

GLOBALISATION: A CHALLENGE TO THE TANZANIAN CONSTRUCTION INDUSTRY

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ABSTRACT

The impact of knowledge based economies and globalisation on construction industries in developing countries is evidenced by the decreasing market share of the local players in the industry. Developing countries need to institute radical reforms in their development agenda in order to leapfrog, and bridge this difference.

The paper discusses problems faced by construction industries in developing countries in the advent of globalisation. It begins by case studying the Tanzanian construction industry which, as in most developing countries, is characterised by low and unreliable rates of profitability, negligible investments in research and development, low investments in human and financial capital, domination by foreign contractors and consultants. The paper acknowledges that in a globalised economy the construction industry is no longer a localised industry and developing countries cannot be safe in their own local markets.

The paper proposes a paradigm shift from the traditional capacity building in small and medium contracting firms which target the lower value market segment and, instead fast track the development of “large” local contractors who are better placed to compete with foreign firms and mitigate the threats of globalisation to construction industries in developing countries.

Keywords: Construction Industry Development, Globalisation, Market Share, Paradigm Shift

INTRODUCTION

The Construction Industry (CI) creates and maintains the built environment, which is the cornerstone for the socio-economic development for any nation and a reflection of a nation’s development. Unfortunately most construction industries in developing countries are in very poor shape, Rwelamila (2000) summed up the status of the African construction industries as having low and unreliable rates of profitability; negligible investments in capital, and research and development; training in these industries is falling apart and too many clients still equate price with cost by selecting contractors and

consultants purely on the basis of the tendered price. To put it simply the African construction industries are under siege due to poor performance.

The advent of globalisation and the transformation of leading economies into knowledge based economies will further marginalise the construction industries in developing countries if appropriate measures and initiatives are not taken to reverse this status quo. Ofori (2000) outlined these to include a fundamental and comprehensive review of all aspects of each construction industry in a developing country. This review should provide the basis for the formulation of initiatives to attain progress on a broad front throughout the industry. The review should aim to enable the industry to face the challenges, which will be posed in its domestic market as well as wider issues of an international nature. The process should involve the main stakeholders of the industry although government can play a leading role.

This paper conducts an analysis of the challenges facing the Tanzanian construction industry. It reviews previous construction industry development initiatives in the country and draws from deliberations conducted in four consultative meetings convened to chart out strategies for mitigating the threats posed by globalisation to the local construction industry.

The paper draws on emerging trends in the construction industry worldwide and recommends initiatives for adoption.

CONSTRUCTION INDUSTRY IN DEVELOPING COUNTRIES – The Case of Tanzania.

Profile of the Construction Industry in Tanzania

The construction industry in Tanzania is guided by a Construction Industry Policy (2003) whose Vision is to have a dynamic, efficient and competitive local construction industry that is able to undertake construction projects of any magnitude and participate effectively in providing services in the regional and global marketplace.

The construction industry in Tanzania is regulated by 3 main bodies;

- ❑ Contractors have to be registered by the Contractors Registration Board (CRB). Local contractors are registered in seven classes depending on their capacity and competence as specified in the Procedures and Criteria for Registration of Contractors (1998). Foreign contractors are restricted to register in Class I as specified in the By Laws of the Contractors Registration Act 1999(Amended in 2004).Currently there are 3084 registered contracting firms with 97% of the firms being local and 3% foreign. Furthermore 95% of the local firms are in small to medium sized enterprises in classes 5-7.
- ❑ Consulting engineers and engineering firms are registered by the Engineers Registration Board (ERB).Currently there are 90 engineering consulting firms of which 79% are local.

- ❑ Architectural and Quantity Surveying firms are registered by the Architects and Quantity Surveyors Registration Board (AQRB). The Board has 89 registered architectural firms of which 93% are local and 33 registered quantity surveying firms of which 97% are local. The registration of consultants is not classified therefore there is no threshold as to the complexity or maximum contract value that these firms may undertake.

