

# **Development of small building contractors in Botswana; a critical evaluation**

by

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## Abstract

Title of treatise : Development of small building contractors in Botswana; a critical evaluation

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Botswana has adopted policies in its construction industry aimed at developing its citizen contractors to a standard comparable to any other. Towards this end, it has instituted a number of interventions one of which is to provide these contractors with an advance loan to enable them mobilize on site. This facility greatly enhances their chances of success.

This study is an evaluation of this scheme and provides a valuable feedback on the scheme's effectiveness, its shortcomings as well as offering some suggestions as to how its administration can be improved. This it does through a critical analysis of the performance of beneficiaries over a six-year period, identifies reasons for their failure and tries to address concerns of the key players in the application of the scheme.

The major findings are that the scheme has not been as successful as expected. The biggest problem seems to be the diversion of loan funds from their intended purpose. Rigorous sustained training of contractors and monitoring of their progress in skills attainment is the recommended solution. The Government's intervention should also target other role players in the industry for support including emerging suppliers and plant leasing companies, to break down existing monopolistic structures.

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## **Chapter 1:Introduction**

### **1.1 Background to the problem**

Between 1<sup>st</sup> January 1995 and 31<sup>st</sup> December 2000, the combined Central District Council and Ghanzi District Council Architecture & Buildings Departments in Botswana undertook 421 projects in building construction. Of these, roughly 75% by extrapolation benefited from the Advance Mobilization Loan (AML) scheme. An evaluation of the performance of the recipient contractors over this period would indicate that there was not a major improvement in performance of beneficiaries over non-beneficiaries of the scheme. It is important for policy makers, contractors, clients and end users to know if there is indeed something positive to be gained from this assistance. In addition, to determine whether there is a failure in its overall application and, if so, what improvements can be effected to achieve intended goals. A preferred model needs to be established which might more effectively develop contractors' competence and success in the industry.

### **1.2 Problem definition**

The Government of Botswana has adopted a policy of economic empowerment of its citizens of all disciplines and walks of life. To this end it has put in place a number of interventions aimed at promoting and encouraging entrepreneurship in the private sector. This has taken various forms, such as the Local Procurement Programme under which 30% of all Central Government purchases are sourced from local firms, the introduction of the



Financial Assistance Policy (FAP), Micro Credit Scheme, the Credit Guarantee Scheme, Citizen Entrepreneurial Development Agency (CEDA) and other forms of grants and soft loans to businesses of all kinds.

A national conference on citizen economic empowerment was convened in July 1999 under the auspices of the government, which arrived at the following operational definition of this concept:

*“Citizen Economic Empowerment is a set of policies and programmes, designed to benefit a broad spectrum of society and enable Batswana (citizens of Botswana) to participate meaningfully in every aspect of the economy in the fulfillment of social justice and the creation of globally competitive businesses. In this respect, the individual ‘shall unleash his or her potential and take risks to benefit self and other Batswana’”*

(NDP 8 Mid-Term Review)

The construction industry in particular has been a beneficiary of several government schemes in this endeavour, arguably more so than other sectors of the economy in terms of the number of models put in place. This would point towards the government’s recognition of the construction industry’s significant role, its contribution to the economic health of the nation and the need to develop the country’s own homegrown expertise in this sector.

Among the schemes introduced within this sector are the 1995 Presidential Directive on bailout of citizen contractors on a “case-by-case” basis (Cab. 37/95), the 50 million pula bailout fund for citizen contractors of 1998, the 30% reservation policy for citizens for government projects in excess of 1.8 million pula and 100% on the rest, price preference

arrangements for citizen companies in construction tenders, waiving of performance bond requirements and reduction of retained monies on contracts during construction and more recently reservation policies for citizen consultancies. In addition there is the Advance/Mobilization Loan Scheme, a government policy aimed at assisting 100% citizen-owned construction companies to access funds for mobilization on public sector projects and therefore enhance their chances of succeeding in the sector, with a view to assisting them to compete favourably in the open market.

Despite all these interventions there is a perception that the benefits have not been realized and that citizen-owned construction firms continue to “fail” on projects. There are too many reported cases of delayed completion, terminated contracts and penalties levied for delayed completion at a rate that is not acceptable given the support received from the government. It would seem from this that all may not be well and that well-intentioned policies seemingly do not achieve desired goals. This calls for a need to determine whether the perceptions are true, and if so, why? Thus the need for research in this field.

### **1.3 Goals and objectives**

This study is an attempt to establish whether there is a relationship between success of contractors and the acquisition of the advance mobilization loan in its various forms. It also aims at establishing whether there is indeed an unacceptably high failure rate as perceived and the causes of this failure. Finally it seeks to develop a preferred model for effecting this assistance to contractors.

#### **1.4 Benefit of this project**

The benefits include the establishment of a system that will improve the performance of contractors. This would be through a scheme that is more effective to the advantage of all stakeholders who include, among others, contractors, the clients and the community at large. This would result in a more thriving and efficient industry that would support the government in its endeavour to boost economic activity and job creation.

#### **1.5 Scope**

This study is concerned with those building construction projects undertaken between 1<sup>st</sup> January 1995 and 31<sup>st</sup> December 2000 by the Central and Ghanzi District Councils of Botswana. The assumption is that this sample is representative of the entire contractors fraternity in Botswana. This is premised on the fact that the combined Central and Ghanzi Districts make up approximately 32% of Botswana by population based on figures from the 2001 census and 45% in terms of surface area. Secondly the nature of building construction in Botswana is such that contractors can easily traverse the entire length and breadth of the country in search of projects, resulting in the same contractors working throughout the country in the various districts.

## 1.6 The organization of the remainder of the study

The remainder of the study proceeds with a review of related literature, an overview of the construction industry in general and the prevailing circumstances in Botswana in particular. A discussion of government intervention in contractor assistance schemes is highlighted and finally the categorization of contractors in Botswana is presented to complete chapter 2.

The research methodology for each sub problem is laid out as well as the data and their treatment, the results and their analysis. The hypotheses are then tested in relation to the findings and the research methodology and the data and its interpretation are then reviewed. Finally the conclusions and recommendations are presented to the reader at the end of the report.

The paragraphs below briefly outline this study: -

Review of related literature: The theoretical basis of this study as extracted from literature is discussed under the following topics:

- The construction environment
  - Developing countries in general
  - The Botswana situation
- Interventions
- Categorization of contractors in Botswana

Research methodology: The research methods used for each sub problem are spelt out and justified.

Investigating failure rate: The backbone of the research problem was to determine the failure rate. This is analyzed and discussed under this topic.

Reasons for failure: These were identified, quantified and are discussed in this section.

A preferred model: Under this heading, possible improvements to the current systems are analyzed and discussed.

Summary, conclusions and recommendations: This chapter presents the findings of the study and recommendations based on the findings.

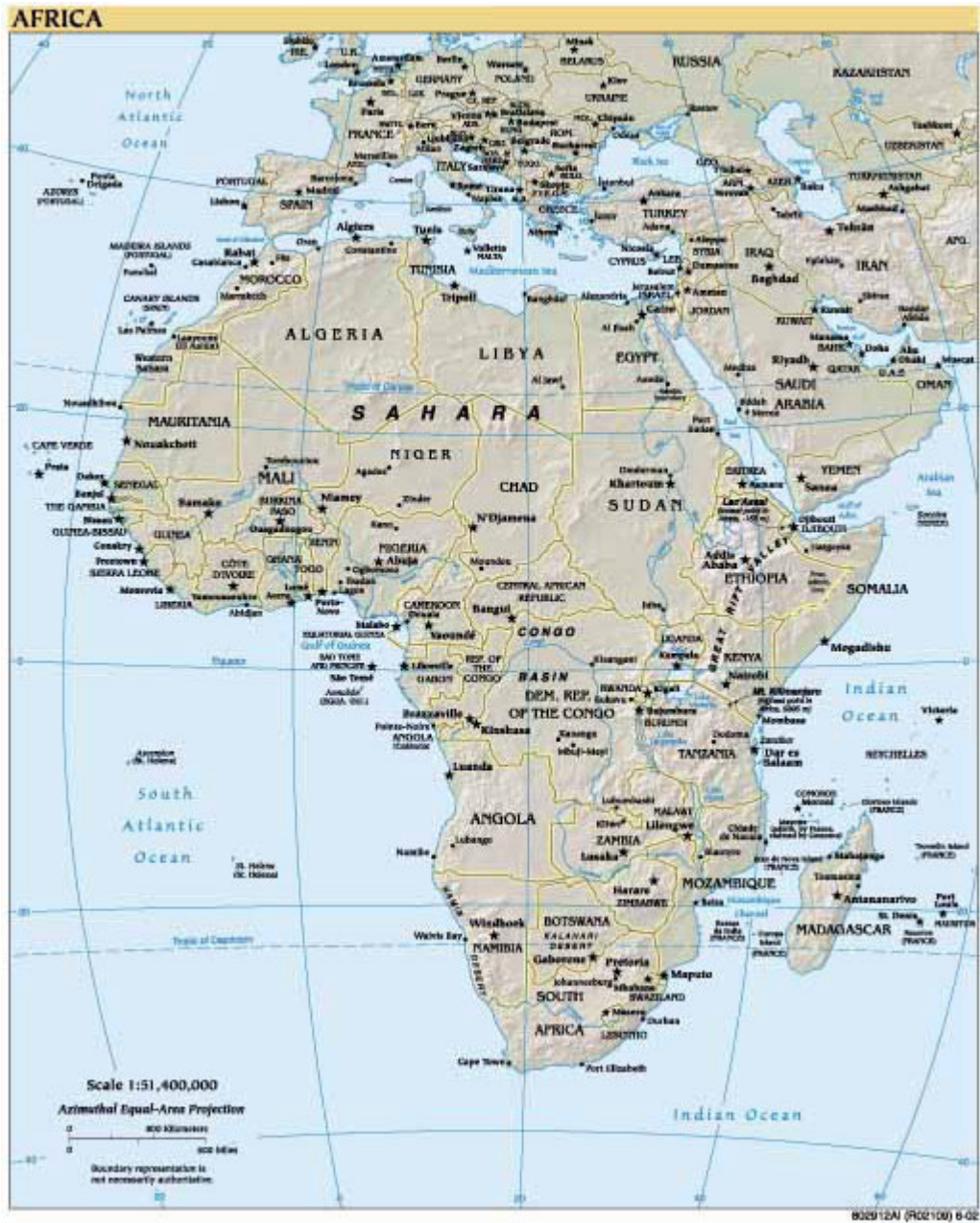


Fig. 1 Map of Africa (Reliefweb)

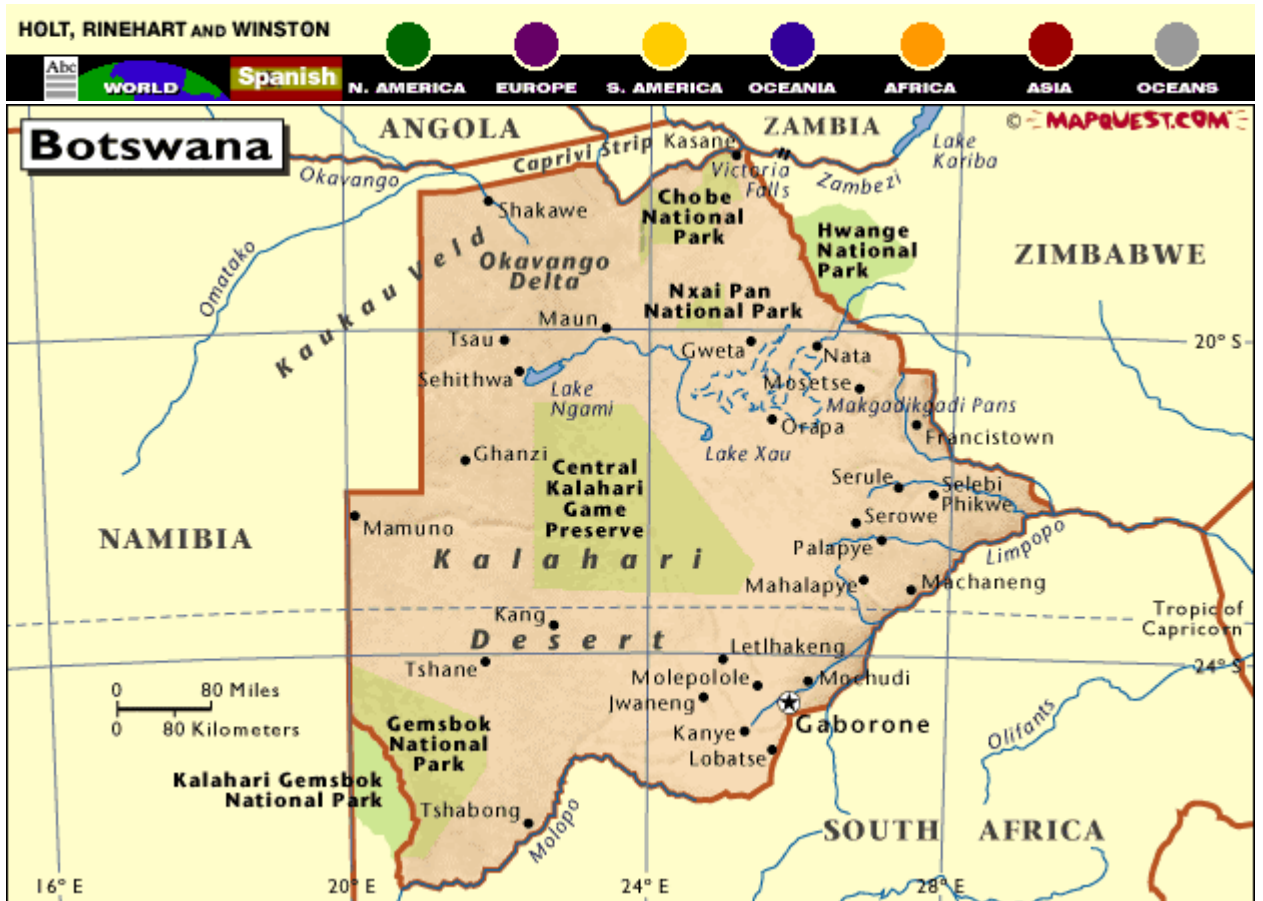
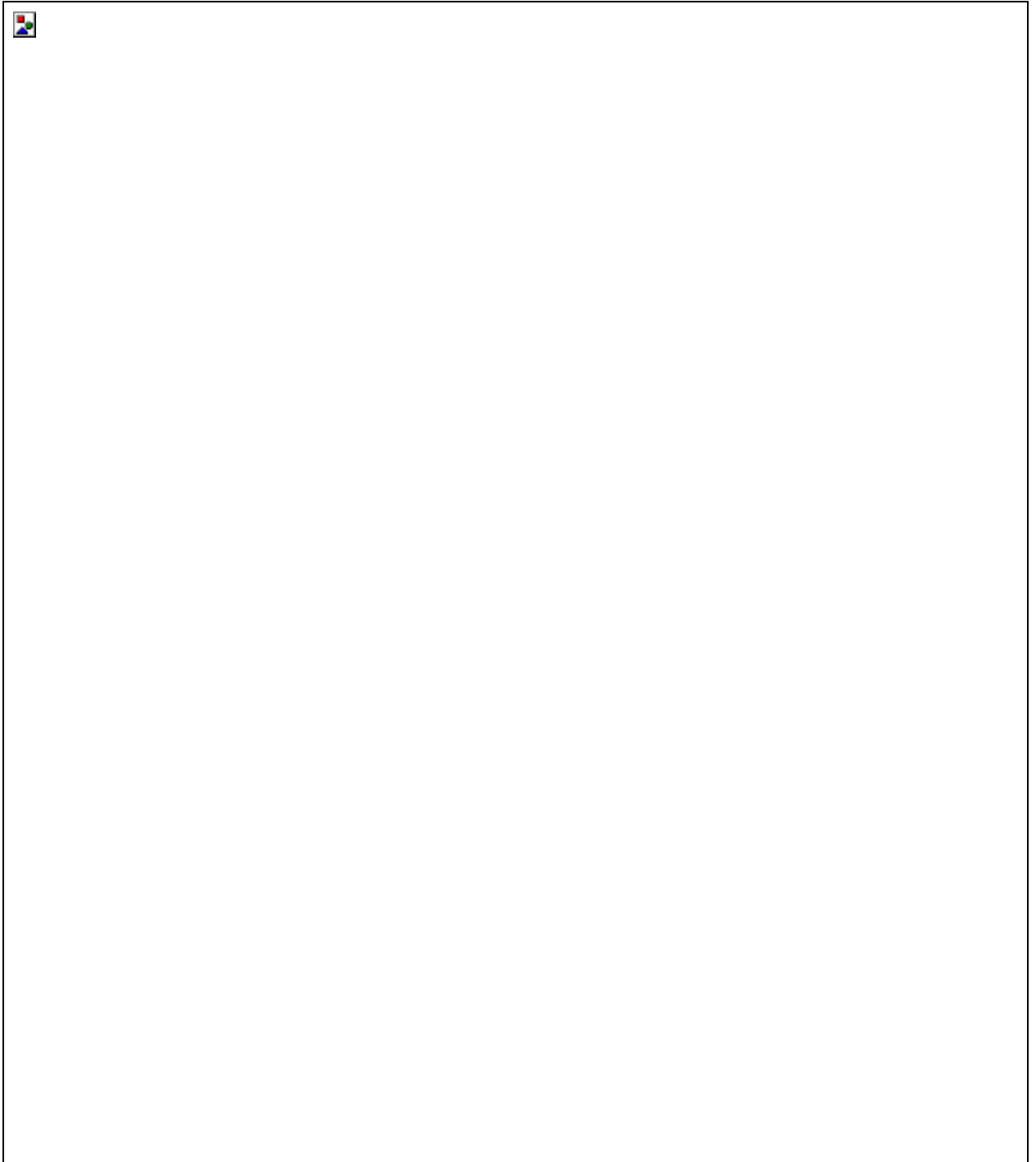


Fig. 2 Botswana Map; Main towns (HRW World Atlas)



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**[Picture not available]**

Fig. 3 Map of Botswana; Districts (Reliefweb)



## **Chapter 2: Review of related literature**

### **2.1 The construction environment**

#### **2.1.1 Developing countries in general**

The construction industry the world over faces problems and challenges of all kinds. There is a perception that the industry is lagging behind in terms of technological advancements, development of operational processes and keeping up to date with prevailing business trends. It has been accused of being monolithic in its structure and slow to change in keeping with present day realities. This has led to perceived poor performance of the industry especially when compared to other industries such as manufacturing. Various studies would seem to support this contention.

Radujkovic (1999) cites a study in which only 16% of (building construction) projects were considered successful, that is, completed on time, within budget, and to specification.

Notwithstanding the reasons for this high figure, a failure rate of this magnitude certainly warrants further scrutiny. If the (construction) industry were to maintain its position with regards to average contribution to development (in terms of GDP) as well as maintain public faith, there is certainly a case for the need to improve.

A research by Smallwood and Rwelamila (1996) ranked causes for poor performance as inadequate training, lack of management expertise, little worker participation, absence of Quality Management Systems and improvement processes.

Inadequate training and lack of management expertise are a predominant problem in developing countries and would appear to be the first point of focus for efforts to improve the industry. The (South African) Department of Public Works (DPW) (1999) however was of a different opinion, stating that international precedents indicate that many of the difficulties associated with the aforementioned issues arise at the design stage (Smallwood, 2000).

A survey of developers from SAPOA by Smallwood (2000) resulted in the following proposals for improvement of the performance and image of the construction industry, Table 1: -

**Table 1** Ways to improve the performance and image of the construction industry, Smallwood(2000)

<b>Aspect</b>	<b>Rank</b>
Implementation of quality management systems	1
Minimum qualification requirement to contract	2
Registration of contractors	3
Pre-qualification of tenderers	4
Construction site hotline (report concerns and problems)	5

Another school of thought strongly links poor performance with a “fundamentally flawed” system of separating the design and construction processes in the procurement of buildings leading to cost and time overruns (Hindle, 2000). The fragmented nature of the industry retards the development of new systems and solutions. Innovation is very slow and the whole process is characterized by adversarial relationships.

Burgess and White (1979) cite the following as factors contributing towards programme changes in construction: -

1. Abnormally bad weather
2. Sub contractor failure to perform to standard
3. Trade dispute in the locality of the site
4. Trade dispute in another industry affecting the availability of material suppliers or an essential service
5. Unpredicted labour shortage
6. Internationally, change in the availability of a material
7. Excessive variations to the contract
8. Overheating of the construction and material supply industry due to action by (H. M.) Government
9. Inability of the consultants to supply information at the required time
10. Unforeseeable site conditions

Other reasons attributable to poor contractor performance are: -

1. Inefficient site management

2. Bad planning and programming
3. Lack of support at site management level of centrally conducted programming and control
4. Misinterpretation of information provided in the documents, particularly with regard to quality standards.
5. Selection of wrong methods or resources.

Regardless of where the blame lies, the bottom line seems to point at an industry undergoing difficult times. The industry needs to adjust to prevailing circumstances and the intervention of key role players is inevitable if success is to be achieved.

The industry on the other hand is a major indicator of a country's state of the economy as well as an important contributor to the Gross Domestic Product. Recent estimates put the share of the industry in developing country economies at between 5 and 10%. Construction also plays a major role in providing capital, accounting for over 50% of gross capital formation in the economy. A booming construction industry has spin-off effects on the larger economy as it fuels activity in many other sectors of the economy. The role of construction in economic development is an important factor facing the construction research community, government and international development agencies. In terms of macroeconomic interdependence, investment in construction, as a major component of a nation's physical capital, is an important tool in the management of the group of interrelated processes of economic growth (Kuznets, 1968). Clearly, it is in the interest of governments and other key role players to ensure a sustainable thriving construction industry.

Ofori (1993) argues that the construction industry should effectively play its role in the economy by realizing its potential to create jobs as well as stimulating business activities in other sectors of the economy. However, for the industry to do this, it has to achieve a certain, sustainable minimum level of development across all its sub sectors. The main role players have the responsibility to ensure that this happens. Governments, with whom the buck stops, must provide interventions to create an enabling environment.

Numerous attempts have been made by governments around the world to improve the performance of the industry through which it converts its revenue into national assets, the construction industry (Hindle, 2000). These have been situation-specific and have achieved differing levels of success. It is however unlikely that a single solution for all situations is possible, nor even desirable. All situations must be approached with regard to the prevailing circumstances and factors such as culture, finance, environmental considerations etc need to be taken on board. The target focus for this improvement effort would also depend on the circumstances and the concerned government's existing policies. This is not always easy. The solution selected may be in line with the prevailing economic circumstances. However, political, technological and sociological factors may have to be considered. These may conflict to some extent and compromise solutions may eventually prevail. Fox, per quote below, argues that new ideas are required.

*Current knowledge about construction industry development still relies heavily on tentative foundations. Current practice in promoting development in less developed countries is nowhere near consistent in achieving success. Both current knowledge and current practice need strengthening with new ideas. (Fox, 1999)*

The importance of taking measures to improve the performance of the construction industry has now been recognized in several countries at various levels of economic development (Ofori, 2000). Agencies have been formed in several countries to administer the continuous improvement of the industry, some under the government while others are purely an industry initiative.

