

CAPACITY BUILDING OF CONSTRUCTION SMME'S – EXPERIENCES ON A SOUTH AFRICAN TOLL ROAD

by

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ABSTRACT

This paper deals with Construction SMME capacity building in the environment of a toll road project between South Africa and Mozambique. The paper explores the use of social contracting as the vehicle to integrate entrepreneurial development into mainstream construction activities and relates the experiences gained in the case study of the South African portion of the toll road.

Keywords: SMME's, construction, social contract

1. INTRODUCTION

This paper deals with Construction SMME capacity building in the environment of a toll road project between South Africa and Mozambique. The paper explores the use of social contracting as the vehicle to integrate entrepreneurial development into mainstream construction activities and relates the experiences gained in the case study of the South African portion of the toll road.

In this paper capacity building refers to the process of empowering SMME's with construction and business skills training as well as empowering them with access to financial resources. SMME's are regarded as fully-fledged entrepreneurs when they no longer exhibit any form of dependency on the established construction and business sector. Ideally the relationship should change from one of dependency to that of interdependency.

Construction SMMEs (small, medium or micro enterprises) is a DBSA development term that refers to local emerging entrepreneurs or small contractors, women in construction, disabled persons and the youth from the previously disadvantaged black communities in South Africa. Participating SMME's identified during the consultative procurement and tendering process are known as targeted SMME's.

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1.1 The Case Study

The case study is of a 30-year concession contract for the upgrading, maintenance and construction of new sections of the 504 kilometres of National N4 toll road passing through the South African province of Mpumalanga and ending at the Mozambique seaport of Maputo.

The case study focuses on the South African portion, approximately 434 kilometers, of the N4 Toll Road from Witbank to the Komatipoort border with Mozambique. As yet no independent evaluation reports have been commissioned for the Mozambique portion.

The evaluation report on the South African portion of the road by the Development Bank of Southern Africa (DBSA) and Ntsika Enterprise Promotion Agency titled “Investment – Led Entrepreneurship Development: An Investigation into the Impact of Large Investments on the SMME sector. The experience of the N4 Maputo Toll Road” Rogerson, C M, (1999) has provided the background to the case study referred to in this paper as the N4 Toll Road. The closing report by the N4 concessionaires (TRAC November 2000) detailing the outcomes of the Social Contract has supplemented the evaluation report of 1999.

1.2 An Overview of the Successes and Shortcomings in the Case Study.

Although entrepreneurial development, or small medium and micro enterprise development (SMME) spans all sectors in the South African economy, this paper focuses on entrepreneurial capacity building in the context of the construction sector, hence the term Construction SMME’s.

In terms of achieving targeted outcomes, the above report indicates a high degree of success in implementing the Social Contract. However, the reports also express the somewhat more subjective view that more job opportunities, training and financial support could have been offered by the concessionaire. This will no doubt remain speculative until such time as a clearer understanding of the ability of the emerging sector to respond to the opportunities to participate in large infrastructure projects is known. This is generally referred to, as the absorption capacity of SMME’s, and is largely dependent on the public and private sectors’ ability to provide an enabling environment for SMMEs to access construction contracts, training and financial assistance.

Although the concessionaire’s attempts at facilitating access to finance proved fruitless, due mainly to the reluctance of commercial banks to lend to those with limited business skills and track records, the number of SMMEs engaged in construction contracts on the N4 (see Table 2) compares favourably with other projects. There is, however, no indication that any growth in financial independence of the SMME’s involved occurred. Judging by the responses of the SMME’s interviewed on the N4 they were left to their own ingenuity to access bridging finance to start up their contracts. The noticeable lack of a suitable financial mechanism resulted in many SMME’s neither participating nor realizing their full potential (Rogerson C 2000).

Notwithstanding these shortcomings, the use of the Social Contract to mobilize private sector resources to engage and build Construction SMME’s capacity has proved worthwhile. A further measure of success is the extent to which the N4 Social Contract now serves as a benchmark for other national toll road projects (See N3 Durban and N4 Platinum Toll Roads).

This paper is divided into three sections that address the contracting environment; the vehicle used to deliver capacity building and the realities on the ground.

Section A. Deals with the policy and regulatory contracting environment in South Africa, the private and public sectors attempts to comply with SMME engagement and an analysis of national benchmarks on job creation in the construction sector.

Section B. Deals with the social contract as a vehicle to deliver SMME capacity building in the construction sector and the enabling training approaches and funding strategies.

Section C Deals with the realities of SMME capacity building on the South African portion of the N4 Toll Road.

