U.S., for example, the companies charged with designing, building, maintaining, and managing the transportation infrastructure, including their suppliers, generated an output value of over US\$120 billion in 2010, exceeding that of: auto-repair & maintenance (\$116.8 billion); advertising (\$106.9 billion); farming (\$97.5 billion); motion pictures (\$82.7 billion); aircraft manufacturing (\$82.4 billion); and coal mining (\$29.8 billion) (Transportation Development Foundation - ARTBA, 2010).

The U.S. construction sector contribution to the Gross Domestic Product (GDP) was estimated at 3% (US\$380 billion) in 2010, outpacing the GDP of Saudi Arabia, Argentina, South Africa, Portugal, Ireland, Israel, Chile and Kuwait. In the same period, both the transportation and civil construction industries employed more than 3 million workers, twice as much as commercial banks, nursing care facilities, university colleges, and real estate. Annually, the sector has generated more than US\$ 159.3 billion in direct and indirect wages, providing US\$ 955 million each year in state payroll tax revenue and US\$ 12.2 billion in federal payroll taxes (ibid).

Similar results are reported in emerging economies, such as Brazil and China. There is evidence of a strong relationship between the behaviour of the construction industry output, GDP growth,

employment, and gross domestic fixed capital formation. In China, the contribution of construction to GDP increased from 3% in 1981 to 7% in 1999 (You-jie, L. and Paul Fox, 2001). The construction sector's contribution to GDP in Brazil was estimated at 18% in 1998 and for every 100 direct jobs created in the sector, the rest of the economy gained 285 indirect jobs, as a consequence of the high degree of domestic economic inter-dependence. As the CBC (1999) notes, the construction industry in Brazil is responsible for just 2% of the demand of imports.

Despite the potential of the construction industry for fostering structural transformation and economic development, international experiences in the construction sector have not always been successful, as the World Bank (1984) documents. For most developing countries (including Botswana and South Africa in Southern Africa and Trinidad & Tobago in the Americas), the construction industry has failed to provide the pre-requisites for development and safeguarding better living conditions. Barriers to the sector's performance remain widespread, decreasing the chance to transform the construction industry into "the engine of growth" (World Bank, 1984; Wells, 1986).

What is behind the failure of most developing countries? There are several factors, however they can all be traced back to institutional variables, specifically the set of rules, both written and unwritten, which regulate the relationship among market players, particularly in the transactions of goods and services. Generally buyers and sellers enter into transactions, requiring significant amounts of capital, facing uncertainties and exposure to the two basic problems of asymmetric information: hidden action and hidden information (Tirole, 1993 and Williamson, 1995).

The problem of hidden information arises because construction projects are highly demanding in terms of information about the market players, quality of the materials used, level of effort required, costs, as well as technical specifications and their alternatives. The information on these items is not readily available and is costly to obtain. Once the contract for a construction project is awarded, the hidden action problem emerges. Due to the monetary amounts involved, market practices include requests for payment of some project costs before the project activities are undertaken. Without appropriate enforcement mechanisms, this raises the risks of inappropriate conduct from the producer, including minimizing effort, creating delays, and delivering poor quality goods (Williamson, 1995).

A theoretical solution for both problems would be to write detailed and complete contracts. This, however, is nearly impossible as market players in the construction industry cannot anticipate every contingency and their output is also a function of the environment. Contingencies increase with the time-scale involved in delivering the project.

The combined effects of the reported problems are increased uncertainty and risk when embarking on construction projects. To safeguard interests against this dilemma, the construction industry players resort to the use of incentives for effort, and adopting insurance and limited liability mechanisms. Suppliers invest in building reputation as a signaling device of their capability to deliver, while the government introduces standards and regulations for minimizing transaction costs as well as resolution of business disputes. The basic objective is to raise the level of trust in the market.

Successful countries have been effective in enforcing trust and establishing a regulatory framework for doing business in a market context with imperfect information. For the construction industry this has had two mutually reinforcing positive implications. First, the possibility of enforcing contracts, associated with a sophisticated judiciary system and regulatory framework, sets the pace for a more conducive environment for business in the construction industry. Second, a better institutional and legal framework encourages the lowering of prices for financial services, increasing the availability of project finance. The availability of project finance at affordable interest rates is fundamental for a sustained take-off of construction projects.

Developing countries are lagging behind because the degree of trust is low; the institutional framework is still evolving behind a background of a weak judiciary system. In such an environment, market segmentation is the dominant feature (Wells, 1986). The financial sector intermediaries demand high interest rates, track records, and collateral that is hard to comply by indigenous construction companies. An additional problem for indigenous construction companies in developing countries is related to the way business is conducted in response to the problem of discontinuous production and fragmented demand.

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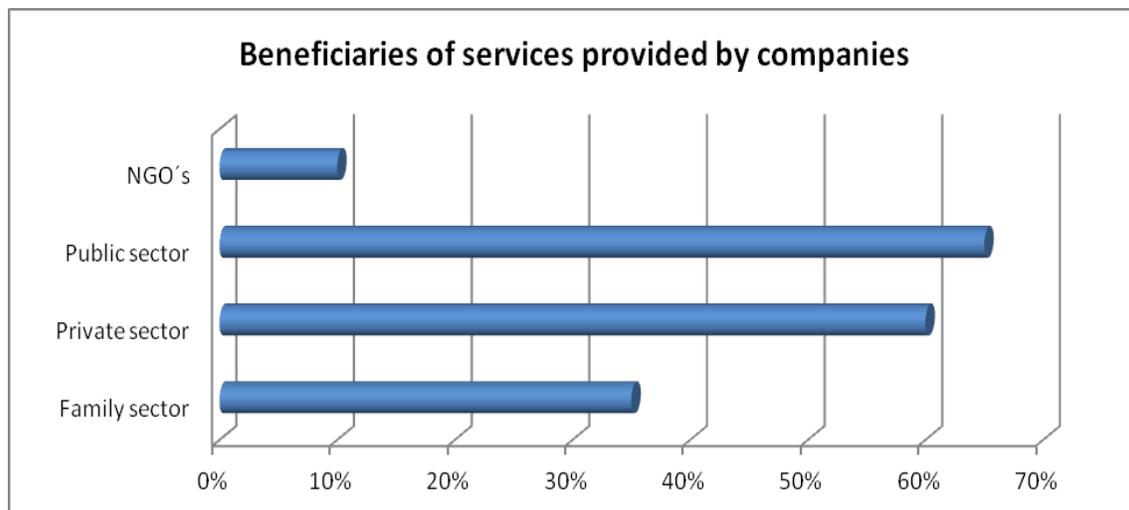
The dominant market practice is subcontracting, meaning the use of casual labor associated with widespread reluctance to invest in fixed capital. This is an appropriate response for uncertainties because it provides high degrees of mobility and flexibility in the use of resources within the industry but it only leads to the desired results where construction resources (manpower, material, machines, and technology) are of high standards and readily available. It has, however, serious implications in most developing countries because there is significant scarcity of qualified manpower, access to materials and machines for hire is limited, and the technology base is low (Wells, 1986, Ofori, 2005, Bakar 2009, Wong and Tomas, 2010), and as discussed in the next two sections, where the case of Mozambique is examined.