Summary:

The industry is beset by all kinds of problems and poor performance. Governments and other key role players have identified the need to intervene and promote the development of the construction industry. The approaches towards this end are many and varied and are dependent on specific circumstances prevailing at the time. The industry itself plays a major role in the economic development of a nation and its continued healthy state needs to be maintained as much as possible. Governments' role as a client, regulator and facilitator will continue to play a leading role especially in developing countries in which the bigger portion of construction activity revolves around government funding.

### **2.1.2 The Botswana situation**

Botswana is landlocked. It is situated in southern Africa bordering Zambia and Zimbabwe to the northeast, Namibia to the west and South Africa to the south. It has an area of 582,000 square kilometres, which is about the size of France or Kenya and an average altitude of 914 metres.

Much of the country is covered with savannah woodland with many species of acacia. To the east of the country which accommodates 80% of the population the terrain is broken by a series of rocky hills which slope away westwards towards the Kgalagadi Desert.

The last 20 years have witnessed a sharp acceleration of social transformation, most dramatically in the growth of the urban population and of the expansion of the commercial economy, mostly in cattle ranching and mining.

Mining accounts for over 37% of economic output and more than 70% of export earnings and about 48% of government revenues. The production of diamonds engineered the growth of the construction industry in Botswana. In 1999, the industry contributed 5.9% of Gross Domestic Product (GDP) involving a value added activity of Pula 1,382 Million (approximately US\$ 260 Million). Employment in the sector was approximately 29,500 people, representing 20% of total employment in the private and parastatal sector (CSO, 2000).

The construction sector continues to be a critical indicator of the socio-economic development of the nation and the policies of government are the determining factor. In addition to its role as main investor and regulator, the government has attempted to act as facilitator in its contribution to construction industry development through various training programmes and assistance schemes. The latter are discussed briefly in the next section.

## **2.2 Interventions**

In a bid to give 100% citizen-owned construction firms an advantage to compete favourably, the government instituted a number of interventions in various forms and to certain specific target groups. The demonstrate the extent to which the government was committed to this cause it set up a “Controlling Body” made up of specially appointed individuals to oversee the implementation of these interventions to best effect. These are discussed briefly in this chapter.

### **2.2.1 Dedicated accounts for contractors**

#### **2.2.1.1 Genesis of the dedicated account**

During a meeting of the Controlling Body in February 2001, the following facts emerged. Through the 1990’s the management of the Boipelego Education Project Unit<sup>Á</sup> tried various methods to assist citizen contractors with the procurement of building materials in an attempt to ensure timely completion of (their) projects. This unit was charged with the responsibility of the development of education facilities at secondary and higher school



levels for the Botswana Government. At this time the government had accelerated its development programme for education and infrastructure development was one of the priority areas. The following schemes were instituted at various stages: -

#### **2.2.1.2 Advance payments**

In this arrangement, an advance of 10% of the contract sum was paid to the contractor on provision of a surety for the advance by the contractor. The surety was in the form of an undertaking from a bank, insurance company or other financial institutions to guarantee the repayment of the advance within a specified period. This method could have been effective as it identified committed contractors. However, it did not work well since most of the citizen contractors had constraints and could not raise the surety, rendering them unqualified for the advance.

#### **2.2.1.3 Mobilization loan**

This was meant to assist citizen contractors with the necessary start-up capital required to start the project. The intention was to ensure that citizen contractors were able to fully mobilize to the construction site. The loan was fixed at 10% of the construction sum, payable in three equal installments at no interest. This was later revised to 15% payable in six equal installments. This scheme was however abandoned as the loan was supposedly used elsewhere by many of the contractors rather than for the mobilization. There were no sureties required.

#### **2.2.1.4 Case-by-case policy**

In 1995, the Government set aside a total of Ten million Pula (15 Million Rand) for the purchase of the material and payment for labour to complete the so-called case-by-case projects. This was a scheme whereby a project administrator paid both material and labour costs on behalf of the contractors in cases where the contractor had failed for some reason to complete their project. The administrator in this case was the government institution concerned with management of construction projects i.e. the Department of Architecture & Building Services (DABS) under the Ministry of Public Works. This initiative was very specific in its target group and its tenure. The one-off policy was terminated after the identified projects were completed. No study was conducted to review the effect it had on the construction companies, but the initiative did save them from liquidation. It would not have been easy to sustain such a system for a long time, in any case.

#### **2.2.1.5 Direct payments for materials in lieu of loan cash**

In this arrangement the contractors identified their material suppliers who would then be paid directly by the project administrator on delivery of materials to site. These amounts would then be deducted in six equal installments from the contractors' monthly certificates. This method however required enormous manpower resources to administer and proved expensive and cumbersome. With the absence of clerks of works on site, it proved difficult to monitor movement of materials on site. It was abandoned after some time.

#### **2.2.1.6 Dedicated accounts method**

The Boipelego Unit set this method up as an experiment and not as a policy. The intention was to safeguard the mobilization loan while at the same time getting the projects implemented.

In 1995, the Boipelego Unit agreed with three local commercial banks and members of the association of contractors in Gaborone the following arrangement:

- a, The banks undertake the administration of a current account for citizen contractors into which the lump sum mobilization loan would be deposited.
- b, The Ministry of Education authorize all withdrawals from the account and that the funds were not to be used for any other purpose except the purchase of building materials for the specified contract. The account would be non-interest bearing and all payments to suppliers would be in the form of bank drafts or bank issued cheques.
- c, Closure of the account and use of any balances would require authorization by the Boipelego Unit.

With this scheme no bond would be required. The mechanism put in place prevented the contractor from issuing cheques or making withdrawals against the account without the involvement of the Boipelego Unit. The onus was thus on the bank management to ensure strict adherence.

The shortcomings to this method once again proved to be in its involving nature and additional documentation required to monitor payments made from the accounts. The Clerk of Works needed to be vigilant in certification of materials delivered to sites by suppliers. The banks' continued willingness to participate could not be assured. If workable this method would ideally be one of the better solutions.

### **2.2.2 Local preference scheme**

This policy was first instituted in 1978. The Local Preference Scheme is one of the three main types of industrial incentives offered by the Government as stated in the Industrial Development Policy, the other two being the Financial Assistance Policy (FAP) and Tariff Protection.

The purpose of the Local Preference Scheme was to direct a substantial share of the purchases of the Government, Local Authorities and parastatals towards resident manufacturers as a means of increasing production in Botswana and creating more job opportunities for Botswana. Its major features are that the goods of qualifying Botswana manufacturers would be accorded a price advantage over foreign produced goods. The firm's price advantage would be 40% of the "Local Content Ratio". The higher the firm's "Local Content" relative to its sales revenue the higher would be its Local Content Ratio and the greater its price advantage.

There are specific definitions of what constitutes "Local Content" which is determined by the Ministry of Commerce and Industry who screen applications for Local Preference Scheme Manufacturer's Certificates. The certificates are issued showing the price advantage that is to be applied to adjust tendered amounts in favour of the certificate holder.

Later in June 1985, the Local Preference Scheme was extended to include citizen construction firms bidding for Government and parastatal projects. During evaluation, those tenders submitted by citizen contractors had to be adjusted downward by 2.5% of their

tender sum for purposes of evaluation up to a specified maximum value, currently 300,000 Pula.

In the application of the Preference Scheme priority would be given to contracting firms in the following order: -

- 100% citizen firms
- Majority citizen owned joint venture firms (over 51% citizen)
- Minority citizen owned joint venture firms (25% to 50%)

### **2.2.3 30% Reservation policy for building projects**

This policy came via Presidential Directive in 1997. Under this policy, projects amounting to a value of at least 30% of the total value of work to be tendered for the year in question must be reserved for 100% citizen-owned contracting firms. This refers to projects exceeding 1.8 million Pula since all projects below that value are automatically reserved for small 100% citizen contractors.

Government institutions are required to submit a list of projects they intend to undertake for each year and the Controlling Body determines which projects to reserve under the policy. This policy is useful as it ensures that local contractors have some work to do at all times.

#### **2.2.4 Performance bond**

To reduce the financial burden for contractors a system has been set up to exempt certain contractors from requirements of performance bonds and to reduce the amounts for others as follows: -

- Categories OC, A and B (see Table 2) contractors are exempt from providing performance bonds.
- Citizen and joint venture firms in categories C to E provide 5% of the contract sum.
- All expatriate firms must provide a value of 10% of contract sum.

In addition, performance bonds imposed on 100% citizen contractors are to be released, at the request of the contractor, as follows: -

- a) 25% of surety on completion of 50% of the project;
- b) 50% of surety on completion of 75% of the project and
- c) 100% of surety at practical completion of project.

#### **2.2.5 Retention**

Retention amounts withheld on projects should be according to the following: -

- a) 5% of the certified value of works completed for the first 50,000 Pula and

- b) 2.5% of the balance, or in other words, certified value of works completed in excess of the first 50,000 Pula for citizen contractors.
- c) 10% of certified value of works for expatriates.

### **2.2.6 Conclusion**

The Controlling Body was charged with the task of ensuring that the above policies are followed, which indeed they do to a large extent. The ideas borrowed from the initial Boipelego Project experimentation have been applied to varying degrees of success in current tendering and contracting procedures. The dedicated accounts model and the case-by-case scheme were one-off solutions that have not been repeated. The advance and mobilization funds given to contractors separately have been merged and adopted as one under the Advance/Mobilization Loan Scheme. This also caters for direct payments to material suppliers in methods that individual institutions deem fit for their specific situations.

The prevailing procedures being implemented largely emanated from a meeting between representatives of Tshipidi Badiri Builders Association (the sole representative of contractors in Botswana) and officials from the Ministry of the then Local Government Lands and Housing in April 1998. Among other items, it was suggested that where contractors were able to furnish securities for mobilization loans, then 15% of the contract sum on a project must be paid to that contractor upon signing of the contract. This amount was to be recovered in six equal installments from the contractor's monthly payments

In instances where no security is given, it was suggested that contractors be paid 5% cash on physical mobilization on site with a further 10% paid directly to suppliers for material purchase, the exact mode of payment being at the discretion of the council or institution. Only 100% citizen owned companies qualify for advance/mobilization loans.

The issues that arise out of the system are the mode of direct payment for materials. The ministry's official position was that direct payments were not encouraged, and indeed the institutions took full responsibility for making the payments. Certain councils had more than 100 on-going contracts at any given time, resulting in an enormous workload in effecting direct payments for all contractors. In addition, it would be impossible to monitor the movement of materials from the sites.

Finally, a list of bona fide citizen contractors is prepared on a regular basis to assist institutions in issuing benefits of the government policies.



### 2.3 Categorization of contractors in Botswana

**Table 2** Ceilings for contractors' projects costs in Pula (Central Tender Board, 1999)

#### BUILDING CODE 01

Sub Code	Grade OC	Grade A	Grade B	Grade C	Grade D	Grade E
01	300,000	900,000	1,800,000	4,000,000	8,000,000	Unlimited
02	Nil	900,000	1,800,000	4,000,000	8,000,000	Unlimited
03	Nil	900,000	1,800,000	4,000,000	8,000,000	Unlimited
04	Nil	50,000	100,000	250,000	500,000	Unlimited
05	Nil	Nil	Nil	Nil	4,000,000	Unlimited
06	Nil	Nil	Nil	Nil	4,000,000	Unlimited
<b>TOTAL</b>	<b>270</b>	<b>220</b>	<b>146</b>	<b>90</b>	<b>45</b>	<b>15</b>

#### CODE 01 BUILDING

##### SUB-CODES

- 01 Building construction
- 02 Structural steel work
- 03 Pre-fabricated buildings
- 04 Solar water heating
- 05 High rise buildings
- 06 Design and build

Interpretation: A contractor with the following grading: **Grade A 01 04** is allowed to undertake only pre-fabricated building works and up to a limit of Pula 50,000 worth.

These codes were set by the Central Tender Board (CTB), which is a body constituted by legislation to oversee the procurement and disposal of public assets. The Central Tender Board was also mandated with the task of registration of contractors in the above categories using their discretion.

## **Chapter 3: Research methodology**

### **3.1 The first sub problem**

The first sub problem was to determine whether there has been a significant failure rate among contractors. Failure in this instance was defined as the inability to complete the project within the specified time and quality to the satisfaction of the client. The other parameter of cost was not considered under this study and this would form the basis of another research, not within the scope of the current survey. Quality was presumed to have been considered on acceptance of the projects by the client department and thus was technically not researched into.

The data needed for this part of the study was empirical data from contract records.

#### **3.1.1 Research type**

A non-experimental quantitative research was employed. Leedy (1997) describes this as involving “making careful descriptions of observed phenomena and/or exploring the relationships between different phenomena”. Different types included under this broad heading are the descriptive survey, longitudinal (developmental), correlational, and ex post facto research designs.

The ex post facto or causal-comparative research is used for this sub problem. This describes relationships between something that occurred in the past (after the fact) and subsequent responses. The intent is to uncover possible cause-and-effect relationships among these phenomena. (Leedy)

This method was intended to determine cause-and-effect relationships and/or to compare groups on some dependent variable. In our case, the desire was to determine whether there was any relationship between the acquisition of the advance mobilization loan to contractors and their performance in terms of timely completion of projects. In addition, the intention was also to compare whether the recipients of this advance mobilization loan fared any better than non-recipients under similar circumstances.

A cursory comparison was also made between recipients of different amounts of loan as well as a semi-longitudinal (developmental) approach to determine any improvement in performance over the years.

The advantage of this method is that the data cannot be manipulated during collection. The sampling and interpretation of the data is the most important thing. Bias in the sampling was minimized as will be discussed a little later.

### **3.1.2 Selecting the population**

The population to be studied was selected basing on geographical region and administrative boundaries. The study was confined to research contractors' performance in the Central and

Ghanzi District Councils in Botswana. Fig 1, 2 and 3 show the relationships of these areas to the rest of Botswana. In summary, Table 3.1 gives the existing situation: -

**Table 3** Central and Ghanzi districts area and population (CSO, own research)

District	Sub District	Area (km <sup>a</sup> )	% of National	Population (2001)	% of National
<b>Central</b>		<b>142,076</b>	<b>24.42%</b>	<b>501,381</b>	<b>29.83%</b>
Central	Bobonong	14,242		66,964	
Central	Boteti	33,806		48,057	
Central	Mahalapye	16,507		109,811	
Central	Serowe/Palapye	31,381		153,035	
Central	Tutume	46,140		123,514	
<b>Ghanzi</b>		<b>117,910</b>	<b>20.27%</b>	<b>32,481</b>	<b>1.93%</b>
TOTAL		259,986	44.5%	533,862	31.76%
BOTSWANA TOTAL		581,730		1,680,863	

The reasons for this population sample were that: -

1. The combined populations of Central and Ghanzi Districts make up almost 32% (a third) of the entire population, a significant proportion of the whole.
2. In terms of geographical extent, the combined districts make up 44.5% of the entire country also representing a large proportion of the whole.
3. The third and most significant factor is that the procurement system in local authorities is structured in such a way that contractors from anywhere in the country are free to tender, and do so, in all regions, resulting in the same contractors potentially working for all the district councils.

4. Administrative boundaries were used to narrow down sources of information for convenience without compromising the trustworthiness of the findings and conclusions.
5. Finally, the choice of Central and Ghanzi offered two districts whose geographical locations were diverse in terms of remoteness. This afforded sampling of a region with relatively easy access to goods and services (Central) and another at the opposite extreme (Ghanzi). (Relative is used since some regions in Central District are quite remote. However, the headquarters in Serowe is quite accessible thus the contention of non-remoteness)

A time scale was also necessary to delimit the population under consideration. The six-year period between 1<sup>st</sup> January 1995 and 31<sup>st</sup> December 2000 constitutes roughly the span of time between the genesis of these initiatives to their maturity. This period also allows a comparative survey to gauge any improvement in performance since the initiation of the interventions. Finally it allows a reasonable population size for determining realistic trends in terms of contractor behaviour and performance.

### **3.1.3 Sample Selection**

The population sizes were relatively small. In Central District Council, 341 projects were undertaken during this period while in Ghanzi District Council, 80 were done. The intention was initially to take the entire population and include it in the research. However, lost records and misplaced files rendered this impossible.

This then necessitated a degree of sampling. For this reason a nonprobability sampling approach was adopted. According to Leedy, in nonprobability sampling a researcher has no way of forecasting, estimating, or guaranteeing that each element in the population will be represented in the sample.

The type of nonprobability sampling method selected was the convenience or accidental sampling. This sampling style takes the units as they arrive on the scene or as they are presented to the researcher by mere happenstance. In our case, all the projects whose records were available were included in the sample. There was nothing to suggest any systematic design to remove certain projects from the records, thus it was assumed that this was random. However the guidelines according to Krejcie and Morgan (1970) and Gay (1996,p125) (Leedy) were used as far as possible (see Table 4)

- The larger the population size, the smaller the percentage of the population needed to get a representative sample.
- For smaller populations,  $N < 100$ , there is little point in sampling. Survey the entire population.
- If the population size is around 500, 50% of the population should be sampled.
- If the population size is around 1,500, 20% should be sampled.
- Beyond a certain point (about  $N=5000$ ), the population size is almost irrelevant and a sample size of 400 will be adequate. (Leedy/Gay)

In Central District a sample of 244 was studied out of the 341, while in Ghanzi 64 of 80 were studied. Overall, 308 of 421 were studied constituting 73% of the entire population. According to the Table 4 below, a sample of around 201 was required.

**Table 4** Sample sizes (S) required for given population sizes (N) Krejcie and Morgan, Leedy

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

### 3.1.4 Location of the data

The data was extracted from contract files in the Registries of the Architecture and Buildings departments of Central and Ghanzi District Councils.

### 3.1.5 Data collection technique

A physical search was undertaken file-by-file, recording events from contract signing through to the Final Account. These were tabulated systematically in preparation for the next stage of manipulation and interpretation. (See Annexure A and B). The factors under consideration were: -

1. Contract start date
2. Scheduled completion date
3. Actual completion date
4. Reasons for change in completion date for projects with time overruns
5. Advance mobilization loan amount taken (as % of contract sum)

Other factors like cost overruns, location, contract sum and contractor were recorded but did not constitute a critical part of the research. The reasons for change in completion dates were identified either through time extension awards (which specified reasons and length of extension), Council Secretary's Instruction (Architect's Instruction), Variation Orders and penalties charged to the contractor, where the reason went down as mismanagement by contractor. Table 4.1 gives a list of reasons for delays. These were formulated from the findings in the contract files.



### 3.1.6 Treatment of bias

Bias in the research could not entirely be eliminated. In the first instance, the selection of the two districts for case studies immediately assumes a representative sample of the whole population. Even though the reasons supporting this are fairly valid, it is not possible to eliminate the human factor in, for example the personality traits of the Council officials in both places. It is conceivable that they may have had an influence on the outcomes discovered, albeit unintentionally. It is noteworthy to mention, however, that the policy of Local Authorities Human Resources Management Division (Unified Local Government Service) is to transfer people around all the Local Authorities as often as possible. This could have eliminated to a large extent, the influence of individual officers.

The necessity to hold other factors constant for example, cost overrun considerations, grade of contractor, size of project could be argued as being legitimate factors that may have a bearing on the trends that are observed. The answer to this is even if that may be so, the randomness of the sample selection and the fact that the entire population is proportionately represented in terms of these other factors the final findings should be proportionate.

The third aspect of bias is in relation to the “semi-longitudinal” study to determine whether there was improvement in performance with time and experience. Strictly speaking, a longitudinal research would involve the study of the same individual(s) at different times over a period of time. This research makes the assumption that all contractors are developing at the same time and assessment of general performances of contractors over the years is a valid way of monitoring their progression.

### **3.2 The second sub problem**

The second sub problem was to identify causes of failure among contractors. The data needed was both historical data and responses from various stakeholders involved.

#### **3.2.1 Research type**

Using findings from the first sub problem a non-experimental quantitative research approach was used to conduct part of the study. In addition a descriptive survey was conducted using questionnaires and structured interviews (See Annexure C, D and E)

These were primarily intended to research the following factors: -

1. Causes for non-performance noting client and supplier contribution thereto
2. The effect of delayed projects
3. The effect of the advance mobilization loan on contractor performance
4. The problems associated with administering the scheme
5. The prevalence of the advance mobilization loan
6. The effect (on contractual performance) of direct payments to suppliers
7. Alternative approaches

#### **3.2.2 Selecting the population**

The population sample for contractors was to be 30, five from each contractor category. The population sample for council officers was 15 representing one response from each council.

Finally, all the main suppliers of building materials in Botswana were targeted as

respondents, numbering 11 in total. The numbers represent very small population groups, but unfortunately, Botswana is a small country with a limited number of participants in most fields of endeavour.

### **3.2.3 Sample selection**

In view of categorization of contractors, a probability sampling approach was adopted in order to achieve representation from all classes of the contractor population. This resulted in the taking of samples from each category. Secondly it was felt that the contracting community in Botswana is fairly homogeneous, especially working from the upper grades downwards (i.e. between Categories E and OC).

The increasing level of heterogeneity as the grades go up was considered a justification for choosing the same sample size for each contractor category, in nonconformity with the dwindling population size as categories go up (see Table 2).

The homogeneity of the population was also used to justify the sample size taken vis-à-vis the whole population e.g. five contractors under category OC from a population of 270.

Having decided on the size of the sample for each category, the roulette wheel method was used to select the individuals to be included in the samples.

Total population survey was adopted as far as possible for council staff and suppliers.

### **3.2.4 Location of the data**

Contract files and responses from contractors, suppliers and council staff.

The specific locations in the questionnaire and structured interviews are as follows: -

1. Contractors' structured interview: -

Questions 8, 12, 14, 18

2. Suppliers' structured interview

Questions 14, 15

3. Council officers' questionnaire

Questions 12, 13, 14, 15

### **3.2.5 Data collection technique**

Questionnaires were sent out to council staff by post for completion. Structured interviews were conducted with contractors and suppliers as far as possible. It was felt that honest responses would be easier to solicit from contractors and suppliers in a face-to-face situation.

### **3.2.6 Treatment of bias**

As far as possible, the research attempted to eliminate bias in the following ways: -

1. Survey of the total population for councils and main suppliers
2. Random selection of contractor respondents after determining the sample sizes

3. The questionnaire responses to be as discreet as possible to minimize subjective opinions

### **3.3 The third sub problem**

This was to attempt to develop a preferred model for administration of the scheme. This was done basing on findings from the survey as well as responses to direct questions posed to all role players including council staff, contractors and suppliers. These were then analyzed using statistical techniques and conclusions were drawn from this pool of data.

The methodology was the same as for the second sub problem as the same questionnaires were used concurrently for the two surveys.

## **Chapter 4: Investigating failure rate**

### **4.1 The first sub problem**

This was to determine whether there was a significant failure rate among the contractors.

#### **4.1.1 The data and their treatment**

The first step was to present the data in a systematically tabulated manner from the findings of the research. With regard to the empirical data from the existing records, the raw data is presented in Annexure A and B.