These regulatory bodies which were all established by acts of parliament in 1997 are also charged with the responsibility of developing the respective firms / professionals registered with them.

Performance of the Industry

The performance of the local construction industry can be measured using several indicators. In Tanzania the industry contributes 4.7% of the country's GDP and 47.3% of the Gross Fixed Capital Formation (GFCF). Furthermore, significant portion of the government's development budget (about 60%) is also spent on construction projects.

The industry has recorded steady growth from 8.7% in 2001, to 11% during 2002 and 15% in 2003. This growth is attributed to continued Government investment in infrastructure. Also, the economic reforms carried out during the past decade have attracted a significant increase in donor, private sector and foreign direct investment in infrastructure developments.

Despite the increase in investment and growth, the market share of local players both consultants and contractors remains very low. Foreign contracting firms managed to get 80% (by value) of all contracts during 2003 leaving only 20% for the locals.

Since approximately 85% by value of most construction works entails the procurement of a contractor, the paper will now focus on issues facing Contractors in Tanzania.

The Contracting industry is characterised by two distinct market segments, the high end, high value, complex projects segment which is dominated by foreign contractors owing to their superior technical and management expertise and access to financial resources and, about 5% of the local construction firms which are in Classes I to III.

The other segment is the low end, low value projects segment serviced by 95% of purely local contractors. This market segment is "overcrowded" by small family based contractors. The ensuing competition for the jobs in this segment leaves at least 19% of these contractors unable to win a single contract every year.

Data analysed by the Contractors Registration Board from Contractors Annual Returns for the year 2003 as summarised in Table 1 below shows that civil works get the biggest contract values followed by building works. The value of projects awarded to small contractors in classes V-VII is at best on a subsistence level with a contractor getting an average of 3 small contracts per annum.

Table 1. Average contract values for Contractors during 2003

Type/Class of Contractor	I	II	III	IV	V	VI	VII
	<i>Value In Million Tanzanian Shillings (TShs) [1000 TShs = 1US Dollar]</i>						
Building	2,769	285	175	144	162	34	27
Civil	8,391	437	156	224	112	33	16
Electrical	110	-	47	16	9	13	4
Mechanical	1,662	-	-	-	-	2.9	0.9

Source: CRB Contractors Annual Returns 2003

In the higher classes the scenario is not any better. A typical Class I Tanzanian contractor is allowed by law to undertake works of unlimited value. The data extracted from annual returns for the past three years indicates that the largest contract executed by a local contractor was in the region of USD 8.0 million. By and large a Class I Tanzanian Contractor is a small to medium sized enterprise by International Standards.

Between 1995 and June 2004 a total of 41 road and bridge construction projects have been completed in the country. These projects with a total value of 998.8 billion Tanzanian Shillings (about 1 billion US Dollars) were executed by foreign construction firms. Local firms could not qualify due to a myriad of reasons including, donor conditionalities, not having the requisite experience and financial turnovers and unfamiliarity with the required delivery methods e.g. design and build.

The scenario depicted in the Tanzanian industry is not very different from other developing countries, Drewer (1980) attributed this to the fact that most of the construction projects that developing nations require for their socio-economic development are beyond the capability of their industries to undertake owing to the size, novelty and complexity of those projects.

Major Constraints Facing the Tanzanian Contracting Industry

Through data analysed from Annual Returns for year 2003 on a sample of 638 Contractors “the Supply Side” and 31 major Clients “the Demand Side”, the Contractors Registration Board has identified major constraints affecting the development of capacity and competence in the local industry from the Contractors Perspective and from the Clients perspective as tabulated in Table 2 and 3 below ;

Table 2: Major Constraints – The Contractors Perspective

Problem Area	Type of Problem	% Respondents
1 Work Opportunities	Stiff competition / few work opportunities	47
	Difficult Bid / Tender conditions	23
	Corruption, Favouritism, bureaucracy	6
2 Skilled Personnel	Available but difficult to keep during idle times	11
	Demand too high salaries / No ability to pay	7.5
	Some skills not available at Technician level	3
3 Finance	Limited / small capital base	50.62
	Delays in payments from clients	25.8