3 The Construction Industry in Mozambique

This section provides an overview of the Mozambican construction sector, including both civil and heavy construction, as well as building materials. The section discusses the policy and regulatory framework which shape the construction industry, its organization and structure, and how firms behave and perform within this environment

Following the end of the civil war in 1992 and the successful completion of the first multiparty election in 1994, Mozambique experienced an unrivalled growth surge. Specifically in the construction sector, the government established policies, programs, and a regulatory framework to boost the construction industry in order to respond to mass production process of public and social infrastructures in the country, such as the “Política e Estratégia de Habitação”; the “Estratégia e Plano de Acção para Aplicação e Disseminação dos Materiais e Sistemas Construtivos Alternativos”. Despite the steady growth in private demand, the public sector remains the single most important final consumer of the construction sector output (Chart 1, ANEMM, 2000, Lopes, 2006, AIMO, 2010). Private investors are the second most important consumers. Almost 60% of the surveyed companies reported doing business with their counterparts in the private sector (Chart 1). Reflecting limitations of the housing market, the share of the surveyed companies that reported supplying goods and services to the housing market is low (35%) (Chart, 1, ANEMM, 2000)

Chart 1: Beneficiaries of Construction Industry Services



Source: Authors' calculations based on a sample of 30 construction firms.

The construction sector in Mozambique features both formal and informal operators. However, it is within the housing market (family sector) where informal operators are dominant throughout the entire value chain. The formal market for project developers, building materials, equipment rental firms, and contractors has oligopolistic characteristics, but it tends to be more competitive for projects requiring reduced amounts of project finance, including demand for housing projects, construction of small scale industries in both rural and urban areas, and public services at the district level². It is also within this market segment where we find the majority of indigenous contractors and more intensive use of locally generated building materials and project developers (ANEMM, 2000 and Lopes, 2006). In this context, complaints regarding unfair competition, project delays, and delivery of poor quality projects are frequent (Lopes, 2006).

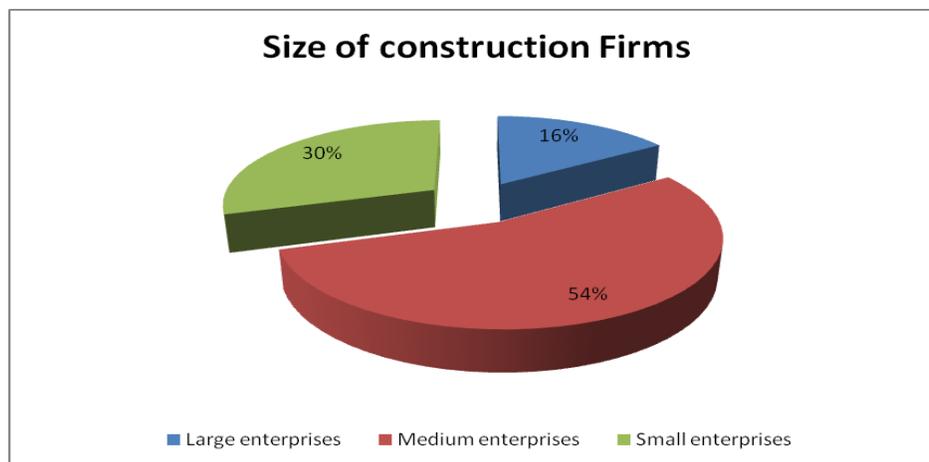
As one moves from low project finance requirements to high cost projects, the degree of competition is reduced. This is carried over into the market share of local contractors, project developers, and inputs. The public sector development projects and increasing Foreign Direct Investment (FDI) constitute the main sources of demand for projects requiring higher project

² According to one source, indigenous construction firms bid frequently for projects requiring limited finance, involving less than US\$500,000. Close to 95% of local construction firms are able to bid for this kind of project (ANEMM, 2000, Lopes, 2006). Lopes (2006) reported the existence of 270 Mozambican contractors, of which only 5% are able to bid for construction projects requiring high project finance.

finance. The presence of indigenous companies and the use of local inputs is minimum to non-existent. The market segment is close to bilateral monopoly, allowing for collusion among suppliers and bid rigging. The main contractors are South African, Chinese and Portuguese companies, as they can take advantage of their network with foreign investors and markets, and are better placed to secure rewarding contracts (ANNEMM, 2000 and Lopes, 2006, AIMO, 2010). Their foreign connections provide greater flexibility for sourcing inputs and accessing financial resources. This explains their competitive advantage over indigenous companies.

Chart 2 describes the construction industry structure based on the INE 2005 census of enterprises. The majority of constructions firms are of medium scale (54%), 30% percent are small scale firms and only 16% are large firms. This is in line with the general trend in the composition of the private sector in Mozambique (ANEMM, 2000, Lopes, 2006, AIMO, 2010).

Chart 2: Distribution of Construction Firms

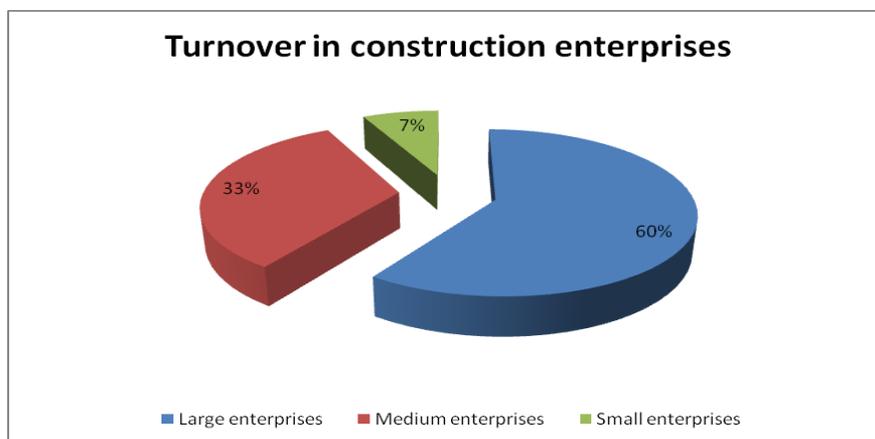


Source: INE, 2005

As Chart 3 illustrates, large firms have the highest turnover, at 60%, followed by medium firms with 30% of the industry total turnover. This is not surprising because large scale firms have the possibility for maintaining business relations with the high project finance market segment. They

have built their reputation and due to their links to foreign capital, they are able to mobilize construction resources and project finance with minimum constraints.

Chart 3: Distribution of Turnover by Scale



Source: INE, 2005

It is noteworthy that firms along the construction industry value chain followed different paths over time.³ Project developers, equipment rental firms and contractors, altogether labelled as “construction” in Table 1, on aggregate recorded one of the highest average yearly growth rates (close to 10%) from 2005 to 2010, hiding however large differences between indigenous and foreign-controlled firms. The manufacturing segments, such as cement, iron and glass industries, generally grew at lower rates during the period, although there may be some significant entry from foreign investors in response to future pent-up demand from large projects and the overall expansion of the economy.

³ Mozambique national accounts define construction sector output as the sum of the value added from project developers, equipment, and machine rental firms and contractors. The output from building materials is reported as part of the manufacturing sector output.