#### **4.1.2 The findings and their analysis**

The number of contractors who failed to complete the projects on schedule was extracted from the raw data in Annexure A and B in relation to the amount of advance taken (as a percentage of the contract sum). These were tabulated together with the total sample size studied. This was used to calculate the percentage of the sample that actually succeeded in completing the projects on schedule. The percentages would enable comparisons to be made easily and realistically. The exercise was done for each district separately and then for the combined total.

The information was then plotted on graphs separately for each district and then a combined graph for the total. The failure rates were analyzed with regard to the amount of advance mobilization loan taken by the contractors.

Table 5 gives a summary of success rate in terms of projects completed within the stipulated contract period for Central district.

**Table 5** Central district council projects 1995-2000

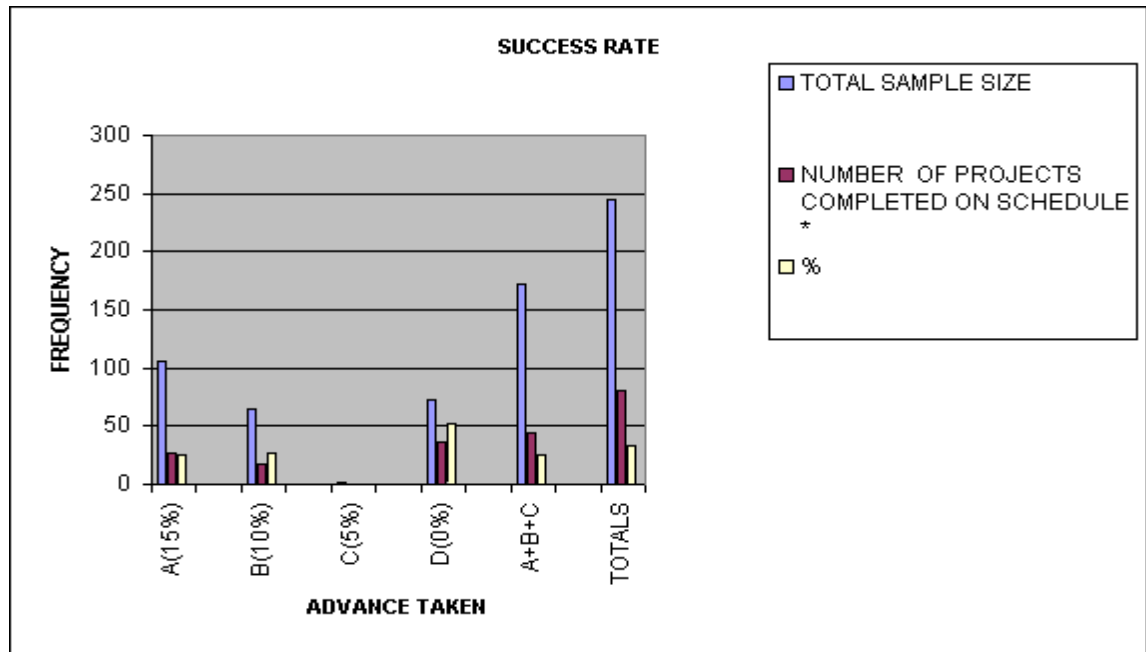
<b>Advance taken (As percentage of contract sum)</b>	<b>Total sample size</b>	<b>Number of projects completed on schedule*</b>	<b>%</b>
<b>15%</b>	106	27	25.47
<b>10%</b>	64	17	26.56
<b>5%</b>	2	0	0.00
<b>0%</b>	72	37	51.39
<b>TOTALS</b>	<b>244</b>	<b>81</b>	<b>33.20</b>

Total projects done by Central District Council **341**  
 Total studied (%) **71.55**

\* This number includes projects completed less than 31 days after the scheduled completion date to account for average delay in inspections by Council staff

From the table, contractors who received the mobilization loan did not necessarily fare better than non-recipients. In fact, the success rate for those who got the advance was about half that one of the non-recipients. Only contractors who did not receive the loan attained a success rate of over 50%. This could be attributed to the fact that a number of the firms that did not get the loan were seasoned foreign contractors and therefore more likely to succeed. Secondly, qualifying contractors who opted not to take the loan would be presumed to be

confident of their capacity and resource base. The data however state clearly that there was a high failure rate among recipient contractors in the Central district.



**Fig 4** Central District Council projects success rate

Figure 4 indicates that non-recipients of advance mobilization loan fared better with a success rate of over 50%. The rest achieved scores of around 25%.

Table 6 shows that for Ghanzi the highest success rate was with the recipients of 5% loan, followed by 15%, 0% and then 10% in that order. No clear pattern could be established for this trend, except to note that the population sample was very small despite covering 80% of the entire population.

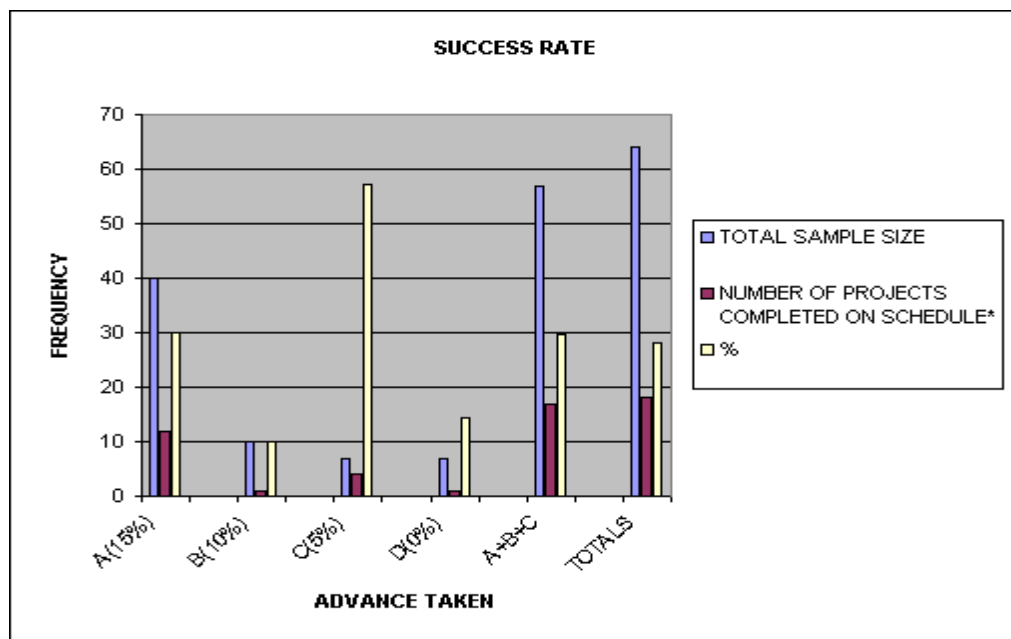


**Table 6** Ghanzi District Council projects 1995-2000

Advance taken (As percentage of contract sum)	Total sample size	Number of projects completed on schedule*	%
15%	40	12	30.00
10%	10	1	10.00
5%	7	4	57.14
0%	7	1	14.29
<b>TOTALS</b>	<b>64</b>	<b>18</b>	<b>28.13</b>

Total projects done by Ghanzi District Council 1995-2000 **80**  
 Total studied (%) **80**

Figure 5 highlights this aspect of small population behaviour, but significantly, success rate for loan recipients in general is still well below the cut-off point leading to the conclusion that there was a high level of failure in Ghanzi as well.



**Fig 5** Ghanzi District projects success rate

The overall rate for the combined districts also indicates a high level of failure overall for the recipients of the advance as shown on Table 7. Recipients of 10% and 15% had success

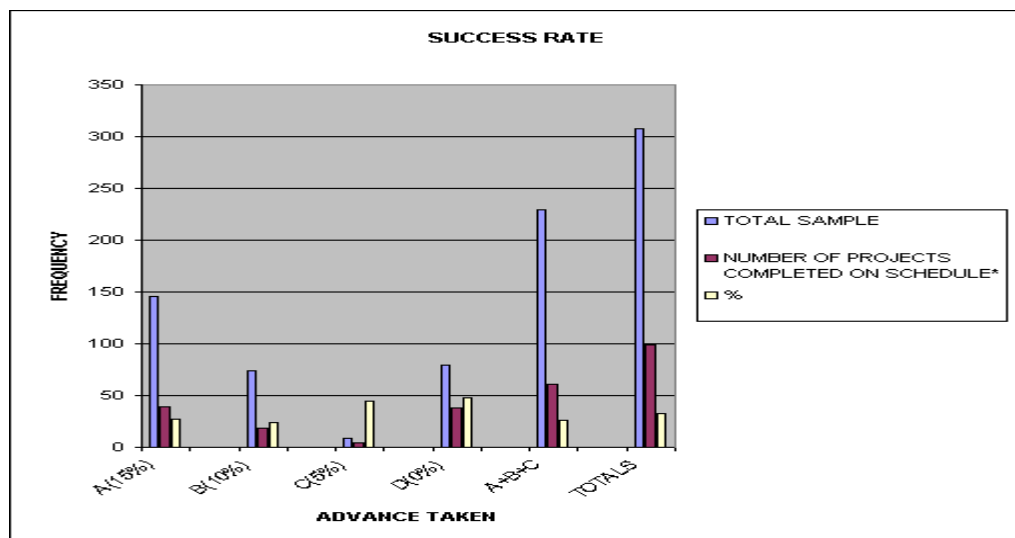
rates of around 25% each, while recipients of the smaller amount and non-recipients achieved success rates of close to 50%. Based on these findings, assuming all other factors were held constant, it would appear that the loan had no positive influence on the performance of contractors during this period.

**Table 7** Central and Ghanzi combined projects 1995-2000

<b>Advance taken (As percentage of contract sum)</b>	<b>Total sample</b>	<b>Number of projects completed on schedule*</b>	<b>%</b>
<b>15%</b>	146	39	26.71
<b>10%</b>	74	18	24.32
<b>5%</b>	9	4	44.44
<b>0%</b>	79	38	48.10
<b>TOTALS</b>	<b>308</b>	<b>99</b>	<b>32.14</b>

Total projects done **421**  
 Total studied (%) **73.16**

Figure 6 below highlights at a glance the high failure rate for the recipients of 10 and 15% mobilization loans.



**Fig 6** Total projects success rate for Central and Ghanzi Districts

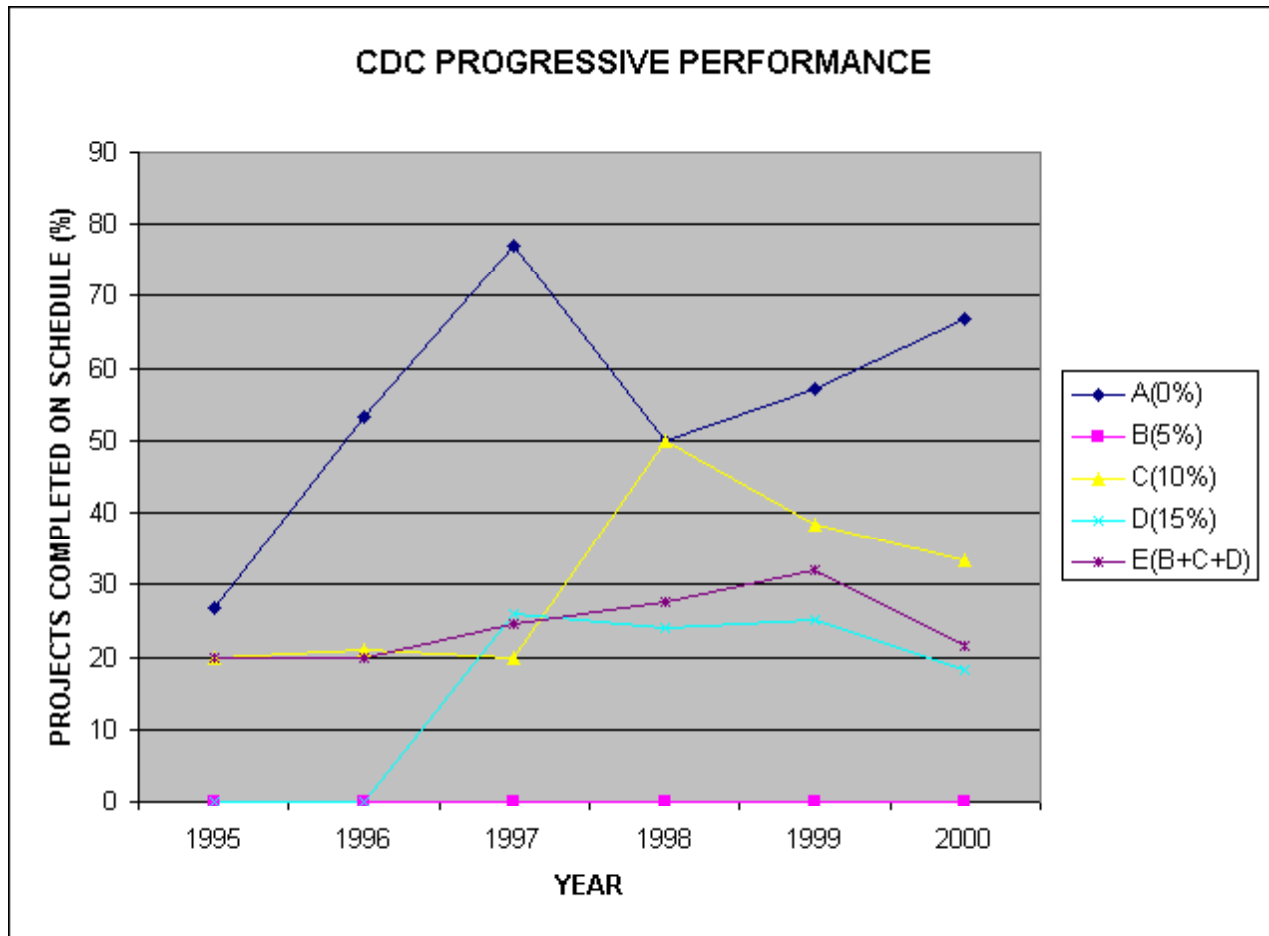
## 4.2 Progressive improvement analysis

A semi-longitudinal research was also taken of the sample with a view to establish whether there was any noticeable general improvement in the performance of contractors over time. Using the same data in Annexure A and B, the contractors' performance was again evaluated in a similar manner to the first, but this time, the overall performance was analyzed for each year from 1995 to 2000. (The year is taken when the project commenced). These were plotted for each category of contractor (Tables 8, 9 and 10). They were then transferred onto a line graph, which gave a trend for each category through the six-year period under survey. The findings are shown on Figures 7, 8 and 9.

**Table 8** Yearly success rate (%) for Central District per AML category

	<b>A (0%)</b>	<b>B (5%)</b>	<b>C (10%)</b>	<b>D (15%)</b>	<b>E (B+C+D)</b>
<b>1995</b>	26.7	NIL	20	0	20
<b>1996</b>	53.3	0	21.1	0	20
<b>1997</b>	76.9	NIL	20	25.9	24.6
<b>1998</b>	50	0	50	24	27.6
<b>1999</b>	57.1	0	38.5	25	32
<b>2000</b>	66.7	0	33.3	18.2	21.4

Table 8 gives the annual success rates for all categories of loan recipients. The final column gives the weighted averages for the actual loan recipients for purposes of comparing with non-recipients who could be considered as the "control" category. These were then plotted on a graph, Figure 7 to show the annual progression.



**Fig 7** Progressive performance for Central District

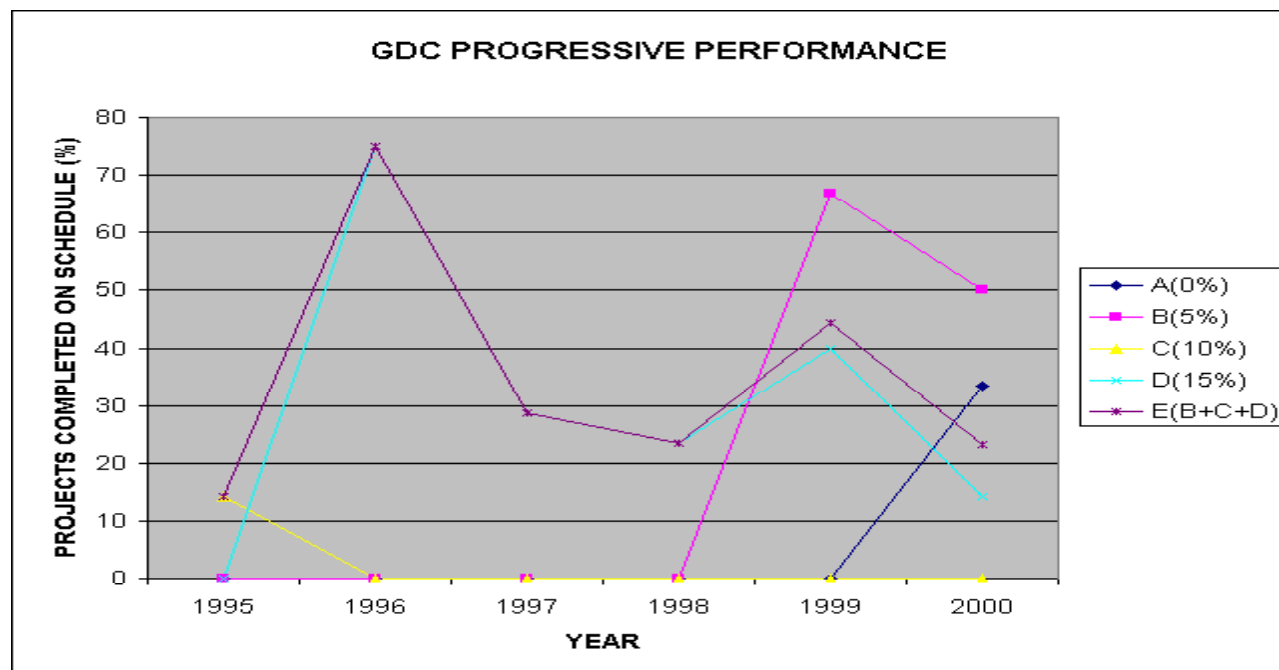
From figure 7, a very gradual improvement overall can be seen for all loan recipients until 1999-2000 when there is a sudden drop. This improvement is however caused essentially by a remarkable improvement between 1997-1998 of recipients of 10% loan, while the 15% category actually dropped during the same period and there was no change in the 5% category. The control group, the non-recipients had a fairly haphazard pattern, although they improved every year except one. A sharp drop for all recipients during 1999-2000 is not

easily explicable, but all in all, the results do not reflect a significant improvement in performance with time.

**Table 9** Yearly success rate (%) for Ghanzi District projects

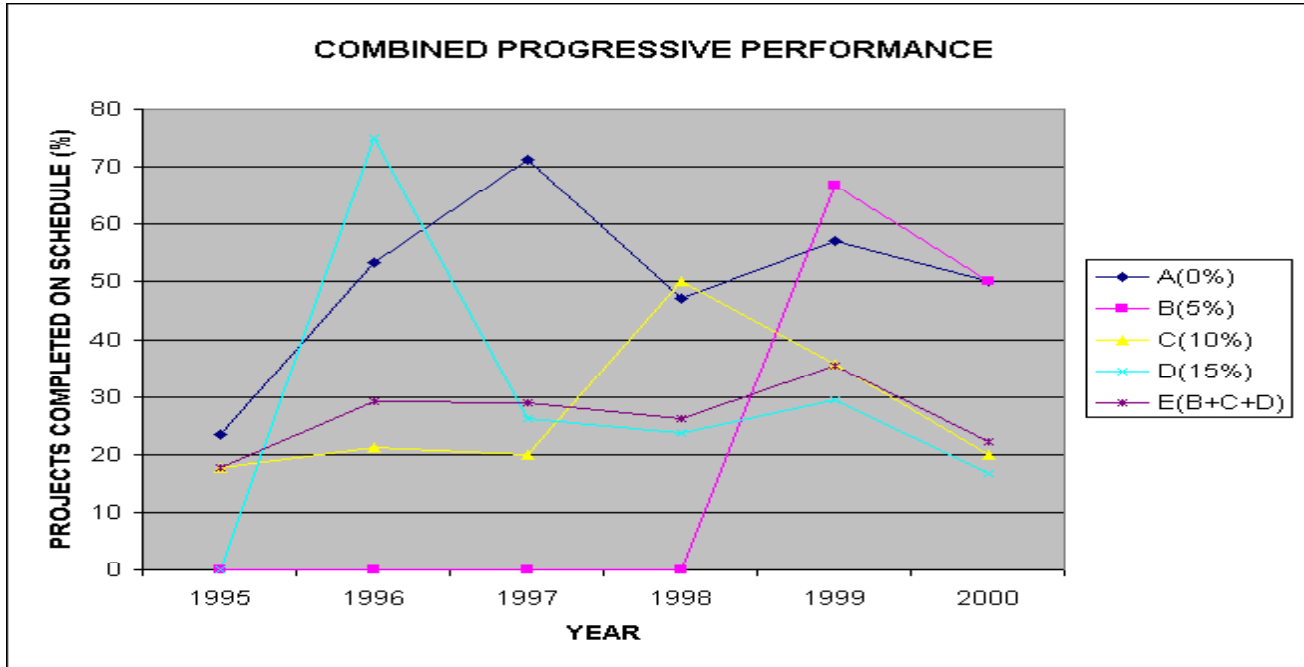
	A (0%)	B (5%)	C (10%)	D (15%)	E (B+C+D)
<b>1995</b>	0	0	14.3	0	14.3
<b>1996</b>	0	0	0	75	75
<b>1997</b>	0	0	0	28.6	28.6
<b>1998</b>	0	0	0	23.5	23.5
<b>1999</b>	0	66.7	0	40	44.4
<b>2000</b>	33.3	50	0	14.3	23.1

The Ghanzi graph was a bit difficult to interpret as the sample population proved to be quite small and almost difficult to consider in isolation. Table 9 gives the figures for the success rate for Ghanzi District projects. As can be seen from Figure 8 below, no defined pattern could be read from the findings. Nevertheless, it can be concluded that there was no discernible improvement in the performance of the recipient contractors.



**Fig 8** Progressive performance for Ghanzi District

To consolidate the research, the values for the two districts were combined to get a result that would reflect the prevailing situation for the entire national population. Figure 9 below is a representation of the weighted combined values for the success rates for projects in Central and Ghanzi District Councils in progressive years between 1995 and 2000. No clear pattern of improvement or otherwise appears from the findings leading to the conclusion that there was no discernible improvement of performance among the contractors during this period. The only significant observation is that there seemed to be a definite drop in performance for all categories between 1999 and 2000. This may have been due to massive reinforcement of the professional cadre in the Local Authorities during this period especially quantity surveyors, which may have instilled renewed professionalism into the process. This probably had a negative effect on the performance of contractors used to old practices.



**Fig 9** Progressive performance for combined Central and Ghanzi Districts

### **4.3 Summary of results**

In summary the findings are that: -

1. There was a significant rate of failure in contractual performance in spite of the advance mobilization loan.
2. There was no discernible improvement of contractual performance with time.

## Chapter 5: Reasons for failure

### 5.1 The second sub problem

The second sub problem was to identify causes of failure among recipient contractors.