2. THE CONTRACTING ENVIRONMENT IN SOUTH AFRICA

2.1 The South African Legislative and Regulatory Framework for SMME Development

The introduction of Social Contracting into the environment of the Construction Sector should be seen in the context of South Africa's desire to bring about economic reform and transformation through social upliftment and investment in infrastructure. South Africa's current legislation provides a framework for the preferential employment of emerging black entrepreneurs (The Preferential Procurement Policy Framework Act No 5 of 2000). The education and training environment also actively promotes the development of entrepreneurial skills (The Sector Education and Training Authority Act No 9 (1) of the Skills Development Act no 97 of 1998), as do the government structures responsible for the "roll out" of construction sector policy such as the Department of Public Works and the South African National Road Agency (SANRA) which have played a leading role in consultations with the established Construction industry, the Emerging Construction sector and government. This has resulted in a new construction sector white paper aptly titled "Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry".

2.2 New Approaches to Contracting

As a result of the above initiatives, conventional construction firms in South Africa have undergone rapid change and have transformed into a collective mix of established and emerging contractors. Innovative and in some cases dubious examples of equity shareholding, joint ventures, and informal social compacts have created a contracting environment where the interests of the emerging contractors require constant monitoring to ensure that exploitation does not occur. Although not the norm, cases of fronting, where established contractors attempted to gain access to contracts by buying in so-called emerging SMMEs with little or no contracting experience were evident on the N4 toll road. Notwithstanding the above, the transition has been smooth and in most cases appears to be gathering momentum across a broad spectrum of private and public sector funded projects (See Table 1).

2.3 The Outcome of SMME Capacity Building interventions on Projects in SA

Policy interventions (legislation mentioned above) and the use of an investment led entrepreneurial development strategy has without a doubt led to large scale Construction SMME capacity building in projects not only in the public and private sector but also in the large private public partnership projects (PPP's) such as the N4 toll road (Havemann, van Gass 2001). Table 1 below provides a clear indication of the impact of social contracting on a variety of infrastructure projects across South Africa.

Table 1: Case studies of compliance with SMME policy and employment outcomes in public, private, private public partnership (PPP) and development funded projects

Case study	Areas of compliance	Outcomes as a percentage of cost- typical set asides
Sun International Carnival City Brakpan	New Casino license to construct, manage and operate a casino. Implemented SMME "set a sides" in the construction process, equity ownership and Service Level Agreements	70% of the cost of the construction work awarded to SMMEs (Reznik 2000)-(Rogerson 1999)
Concessionaire contract with the Trans Africa Concessionaire (TRAC) N4 Maputo Toll Road	Concessionaire contract for the design, finance, operation and maintenance of a national toll road. Implemented a comprehensive socio economic development strategy around job creation, SMME and community development	14.6% of the cost of the SA section of the toll road construction works awarded to SMMEs. (Rogerson June 1999) Note: The subsequent TRAC Report November 2000 indicates that the initial 14.6 % was increased and the target of 20% achieved)
Development Bank of Southern Africa-development funded projects.	Pre-requisite to disbursement in DBSA funded projects. Implementation of the development impact approach, job creation and involvement of SMMEs	Varies per sector from 0.25 to 46% of the project cost and upward (Havemann, van Gass 2001)

2.4 SA National Benchmarks for Employment Creation in the Construction Sector

Although entrepreneurial development is not separately recorded by the SA Statistical Services, the number of jobs created in the Construction sector is used as an indicator. The national benchmark for the SA Construction sector for 1999/2000 is 14.69 person years per R1 million invested in infrastructure. This is made up of 13.93 for Civil Engineering and 15.46 for Building. Dividing value added or expenditure into employment derives person years per R1 million invested in infrastructure.

(Refer. "Employment Creation and Construction SMME involvement in Development Projects in South Africa- A Sector and Sub sector Analyses" Havemann, van Gass 2001.)

2.5 Entrepreneurial Job Creation on the N4 Toll Road

By comparison, the entrepreneurial jobs on the N4 toll road, based on the value of the SMME contracts (R226mil) over the 3-year construction period, were more than double the national norm at 32 person years per R1 million. These figures are expected to further increase over the remaining 27 years during which the SMME maintenance contracts will go out to tender.

3. SOCIAL CONTRACTING AS A VEHICLE FOR CAPACITY BUILDING

From the lessons learnt on other DBSA funded projects, alternative approaches on how to create an enabling environment for SMME involvement, such as packaging projects, identifying, targeting and catering for SMME needs. They are discussed below and were adopted in the Social Contract on the N4 Toll Road.