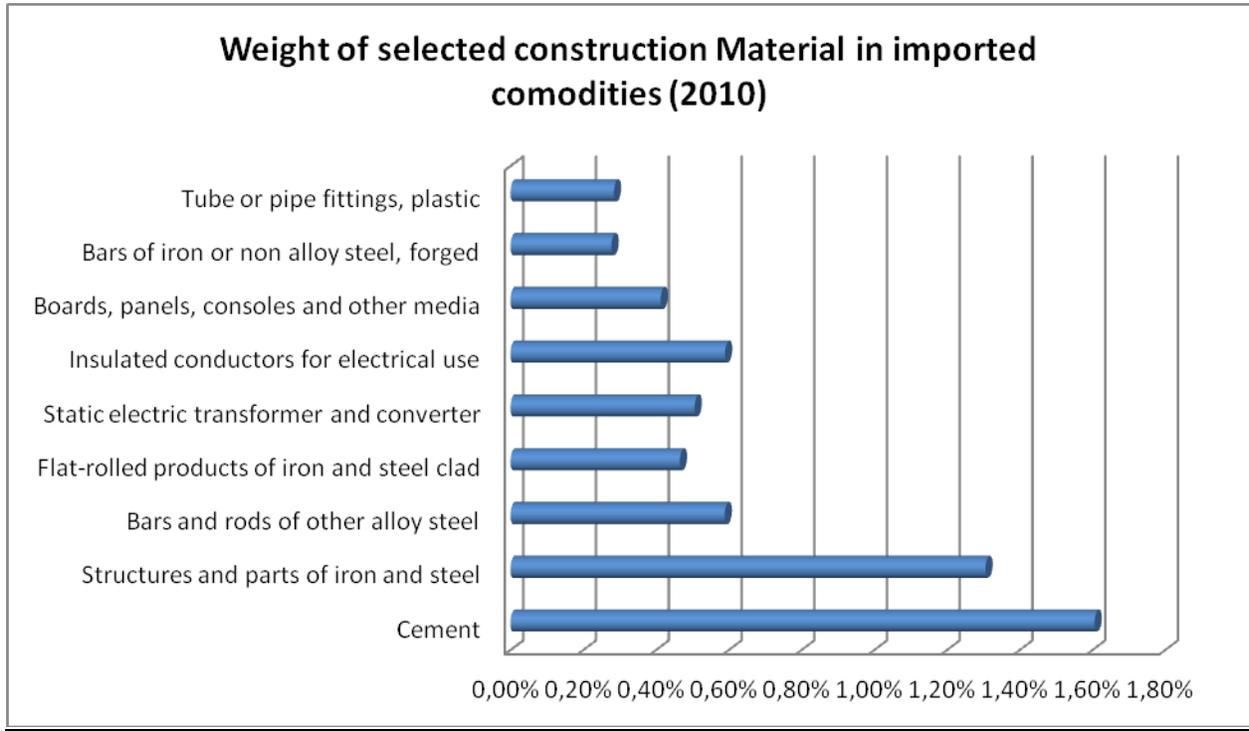
Table 1: Growth rates - GDP and the construction industry

	2005	2006	2007	2008	2009	2010
GDP	8%	9%	7%	7%	6%	7%
Construction	13%	10%	12%	13%	6%	4%
glass and glass article	2%	2%	2%	2%	2%	2%
Porcelain, earthenware and stoneware	6%	34%	11%	8%	49%	2%
Materials clay building	4%	na	2%	2%	-6%	16%
Cement and clinker	6%	2%	2%	-5%	-29%	91%
Fiber cement lime and plaster	6%	2%	2%	-5%	56%	-13%
Stone for construction and other non metallic products	2%	1%	2%	0%	70%	-72%
Flat-rolled products of iron and steel	5%	2%	2%	2%	5%	46%
Other products in the basic industry of nonferrous metals	-24%	222%	-18%	16%	131%	-19%

Source: INE

Still, with few exceptions, existing industrial firms operate below their capacity (ANEMM, 2000, AIMO, 2010). To fill the gap, contractors resort to increased imports (Chart 4). Despite such differences, one common trend is that most indigenous firms are failing to position themselves in the market on a sustainable basis.

Chart 4: Share of imported Construction Materials on Total imports for the Construction Sector



Source: INE, 2010

4 Why Local Construction Firms are failing to compete?

This section aims at identifying the factors preventing Mozambican firms from competing head on the construction works market, while constraining the development of the building materials industry. As noted in section 2, the construction industry has the potential for spurring a rapid and broad-based growth for a developing country like Mozambique. As Wong and Tomas (2010) suggest, developing this sector, however, requires finding appropriate responses to the problems described in that chapter and summarized in table 2.

Table 2: Summary of Common Problems in the Construction Industry

General	Finance	Human Capital and Management
<ul style="list-style-type: none"> • Adverse policies and regulations • Unfavorable institutional conditions • Industry fragmentation • Low integration along the value chain 	<ul style="list-style-type: none"> • Insufficient capital • Insufficient profits 	<ul style="list-style-type: none"> • Lack of business and managerial knowledge and experience • Lack of line experience • High employee turnover • Poor accounting systems • Inadequate sales • Over-expansion • Lack of competitiveness

Source: Authors' adaptation from Well, 1986, and Wong and Thomas, 2010

The failure of local players in the construction industry value chain can be ascribed to four sets of factors (ANEMM, 2000, Lopes, 2006, AIMO, 2010). The first is of historical nature, since it is the result of events that shaped the economy of Mozambique for the last 35 years. The second is related to the regulatory and policy space, while the third to the lack of local competencies (human, financial, technological, and import constraints). The final set of factors are grounded on a fundamental flaw related to what Evan (2011) referred to as state-civil society linkages.

4.1 Historical Factors

The construction industry in Mozambique dates back to the 1930s, when the first small scale industries producing cement and bricks were set up to service a small colonial community. When Portugal adopted economic nationalism, with a view to foster rapid economic and social development, the sector and the economy as a whole gained additional strength to take off and diversify. Economic nationalism reserved a special role for the colonies in Africa, including Mozambique, as a reservoir of cheap labour, a supplier of primary goods, a market for industrial goods, and an important base for investment and overseas employment for the Portuguese. Using a set of Promotion Plans, Portugal introduced deliberate measures to build what can now be considered the first generation of locally based commercial ventures and entrepreneurs in Mozambique. By 1975, Mozambique was the 8th industrial power in Africa with a relatively diversified industrial base (Tyler et al, 1999).

Mozambique's independence in 1975 and the adoption of centrally planned economy of socialist style shifted the balance of power towards state intervention. The then emerging market forces and private sector dynamism were suppressed, stimulating a large-scale exodus of human and physical capital with devastating long term implications for industrial production. In order to face this situation, the government reinforced centralization, introduced state companies, and hardened administrative mechanisms of price control to govern the allocation of scarce resources in the economy.

The government nationalized the cement, iron and steel industries. It also created regional civil and heavy construction state companies under the Ministry of Public Works. In 1977, the government announced the nationalization of the housing market. To counteract the effects of manpower scarcity, expenditure on education increased and the government sealed agreements with socialist countries such as Russia, Cuba and others for training Mozambicans abroad.

The consequences for Mozambican industries and the construction sector in particular were costly. While until 1981 the economic reforms appeared to result in improvements in employment and production, in 1983, it became clear that the implied changes were unsustainable, leading to costly distortions in the allocation of resources and the disruption of the

production and the value chain of the construction industry. At the same time the economic reforms could not reverse the long term effects of the colonial ban on developing indigenous business and a skill-oriented education framework.

Rural production suffered dramatically during this period, reducing the supply of raw material to the construction industry as well as the demand for industrial output. Production of tea, cashew, cotton and sugar, the country's main exports at independence, dropped to 30% of the 1980s levels. The combined effects of the reduced supply of locally generated raw materials, the limited access to foreign exchange reserves associated to declining exports, as well as the drop in the demand for housing and infrastructure, left the construction industry close to collapse. The war and natural disasters added to the problem through the sabotage of badly maintained infrastructures and the disruption of the road network.

By the year 1987, despite being a monopoly, capacity utilization at the cement industry was below 50%. The civil and heavy construction industries were stagnant, surviving on the basis of state subsidies and public tenders, while holding a significant proportion of redundant labour force. The colonial era logistics, learning expertise as well as market intelligence within the civil and heavy construction sector had in fact suffered a second blow, following the reported massive exodus of skilled labour. Furthermore, due to the nationalization of houses in 1977, private business within the housing market disappeared. This measure blocked the potential for a highly rewarding channel for the development of indigenous entrepreneurial skills as well as an important source of capital and economic growth.