#### 5.1.1 Data processing and analysis of findings from records

From the records reasons for delays were extracted and summarized in table form, Table 10. These were classified according to broad outlines resulting from trends observed from the study samples as well as insights gleaned from available literature. Eight categories in total were identified and labeled R1 to R8. Each of these had sub divisions that are included in Table 10.

**Table 10** Contractors' reasons for delays

<u>R1</u>	<b><u>Delay by client</u></b>
	1a No site
	1b Council Secretary's Instructions and Variation Orders
	1c Delayed information e.g. unfinished drawings, specifications etc
	1d Delayed inspections and payments
	1e Underpayment
<u>R2</u>	<b><u>Specific site conditions</u></b>
	2a Excavation in rock
	2b Excavation in deep sand
	2c Site encumbrances e.g. utility services to be relocated etc
	2d High water table
<u>R3</u>	<b><u>Logistical problems</u></b>



- 3a Poor roads
- 3b Lack of water
- 3c Lack of services

**R4 Contractor's plant**

- 4a Lack of transport
- 4b Lack of equipment
- 4c Other

**R5 Inclement weather**

- 5a Rain
- 5b Other

**R6 Default or breach by contractor**

- 6a Reworks and condemned works
- 6b Mismanagement

**R7 Suppliers and subcontractors**

- 7a Delay by material suppliers
- 7b Delay by subcontractors

**R8 Acts of God/force majeure**

- 8a Strike
- 8b Personal tragedy
- 8c Other

The raw data were entered into a computer spreadsheet and analyzed using Microsoft Excel computer programme. These were converted into appropriate graphical representations and presented using descriptive methods to enable inferences and comparisons to be drawn.

The reasons for delays on projects in Central, Ghanzi and the combined two districts are presented according to amount of advance loan received in table form. They show contributions for failure against each reason as percentages to facilitate ease of comparison for the contribution of each factor. They were also represented as histograms to show the reasons in graphic form. These presentations were useful in comparing the prevalence

of the various reasons for delay, as well as how the recipients of different amounts of advance were affected by each reason. This, it was hoped, could shed some light on whether the amount of the advance mobilization loan had any bearing on the successful completion of projects within schedule, or whether it reduced instances of certain causes of delays.

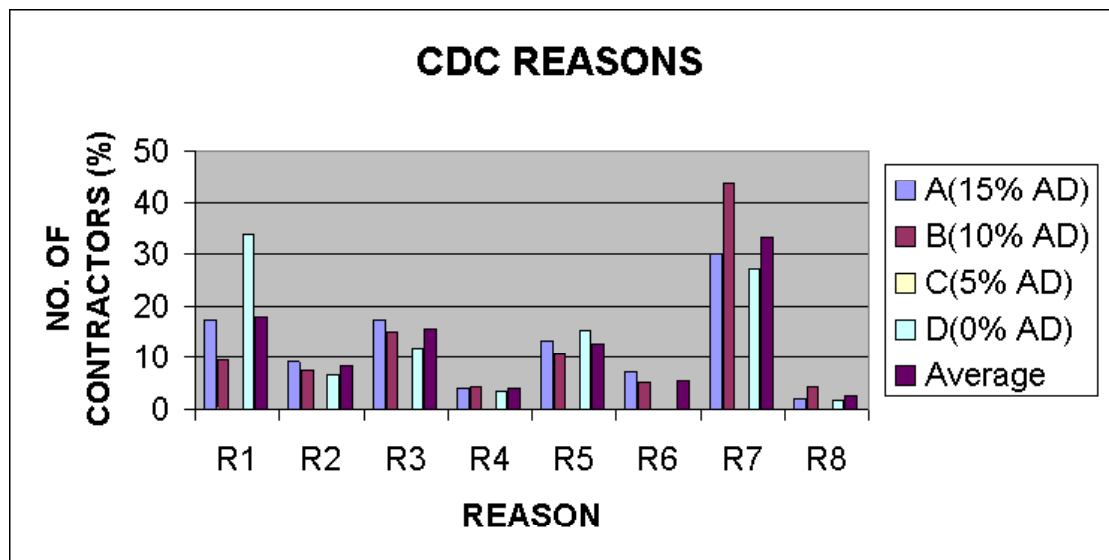
### **.5.1.2 Findings and discussion**

From the analysis of the data, the findings are that, for Central District Council projects, the most prevalent reasons for delays can be attributed to suppliers and sub contractors, whose contribution is exactly one third of the total. However, going by individual categories of loan recipients, the most delays for non-recipients' are caused by the client or client related reasons. This can be expected, as this category of contractor was arguably more experienced and therefore more knowledgeable about contractual provisions like claims for extension of time for delayed information among others. Table 11 summarizes the contribution of each reason for each category of loan recipient and a weighted average for the entire district for comparison purposes. The low score of contractor's default (ranked sixth) is surprising in view of the findings of the qualitative data obtained from questionnaire surveys, but only assuming that all the other factors were beyond the contractor's control. The contribution by client is noteworthy.

**Table 11** Reasons for delays on Central District Council projects (%)

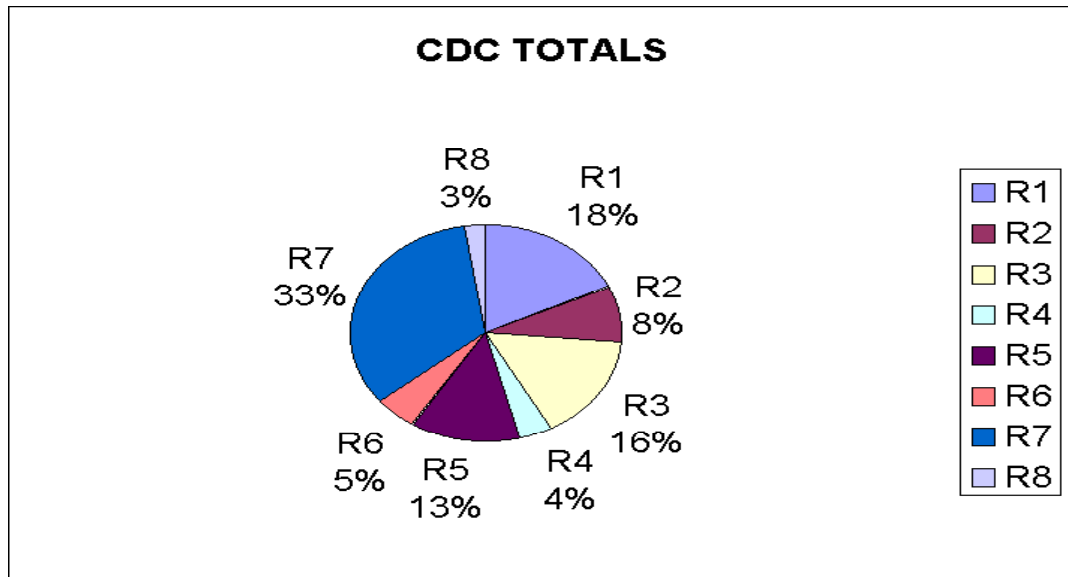
Advance as %	A (15% AD)	B (10% AD)	C (5% AD)	D (0% AD)	Average
<b>R1</b>	17.26	9.57	0	33.9	18
<b>R2</b>	9.14	7.45	0	6.78	8.29
<b>R3</b>	17.26	14.89	0	11.86	15.71
<b>R4</b>	4.06	4.26	0	3.39	4
<b>R5</b>	13.2	10.64	0	15.25	12.86
<b>R6</b>	7.11	5.32	0	0	5.43
<b>R7</b>	29.95	43.62	0	27.12	33.14
<b>R8</b>	2.03	4.26	0	1.69	2.57

Fig 10 below indicates that in general, the contribution of each reason for the various categories of loan recipient followed the same pattern. Remarkably, contractors receiving 15% advance loan were almost consistently among the top defaulters for each reason, ranking first and second in three each. This could be attributed to the fact that the contractors who applied for the total loan were mostly the ones who required the support, financially and otherwise, and were generally smaller and less experienced.



**Fig 10** Frequency of delays (%) for each reason, Central District

Figure 11 below shows the rating for reasons for delay for Central District in the following order: - Suppliers and sub contractors; client; logistical problems; inclement weather; (adverse) site conditions; default by contractor; contractor’s lack of plant and lastly force majeure.



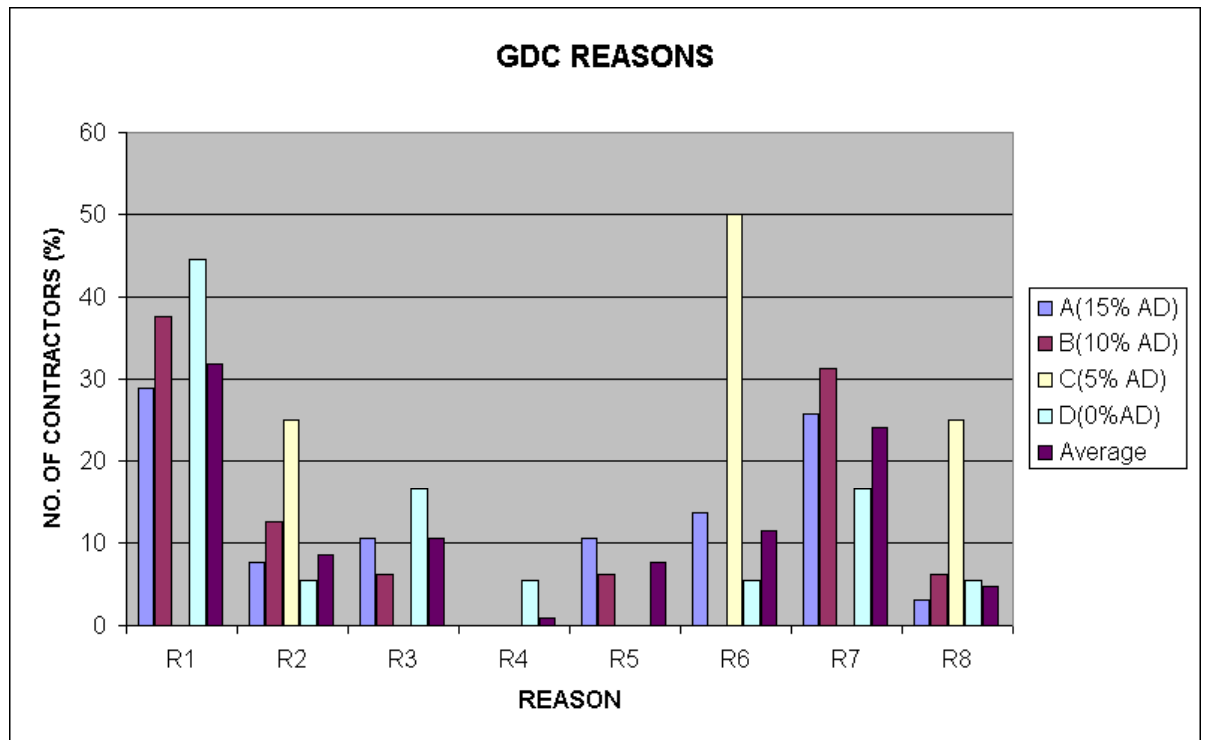
**Fig 11** Frequency of delays for entire sample population (%) for Central District

Table 12 presents the frequency of delays for Ghanzi District and once again, the non-recipient contractors cite client delays as the biggest source.

**Table 12** Frequency of delays (%) for Ghanzi District

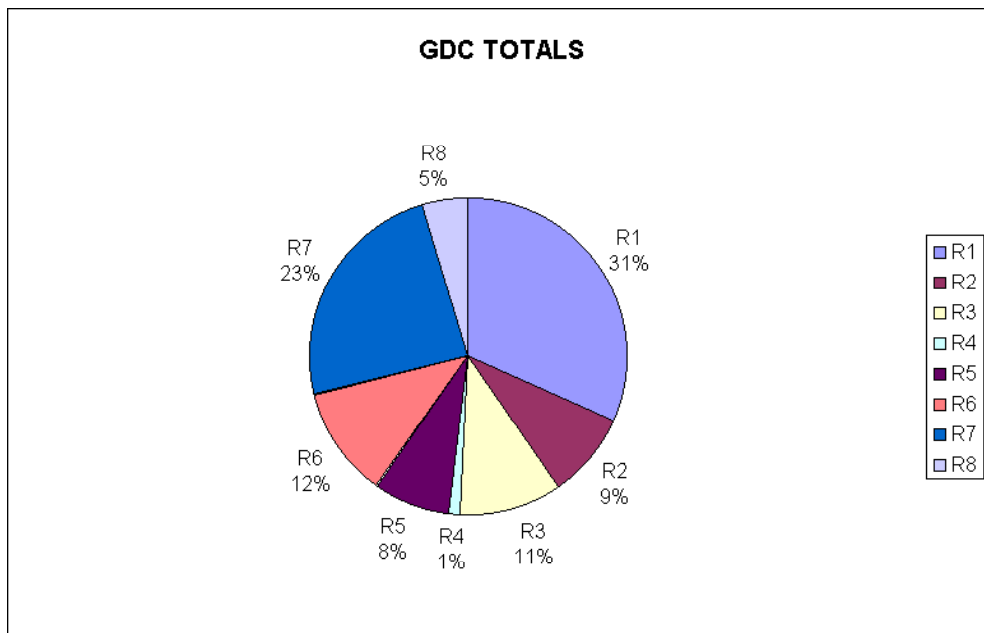
	A(15% AD)	B(10% AD)	C(5% AD)	D(0%AD)	Average	Advance (%)
<b>R1</b>	28.79	37.5	0	44.44	31.73	
<b>R2</b>	7.58	12.5	25	5.56	8.65	
<b>R3</b>	10.61	6.25	0	16.67	10.58	
<b>R4</b>	0	0	0	5.56	0.96	
<b>R5</b>	10.61	6.25	0	0	7.69	
<b>R6</b>	13.64	0	50	5.56	11.54	
<b>R7</b>	25.76	31.25	0	16.67	24.04	
<b>R8</b>	3.03	6.25	25	5.56	4.81	

Figure 12 also vaguely shows a consistent pattern for all categories. The Ghanzi sample was very small and therefore prone to distortions. The contractors receiving 15% advance fared much better in Ghanzi keeping at roughly average of the total sample for all reasons.



**Fig 12** Frequency of delays (%) from each reason for Ghanzi District

For Ghanzi, Figure 13 shows the first two factors have interchanged from those of Central District and the order of rating reasons for delays is as follows: - Client; suppliers and sub contractors; contractor; logistics; adverse site conditions; inclement weather; force majeure and lack of plant. It is noteworthy that the first two reasons contribute 51% and 54% of Central and Ghanzi delays respectively, over one half of the total, while three of the top four in both districts i.e. adding logistical reasons to the other two, account for over 65% in both cases.



**Fig 13** Frequency of delays (%) for entire sample population for Ghanzi District

Table 13 ranks the reasons for delay as established by empirical data.

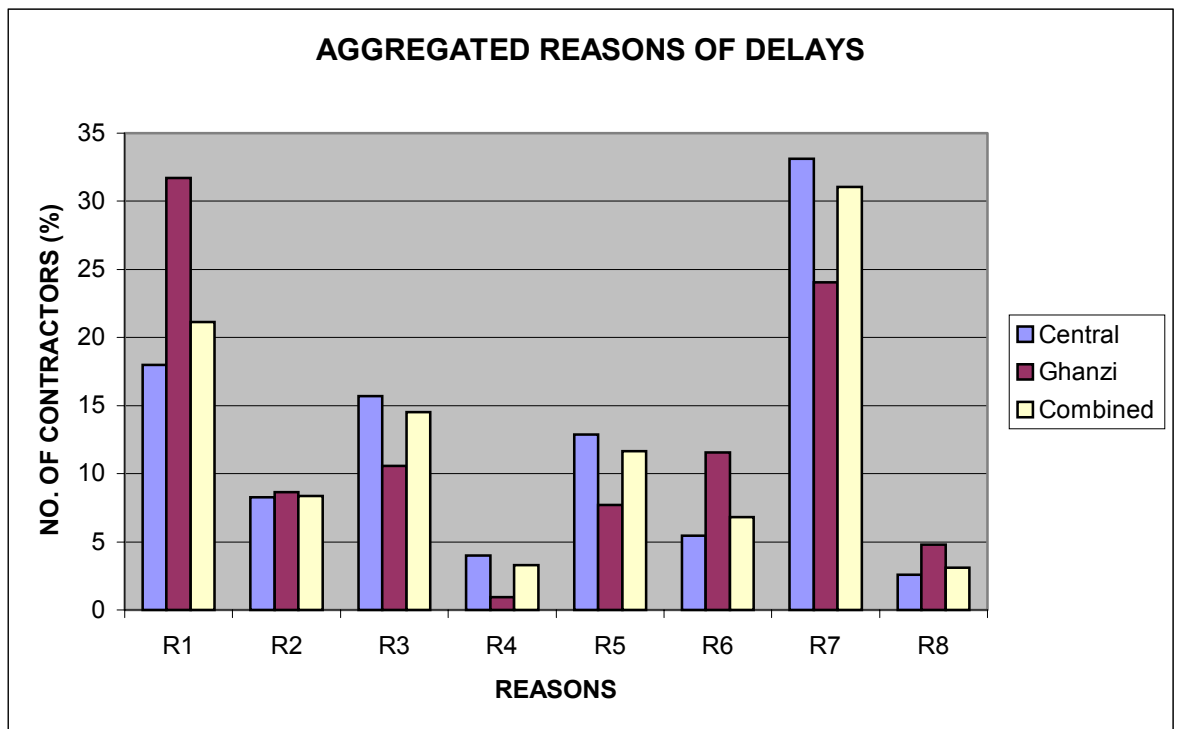
**Table 13** Frequencies for delays (%) for weighted averages of total populations

	Reason of Delay	Central	Ghanzi	Combined	Rank
<b>R7</b>	Suppliers and Sub contractors	33.14	24.04	31.06	1
<b>R1</b>	Client	18	31.73	21.15	2
<b>R3</b>	Logistics	15.71	10.58	14.54	3
<b>R5</b>	Inclement weather	12.86	7.69	11.67	4
<b>R2</b>	Site conditions	8.29	8.65	8.37	5
<b>R6</b>	Contractor default	5.43	11.54	6.83	6
<b>R4</b>	Lack of plant	4	0.96	3.3	7
<b>R8</b>	Force majeure	2.57	4.81	3.08	8

Taking individual reasons, (Annexures I and J) delay by material suppliers (7a) accounts for 25.1% of total delays followed by rain (5a) and lack of water (3b), both at 11.7%. Variation

orders and Council Secretary’s Instructions are significant contributors at 8.4% while, of the reasons that elicited any points at all, excavation in sand and strike were the smallest contributors at 0.2% each. Mismanagement by the contractor at 5.1% was only eighth in the rankings out of a total of 25.

Figure 14 indicates that the spread of reasons for delays took a similar distribution for both Central and Ghanzi Districts. In view of the contrasting circumstances prevailing in the two districts, this was an important indicator as to whether the trend was similar nationwide.



**Fig 14** Aggregated reasons for delays for combined Central and Ghanzi Districts

These findings were compared with the qualitative responses from the questionnaires.

### 5.1.3 Analysis of questionnaires

The descriptive survey employed the use of questionnaires and structured interviews. The questions were kept simple and straightforward. The information obtained was to reveal perceived causes for nonperformance of contractors as well as how the advance mobilization loan could be made more useful. The questionnaires made an allowance for commentary, where the respondents could expand on their responses.

These responses were used to compare with and corroborate findings from the analysis of the historical data in the previous section. The contractors were asked to state the perceived main reason for delay on their projects from among the reasons that were identified from the analysis of empirical data. The contractors' responses are summarized in Table 14 as follows: -

**Table 14** Response from contractors' questionnaire (%) for reasons for failure

<b>Reason</b>		<b>%</b>	<b>Rank</b>
Suppliers and sub contractors	R7	30	1
Logistical reasons	R3	20	2
Delay by client	R1	20	2
Site conditions	R2	10	3
Condemned works	R6	10	3
Lack of plant	R4	0	6
Inclement weather	R5	0	6
Force majeure	R8	0	6
Other	R9	10	



A few contractors stated that they had no delays on projects and were thus not included in the ranking. These findings are similar to the findings from empirical records in that the first three reasons are the same.

The suppliers were asked to state their perception of the frequency of timely material deliveries to their clients (contractors) and the biggest cause of late deliveries. Table 15 below indicates, not surprisingly, that suppliers believe that their deliveries are timely in most cases. This contradicts the empirical evidence and the contractors’ perceptions. A reason for this is that material suppliers have an “order period” which they require to acquire the ordered material from their sources and deliver it to respective sites. A lot of contractors do not factor these lead times into their programmes and consequently blame the supplier for the ensuing delay. Many small contractors on the other hand do not strictly adhere to their programmes leading to haphazard procurement processes.

**Table 15** Response from suppliers’ interview (%) for timely deliveries of material

<b>Frequency of timely deliveries</b>	<b>(%)</b>
Always (100% of the time)	17%
Often (75% of the time)	66%
Sometimes (50% of the time)	0
Rarely (30% of the time)	0
Never	0
Unsure	17%

Table 16 lists reasons for late deliveries where this applies as experienced by suppliers. Non-availability of materials is the single most important reason from the findings of the survey. From discussions held with the suppliers, they cite untimely orders to be the cause of this situation. Lack of water was raised by water heater suppliers/sub contractors.

**Table 16** Suppliers’ reasons for late deliveries (%)

<b>Reason</b>	<b>(%)</b>	<b>Rank</b>
Unavailable materials	50	1
Distance	20	2
Lack of water	10	3
Wrong address received from client	10	3
Other	10	3

Council staff were asked for opinions as to what factors contribute to delays on projects. They were asked to list as many as possible and rank them according to degree of importance. Four points were given for the top reason progressively reducing to one for the fourth one. Respondents gave a maximum of four reasons from the survey. These were presented along with the number of respondents mentioning each as a factor. Table 17 ranks individual reasons as perceived by respondents. The second column titled “Category.” represents the broad category as listed in this survey that the reason has been classified under. Poor management skills were perceived to be the biggest cause of failure, contrary to findings from the other surveys. However, lack of information, which is attributable to client delay, ranked second in line with the other findings.

**Table 17** Response to questionnaire from council staff for factors contributing to delays on projects (%)

Reasons for delay	Category	1	2	3	4	Score	Rank
Poor management skills	R6	4	2	1	2	26	1
Lack of information	R1	2	0	1	0	10	2
Lack of skilled labour	R6	0	1	1	1	6	3
Poor financial management	R6	1	0	0	1	5	4
Lack of plant	R4	0	1	1	0	5	4
Poor pricing	R6	0	0	2	0	4	6
Delayed material orders	R6	1	0	0	0	4	6
Incompetence	R6	1	0	0	0	4	6
Monopoly of suppliers	R7	1	0	0	0	4	6
Poor cost management	R6	0	1	0	0	3	10
Tenderers do not visit sites	R4	0	1	0	0	3	10
Lack of skills	R6	0	0	1	1	3	10
Diversion of loan funds	R6	0	1	0	0	3	10
Poor project team relations	R1	0	1	0	0	3	10
Lack of commitment	R6	0	1	0	0	3	10
Material shortage	R7	0	0	0	2	2	16
Overextended	R3	0	0	1	0	2	16
No knowledge on contract	R6	0	0	0	1	1	18
Late payments	R1	0	0	0	1	1	18
Nonpayment of staff	R6	0	0	0	1	1	18

In order to facilitate ease of comparison with the other surveys, the reasons given by council staff have been classified in the eight broad categories, R1 to R8, that have been used in the study. Table 18 shows the findings that contractor mismanagement ranked far above the rest of the causes followed by client delay, lack of plant, delay by suppliers and sub contractors and lastly logistical problems. Other categories were not mentioned.