	Difficulty in assessing loans / credit facility	14
4 Equipment	Not readily available / High hire rates	30
	Insufficient plant hire facilities	16
	No ability to purchase	12
	Poor condition of hired equipment	3
5 Materials	High prices	28
	Low quality	9
	High Taxes for imported material / Bureaucracy in clearances	7.5

Source: CRB Contractors Annual Returns 2003

Table 3: Major Constraints – Clients Perspective

No	Problem	% Respondents
1	Lack of Equipment	67.7
2	Lack of qualified staff	51.5
3	Lack of Capital	32.5
4	Poor knowledge of tendering	20
5	Poor Financial and project management	6.5

Source: CRB Clients Annual Returns 2003

In summary these results identify problems on the “supply side” (Contractors) of the industry as being;

- ❑ Poor corporate management of local firms
- ❑ Resources Constraints – access to finance, knowledge and skills, plant and equipment
- ❑ Stiff Competition /Access to work opportunities

And, problems on the “demand side” (Clients) as being;

- ❑ Bureaucratic procurement procedures, contract award and administration
- ❑ Inadequate funding for infrastructural projects

The results form a basis for determining where development initiatives of the Construction Industry in Tanzania should be focussed. In this case, improvement of the delivery system of contractors - “supply side” is a priority in order to enable the local contractors gain the requisite capacity and competence to claim a significant market share of the investment that is being channelled into infrastructure development.

This conflicts with Milford et al’s (2000) argument that “supply side” development initiatives may not necessarily be the most important focus in developing countries and rather advocated for increased infrastructure investment as a strategy to develop the construction industry in South Africa. This is not surprising, as earlier noted by Ofori (2000) a fundamental and comprehensive review of all aspects in each construction, industry in a developing country is of paramount importance prior to formulating strategies, implying, that there are no “one size fits all” solutions in CI development.

Previous Contractor Development Programs in Tanzania

There have been several initiatives aimed at developing the Construction Industry during the last two decades. These include ;

- ***Improving Access to Work Opportunities by;***
Packaging projects in sizes that local companies can undertake, improving procurement procedures by enacting the Public Procurement Act which gives a margin of preference to local suppliers and reducing Government involvement in actual construction activities by contracting most of the works to the private sector,
- ***Improvement of the Business Environment by;***
Providing Bid Bond and Advance Payment Guarantees to contractors through the Contractors Assistance Fund (CAF), establishment of government owned plant and equipment hire companies and Tax reforms.
- ***Providing Training and skills development through;***
Establishment of the Sustainable Structured Training Program (SSTP) for contractors and Training for Labour Based Contractors.

As in most developing countries, these initiatives have been government led and were geared to the development of small and medium size contractors. The justification for directing most developmental initiatives in the construction industry to SME's has been that since small and medium scale enterprises tend to be relatively labour intensive and utilise low levels of technology, a strategy commensurate with the development of this sector is consistent with employment creation, poverty alleviation and income distribution objectives, which, is ideologically correct for any developing country.

Although these initiatives have borne significant progress in the Tanzanian construction industry, most local firms are still unable to undertake large and technically complex projects. A major shortcoming in these strategies is that "large" local contractors have been left out from most developmental initiatives and have thus failed to provide any formidable competition to their foreign compatriots for the high value projects as the market share indices show.

Emerging Trends in the Construction Industry in Developing Countries.