Mozambique turned to the World Bank and the International Monetary Fund in 1984. This was followed by the introduction of the Economic Rehabilitation Program (SAPs) in 1987, and a market-friendly constitution in 1990. For the construction industry, the SAPs privatization and liberalization has implied not only the obvious changes in terms of asset ownership, but also: (i) exposure to global competition; (ii) the emergence of a competitive housing market; and (iii) open opportunities for partnership with foreign private capital.

Competing in a global industrial environment, however requires the existence of certain initial conditions that Mozambican firms have not had the opportunity to develop. To minimize the impact of asymmetric information, construction industry market players invest in signalling

devices, such as reputation and the use of international standards in management processes, inputs and outputs. In order to successfully compete with global players, the management process, inputs (including the labour force), and outputs need to be certified. However, Colonialism and the socialist experiment prevented the development of the reported signalling devices among indigenous construction companies. Next we detail the issues, the causes and implications of this weakness of construction firms in Mozambique.

4.1.1 Credibility and Reputation Barriers

Standards matter as they are crucial for accessing the public sector and foreign investors markets. Standard market practices require detailed information on management process, labour force, and the characteristics of inputs and outputs. Construction projects are particularly concerned about preventing security and health problems. Despite increased awareness about this, the number of indigenous construction companies certified is small in Mozambique. Among the 12 contractors surveyed by Lopes, 2006, only two firms reported to have certification on total quality control. This situation has not changed to date. In 2010, the number of industrial companies (including firms within the building materials category) willing to go through a certification program for management practices under a donor-supported government program was particularly small (in fact less than 10% of the firms in the industry) (AIMO, 2010).

The reasons for a relatively weak demand for certification services include: (i) public sector constraints for setting up and funding internationally certified institutions for supporting the development of standards among SMEs; (ii) lack of certified laboratories; (iii) a business environment which does not induce certification; and (iv) lack of vibrant networks of construction industry business associations. The first contractors' association, EMPREMO, was established at the end of the 1990s. It is understaffed and, like many other business associations in Mozambique, it lacks the resources for leading the transformation agenda of the current for the construction industry, which remains fragmented, isolated, and not integrated into a value chain network.

4.1.2 The Dimension and Age Factors

The alternative solution for the absence of certification is to build up a consistent track record. This requires time and opportunity for multiple interactions with high profile clients. Unfortunately, due to historical reasons, most firms are the result of the recent wave of privatization and liberalization, being below the international construction industry standard maturity stage. Indeed, in the civil and heavy construction industries, small size and young age pose a significant handicap (ANNEM, 2000, Lopes, 2006)⁴. Getting access to large projects requires scale and a track record that takes time to build, and in the absence of which it is hard to break in the FDI and large public sector projects regulated by international standards.

The failure to build effective mechanisms for ensuring credibility also leads to: (i) increased perceived risks of doing business with indigenous construction companies; (ii) limited access to the high income segment of the construction industry. Combined they trap indigenous companies in the vicious cycle of low demand, low income, and reduced capacity to build up signalling devices.

4.2 The Policy and Regulatory Framework

Following the adoption of the Millennium Development Goals in 2000 coupled with the Agenda 25 and the “Plano de Acção de Redução da Pobreza (PARP II)”, the government of Mozambique defined six priority sectors for allocation of public expenditure. These were education, health, infrastructure, agriculture, rural development, and good governance. The objective was to expand the flow of resources for these sectors. The effect was a reduction of absolute poverty from 70% in 2000 to 45% in 2010. Given the widespread scarcity of public services for the selected sectors, the government embarked on a vast program of infrastructure development, mainly investing on rehabilitating roads, schools, housing, health centres, and public administration offices.

With significant donor support, Mozambique succeeded in expanding government expenditure in education, mainly for increasing primary school enrolment rates in the rural areas. The share of education in total government expenditure was close to 20% in 2007 and remained close to that

⁴ A typical locally owned construction company started operating in early 1990s. According to Lopes, 2006, only three local contractors initiated their operations before independence. These contractors have national dimension and have managed to compete within the medium and high project finance market segment.

figure from 2007 to 2009 (Table 3). Approximately, half the resources were spent in building the rural education infrastructure. The expenditure on infrastructure (roads and other transport and communication infrastructure) was estimated at 13% in 2007, but increased to almost 17% in 2009 (Government of Mozambique, 2011).

Table 3: Growth Rate of Government Expenditures by Sector

	2008	2009	2010	2011
Education	27%	10%	-2%	-27%
Health	-4%	16%	-5%	3%
HIV/AIDS	2%	-37%	-48%	-31%
Infrastructure	21%	7%	-29%	29%
Agriculture and rural development	20%	48%	-56%	7%
Governance, Security and Justice System	41%	22%	-11%	16%
Others priority sectors	86%	15%	-2%	50%

Source: Conta Geral do Estado (2008, 2009 and 2010) and Relatório de Execução do Orçamento do Estado (2011)

The expansion of government expenditure on social infrastructure and the transportation infrastructure has created a market for the construction industry with potential multiplier effects. However, it has not allowed for local indigenous contractors to break out of their niche markets due to constraints related to: (i) the size of the housing market; (ii) the VAT level and associated reimbursement procedures; and (iii) government procurement policies (ANEMM, 2000, Lopes, 2004, AIMO, 2010).

4.2.1 The Housing Market Limitations

The housing market plays a fundamental role for fostering economic development. It is the backbone for sustained growth for local entrepreneurs as it is less demanding in terms of construction resources, costs and finance.

Yet, after the collapse that followed the nationalization of the 1970s, the housing market is experiencing relatively slow growth. This seems paradoxical, because Mozambique has gone through a rapid process of economic expansion, increased government expenditures, and urbanization, but it is not surprising.

The housing market's failure to take off is rooted *first* in the fact that economic growth took off from a very low base. In urban areas, income inequality either did not improve or actually deteriorated. In such conditions it is hard to find a low to middle class group with sufficient income and the willingness to purchase houses at their current prices in the formal housing market.

Second, land in Mozambique belongs to the state. Acquiring a plot for construction takes time and a long bureaucratic process involving institutions ranging from the local authorities to the federal municipalities. The World Bank doing business report for 2011 estimated that there are 17 necessary steps to get permission for construction in Mozambique.

While this may not be a problem in less populated rural areas, where there is excess supply of land, the state ownership of land and the associated bureaucracies in the context of a non-existent formal market for land titles opens space for rent-seeking behaviour from government officers. Because demand is increasing due to urbanization, this phenomenon also raises the monopoly power of government officials, heightening the real costs of building in urban areas.

For the construction industry players, the impact of this problem is reinforced by two additional binding constraints. First, the savings and earnings of the emerging middle class (the most important source of demand in the housing market) remain significantly low. Furthermore, Mozambique's middle class is considered risky as they cannot use the informally acquired land as collateral, therefore not being eligible for bank credit. The ultimate implication for the construction market is straightforward: without a safe source for financing it is hard to use formal project developers and contractors, raising informality in the housing market in Mozambique⁵.

⁵ See also Lopes, 2006 for a discussion on informality within the construction industry in Mozambique.

4.2.2 VAT Reimbursement and Procurement Barriers

Construction companies' involvement with the public sector is regulated by the public tender decree number 15/2010. The decree states that the public sector procurement rules must adhere to the principle of public tenders. However, for promoting local SMEs the decree additionally, under Articles 90, 106 and 113, divided the public sector bids in three as follows:

- Limited tender, for construction projects estimated to cost between 1,750,000 and 3,500,000 MT (Mozambican Meticais);
- Small bids, for construction projects amounting to 15% of the previous bids;
- Direct adjustment, for construction projects costing between 87,500 MT and 175,000 MT, which does not require a formal public sector tender.