**Table 18** Categorized ranking for reasons for delays as perceived by council staff

<b>Reasons</b>	<b>No.</b>	<b>Score</b>	<b>Rank</b>
R6	12	63	1
R1	3	14	2
R4	2	8	3
R7	2	6	4
R3	1	2	5
R2	0	0	6
R5	0	0	6
R8	0	0	6

Table 19 indicates that the perception of reasons for failure by council staff is quite different from either empirical evidence or contractors’ perceptions. The main reason for this anomaly seems to be what the two protagonists consider to be the contractor’s responsibility in a building contract. Most council staff considered issues like delay by suppliers and sub contractors, lack of plant, and to a certain extent, logistical reasons, site conditions and even inclement weather to be within the control of the contractor. Instances of contractors not visiting sites before tendering have been cited as one reason for failure. One could argue that the above factors could be minimized by prior inspection of the site.

**Table 19** Comparative ranking from all sources for reasons for delays on projects

<b>Reason for delay</b>		<b>Ranking by empirical data</b>	<b>Ranking by contractors</b>	<b>Ranking by council staff</b>	<b>Weighted totals</b>	<b>Overall weighted ranking</b>
Suppliers and sub contractors	R7	1	1	4	6	<b>1</b>
Delay by client	R1	2	3	2	7	<b>2</b>
Logistical reasons	R3	3	2	5	10	<b>3</b>
Default by contractor	R6	6	5	1	12	<b>4</b>
Site conditions	R2	5	4	6	15	<b>5</b>
Lack of plant	R4	7	6	3	16	<b>6</b>
Inclement weather	R5	4	7	6	17	<b>7</b>
Force majeure	R8	8	8	6	22	<b>8</b>
Other	R9	N/A	9	N/A		

To determine the overall causes for the delays and thus failure, the findings of the different surveys have been combined to come up with a unified ranking system. The ranking for each reason has been totaled to give the contribution of each survey and these weighted totals were then used to determine the overall ranking. Table 19 shows this overall ranking and the results, starting from the biggest cause of delays are as follows: - Suppliers and sub contractors; client; logistical reasons; contractors' default; site conditions; lack of plant; inclement weather; force majeure.

In summary, the ranking from empirical data and contractors followed a remarkably similar trend, resulting in the overall ranking following suite. The deviation from this pattern by the council staff ranking was explained in part, from follow up discussions with respondents, by the fact that the need for gentle treatment of contractors resulted in various reasons for extensions of time on contracts being attributed to soft factors like inclement weather, to avoid penalizing the contractors through liquidated and ascertained damages. This could be supported by the high instance of delay due to rain at 11.7%, considering that Botswana is a relatively dry country. With no documented evidence of this, however, it was not deemed fit to be included as a factor, however plausible. What required serious consideration, however, was whether, in view of suppliers' responses regarding late deliveries to contractors, the delays caused by suppliers should not have been classified under contractors' default to some extent. The contention is yes, as this to a large extent could have been caused by lack of proper procurement management practices. Further research may be required on this issue, but it did not fall within the scope of the current study.

The contribution by the client is noteworthy in that most projects emanate from standard designs, most of which are already familiar to both client and contractor. One would expect few variations, if any. Councils have however complained of capacity constraints for a long time and this may have contributed to delays on projects.

## **5.2 Summary of results**

1. The findings have established that the following are the main reasons for delays in contractual performance: -

Delays by suppliers and subcontractors; client; logistical reasons; contractors' default; site conditions; lack of plant; inclement weather and force majeure in that order.

1. In terms of responsibility for the delays, a number of them could be categorized under contractor's default as contractors are ideally required to handle the management aspect of the project
2. A significant lack of agreement exists between contractors and suppliers with the regard to the apportionment of blame for late deliveries or "delays by suppliers". Suppliers by and large believe that their deliveries are timely within reasonable limits.

## **5.3 Testing of the first hypothesis**

**The first hypothesis stated that the recipient contractors who perform below expectations do so due to financial mismanagement.**

The findings do not support this hypothesis.

## **Chapter 6: A preferred model**

### **6.1 The “third” sub problem**

Leading from outcomes of the research on the first two sub problems was to attempt to come up with a preferred model for the implementation of the scheme. This was also conducted through a quantitative method of data production comprising the design and administration of questionnaires among three target population groups namely contractors, suppliers and council staff (clients). The sampling approach has already been discussed and the methodology defined in previous chapters. For ease of administration, the same questionnaires for the last sub problem were used on the respondents. The findings were as follows:

#### **6.1.1 Analysis of the data and findings**

The contractors were asked to rank the importance of the advance mobilization loan to the success of their projects on a Likert scale one to five, the perceived effectiveness of the loan on project success, how they prefer to receive their loan, and parameters negatively influencing the effective utilization of the loan. They were also asked to suggest ways of improving the administration of the advance mobilization loan.

The questions posed to the suppliers were mainly concerned with direct payments, discounts and credit. The research wished to identify what risk factors are involved in providing credit

to contractors, whether discounts were the same as with cash payments, whether there are any benefits or disadvantages to contractors in direct payments and any opinions on any other preferred arrangement.

Council staff were required to rate the risk of providing unsecured loans, the importance and effectiveness of the loan, to state factors negatively influencing the effective utilization of the loan and finally how the problems associated with the administration of the scheme could be minimized or eliminated.

Where the respondents were required to respond in terms of a range of frequencies, or to rate performance using a range of responses, it became necessary to compute an importance index (II) with a minimum value of 0 and a maximum value of 4, to enable a comparison of various aspects. The importance index is calculated using the formula:

$$\frac{4n_1 + 3n_2 + 2n_3 + 1n_4 + 0n_5}{(n_1 + n_2 + n_3 + n_4 + n_5)}$$

where       $n_1$  = Always/Excellent etc  
               $n_2$  = Often/Good etc  
               $n_3$  = Regularly/Average etc  
               $n_4$  = Seldom/Poor etc  
               $n_5$  = Never/Very poor etc

*Source J. Smallwood*



Both contractors and council staff rated the advance mobilization loan as being very important to project success with the former returning an importance index of 3.49 while the latter returned 2.74, Table 20. These are both well over the middle level of 2.0. The importance levels were given from 1 (Very important) to 5 (Not important).

**Table 20** Rating the importance of the advance mobilization loan to project success

Importance	Response per frequency (%)					II*
	1	2	3	4	5	
Contractors	66	17	17	0	0	3.49
Council staff	55	9	9	9	18	2.74

1(Very important) to 5(Not important)

Both groups also found the loan to be effective on the success of the project, returning indices of 3.15 and 2.07 for contractors and council staff respectively, (Table 21).

**Table 21** Rating the effectiveness of the advance mobilization loan on project success

Effectiveness	Response per frequency (%)					II*
	1	2	3	4	5	
Contractors	66	17	0	0	17	3.15
Council staff	18	9	36	36	0	2.07

1(Very effective) to 5(Not effective)

However, for council staff, the figure is just over the middle level of 2.0 indicating that the perception is far from unanimous. Empirical data also did not corroborate this view, as there was no noticeable difference in performance between recipients of different amounts of advance mobilization loan. This on the other hand could be attributed to other factors like capacities of recipients may have been directly linked to need for the loan etc

Table 22 indicates that most of the contractors preferred to receive the entire loan amount of 15% as cash, but many could not raise the required securities. They cited negotiating power (with suppliers) as being the most important reason for this preference. They also said this ensured available payment of salaries to workers at the early stages, which was critical to retaining qualified staff on site.

**Table 22** Methods of loan disbursement preferred by contractors

Method	Response (%)	Rank
15% cash	66	1
5% cash only	17	2
5% cash and 10% direct payment for materials delivered on site	17	2
5% cash and 10% direct payment for material incorporated into the works	0	4
Other	0	4

Using the rating scale of one to five again, contractors and council staff were asked to rate the following factors according to what extent they negatively influenced the effective utilization of the advance mobilization loan. Importance indices were then calculated from the data received for both sets of respondents. Table 23 below gives the findings that both the contractors and council staff were unanimous in their view that diversion of funds to other uses and lack of management skills, in that order were the most important factors negatively influencing the effective utilization of the loan. The other factors including inadequate loan amount, method of disbursement, difficult repayment schedule and any other factor were found not to influence negatively the effectiveness of the advance. They received importance indices well below the middle level of 2.0

**Table 23** Importance indices for factors negatively influencing the effectiveness of the advance mobilization loan

<b>Factor</b>	<b>Contractors index</b>	<b>Rank</b>	<b>Council staff index</b>	<b>Rank</b>	<b>Average</b>	<b>Combined Rank</b>
Diversion of funds to other uses	4	1	3.46	1	3.73	<b>1</b>
Lack of management skills	3.66	2	3.21	2	3.435	<b>2</b>
Inadequate loan amount	0.85	3	0.99	3	0.92	<b>3</b>
Method of disbursement	0.68	4	0.63	4	0.655	<b>4</b>
Difficult repayment schedule	0.68	4	0.54	5	0.61	<b>5</b>
Other	0	6	0	6	0	<b>6</b>

From the above findings, both council staff and contractors believe that the advance mobilization loan is both important and effective. Both also are of the opinion that diversion of funds from their intended purpose and lack of management skills are, in that order, the biggest factors negatively influencing the effectiveness of the loan. The contractors on the other hand would prefer to receive the entire loan as cash. The contractors were therefore asked to state their support or non-support of the direct payment system as the alternative arrangement, where part of the loan is disbursed as direct payments to suppliers for materials on site. The suppliers were also asked for their position on direct payments and a comparative analysis of the two findings is presented on Table 24.

**Table 24** Comparative levels of support for the direct payment system between contractors and suppliers

	Response (%)	
<b>Support</b>	<b>Contractors</b>	<b>Suppliers</b>
No	66	0
Yes	34	100

The table clearly shows contrasting positions and reasons for these were extracted from the data and are shown on Table 25 below.

**Table 25** Reasons for supporting/not supporting the direct payment system

Reason	Support	Response (%)		Suppliers	Rank
		Contractors	Rank		
Contractor's own management is important	No	50	1	0	6
Helps the contractors to procure materials	Yes	34	2	0	6
This increases prices of materials	No	16	3	0	6
Payments are assured	Yes	0	0	37.5	1
Contractors are associated with high risk	Yes	0	0	25	2
Contractors relieved of burden	Yes	0	0	12.5	3
Councils are knowledgeable about procedures	Yes	0	0	12.5	3
Councils refuse to take responsibility	(Yes)	0	0	12.5	3

Not surprisingly, most of the reasons are tied to each party's best interests. Evidently the suppliers wanted to ensure that their material was paid for while the contractors' concerns were centred on procuring materials at the best prices to boost their profit margins. Some suppliers supported the direct payment system, but had reservations about councils' commitment to pay under certain circumstances thus giving contradictory information on the table. Following on the theme of direct payments, both groups were asked to state how discounts were handled under direct payment arrangements, and the results are presented on Table 26 below.

**Table 26** Perceptions as to the extent to which discounts are offered to contractors under direct payment arrangements

Discount offered	Response per frequency (%)					II*
	Always	Often	Sometimes	Rarely	Never	
Contractors	0	0	0	0	100	0
Suppliers	83	0	0	0	17	3.32

A number of suppliers qualified their response to the above question, for instance some said they offered discount as on credit arrangements while one said that discounts are offered only on request. It is necessary for suppliers and contractors to reach an agreement on the definition of discount in these circumstances, as it would seem that the perceptions are at variance as to whether discounts are indeed offered. This is a critical determinant to the acceptability of the direct payment system to all parties.

The suppliers were asked to mention any problems encountered with the current direct payment system and to suggest any preferred alternatives. The summary of the response was that suppliers felt that the current arrangement offers no airtight guarantees to the suppliers. They would prefer an alternative that is more legally enforceable, and one that would ensure quicker payments to the suppliers for goods delivered. No indication was given of considerations for guarantees to the other parties. Council staff, on the other hand were also concerned about unsecured loans to contractors. Table 27 shows that 64% of respondents felt that there was some level of risk in issuing unsecured loans.

**Table 27** Council staff perception of risk involved in offering unsecured loans to contractors

Risk	Response (%)	Rank
Fairly risky	55	1
Little risk	36	2
Very risky	9	3
No risk	0	4

Finally contractors and council staff were asked to give suggestions on how the administration of the advance mobilization loan could be improved. Table 28 gives the findings, which identify improvement of contractors’ skills as being the most important requirement.

**Table 28** Contractors' and council officers' view on ways of improving the advance mobilization loan scheme (Own research)

Legend-Classification

- 1 Diversion of funds
- 2 Contractors’ skills level
- 3 Other

Factor	Classification	Response (%)		Council staff	Rank	Combined average	Rank
		Contractors	Rank				
Contractors management skills to be improved	2	29	1	31.25	1	30.125	1
All payments to be made directly to suppliers	1	29	1	12.5	3	20.75	2
Contractor attitude to change	2	14	3	18.75	2	16.375	3
Ensure no diversion of loan funds	1	14	3	0	8	7	4
Dedicated accounts system to be reintroduced	1	14	3	0	8	7	4
Employ qualified staff	2	0	6	12.5	3	6.25	6
Security to be provided by contractors	3	0	6	12.5	3	6.25	6
Registration process of contractors to be improved	3	0	6	6.25	6	3.125	8
Advance should be used to pay trainers of contractors	2	0	6	6.25	6	3.125	8

This was followed in this order by: Loan monies all to be paid to suppliers; contractors to change their attitudes; to ensure no diversion of funds (who?); reintroduction of dedicated accounts system as the most important. These suggestions were classified under the broad headings that had been identified in previous findings as being the main causes of ineffective utilization of the advance mobilization loan, namely funds being diverted to

other uses and lack of skill on the part of the contractors. Others that fitted neither of the categories were classified under “other”.

Majority of contractors felt that the best solution lay in arresting the misuse of the advance mobilization loan while council respondents seemed to be of the opinion that the answer lay in the overall improvement of the contractors’ skill levels. These results are tabulated on Table 29 below. These results should however be taken circumspectly as not a majority of contractors, for example, support direct payments as seen from some of the findings. Rather, the concern is with the introduction of means that will curb the diversion of the loan from specific projects.

**Table 29** Categorized responses by contractors and council staff for improvement of AML  
(Own research)

Category	Classification	Responses ( % )		Average	Rank
		Contractor	Council staff		
Contractors' skills level	2	43	68.75	55.875	1
Diversion of funds	1	57	12.5	34.75	2
Others	3	0	18.75	9.375	3

## 6.2 Summary of results

This study found that

1. Both council staff and contractors believe that the advance mobilization loan is both important to project success and effective in determining the success of projects.
2. Contractors would prefer to receive the entire amount of loan as cash to assist in negotiating prices with suppliers as well as promptly paying skilled labour salaries.
3. Diversion of loan funds and lack of skills by contractors are ranked by both council staff and contractors as the major contributors towards ineffectiveness of the advance mobilization loan in that order.
  4. Contractors and suppliers have differing opinions as to the support of direct payments for material with contractors against while suppliers are for. Self-serving reasons were evidently top of their lists regarding their preferences, as both parties are business oriented. It is also clear that the perception of discounts by the two parties is not in harmony as they are in total disagreement as to whether discounts are offered in direct payment arrangements.
  5. Suppliers generally wanted more guarantees for direct payments than what they presently have.
  6. Most council staff were apprehensive about issuing unsecured loans to contractors.
  7. Finally contractors felt that plugging the misuse of loan funds for projects other than the ones intended for them was the best solution for improving the advance mobilization loan scheme, whereas council staff felt that improving of contractors' skills would be more useful.



### **6.3 Testing of the second hypothesis**

**The second hypothesis stated that the method of disbursement of the advance whereby part of the total amount is remitted as direct payment to suppliers of material creates a dependency by the contractors on government officials for financial management and fiscal discipline**

Even though most contractors do not favour direct payments to suppliers, the method of disbursement of the advance mobilization loan was categorically not a factor in contributing to the ineffectiveness of the loan. This hypothesis is therefore not supported by the study.

## **Chapter 7: Summary, conclusions and recommendations**

### **7.1 Overall summary and conclusions**

This research has shown that there is a need to review the administration of the advance mobilization loan scheme due to a less than satisfactory rate of success in contractual performance. In the period under review, a great majority of projects were completed behind schedule, regardless of the amount of loan acquired. Over the same period, there was also no discernible improvement generally from year to year.

Delay in delivery of materials by suppliers was the single most important reason leading to failure. There is a serious communication gap between contractors and suppliers regarding who should be blamed for this delay. There is a need to resolve this misunderstanding if any improvements are to be realized. Contractors must be made aware of the need to allow for lead times in procurement procedures, while at the same time, monopolistic tendencies by suppliers need to be discouraged.

The contribution of clients to delays ranks second, and this is mostly in the form of Council Secretary's (Architect's) Instructions and Variation Orders. Literature review also indicates the same trend of client changes and default being a key determinant of contractual performance. If, as claimed by councils, capacity constraints are to blame, then this needs to be addressed, as delays are just as harmful to contractors as they are to the client.

It is important for both client and contractor to factor into their contract periods possible delays by logistical reasons and site conditions through thorough initial investigations. This will reduce perceived “delays”.

Default by the contractor has been ranked low among the reasons for failure, but the underlying causes for some of these delays may well be attributable to contractor’s default. In fact when these reasons are categorized in terms of where responsibility falls, then mismanagement by the contractor would indeed emerge as a primary cause for failure.

All parties considered the advance mobilization loan to be both important and effective in terms of project success despite poor results coming from the empirical data gathered. This may be interpreted as a perception that without the advance the situation could have been worse, especially for new entrants into the industry. Recipients of the advance mobilization loan believe they would be served best if they received the entire amount cash. Most cannot raise the required securities and therefore do not qualify to receive the loan. Having the cash amount gives the contractors negotiating power when procuring material, that is they may be able to bargain for discounts, they have wider choices of sources of supplies, and greater say in issues of transportation etc. In addition, the improved cash flow enables them to manage the projects more effectively, like paying wages on time to retain good workers especially at the initial stages of the project, and generally being able to pay upfront for certain necessary services and goods.

Diversion of funds to uses other than those it was meant for must be discouraged in the strongest possible manner. This is the main reason why the scheme is faltering. Sustained imparting of skills to contractors is the best way to ensure that this happens in that with knowledge, there is appreciation of what the advance can do for the success of the project and how. Suggestions of ensuring that contractors do not handle the funds at any stage may reduce or even stop the problem of diversion of funds, but, depending on how this is done, this may also have the opposite effect of what was initially intended, and that is to empower the contractors to develop into viable, independent and self-sustaining businesses. They can only do this by learning to make their own decisions, choices and taking their own risks. Therefore a sensitive approach is required.

Where the system of direct payments for materials is adopted, it is important to resolve the issue of discounts. Currently there is a disagreement as to whether these are offered to contractors or not under direct payment arrangements. In order for contractors to make profits, they need to participate meaningfully in all transactional decisions at all levels on the project. Choice of supplier, power to negotiate discounts and credit, responsibility for materials and transportation issues all should lie squarely on the contractor's shoulders as long as the interests of all the other parties are guaranteed. Suppliers need to be assured of timely payment for their materials while the client would wish to protect both his money and the project. Only a system that addresses all these concerns is feasible in the final analysis.

## **7.2 Limitations of the study**

1. The response rate for the sample populations was very small. The response rates were 20%, 45% and 73% for contractors, suppliers and council staff respectively.
2. The study confined itself to researching reasons for failure to complete projects on schedule. The data from the records essentially only revealed the reasons as recorded and agreed by the council staff and contractors. However, the underlying causes of delays could not be determined within the scope of this study e.g. what caused suppliers to delay deliveries, why logistical reasons had so much prominence etc. It is recommended that further work be carried out along these lines to identify the root causes of the problems.
3. This study limited itself to projects within Local Authorities in Botswana. To get an overall balanced picture, it would be necessary for a similar study to be conducted for projects handled by the Central Government through the Department of Architecture and Building Services (DABS) in the Ministry of Works.
4. The study did not attempt to analyze performances based on different categories or sizes of contractor. Other significant parameters like cost overruns were also excluded from consideration in the scope of this research effort. This in our view did not lessen the authenticity of the study, but further work with these specific focus areas would broaden the knowledge base regarding the systems under review, and such work is recommended for future consideration.

### 7.3 Recommendations

1. Training of contractors ranks as the most important intervention at this stage by the Government. The policy must ensure that contractors who benefit from these schemes have undergone training provided by Government institutions created for this purpose e.g. Integrated Field Services, Ministry of Commerce, and Construction Industry Trust Fund. Principals of construction companies should be required to prove attendance before qualifying for these incentives.
2. Registration of contractors by the former Central Tender Board needs to be tied to contractors' performance. Annual renewals could be made mandatory and contractors' attendance to skills improvement courses should be among the criteria for re-registration.
3. Councils need to strengthen their staff contingent to minimize delays caused by client default. Delays are costly to all parties involved, especially the client.
4. The system of direct payments for material as it currently stands does not help the contractor. The dedicated account system is a preferable arrangement as this gives the contractor more leverage in dealings with suppliers while at the same time safeguarding the supplier's interests. The original aim was to develop the contractor first and the government may have to put in extra resources in terms of manpower and funds in Councils to sustain this kind of arrangement.
5. The Government should also seriously consider extending assistance programmes to other members of the supply chain within the industry. In addition to developing emerging contractors, other players such as new suppliers and plant hire entrepreneurs etc equally need support as they form a critical sector of the industry.

This will help reduce monopolistic tendencies among few suppliers that may result in poor delivery at the procurement level.