3.1 Social Contracting

Social Contracting in this paper refers to a formalized contract in which the concessionaire is obliged to assist in the social and entrepreneurial upliftment of communities in the immediate vicinity of the project. In the context of construction SMME development the term empowerment is often used as an alternative to capacity building. Construction SMMEs are considered empowered when they reach a stage when their levels of dependency on the provision of training and mechanisms to access working capital fall away. In other words they are enabled to self sustain their SMME activities. (Refer. "Investment led Entrepreneurship Development: An investigation into the impact of large investments on the SMME sector"-Rogerson 1999).

3.2 Key Objectives and Funding Strategies

The key objective in social contracting is to create an enabling environment that leads to increased SMME participation and skills development. This requires mobilizing available construction sector resources such as the established contractor or concessionaire to provide training and transfer skills on site. Accrediting the construction site for training purposes is an approach that ensures that SMME training is directly related to the job opportunity, meets the requirements of the Sector Education and Training Authorities (SETA) and enables the auditing of allocated funds.

The arrangements for providing financial mechanisms (such as collateral guarantees) to enable SMMEs to access working capital from commercial banks, remains both complex and difficult to resolve. (See N4 Case study). The DBSA is however making progress with a commercial banking institution towards piloting a conceptual model to serve as a model for financial guarantees.

3.3 Targeting Construction SMME's

Targeting has the decided benefit of enabling both beneficiary and provider to identify demand driven training and to allocate resources during the implementation phase of the project. Because of the uncertainty surrounding SMME needs, budgeting for the Social Contract in the bidding stages of most projects remains speculative and therefore difficult to motivate. Most projects inevitably underestimate the training needs of SMMEs. This leads to budget driven as opposed to

demand driven training programmes that limit entrepreneurial training. On the other hand entrepreneurs see an opportunity to access free training, which places an added pressure on the project budget. In general, because of the huge demand for training in South Africa it is debatable as to what could be considered an adequate budget or for that matter to what extent projects should be burdened with excess training needs. In the case of the N4 toll road approximately R8 million (0.53%) of the R1.5 billion concession contract was spent on implementing the Social Contract whereas R22 million (0.63%) of the R3.5 billion N3 toll road concession contract was budgeted for implementing the Social Contract.

3.4 Designing for Construction SMME Participation

To accommodate SMMEs, projects are designed and packaged to present a wide range of economically feasible job opportunities, many of which are subsequently revised after consultation with SMMEs. (See N4 Case study). These packages represent small construction or maintenance contracts. In some cases these contracts are either part of a larger negotiated set aside package of SMME work (such as the N4 toll road) or collectively make up the total construction contract. Both approaches require the resources of an established contractor in the form of a joint venture with the SMMEs. The social contract acts as the adhesive force between the contracting parties provided that the SMME/established contractor business relationship is based on fostering interdependency rather than sustaining the current high levels of SMME dependency.

4. THE N4 TOLL ROAD – A CASE STUDY

4.1. The N4 Concession Contract

In May 1997, a 30-year concession contract for the upgrading, maintenance and construction of new sections of the 504 kilometres of national N4 toll road passing through the South African province of Mpumalanga and ending at the Mozambique seaport of Maputo was awarded to a South African and French construction consortium (Trans African Concessions- TRAC). The concessionaire was required to design, build, operate and maintain the toll road and toll plazas on a thirty-year Build Operate Transfer (BOT) at an estimated cost of R 1.5 billion.

4.2 The N4 Social Contract

The concessionaire was also required to implement an integrated community participation programme of which the building of construction SMME entrepreneurial capacity was a key focus area. Of the SA portion, 20% of the Initial Construction Work was negotiated and packaged for SMMEs and 30% of the operation and maintenance work while the smaller Mozambique portion was 40% and 50% respectively. This paper only deals with the SMME capacity building experiences on the SA portion.

The N4 Social Contract was structured on three pillars namely, Community Participation, Education and Training and Development of Small and Medium Micro Enterprise (SMME). These pillars collectively underpinned the arrangements for engaging and building the entrepreneurial capacity of Construction SMMEs.

Clear entrepreneurial development objectives with estimated budgets for consultation; pre tender and contract training, and targeted outcomes formed the framework for implementing the Social Contract. The concessionaire made extensive use of DBSA expertise and experience gained in Construction SMME development to formulate a consultative SMME awareness, engagement and participation strategy.