Under the government procurement legislation, open bid therefore covers construction projects whose costs lie above 3,500,000 MT. For qualification, four pre-requisites need to be satisfied. First, the company must be legally registered. Second, the company must be economically and financially sound, based on the size of its balance sheet. Third, it must demonstrate that it has the technical capacity for undertaking the project. Fourth, it is mandatory to be cleared by the fiscal authorities. For all tenders, it is a requirement to apply preference margins of 10% for local companies.

While application of preference margins constitute a relevant innovation compared to the previous legislation, it is hard to predict major changes in the way indigenous construction companies do business with the public sector. This is due to the sizable amounts involved, as requirements for guarantees are costly and add to the hardships of doing business in the construction industry in Mozambique.

To get awarded a project amounting to more than 3,500,000 MT, a company in Mozambique must pay a premium of 1.5% of the total project cost as insurance⁶. Once the project is awarded, the market practice⁷ is to require the payment of 50% of the total project costs as the first instalment. Under the reported legislation, this can only be made with the presentation of a bank

⁶ See also, Lopes, 2006 for a discussion of this.

⁷ The legislation however allows the contracting public entity to pay 20% as the first installment for start ups.

deposit of the same amount as insurance. Being unable to meet this requirement from its own funds, the company may resort to the banking system for mobilizing finance, but this takes time and resources. The associated interest rate and commissions are added to the total insurance cost. After finishing the project, getting the final payment and reimbursement takes additional time, creating liquidity problems among the sector operators. Lopes (2006) estimated the payment time lag to be between three and six months, or even a year, depending on the bargaining power of companies involved.

While requirements for insurance seem appropriate in imperfect markets, the proof of a track record, as well as technical and financial capabilities, introduce an additional distortion to the market. In fact it compromises the achievement of the ultimate objectives of the legislation itself. Compared to their counterparts in South Africa, Portugal, and China, local indigenous companies are young. Forced by the market uncertainties and liberalization, their investment in building assets is also relatively low (Lopes, 2006). This implies that banks will be reluctant for providing finance and public institutions will not take them as appropriate candidates for costly construction projects. The ultimate effect is market segmentation and concentration. Indigenous companies end up being delegated low end market segment.

Two additional policy problems are related to the level of and the procedures for getting the value added tax reimbursement. First, currently, the value added tax (VAT) is 17%, compared to 14% in South Africa. According to the tax code the VAT is expected to be borne by the final buyer. In the context of the housing market the final customer is either a buyer of house or a construction project. When buying construction materials (cement, stone, etc) in bulk the buyer pays 17%. The buyer has to pay the same percentage for formally hiring equipment, material, project developers and contractors. Depending on the amounts involved and the number of transactions involved, adding up all the VAT costs increases dramatically the total costs of embarking in a construction project. In the context of poor savings and a vibrant informal market, this reduces the demand for construction projects, particularly from the middle class, holding back potential buyers from doing business with the formal construction industry operators (ANEMM, 2000, Lopes, 2006).

Second, the procedures and the time spent for getting government payment and VAT reimbursement leads to liquidity constraints among the construction industry operators. According to the VAT code, the fiscal authorities are obliged to reimburse the value added tax paid when purchasing inputs. To be eligible for VAT reimbursement, the company should submit appropriate fiscal forms, invoices and a synthesis of the balance sheet. It must also prove that the required reimbursement is above 50,000 MT. Since most of the VAT expenditures in construction projects lie well above this amount, contractors are among the most concerned and affected parts. A delay in reimbursement implies reduced cash-flow. If it is not finally reimbursed, it results in lost revenue and a reduced capacity to compete.

4.3 Competence Factors

4.3.1 Labour Force and Indigenous Companies' Ability to Compete

Mozambique labour force qualifications are limited. Fifty percent of Mozambique population is illiterate. Of this close to 80% have no professional qualifications. According to the National Institute of Professional Training and Employment (INFP, 2007), 90% of those applying for their first job have not finished basic education. Among them the majority (62%) have no work experience or qualification⁸.

The situation is not different within the construction industry (ANEMM, 2000, Lopes, 2006 and AIMO, 2010). Among the building materials industry, more than 60% of employees hold only a primary school certificate (ANEMM, 2000, AIMO, 2010). According to Lopes (2006), the same percentage holds for employees among contractors and only 9% had finished secondary school. While unskilled labour is in excess supply, contractors report considerable scarcity of mid-level managers, project directors, supervisors, and head-masters for building, carpentry, metal work, electricity, welders and water pumps (Lopes, 2006).

Table 4 presents the education budget projections for the period 2006-10. Although the emphasis on primary education in particular is consistent with the still low levels of development

⁸ At least in a Mozambican context, it is important to note that work experience and qualification can be acquired resorting to on the job training with informal operators

of the country, the Table also suggests a persistent policy bias against vocational and technical education. In line with the objectives set for the Millennium Development Goals, the government projected to channel close to 50% of the available education resource envelope for the expansion of primary education. The share for secondary and higher education averaged 30%. Adult education, which is meant to target most of the current entrants in the labour market, teachers, vocational and technical training, combined was projected to receive an average of 5% of the total education budget.

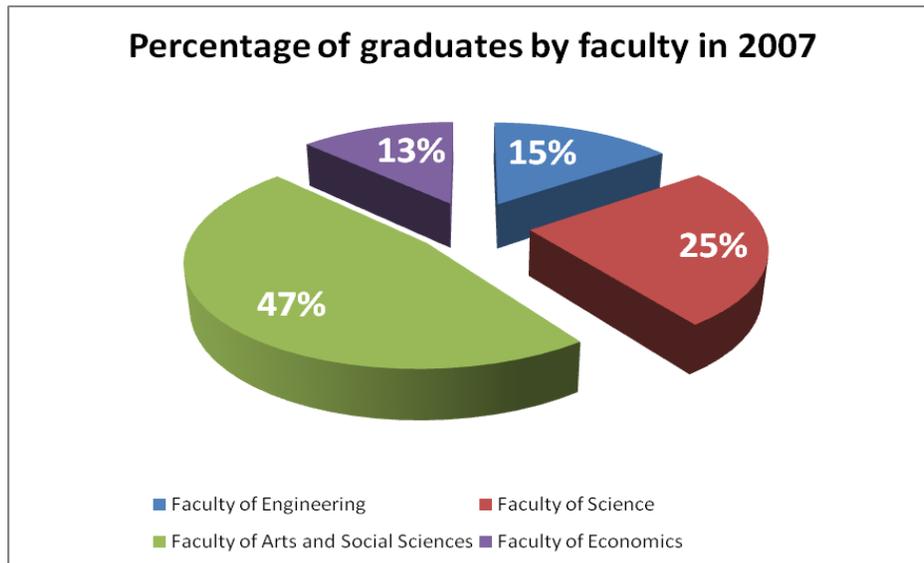
Table 4: Projected Distribution of the Education Budget

	2006-2010				
	2006	2007	2008	2009	2010
Primary Education	49,9	48,8	48,8	48,8	49,4
Secondary School Educ.(1st cycle)	11,9	11	11,7	13,1	13,9
Secondary School Educ.(2 nd cycle)	6,5	7,1	7,4	8,1	8,7
Vocational and Technical Educ.	4,1	3,8	3,8	4	4
Teachers Training	0,4	0,8	1	0,7	0,7
Adult Education	0,8	0,9	1	1,1	1,1
Higher Education	19,1	20,2	19,7	17,7	16
Culture	0,9	1,1	1,1	1,1	1,1
HIV/SIDA	1	1,1	1,1	1,2	1,2
Administration	5,4	5,3	4,8	4,2	3,6
Total	100	100	100	100	100

Source: Government of Mozambique, 2005.

The short term effect of this policy can be spotted in the chart below. Due to their secondary school background, at the Eduardo Mondlane University, the largest of all Mozambican universities, most university graduates are from the Faculty of Arts and Social Sciences.