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## Annexures

## Annexure A. Central District Council list of projects Jan 1995-Dec 2000

Sr.No.	CONTRACT NUMBER	LOCATION	SUB DISTRICT	FACILITY	CONTRACT SUM (P)	CERTIFIED (P)	START DATE	ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	COMPLETION PERIOD	Advance as % of contract sum
1	CDC/AB-16/94/3	MATSHUMO	BOTETI	2CL,2LA2,4TLTS,FEN,ELE	272,400.00	276,707.32	23/01/95	22.05.95	01.10.95	Delayed	0
2	CDC/AB-14/94/3	SEROWE	PALAPYE	6CL, 11LA2,AB,K,10TLTS,ELE	1,444,043.39	1,302,151.30	27/01/95	26.01.96	28.02.97	Delayed	0
3	CDC/AB-10/94/2	MAITINGWE	TUTUME	6CL,3LA2,AB,K,8TLTS,FEN,SELE	740,860.00	673,555.75	06/02/95	11.08.95	09.02.96	Delayed	0
4	CDC/AB-11/94	ZOROGA GWETA MARULASUSU	TUTUME	4CL,2LA2,8TLTS,ELE,FEN 2LA2,AB,8TLTS,FEN,ELE 4CL,8TLTS,4LA2,FEN,ELE	1,149,400.00	1,051,086.17	06/02/95	29.01.96	21.9.96	Delayed	0
5	CDC/AB-1/95/1	SEMITWE	TUTUME	AB,K,4PL,4WC	133,927.00	106,219.00	22/05/95	22.09.95	28.05.96	Delayed	0
6	CDC/AB--1/95/2	TUTUME	TUTUME	2LA2,4PL,4WC,ELE,FEN	206,318.00	169,564.00	30/05/95	29.10.95	15.02.96	Delayed	0
7	CDC/AB-1/95/4	MOSETSE	TUTUME	AB	55,000.00	48,358.00	05/06/95	04.09.95	11.12.95	Delayed	0
8	CDC/AB-1/95/3	SHASHE- MOOKE, THLODI	TUTUME	2CL,2LA2,8TLTS,FEN,ELE. AB,K.	366,000.00	331,587.37	12/06/95	11.10.95	17.02.00	Delayed	0
9	CDC/AB-35/96/5	KODIBELENG	MAHALAPYE	4P.L	25,050.00	21,712.00	15/01/96	14.04.96	24.04.97	Delayed	0
10	CDC/AB-22/95/1	BOBONONG	BOBIRWA	AB,4WC,1PL; 4WC,FRN	120,970.47	116,696.21	18/03/96	17.07.96	13.09.96	Delayed	0
11	CDC/AB-6/96/3	LEETILE	MAHALAPYE	6CL,3LA2,AB,K,FRN,FEN	821,740.00	717,915.55	22/06/96	16.12.96	26.01.97	Delayed	0
12	CDC/AB-5/96/6	PALAPYE N.S	S/PALAPYE	6CL,3LA2,4TLTS,AB,K,FRN,FE N	972,620.00	916,613.99	24/06/96	14.02.97	09.06.97	Delayed	0

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13	CDC/AB-7/96/4	NATA N.S	TUTUME	6CL,3LA2,AB,K,6TLTS,FRN,FE N	995,810.90	1,011,766.48	08/07/96	10.02.97	24.03.97	Delayed	0
14	CDC/AB-7/96/1	MANDUNYANE	S/PALAPYE	LA2,AB,2TLTS,FRN	231,695.78	191,015.23	18/07/96	07.11.96	28.05.97	Delayed	0
15	CDC/AB-31/96/1	SEROWE	S/PALAPYE	2XLA1,7XLA2,6XLA3,3XEHE.H SE	2,011,092.30	2,071,838.97	11/12/96	31.07.97	22.09.98	Delayed	0
16	CDC/AB-35/96/6	FREDERICK	MAHALAPYE	4W.C	35,915.30	34,769.30	05/02/97	04.04.97	30.05.97	Delayed	0
17	CDC/AB-40/97/8	TEWANE	MAHALAPYE	4CL,3LA2,K,AD.BL,6TLTS	1,128,534.50	999,892.77	17/11/97	01.07.98	23.10.98	Delayed	0
18	CDC/AB-40/97/2	MABUO	S/PALAPYE	4CL,4LA2,K,AD.BL,6TLTS	1,491,477.00	1,392,231.15	24/11/97	25.08.98	30.10.98	Delayed	0
19	CDC-AB/10-98/2	GOO-TAU	S/PALAPYE	3LA2,AB	2,427,693.02	2,427,693.02	01/06/98	21.02.99	18.11.99	Delayed	0
20	CDC-AB/09-98/5	MAITENGWE	TUTUME	2CL,AB	1,354,020.00	1,189,876.59	09/06/98	01.03.99	10.06.99	Delayed	0
21	CDC-AB/11/98	MOIYABANA THABALA MABUO	S/PALAPYE	6CL,7LA2,AB,KIT 2CL,4LA2 LA2	3,047,432.00	2,969,587.80	09/06/98	26.04.99	25.10.99	Delayed	0
22	CDC-AB/08-98/3	SEMOLALE	BOBIRWA	2LA2,KIT,AB	836,580.00	806,869.26	10/06/98	27.01.99	03.05.99	Delayed	0
23	CDC-AB/08-98/2	TOBANE	BOBIRWA	2CL,4LA2	925,000.00	896,496.64	22/06/98	09.02.99	06.07.99	Delayed	0
24	CDC-AB/10-98/3	PAJE	S/PALAPYE	2CL,5LA2,AB,KIT	1,691,160.00	1,685,719.43	22/06/98	11.03.99	12.10.99	Delayed	0
25	CDC-AB/29-98/1	MMADINARE	BOBIRWA	8CL,6LA2,AB,KIT,9TLTS	2,458,413.07	2,458,413.07	15/09/98	02.07.99	20.08.99	Delayed	0
26	CDC-AB/38-98/1	SEROWE	S/PALAPYE	1LA3,17LA2	2,343,606.00	2,295,389.92	23/11/98	25.10.99	22.12.99	Delayed	0
27	CDC-AB/63-98/2	GWETA	TUTUME	COMPL.2CL,LA2	318,750.00	49,276.45	12/05/99	11.09.99	21.12.99	Delayed	0
28	CDC-AB/48-98/2	TONOTA	TUTUME	10CL,15LA2,3AB,2KIT	4,113,640.00	3,799,638.73	17/05/99	17.05.00	28.07.00	Delayed	0
29	CDC-AB/17-99/08	Mopipi,Manthab akwe	BOTETI		100,240.00	95,065.00	06/09/99	04.11.99	04.05.00	Delayed	0
30	CDC-AB/38-99/14	Mmadinare	Bobrwa	Extension Offices	150,988.95	118,563.11	01/02/00	22.05.00	15.08.00	Delayed	0
31	CDC/AB-55/97	BOBONONG	BOBIRWA	W/UNIT FACILITIES	1,979,755.70	1,978,546.96		03.05.99	20.12.99	Delayed	0
32	CDC/AB-10/94/1	MOKOBO	TUTUME	4CL,2LA2,AB,K,8TLTS,FEN,EL E	553,500.00	514,836.29	16/01/95	16.06.95	30.06.95	On time	0
33	CDC/AB-15/94/4	BOBONONG	BOBIRWA	4LA2,AB,K,13TLTS,FEN,ELE	1,116,090.00	1,254,686.94	23/01/95	22.01.96	22.12.95	On time	0
34	CDC/AB-16/94/4	MOKOBOXANE	BOTETI	6CL,4LA2,AB,K,8TLTS,ELE,FE N	805,910.00	810,734.45	27/01/95	26.09.95	26.10.95	On time	0
35	CDC/AB-1/95/6	MATHATHANE	BOTETI	COMPL.LA2,S/ELE,FEN,	52,250.00	35,440.50	26/05/95	25.08.95	10.09.95	On time	0
36	CDC/AB-22/95/9	MAITENGWE	TUTUME	4PL	17,000.00	17,192.40	05/02/96	04.08.96	03.05.96	On time	0
37	CDC/AB-22/95/5	TSETSEBJWE	BOBIRWA	4WC	25,000.00	23,252.50	05/03/96	04.06.96	03.05.96	On time	0

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38	CDC/AB-Q6/95/1	MOKOBOXANE	BOTETI	2WC	10,490.34	9,441.00	06/03/96	06.06.96	27.06.96	On time	0
39	CDC/AB-Q6/95/2	DAMUCHEJEEN A	BOBIRWA	2WC	9,078.00	9,078.00	06/03/96	06.06.96	28.05.96	On time	0
40	CDC/AB-22/95/8	LETHLAKANE	BOTETI	6LA2,FEN,ELE	546,178.00	532,688.12	18/03/96	18.11.96	29.11.96	On time	0
41	CDC/AB-6/96/2	MAHALAPYE N.S	MAHALAPYE	6CL,3LA2,4TLTS,AB,K,FRN,FE N	925,202.00	863,937.73	24/06/96	23.01.97	15.02.97	On time	0
42	CDC/AB-5/96/5	MANALEDI N.S	S/PALAPYE	4CL,2LA2,AB,K,3TLTS,FRN,FE N	676,201.00	583,860.42	01/07/96	20.01.97	04.02.97	On time	0
43	CDC/AB-18/96/3	MATHATHANE	BOBIRWA	MATERNITY WARD	226,000.00	166,259.93	08/07/96	09.12.96	13.11.96	On time	0
44	CDC/AB-35/96/3	KUDUMATSE	MAHALAPYE	4WC	36,400.00	37,035.85	13/01/97	12.03.97	12.03.97	On time	0
45	CDC/AB-7/97	TUTUME	TUTUME	2 LA1, 4 LA2	754,300.00	687,174.75	16/06/97	26.02.98	10.11.97	On time	0
46	CDC/AB-16/97/1	LETHLAKANE	BOTETI	2XLA2	297,538.66	275,516.94	04/08/97	10.02.98	27.12.97	On time	0
47	CDC/AB-18/97/12	DIBETE	MAHALAPYE	LA2,2TLTS	119,129.00	106,269.92	14/08/97	15.12.97	18.12.97	On time	0
48	CDC/AB-20/97/7	SERULE	S/PALAPYE	2CL,LA2,3TLTS	348,920.00	336,412.70	18/08/97	19.01.98	17.02.98	On time	0
49	CDC/AB-40/97/4	TSETSBJWE	BOBIRWA	2CL,LA2	891,000.00	783,770.48	13/11/97	14.07.98	02.08.98	On time	0
50	CDC/AB-41/97/1	SEROWE	S/PALAPYE	14CL, 4LA2, 14TLTS	1,860,440.00	1,835,732.91	14/11/97	14.11.98	04.06.98	On time	0
51	CDC/AB-41/97/6	MAHALAPYE	MAHALAPYE	8CL,4LA2,12TLTS	1,234,360.00	1,121,940.20	17/11/97	17.07.98	17.07.98	On time	0
52	CDC/AB-41/97/5	MAHALAPYE	MAHALAPYE	6CL,4LA2,12TLTS	1,167,258.00	1,083,154.31	18/11/97	18.10.98	07.08.98	On time	0
53	CDC/AB-51/97/2	SEROWE	S/PALAPYE	M/WARD,LA2	585,289.00	510,189.98	29/12/97	05.08.98	05.08.98	On time	0
54	CDC/AB-41/97/3	BOBONONG	BOBIRWA	4CL,5LA2,2AD.BL,K,8TLTS	1,923,440.00	1,895,182.10	05/01/98	28.12.98	16.11.98	On time	0
55	CDC/AB-51/97/1	PALAPYE	S/PALAPYE	DHT OFFICES	703,094.00	595,149.61	12/01/98	21.09.98	05.07.98	On time	0
56	CDC/AB-47/97/	SEROWE	S/PALAPYE	M/WORKS OFFICE	924,033.00	882,475.42	19/01/98	18.09.98	27.07.98	On time	0
57	CDC/AB-56/97/10	MAHALAPYE	MAHALAPYE	COMPL.CLRM	99,852.00	94,246.00	14/04/98	21.08.98	30.06.98	On time	0
58	CDC-AB/10-98/6	CHANGATE NKANGE MABUA(Nkange )	TUTUME	3LA2,AB 4CL,4LA2,AB,KIT LA2	2,248,620.00	2,014,837.36	22/06/98	26.04.99	21.01.99	On time	0
59	CDC-AB/09-98/2	LETLHAKANE	BOTETI	2CL,4LA2,AB	1,146,190.00	1,004,494.86	29/06/98	16.02.99	01.03.99	On time	0
60	CDC-AB/38-98/8	BOBONONG	BOBIRWA	1LA2	146,484.09	128,927.39	09/11/98	08.04.99	03.05.99	On time	0
61	CDC-AB/39-98/1	BOBONONG	BOBIRWA	6CL, 15LA2,KIT	2,745,500.00	2,653,633.00	01/12/98	01.12.99	08.10.99	On time	0
62	CDC-AB/48-98/4	PALAPYE	S/PALAPYE	8CL,20LA2,2AB,2KIT	4,080,605.00	3,716,500.10	01/01/99	31.01.00	25.02.00	On time	0
63	CDC-AB/47-98/2	MAHALAPYE	MAHALAPYE	4CL, 15LA2	2,485,720.00	2,246,187.10	18/01/99	17.12.99	17.12.99	On time	0
64	CDC-AB/45/98	NATA	TUTUME	4CL,3LA2,AB,KIT	1,305,200.00	1,153,785.80	08/02/99	08.09.99	17.09.99	On time	0
65	CDC-AB/29-98/4	MANALEDI	S/PALAPYE	1LA2,DEMOLITIONS	149,050.00	119,050.00	20/08/99	21.12.98	18.12.98	On time	0

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66	CDC-AB/38-99/12	Lerala	S/PALAPYE	market stalls, w.c	100,629.00	96,259.20	01/02/00	17.07.00	19.07.00	On time	0
67	CDC-AB/38-99/03	Tamasane Diloru	S/PALAPYE		283,950.00		02/02/00	23.05.00	29.05.00	On time	0
68	CDC-AB/10-98/4	KGAGODI	S/PALAPYE	AB,2LA2	1,918,622.65	1,898,381.70		14.03.99	22.01.99	On time	0
69	CDC/AB-12/94/1	SHOSHONG	MAHALAPYE	6CL,4LA2,AB,4TLTS,ELE,FEN	609,986.00	546,558.42	03/01/95	05.08.95	30.09.98	Terminated	0
70	CDC/AB-12/94/2	RAMOKGONAM I CHADIBE	MAHALAPYE	2CL,2LA2,AB,K,4TLTS,FEN,EL E AB	383,700.00	279,606.02	23/01/95	27.06.95	30.09.98	Terminated	0
71	CDC/AB-12/94/3	MOKGENENE OTSE	MAHALAPYE	4CL,LA2,2TLTS 4CL,2TLTS	464,969.00	460,913.32	23/01/95	30.06.95	30.09.98	Terminated	0
72	CDC-AB/07-98/2	RAKOPS	BOTETI	2CL,3LA2	666,662.03	0.00		26.11.98		Terminated	0
73	CDC/AB-22/95/4	MMADINARE	BOBIRWA	2LA2,FEN,ELE	176,000.00	174,697.30	15/03/96	19.06.96	22.07.96	Delayed	5
74	CDC-AB/38-99/05	Mahalapye airstrip	Mahalapye	clinic, LA2	469,462.85	380,839.33	10/01/00	10.07.00	20.11.00	Delayed	5
75	CDC/AB-10/94/5	SEBINA TUTUME	TUTUME	2CL,4LA2,AB,8TLTS,FEN 4LA2,AB,8TLTS,FEN	1,054,730.00	973,894.36	09/01/95	16.10.95	08.08.96	Delayed	10
76	CDC/AB-10/94/4	DUKWI	TUTUME	4CL,2LA2,8TLTS,FEN,SELE	434,853.00	393,575.52	23/01/95	22.05.95	16.11.96	Delayed	10
77	CDC/AB-14/94/1	PALAPYE	PALAPYE	6CL,6LA2,2AB,6TLTS,FEN,ELE	963,303.00	864,333.00	23/01/95	23.10.95	24.05.96	Delayed	10
78	CDC/AB-14/94/4	MMASHORO	PALAPYE	2CL,4LA2,AB,FEN,ELE	430,859.00	478,774.95	25/01/95	31.05.95	25.07.97	Delayed	10
79	CDC/AB-5/96/3	TSHEKEDI	S/PALAPYE	2CL,AB	372,694.70	324,495.40	17/06/96	18.11.96	28.10.98	Delayed	10
80	CDC/AB-6/96/1	CHADIBE	MAHALAPYE	2CL,FRN	128,535.00	108,692.22	17/06/96	14.10.96	22.10.98	Delayed	10
81	CDC/AB-8/96/1	BOBONONG	BOBIRWA	2CL,LA2,FEN,FRN,ELE	262,805.00	244,599.24	17/06/96	16.10.96	03.12.96	Delayed	10
82	CDC/AB-8/96/2	MATHATHANE	BOBIRWA	2CL,LA2,AB,K,FEN,FRN,ELE	396,797.68	346,357.04	17/06/96	16.12.96	30.04.97	Delayed	10
83	CDC/AB-3/96/3	MMASHORO	S/PALAPYE	M/WARD,ELE	209,362.74	172,850.14	20/06/96	11.10.96	12.11.98	Delayed	10
84	CDC/AB-3/96/4	PALAPYE	S/PALAPYE	H/CLINIC,4TLTS,FEN,ELE	203,075.00	127,895.00	24/06/96	23.12.96	30.07.98	Delayed	10
85	CDC/AB-5/96/1	LECHENG, RADISELE	S/PALAPYE	LA2,K, 2CL	294,384.00	240,120.00	24/06/96	23.10.96	31.03.97	Delayed	10
86	CDC/AB-8/96/4	TSETSEBJWE	BOBIRWA	2CL,LA2,AB,FRN,FEN,ELE	376,090.00	312,195.33	24/06/96	25.11.96	21.10.97	Delayed	10
87	CDC/AB-9/96/3	RAKOPS	BOTETI	2CL,4TLTS	180,966.00	177,246.85	24/06/96	25.10.96	12.03.97	Delayed	10
88	CDC/AB-7/96/2	TONOTA	TUTUME	LA2,AB,2TLTS,FRN	599,720.00	536,451.30	15/07/96	14.02.97	25.08.97	Delayed	10
89	CDC/AB-31/96/3	TUTUME	TUTUME	2XLA2	192,863.20	164,587.00	09/12/96	28.03.97	08.07.97	Delayed	10
90	CDC/AB-34/96/6	RADISELE	MAHALAPYE	2LA2	190,997.36	188,175.76	06/01/97	05.06.97	29.08.97	Delayed	10
91	CDC/AB-35/96/2	MOSHOPA	MAHALAPYE	4WC	33,000.00	31,766.88	20/01/97	19.03.97	10.06.97	Delayed	10
92	CDC/AB-35/96/4	DOVEDALE	MAHALAPYE	4WC	33,582.00	31,902.90	03/02/97	04.04.97	08.10.97	Delayed	10
93	CDC/AB-40/96	MAHALAPYE	MAHALAPYE	4 LA2	404,200.00	353,830.00	14/04/97	15.09.97	09.01.98	Delayed	10
94	CDC/AB-4/97/2	XHUMO	BOTETI	LA2	118,800.81	103,176.24	26/05/97	29.10.97	06.01.00	Delayed	10

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95	CDC/AB-4/97/6	RAMOKGONAMI	MAHALAPYE	LA2	120,704.00	101,070.25	09/06/97	10.11.97	16.01.98	Delayed	10
96	CDC/AB-18/97/5	MOSHOPHA	MAHALAPYE	LA2,3TLTS	130,248.00	116,813.14	19/07/97	19.12.97	02.09.98	Delayed	10
97	CDC/AB-20/97/8	MOREOMABEL E	S/PALAPYE	2CL,LA2,4TLTS	131,650.00	125,047.90	29/07/97	01.12.97	12.02.98	Delayed	10
98	CDC/AB-18/97/9	MACHENENG	MAHALAPYE	2CL,LA2,2TLTS	280,566.40	271,323.47	04/08/97	10.03.98	16.09.98	Delayed	10
99	CDC/AB-19/97/5	SEPAKO	TUTUME	LA2	137,253.40	121,237.69	01/09/97	10.01.98	29.06.99	Delayed	10
100	CDC/AB-39/97/3	SHOSHONG	MAHALAPYE	2CL,4LA2	600,758.00	566,638.90	12/11/97	12.07.98	11.01.99	Delayed	10
101	CDC/AB-41/97/2	TUTUME	TUTUME	10CL,3LA2,10TLTS	1,567,000.00	1,509,130.74	14/11/97	14.11.98	18.12.98	Delayed	10
102	CDC-AB/38-98/9	MMATSHUMO	BOTETI	1LA2	159,361.20	134,989.71	28/10/98	14.03.99	30.11.99	Delayed	10
103	CDC-AB/38-98/5	MAHALAPYE	MAHALAPYE	7LA2,2LA1	1,083,861.80	950,981.30	09/11/98	11.06.99	27.09.99	Delayed	10
104	CDC-AB/42-98/1	KHURUMELA	S/PALAPYE	2CL,3LA2	663,700.00	531,941.17	21/01/99	20.08.99	22.02.00	Delayed	10
105	CDC-AB/48-98/5	SEROWE	S/PALAPYE	8CL, 15LA2,2AB,2KIT	3,879,250.00	3,683,173.84	15/02/99	15.02.00	14.07.00	Delayed	10
106	CDC-AB/55-98/2	PALAPYE	S/PALAPYE	M/WARD	413,557.00	351,804.70	19/03/99	18.10.99	04.04.00	Delayed	10
107	CDC-AB/55-98/1	SEROWE-KADIMO	S/PALAPYE	M/WARD	416,757.00	415,089.04	19/03/99	18.09.99	10.04.00	Delayed	10
108	CDC-AB/54/98	TUTUME	TUTUME	DHT OFFICES	817,001.27	771,238.58	22/03/99	22.11.99	21.03.00	Delayed	10
109	CDC-AB/55-98/3	SEBINA	TUTUME	M/WARD, LA2	582,587.00	529,159.53	22/03/99	22.10.99	27.03.00	Delayed	10
110	CDC-AB/05-99/05	Tobane	MAHALAPYE		74,000.00	0.00	17/05/99	30.06.99	11.08.99	Delayed	10
111	CDC-AB/17-99/01	Chakaloba, Gojwane	S/PALAPYE		98,000.00	0.00	13/08/99	13.10.99	15.12.99	Delayed	10
112	CDC-AB/38-99/06	Seleka	Mahalapye	mtrnty wrd, LA2	538,129.26	474,460.09	24/01/00	15.06.00	26.07.00	Delayed	10
113	CDC/AB-15/94/2	TSETSEBJWE	BOBIRWA	4CL,3LA2,AB,K,8TLTS,FEN,ELE	618,701.00	555,125.00	23/01/95	28.07.95	02.08.95	On time	10
114	CDC/AB-16/94/5	LETHLAKANE	BOTETI	6CL,6LA2,AB,K,6TLTS	1,714,876.00	1,649,362.09	21/03/95	23.03.96	01.04.96	On time	10
115	CDC/AB-22/95/2	BOBONONG N.S	BOBIRWA	6CL,3LA2,5PL,6WC,FEN,EL,FRN	673,017.45	673,017.45	21/03/96	12.12.96	03.10.96	On time	10
116	CDC/AB-3/96/2	MOTOPI	BOTETI	M/WARD,ELE	224,112.00	155,716.74	17/06/96	17.02.97	13.02.97	On time	10
117	CDC/AB-3/96/5	ROBELELA	BOBIRWA	H/POST,2TLTS,FEN	138,440.87	90,410.19	17/06/96	28.02.97	24.12.96	On time	10
118	CDC/AB-9/96/1	MOPIPI MANTHABAKWE	BOTETI	2CL,LA2,AB,K,LA2,2TLTS	591,357.00	529,865.67	24/06/96	23.12.96	15.11.96	On time	10
119	CDC/AB-4/97/1	LETHLAKANE	BOTETI	5LA2	528,931.50	477,386.50	09/06/97	08.01.98	04.11.97	On time	10
120	CDC/AB-19/97/2	MABESEKWA	TUTUME	2CL,LA2,2TLTS	332,502.00	321,379.14	11/08/97	17.01.98	22.01.98	On time	10
121	CDC/AB-18/97/4	RAMOKGONAMI	MAHALAPYE	2CL,LA2,2TLTS	294,958.00	292,873.38	27/08/97	03.03.98	18.02.98	On time	10
122	CDC-AB/29-98/8	RAMOKGONAMI/CHADIBE	MAHALAPYE	COMPL.1CL,2LA2,KIT	482,016.50	460,055.50	24/08/98	05.02.99	28.01.99	On time	10
123	CDC-AB/38-98/10	LETLHAKANE	BOTETI	2LA2	248,620.00	221,707.70	09/11/98	29.04.99	30.05.99	On time	10