Emerging trends in the construction industry worldwide provide a test case as to whether the traditional approaches in CI development adopted by most developing countries are still adequate. When reviewing the developments in the construction industry in Asia Raftery et al (1998) identified three major trends ;

- (a) Increased private sector participation in infrastructure projects,
- (b) Increased vertical integration in the packaging of construction industry projects which are growing larger,
- (c) Increased participation of foreign construction firms

They attributed these trends to “*the globalisation and deregulation of markets necessitated by fiscal technological and managerial constraints.*”

These trends have also permeated into the Tanzanian industry and the effects are already visible with the disadvantages heavily outweighing the advantages.

For example, while the increase in public and private sector investment in infrastructure projects corresponds to an increase in construction demand, local construction companies are not experiencing a corresponding increase in their market share of the industry due to lack of the requisite competitive edge over foreign companies. Furthermore the increase in private sector funded projects reduces the impact of regulatory frameworks which offer margins of preference to local contractors during procurement since these policies are not applicable to the private sector. It is therefore inevitable that foreign contractors shall continue dominating the high value complex project market segment.

It can be argued that the presence of foreign construction firms could offer scope for the development of the Tanzanian industry. Several authors have conducted studies on the technology transfer potential from foreign contractors, Moavenzadeh and Hagopian (1984) see foreign contractors as the sole factor influencing the development of construction industries in developing countries. This model is criticized by Ofori (1996) who notes that the objectives of foreign contractors and host developing countries differ. Carrillo (1994) shows that foreign firms are not keen to effectively transfer their technology since that is a means of nurturing their future competitors. However, Ofori (1996) notes that both local and foreign firms can benefit if systematic efforts are made by the later to develop the former. In Tanzania there are no institutional mechanisms to ensure that there is technology transfer from foreign firms to local firms hence, the impact of foreign firms in developing the local capacity has been insignificant.

New trends are emerging in project delivery requirements imposed by clients which are a departure from the traditional procurement and project delivery methods in Tanzania. For example ;

- The Central Tender Board is adopting Design and Build (D&B) mode for the construction of most major road works. Therefore contractors winning such contracts will have to assume a complex role of managing engineering, quantity surveying and construction services.
- The Tanzanian national road agency TANROADS is embarking on a Performance-based Maintenance and Management system for Roads (PMMR) whereby contractors will enter into Service Level Agreements with the Client as opposed to the traditional Works Contracts. Under PMMR Contractors will have to determine the type and extent of maintenance to be done to meet the service level agreed. Payments to the contractor will be based on outputs of attaining the service level rather than inputs from the Bills of Quantities.
- The proposed Kigamboni Bridge which links Dar es Salaam City with Kigamboni peninsular shall be constructed on a Build Operate Own Transfer (BOOT) basis,

These examples signal a new change in Clients requirements in Tanzania. Local construction firms will have to undergo a business process re-engineering, re-structure their establishments, unlearn traditional delivery methods and establish strategic alliances

with stakeholders in the supply chain so as to cope with these new customer requirements.

In view of the above there is a need to critically review the development initiatives to be applied to match these new trends. A logical question would be ; Is the current focus on developing small and medium sized enterprises still a viable option to mitigate the threats of globalisation in Tanzania? The answer is NO for two basic reasons.

- The net impact of increasing the local market share through the low value market segment which is the domain of these firms is negligible.
- The structure and resources within these firms do not allow them to transform into firms that can offer competition to foreign contractors, Furthermore, these firms are not attractive for joint ventures and strategic partnerships with more advanced foreign firms.

Proposed Strategic Interventions for the Tanzanian CI

If the Tanzanian construction industry is to survive in the globalised CI arena, there has to be a paradigm shift in the CI development agenda to match these new trends in procurement and delivery of projects. This entails embarking on *deliberate efforts* to fast track the development of “large” local contractors to international levels. This is a major departure from contractor development policies in most developing countries. As Seng’enge (2004) coined it, we can no longer count on our traditional small, family based practices to face the challenges ahead of us. This is not a matter of engineering or politics; it is a matter of fact.