There were no contractual penalties in place for non-compliance with the terms and conditions of the Social Contract. Instead the collective voice of the communities, provincial government and the DBSA was instrumental in ensuring that the concessionaire's complied with its social undertakings. This was rectified in later PPP concession contracts such as the national N3 Durban Toll road where substantial penalty clauses could be invoked in the event of non-compliance

4.3 The Partnership and Stakeholders

The N4 project is a partnership between private and public sector commonly referred to as a private public partnership (PPP). Of the total estimated costs of R1.5 billion (approximately \$200 million), the DBSA financed R200 million (approximately \$26.7million). The DBSA played a facilitating role between the lenders and the concessionaires Basil Read, Stocks and Stocks and Bouygues to ensure that the developmental aspect of the project received the necessary attention. Facilitation included implementation of the requirements set by both the SA and Mozambique governments for the effective participation of SMMEs. The stakeholders, especially the SMMEs, continuously expressed the need for an intermediary to ensure compliance with national policy, a role that DBSA fulfilled in the implementation stage of the project.

4.4 Construction SMME Training on the N4

As part of its commitment to the Social Contract, the N4 concessionaire built three Community centres along the length of the road that were extensively used for skills training (See Table 2). These centres, together with mobile community forums, provided local entrepreneurs with the opportunity to become aware of the job opportunities and engage the concessionaire which also made use of the opportunity to identify SMMEs and target those suited for pre- tender training.

Although the concessionaire trained 11503 entrepreneurs in construction skills over a three-year period, this was budget driven, as the concessionaire was unable (at the bidding stage) to determine how many people would require training. A "free for all" training perception was ever present but was controlled by limiting training to the target group who tendered. The training was subsequently extended to those who were awarded tenders. The number of SMMEs trained does not however imply that the total trained complement of entrepreneurs was engaged in the project (See Table 2).

Training covered a broad variety of needs that ranged from the skills required to work in the construction environment to survival skills. For example an additional 8419 people were trained in construction, social and community skills such as safety, induction and environmental awareness, construction skills, first aid /basic health care and nursing, management, road safety, basic tendering, Adult Basic Education and Training, business skills, you and your money, how to apply for a job, security, cooking, computer skills and sewing.

4.5 Job Opportunities and Construction SMME Contracts on the N4

In total 7206 job opportunities were created over the first 3 years of the project at a cost of R226 million (Approximately \$30.1 million). At 32 person years per R1 million invested in infrastructure, this compares favourably with the national benchmark of 13.93 person years per R1 million (see Table 2).

To accommodate SMME's, 680 construction and maintenance contracts were designed and packaged to present a wide range of economically feasible job opportunities consolidated into small contracts. The economic feasibility of the packages of work was often in dispute as many of the contracts proved either too small or too large and were subsequently revised to match the available SMME resources and skills.

Despite the fact that this was a national toll road, communities in the Mpumalanga province were adamant that the N4 toll road came through their province and jobs were therefore automatically reserved for them. This was resolved by offering Mpumalanga communities in the vicinity of the project first option, expanding to the municipal districts in the province and finally to SMMEs from other provinces.

4.6 Involvement of the South African Women in Construction

A notable exception was the involvement of the South African Women in Construction (SAWIC), a national body of emerging women contractors whose members through some skillful negotiation were able to participate at will irrespective of where in South Africa they were registered! No doubt the political desire to be seen to be supporting the issues of gender equity were contributing factors.

The number of women involved in construction activities on the N4 toll road over the three year period of construction was however disappointing with 2 in management, 20 in semi skilled and skilled and 113 in unskilled construction activities. In total, this represented 6% of the total SMME involvement, the balance of 94% being taken up by men. The reasons for the low involvement appears to be the rural environment through which the N4 passes where the perception that the construction sector is an unattractive, harsh working environment in which prejudices against women abounds. (Verwey and Havemann 2001)

4.7 Preferential Procurement Measures on the N4

The concessionaire after consultation and negotiation with the stakeholders developed an 8-point preferential procurement guideline in line with the National Preferential Procurement Policy Framework. Points were given not only on the basis of tendered cost but for using local, black entrepreneurs, percentage equity shareholding in the company, previous experience in construction, construction and management skills, use of women contractors, use of labourers from the community and previous projects completed. SMME's requiring assistance in training to tender were not discriminated against, nor were those without access to adequate equipment, plant and machinery, so long as they had the necessary skills to operate and manage the use thereof.

In some cases SMMEs tendered without the conventional establishment costs, plant and machinery, (these were provided by the concessionaire). In other cases, where they had access to plant and equipment, their tenders included establishment costs. The success of the SMME engagement programme could in part be attributed to the concessionaire’s flexibility in procuring their services.