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124	CDC-AB/46-98/2	MOSHOPA/SEFHARE/MATLHAKO	MAHALAPYE	4CL,8LA2,AB,KIT	2,101,936.00	2,026,832.40	01/02/99	01.12.99	29.11.99	On time	10
125	CDC-AB/56-98/1	KEDIRETSWE-PALAPYE	S/PALAPYE	H/CLINIC	326,492.00	263,243.14	08/03/99	08.09.99	03.09.99	On time	10
126	CDC-AB/56-98/2	CHADIBE	MAHALAPYE	H/CLINIC,LA2	592,122.63	591,871.60	22/03/99	22.11.99	15.11.99	On time	10
127	CDC-AB/05-99/02	Palapye	S/PALAPYE	toilets	325,860.00	282,356.90	17/05/99	18.10.99	09.11.99	On time	10
128	CDC-AB/17-99/05	Lerala,Lecheng	S/PALAPYE	toilets	180,500.00	165,500.00	01/12/99	01.03.00	28.03.00	On time	10
129	CDC-AB/38-99/04	Lecheng	S/PALAPYE		186,701.00	143,302.00	01/02/00	21.06.00	05.06.00	On time	10
130	CDC/AB-14/94/5	PALAPYE N.S	PALAPYE	8CL,4LA2,AB,K,12TLTS,FEN,ELE	701,508.97	646,607.49	23/01/95	29.09.95	30.09.98	Terminated	10
131	CDC/AB-13/94	MAHALAPYE	MAHALAPYE	14CL,12LA2,3AB,6TLTS	1,698,200.00	1,607,586.57	10/02/95	10.05.96	30.09.98	Terminated	10
132	CDC/AB-1/95/5	KHWEE	BOTETI	2CL,2LA2,4PL,2X1PL,FEN,S,ELE	346,272.00	94,508.00	22/05/95	21.10.95		Terminated	10
133	CDC/AB-12/95	MOKUBILO	BOTETI	2LA2,AB,K,4WC,FEN,S/ELE	274,144.00	233,543.26	24/08/95	23.01.96		Terminated	10
134	CDC/AB-3/96/1	XHOSA	MAHALAPYE	COMPL.4LA2,AB,K,4WC	376,704.00	241,919.37	17/06/96	16.10.96		Terminated	10
135	CDC/AB-5/96/2	MASOKOLAMMUALEFE	S/PALAPYE	2CL,LA2 2CL,LA2	456,404.00	87,402.98	17/06/96	18.11.96		Terminated	10
136	CDC/AB-6/96/4	MOSHOPA	MAHALAPYE	2CL,FRN,ELE	131,904.00	85,971.67	17/06/96	16.10.96		Terminated	10
137	CDC/AB-6/96/5	NGAKAAGAE	MAHALAPYE	2CL,FRN,ELE	120,978.00	30,415.34	17/06/96	16.09.96		Terminated	10
138	CDC-AB/38-99/09	Mmathathane	Bobirwa	LA2	150,500.00	74,687.09	17/01/00	17.05.00		Terminated	10
139	CDC/AB-34/96/4	SEROWE	S/PALAPYE	2CL,4W.C	182,721.70	161,026.20	06/01/97	07.05.97	30.04.99	Delayed	15
140	CDC/AB-34/96/7	NGWAPA	MAHALAPYE	LA2	259,110.00	242,802.00	09/01/97	08.09.97	08.12.98	Delayed	15
141	CDC/AB-36/96/2	TUTUME	TUTUME	WATER OFFICES	669,228.50	650,272.79	20/01/97	27.10.97	18.06.98	Delayed	15
142	CDC/AB-34/96/2	PALAPYE	S/PALAPYE	4CL	265,891.20	257,983.90	21/01/97	26.06.97	12.12.97	Delayed	15
143	CDC/AB-51/96	SEROWE	S/PALAPYE	WATER W/SHOP,OFFICES	1,722,248.75	1,687,831.51	05/04/97	07.11.97	22.06.98	Delayed	15
144	CDC/AB-6/97	PALAPYE	S/PALAPYE	LA3, 6LA2	779,910.00	679,511.10	02/06/97	13.01.98	10.02.99	Delayed	15
145	CDC/AB-4/97/4	MMADINARE	BOBIRWA	LA2	116,971.00	105,618.45	09/06/97	08.10.97	10.11.97	Delayed	15
146	CDC/AB-18/97/6	MMUTLANE	MAHALAPYE	LA2,2TLTS	234,460.00	193,847.50	30/07/97	03.02.98	01.06.98	Delayed	15
147	CDC/AB-16/97/4	MANTHABAKWE	BOTETI	LA2,K	567,000.00	537,883.60	04/08/97	10.04.98	10.08.98	Delayed	15
148	CDC/AB-16/97/6	RAKOPS	BOTETI	2LA2,K,EXT-AB	726,141.35	712,461.21	04/08/97	10.04.98	02.09.99	Delayed	15
149	CDC/AB-18/97/3	TUMASERA	MAHALAPYE	2CL,LA2,3TLTS	362,304.91	323,696.37	04/08/97	10.02.98	03.08.98	Delayed	15
150	CDC/AB-18/97/7	CHADIBE	MAHALAPYE	2CL,LA2,2TLTS	318,300.00	286,300.00	04/08/97	10.03.98	26.03.99	Delayed	15
151	CDC/AB-18/97/10	MMAPHASHALALA	MAHALAPYE	LA2,2TLTS	137,893.58	132,648.43	04/08/97	10.01.98	08.06.99	Delayed	15
152	CDC/AB-19/97/3	MMANDUNYANE	TUTUME	2CL	155,175.90	139,282.70	04/08/97	07.01.98	07.07.98	Delayed	15
153	CDC/AB-19/97/8	ZOROGA	TUTUME	2CL,LA2,2TLTS	330,220.25	317,361.01	04/08/97	09.03.98	18.05.98	Delayed	15

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154	CDC/AB-20/97/4	MOGOME	S/PALAPYE	2CL,LA2	304,334.00	288,924.00	06/08/97	06.01.98	02.03.98	Delayed	15
155	CDC/AB-16/97/3	MOSU	BOTETI	LA2,AD.BL,K	701,107.07	701,107.07	11/08/97	18.04.98	30.06.98	Delayed	15
156	CDC/AB-16/97/5	KEDIA	BOTETI	2CL,2TLTS	194,533.93	176,922.97	11/08/97	17.02.98	07.05.99	Delayed	15
157	CDC/AB-18/97/11	MOOKANE	MAHALAPYE	LA2,2TLTS	138,000.00	129,175.47	11/08/97	15.01.98	14.09.98	Delayed	15
158	CDC/AB-18/97/15	IKONGWE	MAHALAPYE	2LA2	271,855.96	244,019.46	11/08/97	17.02.98	13.04.98	Delayed	15
159	CDC/AB-20/97/2	SEROWE(MASA KOL)	S/PALAPYE	2CL	148,712.00	140,453.30	18/08/97	18.12.97	12.03.98	Delayed	15
160	CDC/AB-20/97/1	LECHENG	S/PALAPYE	2CL,LA2,4TLTS	288,232.00	272,138.00	01/09/97	07.02.98	08.04.98	Delayed	15
161	CDC/AB-41/97/4	MMADINARE	BOBIRWA	6CL,4LA2,6TLTS	1,193,816.30	1,179,613.54	03/11/97	15.09.98	28.05.99	Delayed	15
162	CDC/AB-38/97/1	MOTSHEGALET AU	S/PALAPYE	2CL,LA2,2WC,FURN	281,163.89	256,953.49	10/11/97	18.05.98	16.11.98	Delayed	15
163	CDC/AB-39/97/1	NKANGE	TUTUME	4CL	860,973.85	810,574.95	10/11/97	18.07.98	24.09.98	Delayed	15
164	CDC/AB-38/97/2	BOROLONG	TUTUME	LA2,2WC	421,976.80	402,217.73	14/11/97	16.06.98	06.05.99	Delayed	15
165	CDC/AB-38/97/4	MATANGWANE	TUTUME	2CL,LA2,FURN	459,116.00	440,377.70	18/11/97	18.06.98	31.07.98	Delayed	15
166	CDC/AB-40/97/3	MAKALMABEDI	BOTETI	LA2,AD.BL,2TLTS	585,500.00	530,461.52	18/11/97	19.05.98	18.03.99	Delayed	15
167	CDC/AB-37/97/2	MABELAPUDI	S/PALAPYE	2CL,FURN	169,336.97	161,713.87	24/11/97	24.03.98	17.07.98	Delayed	15
168	CDC/AB-37/97/5	KALAMARE	MAHALAPYE	2CL,LA2,2WC,FURN	303,775.16	263,108.77	24/11/97	24.04.98	28.03.99	Delayed	15
169	CDC/AB-39/97/2	MAITENGWE	TUTUME	6CL,2LA2	785,350.00	727,539.60	25/11/97	25.06.98	06.10.98	Delayed	15
170	CDC/AB-40/97/5	TSOKWE		2CL,2LA2,K,AD.BL,7TLTS	983,352.25	923,626.43	28/11/97	28.07.98	12.02.99	Delayed	15
171	CDC/AB-40/97/6	ROBELELA	BOBIRWA	2LA2,K,AD.BL,7TLTS	758,870.00	722,793.79	08/12/97	17.08.97	07.06.00	Delayed	15
172	CDC/AB-51/97/3	THABALA	S/PALAPYE	H/CLINIC,LA2	412,694.00	400,465.60	19/01/98	27.07.98	24.11.98	Delayed	15
173	CDC-AB/07-98/7	MOKIBE/SHOS HONG	MAHALAPYE	2CL,3LA2	651,800.00	629,126.90	01/06/98	07.12.98	10.03.99	Delayed	15
174	CDC-AB/09-98/4	BOROLONG	TUTUME	2CL,4LA2,AB,KIT	1,202,261.20	1,087,081.13	01/06/98	30.01.99	26.07.99	Delayed	15
175	CDC-AB/06-98/2	MMUTLANE	MAHALAPYE	2LA2,KIT	359,119.20	345,845.47	08/06/98	10.11.98	06.08.99	Delayed	15
176	CDC-AB/08-98/6	MOKOBENG	MAHALAPYE	2CL,2LA2,KIT,AB	957,660.00	906,401.29	08/06/98	27.01.99	13.07.99	Delayed	15
177	CDC-AB/07-98/3	ROBELELA	BOBIRWA	2CL,2LA2	531,538.00	505,407.25	15/06/98	18.12.98	11.02.99	Delayed	15
178	CDC-AB/09-98/1	XHUMO	BOTETI	3LA2,AB	1,236,992.05	1,236,992.05	22/06/98	11.03.99	30.10.99	Delayed	15
179	CDC-AB/10-98/1	MOPIPI	BOTETI	12LA2,2KIT,4CL	2,383,546.00	2,346,922.25	23/06/98	08.04.99	21.05.99	Delayed	15
180	CDC-AB/08-98/5	Pilikwe/	MAHALAPYE	3LA2,KIT	829,624.30	821,054.30	24/06/98	31.12.98	06.09.99	Delayed	15
181	CDC-AB/07-98/5	MOOKANE	MAHALAPYE	2CL,3LA2,Kit,4 tlts	733,985.47	733,702.10	02/07/98	18.01.98	02.09.99	Delayed	15
182	CDC-AB/21-98/3	LECHENG	S/PALAPYE	COMPL.H/C,M/W,LA2	184,204.00	147,766.66	24/08/98	05.02.99	25.06.99	Delayed	15
183	CDC-AB/29-98/7	MORALANE	MAHALAPYE	4CL,4LA2,AB,KIT,12TLTS	1,657,772.11	1,657,772.11	07/09/98	21.06.99	03.11.99	Delayed	15
184	CDC-AB/38-98/6	KALAMARE	MAHALAPYE	1LA2	140,598.70	118,755.10	09/11/98	08.03.99	10.04.99	Delayed	15
185	CDC-AB/46-98/3	SEBESO/SERO ROME	S/PALAPYE	6CL,11LA2,KIT	1,990,425.00	1,948,796.28	15/02/99	15.11.99	25.01.00	Delayed	15
186	CDC-AB/47-98/3	SEROWE	S/PALAPYE	4CL,9LA2,AB,KIT	2,192,751.16	2,004,332.86	15/02/99	17.01.00	20.06.00	Delayed	15



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187	CDC-AB/04-99/03	Serowe	S/PALAPYE	Boundary Wall	327,651.36	324,454.06	11/05/99	10.11.99	13.07.00	Delayed	15
188	CDC-AB/48-98/3	LERALA/KUKUB JWE	S/PALAPYE	6CL,9LA2,2AB,KIT	2,942,175.00	2,756,586.63	23/05/99	24.04.00	03.10.00	Delayed	15
189	CDC-AB/17-99/06	Majwanadipitse	S/PALAPYE		84,883.55	77,384.51	12/08/99	12.10.99	29.06.00	Delayed	15
190	CDC-AB/17-99/03	Kukujwe,Molebat si	S/PALAPYE		217,080.00	200,378.65	16/08/99	16.11.99	21.12.99	Delayed	15
191	CDC-AB/38-99/01	Palapye	S/PALAPYE	Clinic	348,500.00	324,083.18	04/01/00	04.05.00	15.08.00	Delayed	15
192	CDC-AB/39-99/01	moralane	MAHALAPYE	Health Post	206,714.50	185,628.50	04/01/00	04.06.00	06.07.00	Delayed	15
193	CDC-AB/39-99/02	MMEA(near Mokubilo)	BOTETI	Health Post	207,050.00	157,150.00	10/01/00	10.04.00	15.11.00	Delayed	15
194	CDC-AB/38-99/11	GWETA	TUTUME	market stalls, w.c	100,100.00	99,151.94	20/01/00	20.04.00	07.11.00	Delayed	15
195	CDC-AB/38-99/13	Shoshong	MAHALAPYE	Extension Offices	157,247.45	115,351.10	24/01/00	22.05.00	15.08.00	Delayed	15
196	CDC-AB/38-99/08	Sebina, Matsitama	Tutume	LA2 LA2	335,872.00	301,744.70	13/02/00	06.05.00	14.02.02	Delayed	15
197	CDC-AB/09-98/3	MMEA(near Mokubilo)	BOTETI	4CL,4LA2,AB,KIT,7TLTS	1,553,922.42	1,553,922.42		29.03.99	18.06.99	Delayed	15
198	CDC-AB/38-98/3	TUTUME	TUTUME	2LA2	271,844.38	260,503.55		26.03.99	10.05.99	Delayed	15
244	CDC/AB-22/95/6	MOTHLABANEN G	BOBIRWA	4PL	19,687.00	17,687.00	11/03/96	10.06.96	08.07.96	On time	15
199	CDC/AB-34/96/5	MOGAPINYANA	S/PALAPYE	2CL,2LA2	362,812.00	347,969.18	23/01/97	12.06.97	16.06.97	On time	15
200	CDC/AB-35/96/1	MALAKA	S/PALAPYE	4WC	37,000.00	42,197.88	03/02/97	07.04.97	21.04.97	On time	15
201	CDC/AB-4/97/5	KUDUMATSE	MAHALAPYE	LA1	100,260.67	82,250.78	02/06/97	01.10.97	10.10.97	On time	15
202	CDC/AB-9/97	BOBONONG	BOBIRWA	3 LA1, 3 LA2	493,640.00	465,514.40	02/06/97	03.01.98	15.10.97	On time	15
203	CDC/AB-8/97	MAHALAPYE	MAHALAPYE	2 LA1, 5 LA2	669,400.00	597,709.00	16/06/97	26.02.98	23.02.98	On time	15
204	CDC/AB-17/97/6	MOLALATAU	BOBIRWA	LA2,2TLTS	149,920.00	150,167.37	23/07/97	23.12.97	22.11.97	On time	15
205	CDC/AB-18/97/13	OTSE(SETHLO MO)	MAHALAPYE	2CL,LA2,2TLTS	351,406.98	351,985.62	04/08/97	10.03.98	09.03.98	On time	15
206	CDC/AB-18/97/8	MOKOBENG	MAHALAPYE	LA2,2TLTS	259,400.00	259,551.26	11/08/97	17.03.98	07.04.98	On time	15
207	CDC/AB-17/97/4	MATHATHANE	BOBIRWA	LA2,2CL	325,637.45	300,232.45	18/08/97	24.03.98	08.03.98	On time	15
208	CDC/AB-18/97/2	MAAPE	MAHALAPYE	2CL,LA2	296,147.60	281,202.00	18/08/97	24.02.98	06.03.98	On time	15
209	CDC/AB-38/97/5	MOSOLOTSHA NE	TUTUME	2CL,LA2,2WC,FURN	357,179.00	348,476.08	17/10/97	26.05.98	01.06.98	On time	15
210	CDC/AB-38/97/3	SIMITWE	TUTUME	2CL,LA2,3TLTS,FURN	298,684.60	276,565.23	14/11/97	12.05.98	18.06.98	On time	15
211	CDC/AB-36/97/2	SEROWE	S/PALAPYE	CTU WASH BAY	57,600.00	47,600.00	24/11/97	24.03.98	23.03.98	On time	15
212	CDC/AB-36/97/1	LETHLAKANE	BOTETI	K	57,083.01	49,530.93	25/11/97	26.02.98	16.03.98	On time	15
213	CDC/AB-51/97/13	SEFHOPE	BOBIRWA	M/WARD	455,352.81	428,324.32	19/01/98	19.08.98	02.07.98	On time	15
214	CDC/AB-51/97/5	MALATSWAI	S/PALAPYE	LA2	157,562.53	162,582.10	29/01/98	06.07.98	24.06.98	On time	15
215	CDC-AB/08-98/4	TSHOKWE	BOBIRWA	2CL,3LA2	616,480.00	587,953.40	01/06/98	07.12.98	09.11.98	On time	15

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216	CDC-AB/09-98/6	NSHAKAZHOG WE	TUTUME	4CL,AB,KIT,4LA2	1,465,816.00	1,407,140.14	22/07/98	22.03.99	21.04.99	On time	15
217	CDC-AB/29-98/5	TUTUME	TUTUME	8CL,8LA2,AB,KIT,10TLTS	2,498,685.84	2,414,678.03	07/09/98	21.06.99	12.07.99	On time	15
218	CDC-AB/38-98/7	SHOSHONG	MAHALAPYE	1LA2	140,598.70	115,356.40	09/11/98	08.03.99	01.04.99	On time	15
219	CDC-AB/63-98/4	MOTLHABANEN G	BOBIRWA	COMPL.2CL,LA2	301,070.00	276,198.14	10/05/99	11.10.99	26.08.99	On time	15
220	CDC-AB/63-98/3	LEPOKOLE	BOBIRWA	COMPL.2CL,2LA2,AB	1,041,918.00	962,344.04	24/05/99	23.02.00	17.02.00	On time	15
221	CDC-AB/04-99/01	Maape East	MAHALAPYE	2clrm,2xLA2	556,342.55	535,294.31	19/08/99	19.01.00	17.01.00	On time	15
222	CDC-AB/38-99/07	Senete	Tutume	clinic, LA2	506,122.63	481,663.72	15/01/00	15.09.00	18.08.00	On time	15
223	CDC-AB/38-99/02	Moiyabana	S/PALAPYE	clinic, mat,LA2	829,700.00	747,772.98	17/01/00	17.11.00	17.10.00	On time	15
224	CDC-AB/05-98/1	MOLALATAU	BOBIRWA	LA2	162,472.11	145,549.44		20.10.98	20.10.98	On time	15
225	CDC/AB-34/96/3	LECHENG	S/PALAPYE	2LA2	207,691.00	58,990.10	06/01/97	11.06.97		Terminated	15
226	CDC/AB-18/97/1	PILIKWE	MAHALAPYE	LA2	131,110.00	75,362.19	04/08/97	04.12.97		Terminated	15
227	CDC/AB-17/97/3	TOBANE	BOBIRWA	LA2, 2TLTS	129,182.60	95,083.84	18/08/97	19.01.98		Terminated	15
228	CDC/AB-17/97/5	MOTHLABANEN G	BOBIRWA	2CL,LA2	266,312.30	62,660.86	26/08/97	04.04.98		Terminated	15
229	CDC/AB-40/97/7	LEPOKOLE	BOBIRWA	2CL,2LA2,K,AD.BL,6TLTS	904,688.00	112,142.50	11/11/97	10.07.98		Terminated	15
230	CDC/AB-37/97/8	SEFHOPE	BOBIRWA	2CL,LA2,FURN	294,236.10	270,407.76	20/11/97	21.04.98		Terminated	15
231	CDC/AB-40/97/1	RAKOPS	BOTETI	4CL,3LA2,K,AD.BL,6TLTS	1,248,807.00	1,195,612.00	05/12/97	14.09.98		Terminated	15
232	CDC/AB-45/97	PALAPYE	S/PALAPYE	2CL,LA2,2TLTS	311,815.55	223,277.91	15/01/98	17.07.98		Terminated	15
233	CDC-AB/29-98/3	MAJWANA A DIPITSE	S/PALAPYE	4CL,4LA2,AB,KIT,12TLTS	1,574,948.84	1,397,675.77	14/04/98	28.06.99		Terminated	15
234	CDC-AB/08-98/1	MOSU	BOTETI	4CL,3LA2	878,262.80	776,397.09	08/06/98	25.01.99		Terminated	15
235	CDC-AB/38-98/2	PALAPYE	S/PALAPYE	8LA2,2LA1	1,235,690.90	581,305.98	16/11/98	16.07.99		terminated	15
236	CDC-AB/04-99/02	Rakops	BOTETI	2clrm, 3LA2	769,132.55	544,599.46	18/05/99	18.04.00		Terminated	15
237	CDC-AB/17-99/04	Mogome,Matlhk ola	S/PALAPYE		90,150.00		30/08/99	25.1099		Terminated	15
238	CDC-AB/38-99/10	Rakops	BOTETI	LA2	148,920.00	9,196.00	15/01/00	15.05.00		Terminated	15
239	CDC-AB/37-99/01	Malatswai	S/PALAPYE	2 clrm	201,900.00	122,345.06	17/01/00	17.04.00		Terminated	15
240	CDC/AB-37/97/1	PALAPYE	S/PALAPYE	4CL,FURN	275,352.52	263,408.72		14.02.98		Terminated	15
241	CDC/AB-51/97/14	RAKOPS	BOTETI	H/POST,LA2	343,367.23	297,556.36	12/01/98	18.08.98		Unavailable	15
242	CDC-AB/21-98/2	MAJWANA A DIPITSE	S/PALAPYE	H/POST,LA2	337,690.88	348,253.32	06/08/98	19.03.99		Unavailable	15
243	CDC-AB/11-99/02	Tobane Sefophe	Bobirwa	Extn. To houses	129,005.00		14/06/99	14.08.99		Unavailable	15
245	CDC/AB-6/94	TUTUME	TUTUME	W/UNIT W/SHOP,TLTS,ELE,FEN	399,500.00	265,986.00	26/09/94	27.03.95		Not included	
246	CDC/AB-9/94/1	MACHENENG	MAHALAPYE	HC,MW,2XLA2,4TLTS,ELE,FE N	401,666.00	337,071.87	06/01/95	07.08.95	30.09.98	Not included	
247	CDC/AB-9/94/2	TSETSEBJWE	BOBIRWA	M/WARD,TLTS,ELE,	228,144.00	198,916.20	09/01/95	10.07.95		Not included	