Chart 5: Percentage distribution of graduates at Eduardo Mondlane University⁹



Source: Eduardo Mondlane University, 2007

While young people with a higher education degree complain about unemployment, companies insist that they are failing to find the right people in the market. A study conducted for the Mozambique Industrial Association (AIMO, 2010) found that local industries' needs ranged from general positions, such as administrative workers, accountants, and budgeting officers, to specialized ones, such as certified welders, mechanical engineers, and workplace safety and hygiene specialists for the construction industry (AIMO, 2010). Companies are finding it hard to get the appropriate and internationally certified technical skills in a labour market dominated by people without qualifications, holding secondary school, or social science degrees.

⁹ Eduardo Mondlane University is the oldest Public University in Mozambique. It has trained the majority of civil and heavy construction engineers.

The limited supply of vocational and technical education graduates is reinforced by two additional factors. The first, and probably the most important, is related to a fragmented institutional and policy setting. The responsibility for training of the labour force in Mozambique lies with the Ministry of Education, the Ministry of Labour through the National Institute for Professional Training and Employment, the Ministry of Science and Technology, and institutions of higher education with a relatively high degree of autonomy in setting their policies. There is limited evidence of systemic interaction between these actors, and the formal and informal private sectors. Linkages between education subsystems-secondary and technical education-remain problematic and the private sector is failing to help due to information and coordination failures.

In order to attract the private sector to the process of building a qualified labour force, the government enacted a new investment code prescribing fiscal incentives for those companies investing on training. So far, however, the results have been limited. Due to the relatively weak judicial system, and constraints related to the flow of information regarding training opportunities for indigenous businesses, companies are reluctant to train their own manpower (AIMO, 2010).

In order to remain productive, the construction industry is forced to invest more resources than necessary in retraining new employees. Alternatively, construction companies employ costly expatriates or retired personnel. In such an environment it is not surprising that only a few companies manage to become suppliers for the booming FDI in Mozambique.

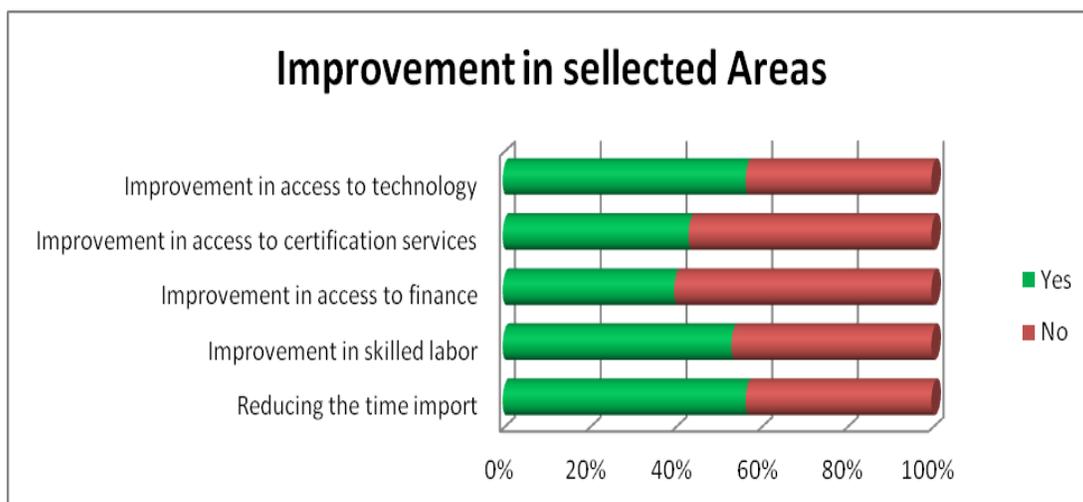
For the Mozambican construction industry the ultimate effects of the relative scarcity of qualified manpower are: (i) reduced flow of investment on the construction industry value chain, given the sector dependence on labour intensive techniques; (ii) inability to access and explore highly remunerated projects; specializing the indigenous construction industries on the low end of the building market; and (iii) increased market power for those companies (few and foreign owned) who can mobilize large amounts of capital and can hire employees worldwide.

4.3.2 Finance

Mozambique's financial system has gone through remarkable improvements since the introduction of the economic rehabilitation program in 1987. The number of banks increased from three at the beginning of the reform process to 18 in March 2012. The country opened the first stock exchange in 1999. The number of insurance and microfinance institutions has also increased. As a result, financial savings, captured by the volume of term deposits tripled from 9.1% as a percentage of broad Money (M3) to 31% in 2008 (Navalha, 2009).

For the construction industry, this success failed to improve access and availability of funds, particularly for long term investment (ANEMM, 2000, Lopes, 2006, AIMO, 2010). As the chart six reports, the majority of construction companies interviewed in the course of this work considered that, despite increases in the number of financial sector operators, there have not been major improvements in access to finance.

Chart 6: Companies' Perceptions about Government Interventions¹⁰



Source: Authors calculations based on a sample of 30 construction firms

¹⁰ The firms were asked to evaluate the Government's performance in selected areas on the basis of previous research results (ANEMM, 2000, Lopes, 2006, AIMO, 2012). Basic issues for each area were also specified. On import of raw materials they reported the need for reduction on import bureaucracy and more clearance efficiency. Enterprises reported to train themselves in order to fill the skills gap. Alternatively, they hire expatriates or send their workers to be trained abroad because they cannot obtain adequate training locally. The dominant response on financial issues is that local banks are not facilitating access to finance. The demand for collateral and guarantees are unaffordable for the surveyed companies.

This is of particular relevance for the civil and heavy industry construction subsector, since private and public procurement procedures involve a number of financial requirements for contracting. The liberalization of the financial sector has in fact increased demand for collateral and raised interest rates, alienating those companies who cannot comply. The local civil and heavy industry construction companies are hit twice due to this process. They cannot invest in long term projects because they lack financial capacity to pay for project insurance, and long term credits are the scarcest input in the market. The poor access to finance for production purposes is grounded on the following factors discussed below.

4.3.2.1 Financial Sector Business Environment Limitations

Business environment constraints refer to the weaknesses associated with property rights protection and financial sector structural limitations. The judiciary system remains weak in the enforcement of financial transactions. Property rights bureaus operate below desirable level of efficiency and the risk management agencies are still in their early stages, having access to human capital among major limitations. They are also unable to generate the relevant information about the risk profile of customers and related property rights. Overall, their coverage is deficient.

The availability and access to the necessary project finance is constrained by: (i) banking sector market concentration; and (ii) low levels of financial savings in the face of high public sector demand, with deposits to credit ratio reported to be below the average for sub-Saharan Africa (FMI, 2010). Among 183 economies, Mozambique is 127th on access to finance, behind Angola, Mauritius, Tanzania, and South Africa, which is placed 2nd in Sub-Saharan Africa (World Bank, 2011).

4.3.2.2 Monetary and Financial Policy Limitations

Recent central bank interventions improved the state of economic conditions in Mozambique. In the last five years the reduction in the capital requirement ratio led to the emergence of new financial institutions, hence increasing financial inclusion. It also led to financial innovations, particularly within the microfinance segment, with indirect effects on interest rates and the degree of competition.

The challenge of a more targeted intervention with a view to support sustained growth for the construction industry and long term investment, however, remains (ANNEM, 2000, Lopes, 2006, and AIMO, 2010). The gap between deposit and credit interest rate has diminished but it remains high by sub-Saharan Africa standards. Recent interventions by the monetary authorities led to additional reductions, but it is unclear how long it will take to significantly improve the situation.