The Contractors Registration Board is planning to initiate a 5 year pilot mentorship program for the development of 12 – 15 Civil Works Contractors in classes I to III with the objective of improving their capacity and competence in order to increase their participation in high value construction projects and compete competitively with foreign contractors. The justification for selecting Civil Works as a priority development area is based on the premises that ;

- Civil works account for 50% in value of the market share in the Tanzanian Construction Industry.
- Most Civil works carried out are Government or Donor funded, hence the program is more likely to get government support as opposed to privately funded projects.

Currently there are 33 registered civil works contractors in classes I – III. The selection of contractors to participate in this program could be daunting and subject to criticism. A broad based selection team with representation from contractors associations and other stakeholders will be set up to deal with the selection. Transparent selection criteria will be clearly spelt out.

Government will be requested to ;

- ⇒ Set aside at least 500km of planned paved road works for the program. These shall be broken down in packages of 30km and the participating contractors shall be requested to bid for these packages.
- ⇒ Waive the requirements of the Public Procurement Act which requires open tendering for all government funded projects
- ⇒ Provide a tax exemption (including VAT) over the five-year period for all capital plant and equipment for the project.

The Contractors Registration Board in collaboration with a steering committee comprising of members from the National Construction Council, Engineers Registration Board, Ministry of Works and other stakeholders will provide the Management of the Program whereby participating firms will be ;

- ↳ Evaluated to identify specific requirements of each participating firm. The firms will be restructured as appropriate and assisted in identifying and employing competent managerial and technical staff and setting up management systems for the sustainability of the companies.
- ↳ Provided with training in the construction technology and equipment operations for paved roads. This training shall be accompanied by trial contracts for each participant whereby all works shall be closely monitored for quality assurance. Specialized training sessions shall also be conducted in identified need areas such as Pre- Contract Practice, Contracts Management, Project and Financial Management.
- ↳ Assisted in obtaining the necessary bonds and guarantees for the purchase of the plant and equipment. The cost of the plant and equipment provided under this program would be deducted from payment certificates for work done
- ↳ Provided with opportunities to bid for work packages within the 500km set aside for the project and also be accorded preferential treatment when bidding for other major works during the program period. This will enable them to acquire the necessary experience and turnovers required when bidding for major projects in International Competitive Bidding
- ↳ Requested to sub-contract at least 20% of the works given to them over the program period to other contractors as a way of encouraging them to embrace partnership, associations and joint ventures. and also encouraged to diffuse knowledge and skills to small and medium local contracting companies.

Expected Outputs of the Program

At the end of the program it is anticipated that the local industry shall have at least 12 contractors who have

- the necessary experience and internationally accepted production rate for the construction of paved roads
- the necessary financial turnovers required when bidding for such jobs in the open market under International Competitive Bidding
- the required complement of skills, plant and equipment for complex road works.

Challenges in Implementing the Program

Capacity Building of the Construction Industry in Tanzania is a National Issue (Seng'enge, 2004) due to its multi-sectoral nature. The Contractors Registration Board cannot handle such a program singularly. Key stakeholders including the Government have to be brought on board during the inception of the program to enable them to “buy in” the concept.

Bearing in mind the nature and structure of the local construction industries. Owners of these firms will have to be convinced that the benefits in participating in the program outweigh the risks. They will have to accept professional advice on re-structuring their firms and investing in proposed areas for their capacity building. As the old maxim says, they will have to “think global and act local”, Botha et al(2004) summarised it that in a couple of years there will only be two types of CEO's who will exist.....those who think globally and those who are unemployed.

CONCLUSION

In conclusion the challenges brought about by globalisation necessitate a change of strategy in the Construction Industry development agenda in developing countries. While efforts in developing small and medium sized enterprises which is the domain of most local construction firms are appreciated, there is a need for a paradigm shift which entails building capacity the capacity and competence of “large” contractors who participate in the complex, high value projects market segment where a greater impact on the CI contribution to the local economies can be achieved. The success of the pilot project in Tanzania will re define the overall strategy of CI development in developing countries in this era of globalisation.

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