4.8 Tenders Awarded to Construction SMME’s

R226 million (approximately \$30.1million) of construction work was awarded to 160 SMME’s in the form of labour contracts, small construction contracts and ancillary contracts such as grass cutting, fencing, catering, signage, haulage, security etc. Judging by the number of contracts awarded (680), many of the SMMEs were awarded contracts on a repetitive basis, thus freeing the concessionaire from engaging and training new SMMEs. The concessionaire held the view that this was providing “sustainable employment” to individual SMME’s for the three-year duration of the project. Although linked to employment, the converse view argues that sustainable development is a process that promotes the entrepreneurial development of SMMEs (new and existing) through ongoing skills development. It is therefore not only the number of employment opportunities created but also the number of people trained in the opportunity.

4.9 Lack of Financial Mechanisms to Enable Construction SMME Participation

Expectations that development institutions specializing in guarantee funds and capacity building and their private sector equivalent, the commercial banks, would provide the desperately needed SMME bridging finance failed to materialize. Because of the concessionaire’s lack of success in facilitating financial SMME support from commercial banks in SA (these institutions were reluctant to provide what was perceived as high risk entrepreneurial loans to SMMEs), many SMME’s fell by the way, much to the concern of the SMMEs and the DBSA. In most cases SMME’s borrowed finance from sources outside the formal financial structures and ended up paying exorbitant interest rates. This also was rectified in later projects such as the N3 toll road where concessionaires were required to provide rather than facilitate SMME funding mechanisms.

4.10 Summary of the Outcome of the Social Contract

Table 2: Construction SMME involvement and Capacity Building- N4 Toll road

Over a 3 year Construction Period	
Consultative community forums	10
Meetings held with communities	Over 200
Employment opportunities taken up	7206
People trained in construction skills	11503
People trained in social and development community skills	8419
Costs associate with all types of training (excluding 3 training centres, furniture and equipment of R1.76 million and dedicated SMME training courses of R0.21 million)	R6.06 million
Construction SMME tenders awarded	680
Construction SMME’s awarded tenders	160
Value of Construction SMME work	R226 million
Value of Construction SMME work as a % of Initial Construction Work (3 year period)	20%
Value of Construction SMME work as a % of Operation and Maintenance Work (27 year period)	30% Anticipated

5. CONCLUSION

In terms of financial empowerment and independence, the financial mechanism to assist Construction SMMEs is a key issue on all projects and was not adequately addressed on the N4. Accountability was neither acknowledged nor contractually binding and the arrangements for sourcing funds for this purpose were based on optimistic expectations.

In Social Contracts of this nature, there is much debate as to where accountability for financial support mechanisms for SMME participation should rest. Three views are currently found. Firstly that in private sector driven projects (such as the N4) the training and financial empowerment of Construction SMMEs should be contained and funded in the project, secondly that projects should source external public or private sector funds for capacity building and thirdly that projects should contain a mixture of both internal and external funding for capacity building. In the author's view as long as the provider is held accountable and arrangements are contractually binding it is possible that all three approaches could work.

While there are differing opinions on the outcomes of the Social Contract, detractors tend to depart from a speculative "could have been better" citing the concessionaires' lack of knowledge of the SMME environment and the lack of any form of contractual penalty and unsupportive financial mechanisms as factors. The high profile nature of the N4, its magnitude and the rural community expectations that it would become an immediate and desperately needed source of employment and training, was a continuing source of concern to the concessionaire. (See number of community meetings- Table 2) The N4 Social Contract was intended to address the needs of the project and not alleviate the burden of unemployment in the Mpumalanga Province. Undoubtedly the N4 project had the potential to generate more than the 20% SMME involvement that it achieved but results can only be judged against intended outcomes, all of which, including SMME training were achieved in the allocated time and budget. Notwithstanding the omission of a suitable financial mechanism, the N4 case study clearly illustrates the effectiveness of the Social Contract as a vehicle to enable Construction SMME capacity building.

6. RECOMMENDATIONS

As illustrated in the N4 case study, most obstacles to SMME capacity building in construction projects such as access to job opportunities and skills training can be overcome, however one key question of SMME capacity building still remains unresolved, that is

"What financial mechanisms are needed to enable Construction SMMEs to access affordable bridging finance and credit lines in an environment where financial institutions do not have the capacity nor the appetite for SMME business?"

This paper strongly recommends that the financial empowerment of SMME's in construction projects receive the attention it deserves.

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