Two recent studies by the Bank of Mozambique (2007 and 2011) report limitations on the central bank transmission mechanism. These studies found a small correlation between the central bank rediscount rate and commercial banks interest rate. This is most likely the result of market concentration, associated with the limited degree of secondary market interactions and the possibility of profitable overseas banking businesses. The possibility of using other instruments, such as government bonds, would open space for improvements, but this still remains a long term objective due to underdeveloped capital markets.

4.3.3 Business Management Constraints

According to the INE 2005 census of enterprises, there are 28,870 private companies in Mozambique. Around 89% are small, 10% medium-sized, and 1% considered to be large. Management practices within the indigenous construction industry are weak, reflecting historical factors: the massive post-independence exodus; the state intervention in the 1970s and mid-1980s; and the privatization of state assets in the context of a liberalized economy afterwards. The overall effects of Colonialism and socialism were the underdevelopment of indigenous capabilities, fractured logistics, and limited market intelligence.

When a market friendly approach surfaced, business management capacities were a scarce resource and continue to remain relatively absent now. Among the construction industry players, financial management practices, accounting, and corporate governance are generally poor, increasing the banks' perceived risks of lending to the industry (Lopes, 2006).

Changing this requires both short term and long term measures to support training of manpower for the construction sector. In line with this sentiment, the government has supported the emergence of mid-level and higher education institutions geared towards the study of business and management. Nonetheless, there are concerns about the competency of their graduates, partly due to the low level of investment on teachers (Table 2).

4.3.4 Technology

Due to environmental concerns and the need to reduce costs, the construction industry worldwide has experienced increased innovation and modernization. However, Mozambique has not taken advantage of this international know-how. This is visible in the World Economic Forum technological performance indicator, where the country is ranked 116th in the world, beneath South Africa, Botswana, Namibia, Zambia, and Lesotho (AIMO, 2010).

Mozambique's poor performance is a result of the following factors: (i) reduced degree of absorption of new technology associated with the lack of skills; (ii) low levels of innovation, (iii) weakness in protecting intellectual property rights; and (iv) reduced private sector investment in research and development, due to its relatively small size and undercapitalization (ANEMM, 2000 and AIMO, 2010).

Indeed, the government industrial strategy for the period from 1997 to 2012 flagged this issue, pointing out the technology gap as one of the main factors behind the indigenous companies' inability to compete. The strategy called for urgent measures, but in a recent survey¹¹, AIMO 2010 found that the situation has not changed despite the fact that the implementation period of the industrial policy and strategy paper is reaching its end. Over 62% of the companies surveyed in the course of the AIMO 2010 study (including producers of building materials, such as cement and heavy construction firms) had not made major acquisitions of new technologies since the

¹¹ The survey targeted the active members of the Mozambique Industrial Association (AIMO).

1990s, their machinery was over 20 years old and they were finding it hard to maintain and replace spare parts¹² (ANEMM, 2000 and AIMO, 2010).

There are several reasons for the reported situation. Around 42% of the surveyed companies complained about the lack of finance and the costs of acquiring new technology; 17% reported their inability to access skilled labour as the main constraint; while the inability to compete in the market (14%), lack of support services (11%), market information gaps on new technologies (9%), and import procedures constraints (6%), the remaining factors. Only one company involved in the construction industry reported to have access to new technology due to its ties with foreign investors. It is this linkage that we believe generally assures ready access to new technologies and allows for constant upgrading and maintenance.

The interviews conducted in the course of this study reinforce these findings. As one of the interviewed firms reported, the current market practices in the building industry involve increased reliance on iron and steel structures coupled with reductions on the amount of cement applied. However, local indigenous contractors and manpower mostly have not mastered the technologies available. When posed to the challenge of running a construction project with iron and steel structures requirements, they either do not accept the venture or they are forced to subcontract expatriates, mainly from South Africa and China.

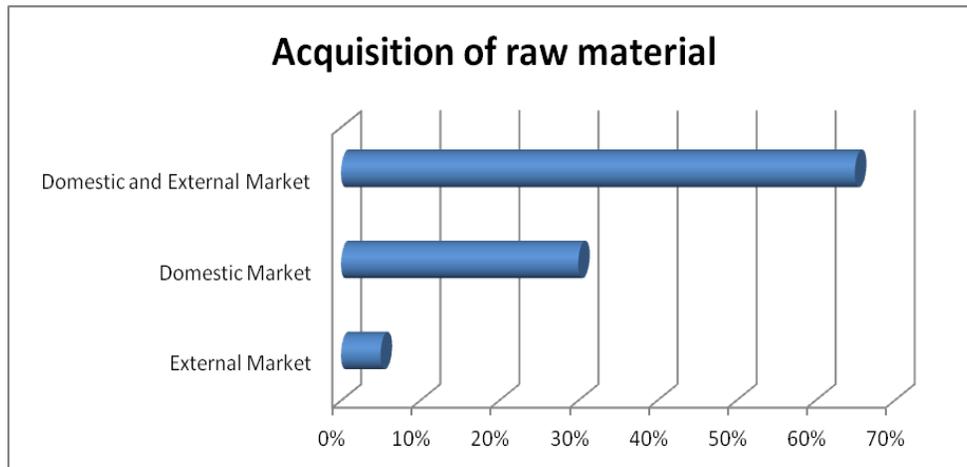
4.3.5 Constraints in the Import of Raw Material

As indicated earlier, part of the growth of the construction industry was sustained by increased imports. Close to 60% of the inputs used by the building materials producers and heavy construction companies are imported (ANEMM, 2000). This is particularly true among construction firms with business relations with foreign investors. The surveyed companies

¹² ANEMM, 2000, reports a range of 2 to 25 average years of age for local industry equipment among contractors and producers of construction materials. The oldest equipments were found specifically among producers of construction materials.

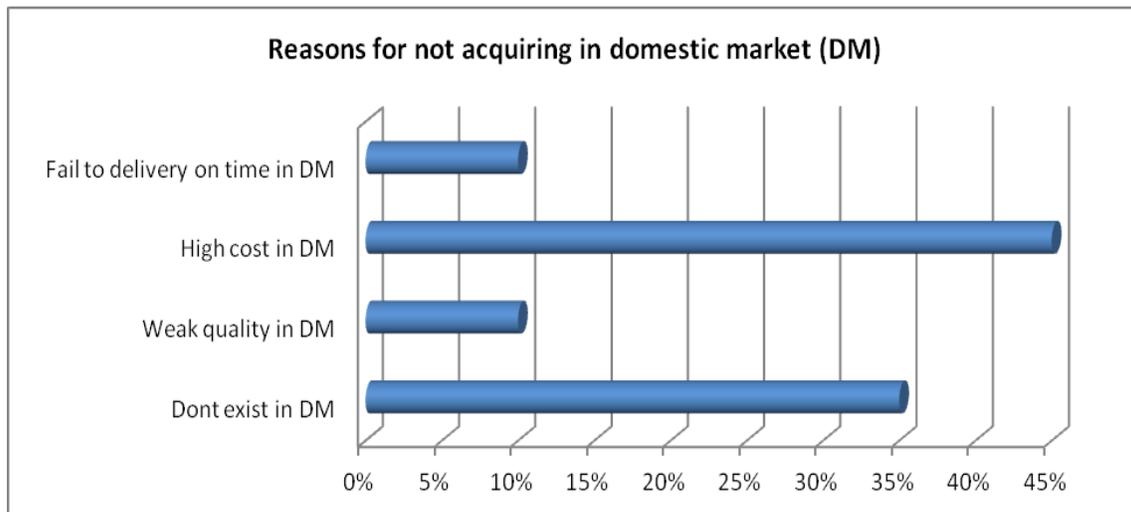
reported that they obtain their inputs from abroad due to the poor quality and lack of availability of local suppliers (Charts 7 and 8).

Chart 7: Distribution of Companies by their source of raw materials¹³



Source: Authors' calculations

Chart 8: Reasons for not using the domestic sources



Source: Authors' calculations based on a sample of 30 construction companies

¹³ Domestic and external markets mean the number of companies reporting to source inputs in both foreign and domestic markets. External market stands for companies using exclusively foreign markets.

A typical Mozambican company has to go through three stages to import raw materials: (i) hire an import broker to start the import process; (ii) pay the import duties; and (iii) clear the imported material and make the appropriate delivery to the factory. The first stage is placed under the supervision of INTERTEK, a world renowned inspection company. In the second stage, the importer deals with customs authorities. For receiving the imported materials, after arrival and payment of import duties, the import broker deals with the cargo terminal officers. During the three stages, importers face delays and have to incur additional costs and time, compromising an already limited capacity to import, while competing with regional and global giants. AIMO 2010 estimates that, on average, a typical industrial importer has to spend 55,473MT for each import made through the Maputo cargo terminal, in addition to the required expenditures¹⁴. This adds to the average cost of inputs, reducing the average margin as well as the competitiveness and performance of the industry (ANEMM, 2000).

4.4 Flaws in State-Society Linkages

The constraints raised above are not a new topic of debate in Mozambique's industrialization. In fact they are the target of several public policy instruments. In 1997, the Industry Policy and Strategy paper pointed to them and defined targets to be achieved by 2012. More recently, similar issues such as finance and technology limitations were incorporated in the SMEs promotion strategy approved by the government in 2011. The three Poverty Reduction Strategy papers also reported similar constraints and the need to remove them for an effective fight against poverty. Why is Mozambique failing to see a major breakthrough on indigenous private sector development, and the construction sector in particular?

The answer is that the State lacks financial, material, and human resources for rapid changes in the industry landscape. However, this is only a small part of the answer. Changing the budget towards an emphasis on individual skills and improving SMEs capabilities requires the expansion of the existing dialogue spaces between main actors in Mozambique: the state, donors, businesses and civil society organizations.

¹⁴ This amount accounts for the additional costs of renting a container, using terminal space, as well as fines, resulting from delays associated with getting authorization for leaving the port after the payment of import duties.

Long years of authoritarian culture and centralization have in fact obviated the development of bottom-up exchanges between the state and civil society. Due to the aid dependence, the government is more accountable to donors than to citizens. The institution of a multiparty democracy has not helped in changing this side effect of aid.

The construction sector association remain weak at the local level and distant from the decision making centres. This implies low levels of information for government officials about local preferences and reduces the chances for fruitful intervention. In the absence of strong bottom-up information flows, it is difficult to expect major changes in favour of a vibrant construction sector value chain, a fundamental block for a broad-base strategy growth in Mozambique.

Changing the outcomes also requires changes in strategy design and definition of priorities in Mozambique. To date, government strategic plans are broad in approach and limited to specific sectors. Each Ministry analyses its own issues, without paying attention to the issues in closely related sectors. This results in wasted resources, because it constrains the establishment of inter-related priorities for ministries. It is not surprising that when looking at the Ministerial sector strategy, all types of sector objectives and mandates are considered priorities; however, they may not be priorities at the national level. This does not mean that at the cabinet level there is no reconciliation of targets, but there is a difference between cabinet reconciliation and effective implementation at the Ministerial and local level.

Solving this problem requires breaking compartments and redesigning government institutions, following a value chain organizational structure¹⁵. A number of bodies, such as the sugar and cotton institutes, have been created in line with this view, but their role remain limited and it is not clear whether the government considers this approach a valuable asset for fostering development and changes in other sectors.

¹⁵ Brazil is good example for this purpose. Evans, 2011, brings fruitful discussions and examples regarding the limitations in building appropriate channels of information exchanges between the state and civil society, and possible implications for building a developmental state.

5 Conclusion and Recommendations

The Mozambican economy has made significant progress in the last 10 years. However, in apparent contradiction with generalized expectations, the reported growth and expansion in investment failed to lead to major improvements within the local construction industry. Local contractors, producers of building materials, and associated firms are finding it hard to compete in a liberalized setting. Only 5% of local contractors manage to bid for construction projects requiring significant finance.

The failure of local construction firms is rooted in the following factors: (i) weak credibility associated to their age, dimension, track record and lack of certification; (ii) the VAT level and the associated reimbursement delays; (iii) multiple and long bureaucratic procedures associated to the state ownership of land, which raises the costs of access to land in urban areas, increasing informality and hampering the development of the housing market; (iv) inadequate government procurement codes; (v) limited access to credit; (vi) lack of qualified manpower; (vii) weak use of modern technology; (viii) delays and bureaucratic barriers for import of raw materials and; (ix) policy and institutional fragmentation (ANEMM, 2000, Lopes, 2006, AIMO, 2010).

Partnership, as well as the local industry integration, do matter for success in the global market. Unfortunately, the construction industry operators do not seem prepared for that; they are dispersed and deficiently connected (Lopes, 2006). The emerging business association movement within the construction industry has the potential to push for changes in the right direction, but, so far, it has not been visible. It is weak and lacking in terms of human and financial resources.

Changing the prevailing construction industry landscape will require the introduction of the following measures:

- Encourage the development of certification programs involving all aspects of the construction industry (human resources, management, and total quality control issues).
The introduction of this measure has the potential for minimizing the credibility gap of

indigenous firms, while stimulating, with multiplier effects, savings, gross domestic capital formation, employment, and broad based growth.

- Examine the possibility of VAT exemptions for construction materials and services. At its current level, VAT acts as one of the major barriers for increased trade within the formal construction sector. For the emerging middle class and for the country as a whole, it acts as tax on savings as well as on gross domestic capital formation. Introducing VAT exemption on construction materials and associated services has the potential for increasing the demand in the formal construction sector. In the short term it is fundamental to search for mechanisms for simplifying and speeding up the procedures for VAT reimbursement.
- Promote an in-depth discussion on the benefits, costs and optimal approach to reforms on land rights, including the introduction of marketable land titles for urban land. By removing the monopoly power of government officials, this should lead to reductions in land related construction costs, while increasing state revenue, through adequate property taxes. In addition, marketable land titles also has the potential to encourage financial sector innovations in favour of a more competitive formal housing market.
- Reform the government procurement code. The current code encourages market segmentation and pushes local contractors and other construction industry players towards the low end of the market. Reforming the code requires creating incentives for reducing the time lag in which the public sector clears the construction sector bills as well as the associated reimbursements. It also implies considering the introduction of mandatory requirements for sub-contracting local construction firms and suppliers. These are acceptable procedures because the current market practices go against indigenous firms. They are also in line with regional and international practices. A good regional example is South Africa.
- Increase the resources available for technical and vocational training for mid level skills in the construction industry. If the education budget allocations are kept unchanged, there will be a crisis of manpower in the near future. Changing this scenario is a fundamental

pre-requisite for success. It will need to be supplemented with a program of technological upgrading.

- Encourage reforms of the financial sector in favour of a more competitive environment. For reducing the perceived risk, this needs to be supplemented by changes in management practices and corporate governance among the construction industry players.
- Encourage simplification of procedures for importing raw materials and equipment in line with international best practices.
- Encourage the development and empowerment of the construction industry federation. This federation will have to involve all the construction industry players, building material producers, contractors, hiring firms, and project developers.
- The government should also reflect on the possibility for setting up a construction industry body, bringing together all the concerned entities from both the private and public sectors (the Ministry of Public Works, the Labour Ministry, the Ministry of Science and Technology, The Education Ministry, and Universities). If properly run, a strong federation and construction body will make space for bottom-up interaction with positive effects for the whole construction industry value chain, and would have a crucial role in developing management capabilities, skills, standards, certifications, as well as promotion of joint-ventures for procurement and bidding purposes.

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