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248	CDC/AB-10/94/3	MABISEKWE	TUTUME	4CL,2LA2,8TLTS,FEN	424,317.00	383,551.00	23/01/95	22.05.95	01.09.95	Not included	
249	CDC/AB-15/94/3	DAMUCHEJEEN A	BOBIRWA	4CL,2LA2,4TLTS,ELE,FEN	1,167,740.00	1,048,412.06	23/01/95	22.01.96	20.12.95	Not included	
250	CDC/AB-12/94/4	XHOSA	MAHALAPYE	4LA2,AB,K,4TLTS	392,000.00	66,850.00	23/01/95	27.06.95		Not included	
251	CDC/AB-14/94/2	THABALA MOGOROSI	PALAPYE	2CL,4LA2,AB,K,4TLTS,FEN,EL E 2CL,4LA2,AB,K,2TLTS,FEN,EL E	1,139,768.00	1,041,563.05	23/01/95	30.12.95		Not included	
									30.09.98		
252	CDC/AB-15/94/1	MOTHLABANEN G	BOBIRWA	6CL,3LA2,K,8TLTS	639,111.00	772,534.10	31/01/95	04.08.95	30.09.98	Not included	
253	CDC/AB-22/95/7	LEETILE	MAHALAPYE	2CL,FRN	106,111.38	86,471.74	19/02/96	18.08.96		Not included	
254	CDC/AB-22/95/3	BOBONONG N.S	BOBIRWA	14CL,7LA2,AB,K,11TLT,EL,FN, FR	1,723,188.00	1,570,897.03	11/03/96	10.02.97	22.03.97	Not included	
255	CDC/AB-8/96/3	SEFHOPHE	BOBIRWA	2CL,AB,LA2,K,FEN,ELE,FRN	399,846.00	349,567.84	17/06/96	18.11.96	23.06.97	Not included	
256	CDC/AB-7/96/3	BOROLONG	TUTUME	LA2,2TLTS	229,291.91	138,384.04	17/06/96	16.10.96		Not included	
257	CDC/AB-B265	LETHLAKANE	BOTETI	4CL,K,	355,668.00	323,517.45	01/07/96	31.10.96		Not included	
258	CDC/AB-5/96/4	LERALA N.S	S/PALAPYE	4CL,2LA2,AB,K,3TLTS,FRN,FE N	679,598.44	558,468.00	08/07/96	08.01.97		Not included	
259	CDC/AB-18/96/2	SEROWE	S/PALAPYE	MASOKOLA B/WALL	37,485.00	37,485.00	10/07/96	14.08.96	16.08.96	Not included	
260	CDC/AB-18/96/1	SEROWE	S/PALAPYE	CTU VEHICLE BAY	37,500.00	7,710.00	22/07/96	21.10.96		Not included	
261		MOTSHAGELET AU	S/PALAPYE	2CL,AB	225,691.33	206,978.33	12/02/97	18.07.97	20.08.97	Not included	
262	CDC/AB-Q/1/97	SEROWE	S/PALAPYE	GENERATOR ROOM	5,785.40	8,226.15	05/03/97	25.03.97	21.04.97	Not included	
263	CDC/AB-38/96	TUTUME	TUTUME	RENOVATIONS	104,897.50		10/03/97	16.06.97		Not included	
264	CDC/AB-49/96	TONATA	TUTUME	SEC.FENCING AT PRIMARY SCH.	42,517.97		28/04/97	28.06.97		Not included	
265	CDC/AB-2/97	SEROWE	S/PALAPYE	CTU, BOUNDARY WALL	110,900.00	6,124.38	02/06/97	01.09.97		Not included	
266	CDC/AB-4/97/7	SHOSHONG	MAHALAPYE	LA2	124,400.00	106,847.50	09/06/97	14.11.97		Not included	
267	CDC/AB-5/97	SEROWE	S/PALAPYE	4LA3, 18LA2	2,479,200.00	2,364,699.06	09/06/97	08.06.98		Not included	
268	CDC/AB-11/97	TUTUME	TUTUME	COMPL.W/W SHOP	300,343.00	293,724.39	16/06/97	22.10.97		Not included	
269	CDC/AB-20/97/5	MOGOROSI	S/PALAPYE	2CL	161,387.00	157,289.32	28/07/97	28.11.97		Not included	
270	CDC/AB-20/97/9	LERALA	S/PALAPYE	2CL,LA2,4TLTS	314,818.00	303,726.30	30/07/97	03.02.98		Not included	
271	CDC/AB-19/97/1	GWETA	TUTUME	2CL,LA2,2TLTS	304,475.90	101,207.29	31/07/97	05.03.98		Not included	
272	CDC/AB-16/97/2	KHWEE	BOTETI	2CL,LA2,K,1TLT	390,938.37	354,887.15	04/08/97	10.03.98		Not included	
273	CDC/AB-19/97/6	SHASHE- MOOKE	TUTUME	2CL	140,930.00	123,450.00	04/08/97	04.12.97	12.12.97	Not included	
274	CDC/AB-19/97/4	NSHAKAZHOG WE	TUTUME	2CL,LA2,2TLTS	444,704.00	413,959.88	04/08/97	10.03.98		Not included	
275	CDC/AB-20/97/3	MATHAKOLA	S/PALAPYE	2CL,LA2,2TLTS	350,475.54	340,392.33	04/08/97	10.02.98	24.02.98	Not included	
276	CDC/AB-19/97/9	TONOTA	TUTUME	4CL,,2LA2,5TLTS	487,311.20	443,908.67	11/08/97	17.03.98	30.07.98	Not included	

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277	CDC/AB-18/97/14	KODIBELENG	MAHALAPYE	2CL,LA2,2TLTS	328,537.19	314,739.26	18/08/97	24.03.98		Not included	
278	CDC/AB-19/97/7	TONOTA	TUTUME	2CL,3LA2,1TLT	496,140.00	485,006.35	18/08/97	18.03.98		Not included	
279	CDC/AB-20/97/6	RADISELE	S/PALAPYE	2CL,LA2,2TLTS	302,520.00	282,270.04	18/08/97	22.01.98		Not included	
280	CDC/AB-37/97/6	MAKWATE	MAHALAPYE	LA2,2WC	152,085.41	153,326.00	10/11/97	14.03.98		Not included	
281	CDC/AB-37/97/4	NSWAZI	TUTUME	2CL,LA2,FURN	320,472.00	301,298.00	17/11/97	17.04.98		Not included	
282	CDC/AB-37/97/3	TSHOKOTSHA	S/PALAPYE	LA2,2WC	150,720.00	33,881.47	05/01/98	07.05.98		Not included	
283	CDC/AB-51/97/7	TEWANE	MAHALAPYE	H/POST,LA2	279,192.00	303,120.17	05/01/98	11.08.98		Not included	
284	CDC/AB-51/97/12	TUTUME	TUTUME	SUBLAND BOARD OFFICES	789,829.30	789,829.30	12/01/98	12.09.98		Not included	
285	CDC/AB-51/97/6	SHOSHONG	MAHALAPYE	H/CLINIC,	280,796.55	288,383.92	12/01/98	17.07.98		Not included	
286	CDC/AB-51/97/8	SELEKA	MAHALAPYE	H/CLINIC,	299,050.00	246,192.22	19/01/98	27.07.98		Not included	
287	CDC/AB-51/97/4	SEOLWANE	S/PALAPYE	LA2	132,996.03	42,833.59	19/01/98	22.06.98		Not included	
288	CDC/AB-51/97/11	NSWAZI	TUTUME	H/CLINIC,LA2	583,007.20	570,063.53	27/01/98	09.10.98		Not included	
289	CDC/AB-51/97/10	NKANGE	TUTUME	M/WARD	355,811.77	355,416.47	28/01/98	28.09.98		Not included	
290	CDC/AB-51/97/9	MATHANGWAN E	TUTUME	M/WARD,LA2	448,547.24	436,383.55	29/01/98	07.09.98		Not included	
291	CDC/AB-56/97/4	MASITAMA	TUTUME	1 TLT, S/FEN	40,415.40		01/04/98	07.07.98		Not included	
292	CDC/AB-56/97/5	MGWNE,BRLN G,SBN	TUTUME	8 TLTS	45,200.00		01/04/98	07.07.98		Not included	
293	CDC/AB-56/97/7	BOBONONG	BOBIRWA	S/FEN	80,231.25		01/04/98	07.07.98		Not included	
294	CDC/AB-56/97/8	MMADINARE	BOBIRWA	S/FEN	105,955.10		01/04/98	07.07.98		Not included	
295	CDC/AB-56/97/2	S/MOOKE,TNTA	TUTUME	S/FEN	133,782.35		01/04/98	07.07.98		Not included	
296	CDC/AB-56/97/1	MAITINGWE	TUTUME	11 TLTS, S/FEN	109,907.45		14/04/98	18.09.98		Not included	
297	CDC/AB-56/97/3	GSHWE, MAKOBO	TUTUME	4 TLTS,S/FEN	94,060.00		14/04/98	17.07.98		Not included	
298	CDC/AB-56/97/6	MARAPONG	TUTUME	S/FEN	71,155.00		14/04/98	16.06.98		Not included	
299	CDC/AB-56/97/9	GOBOJANGO	BOBIRWA	S/FEN	33,420.00		14/04/98	15.06.98		Not included	
300	CDC/AB-57/97	SEROWE	S/PALAPYE	COMPL.CTU COMP.WALL	136,100.00		20/04/98	22.07.98		Not included	
301	CDC-AB/10-98/5	MATHANGWAN E	TUTUME	4CL,4LA2,AB,KIT	1,672,563.00	1,365,467.25	15/06/98	04.03.99	27.05.99	Not included	
302	CDC-AB/29-98/6	KUTAMOGORE E	TUTUME	4CL,4LA2,AB,KIT,12TLTS	1,595,187.08	1,595,187.08	14/09/98	28.06.99		Not included	
303	CDC-AB/29-98/2	SEROWE	S/PALAPYE	6LA2,8CL,AB,KIT,10TLTS	2,141,690.00	2,140,641.81	20/10/98	20.07.99		Not included	
304	CDC-AB/39-98/3	MMADINARE	BOBIRWA	4CL,4LA2,AB,KIT	1,275,597.72	1,227,840.36	13/11/98	13.08.99		Not included	
305	CDC-AB/39-98/2	BOBONONG	BOBIRWA	4CL,7LA2,AB,KIT	1,749,854.00	1,628,216.23	16/11/98	10.11.99		Not included	
306	CDC-AB/42-98/2	MOSOLOTSHA NE	S/PALAPYE	2CL,2LA2	568,568.00	545,744.31	18/01/99	17.09.99		Not included	
307	CDC-AB/46-98/1	SELEKA/RAMO KGONAMI	MAHALAPYE	4CL,6LA2,AB,KIT	1,665,770.80	1,522,480.85	22/01/99	22.11.99	03.03.00	Not included	

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308	CDC-AB/44/98	KUDUMATSE	MAHALAPYE	3LA2,AB,KIT	1,060,830.00	916,695.95	10/02/99	10.09.99	11.11.99	Not included	
309	CDC-AB/47-98/4	TUTUME	TUTUME	4CL,14LA2,KIT	2,500,298.00	2,361,589.89	15/02/99	15.01.00		Not included	
310	CDC-AB/48-98/1	TONOTA	TUTUME	10CL,12LA2,2KIT	2,475,300.00	2,408,331.48	19/02/99	20.12.99		Not included	
311	CDC-AB/57-98/4	MOTLHOPI	BOTETI	LA2	166,374.27	151,695.79	02/03/99	02.08.99	30.06.99	Not included	
312	CDC-AB/57-98/2	NKANGE	TUTUME	LA2	169,956.70	76,269.61	15/03/99	18.08.99		Not included	
313	CDC-AB/56-98/4	LETLHAKANE	BOTETI	H/CLINC UPGRADING	295,404.20	209,555.11	22/03/99	24.09.99		Not included	
314	CDC-AB/05-99/03	Sebina	TUTUME		78,000.00	0.00	07/06/99	06.09.99		Not included	
315	CDC-AB/17-99/02	Borakonelo,Masupe	S/PALAPYE		142,000.00	123,433.80	09/08/99	08.10.99		Not included	
316	CDC/AB-4/95	RAKOPS	BOTETI	COMPL.1X6CL	115,350.00	115,186.48			27.10.95	Not included	
317	CDC/AB-36/96/1	MAHALAPYE	MAHALAPYE	WATER W/SHOP,OFFICES	1,863,034.23	1,863,034.23				Not included	
318	CDC/AB-50/96	TUTUME	TUTUME	MNTCE.OF STAFF HOUSES	314,500.00					Not included	
319	CDC/AB-52/96	LEPASHA	TUTUME	MAINTENANCE	66,678.00					Not included	
320	CDC/AB-4/97/3	MOKUBILO	BOTETI	LA2	109,600.00	93,646.15			10.11.97	Not included	
321	CDC/AB-37/97/7	KUDUMATSE	MAHALAPYE	2CL,LA2,FURN	304,237.00	280,937.00		17.05.98		Not included	
322	CDC/AB-37/97/9	TUTUME	TUTUME	4LA1, CLEARING	345,426.42					Not included	
323	CDC-AB/05-98/2	TEWANE	MAHALAPYE	LA2	155,591.64	140,265.73				Not included	
324	CDC-AB/06-98/1	POLOKA	MAHALAPYE	2LA2,KIT	370,590.00	336,707.50		18.11.98	25.01.99	Not included	
325	CDC-AB/07-98/1	MAKALAMABEDI	BOTETI	2CL,2LA2	533,851.00	495,816.99		07.12.98		Not included	
326	CDC-AB/07-98/4	LEPOKOLE	BOBIRWA	2CL,3LA2	678,586.00	662,394.55		11.01.99		Not included	
327	CDC-AB/07-98/6	KODIBELENG	MAHALAPYE	2CL,2LA2,KIT	652,538.00	652,538.00		30.11.98		Not included	
328	CDC-AB/21-98/1	KUTAMOGORE	TUTUME	H/POST,LA2	336,083.25	319,458.73		17.02.99		Not included	
329	CDC-AB/29-98/9	MACHANENG	MAHALAPYE	COMPL.H/C,M/W,2LA2	286,741.00	257,970.20		05.02.99	27.11.98	Not included	
330	CDC-AB/41-98	MALATSWAI	S/PALAPYE	2CL,4tits	255,732.25	224,679.00		09.07.99		Not included	
331	CDC-AB/43-98/1	TACHIBONA-DUKWI	TUTUME	2CL,4LA2	830,725.00	742,488.08		22.09.99	08.11.99	Not included	
332	CDC-AB/43-98/2	SEPAKO	TUTUME	2LA2,AB	784,429.68	741,384.91		17.08.99	18.10.99	Not included	
333	CDC-AB/47-98/1	MAHALAPYE	MAHALAPYE	4CL,13LA2,KIT	2,150,361.30	962,418.96		01.12.99		Not included	
334	CDC-AB/56-98/3	MANGA	BOBIRWA	H/CLINIC	333,250.00	65,546.98		22.09.99		Not included	
335	CDC-AB/57-98/1	MATOLWANE	S/PALAPYE	LA2	156,478.29	137,124.69		12.07.99		Not included	
336	CDC-AB/57-98/3	MOSLOTSHANE	S/PALAPYE	LA2	148,000.00	127,765.00		02.08.99		Not included	
337	CDC-AB/05-99/01	Serowe	S/PALAPYE	48 tits	599,519.80	545,477.37				Not included	
338	CDC-AB/05-99/04	Mahalapye	MAHALAPYE	18 tits	354,051.15	290,619.32				Not included	

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339	CDC-AB/11-99/01	Semolane Mabolwe Gobojango	Bobirwa	Extn. To houses	180,207.00						Not included
340	CDC-AB/11-99/03	Moletemane Tsetsebjwe	Bobirwa	Extn. To houses	167,900.00						Not included
341	CDC-AB/38-98/4	TUTUME	TUTUME	4LA1	381,814.64			16.05.99			Not included

## Annexure B. Ghanzi District Council List of Projects Jan 1995- Dec 2000

S. No.	CONTRACT NUMBER	LOCATION	FACILITY	VOTE	CONTRACT SUM (P)	AMOUNT CERTIFIED (P)	START DATE	ORIGINAL COMPLETION DATE	ACTUAL COMPLETION DATE	FINISH PERIOD	ADVANCE as % of contract sum
1	GDC/06/97 B	GHANZI	3 LA2, 2 LA3	LG 203	567,704.00	562,527.34	23/05/97	06.11.97	29.01.98	Delayed	0
2	GDC/97 B	GHANZI	HP, 1 1LA2	LG 1104	287,502.00	287,871.96	06/07/98	25.10.98	29.11.98	Delayed	0
3	GDC/26/99 B	NEW XADE	1LA2	LG 1106	169,765.88	154,332.04	15/03/00	07.06.00	03.11.00	Delayed	0
4	GDC/22/2000 C	KOLE	1 LA2	LG 1102 98/99	154,750.00	31,649.80	27/11/00	20.02.01	17.08.01	Delayed	0
5	GDC/26/99 C	NCOJANE	2LA2,4PL	LG 1102 98/99	372,548.48	326,154.20	13/03/00	11.09.00	08.09.00	On time	0
6	GDC/18/94	KACGAE BERE	3CL,AB,4PL,4LA1 3CL,AB,4PL,4LA1	LG 114-96/97	1,123,188.00	270,807.51	19/06/95	15.03.96	01.10.96	Terminated	0
7	GDC/19/94	GHANZI KABAKAE	2CL,AB,2PL,6LA1,2LA2 2CL,2PL,4LA1	LG 114-96/97	1,339,250.00	236,401.07	24/06/95	26.04.96	01.10.96	Terminated	0
8	GDC/40/98 C	GHANZI KABAKAE	4CL,2LA2,4PL 2PL	LG1102	736,310.00	633,310.00	26/04/99	26.09.99	07.02.00	Delayed	5
9	GDC/26/99 E	KALKFONTEIN	1LA2,4PL	LG 1102 98/99	223,661.25	209,332.00	01/03/00	31.05.00	29.11.00	Delayed	5

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10	GDC/40/98 A	EAST HANAHAI	2PL	LG1102	25,700.00	20,700.00	23/03/99	14.06.99	14.06.99	On time	5
11	GDC/40/98 F	KARAKUBIS	2PL	LG1102	29,400.00	24,400.00	23/03/99	28.06.99	28.06.99	On time	5
12	GDC/24/99D	GHANZI	1LA2	LG 1104 99/00	142,580.00	153,292.75	15/02/00	04.07.00	04.07.00	On time	5
11	GDC/14/2000 B	GHANZI PRI SCHOOL KABAKAE PRI SCHOOL	12TLTS 12TLTS	LG 1102 98/99	291,720.00	296,420.00	25/09/00	12.03.01	12.02.01	On time	5
13	GDC/25/99	NEW XADE	Day Care Centre	LG 1106 DDP	377,107.00	283,989.90	10/03/00	18.06.2000		Terminated	5
14	GDC/22/94	XANAGAS	2LA2,AB,2LA1,2PL	LG114-94/95 DDF	476,300.00	447,072.30	07/02/95	18.12.95	31.08.96	Delayed	10
15	GDC/15/94	KOLE/NCOJANE	2CL,AB,2PL	LG114-94/95 DDF	278,300.00	257,548.80	06/03/95	14.07.95	19.09.95	Delayed	10
16	GDC/16/94	NEW XANAGAS	2LA1,AB,2PL	LG114-94/95 DDF	498,960.00	453,600.00	13/03/95	09.10.95	03.04.97	Delayed	10
17	GDC/20/94	CHARLESHILL	AB	LG114-94/95 DDF	91,025.20	86,109.44	27/03/95	26.08.95	19.12.95	Delayed	10
18	GDC/04/95	EAST & WEST HANAHAI	4CL,1LA2,2LA1,AB,4PL	LG114-94/95 DDF	623,810.02	579,160.59	13/06/95	03.10.95	08.02.96	Delayed	10
19	GDC/07/95	METSIMANTSHO	5CL,1LA2,2LA1,AB,2PL	LG114-94/95 DDF	982,734.50	930,080.52	23/07/95	18.03.96	10.06.96	Delayed	10
62	GDC/24/99B	KALKFONTEIN	1LA2	LG 1104 99/00	138,430.00	133,430.00	06/03/00	26.06.00	19.06.01	Delayed	10
63	GDC/14/2000 D	KUKE D'KAR	7PL 7PL	LG 1102 98/99	222,805.00	175,119.00	25/09/00	01.12.00	03.03.01	Delayed	10
20	GDC/21/94	KALKFONTEIN	AB,K	LG114-94/95 DDF	153,186.08	149,210.80	06/03/95	06.07.95	28.07.95	On time	10
61	GDC/40/98 B	KUKE/D'KAR	4PL/4PL	LG1102	71,350.00	17,360.00	12/04/99	04.07.99		Terminated	10
21	GDC/17/96 B	BERE	Compl. 3CL,2LA1,AB,2PL	LG114-94/95 DDF	555,346.00	498,861.20	01/04/97	07.07.97	06.08.97	Delayed	15
22	GDC/17/96 C	GHANZI KABAKAE	Compl. 2CL,6LA1,AB,2LA2,2PL, 2CL,4LA1,2PL	LG114-94/95 DDF	1,018,243.60	931,408.57	01/04/97	04.08.97	21.10.97	Delayed	15
23	GDC/17/96 A	KACGAE	Compl. 3CL,4LA1,AB,2PL	LG114-94/95 DDF	622,882.26	562,346.60	07/04/97	09.11.97	17.12.97	Delayed	15
24	GDC/06/97 A	GHANZI	1 LA1, 4 LA2	LG 203	536,700.00	540,342.56	21/04/97	24.10.97	08.07.98	Delayed	15
25	GLB/01/97 A	GHANZI	2 LA1, 2 LA2	LG 203	393,500.00	401,330.05	26/05/97	05.02.98	06.03.98	Delayed	15
26	GDC/23/97 G	CHARLESHILL MAKUNDA	2CL,2LA2,4PL AB,1LA2	LG1102	696,703.00	691,068.00	19/01/98	02.08.98	09.12.98	Delayed	15
27	GDC/23/97 E	QABO	2CL,2LA2	LG1102	468,800.00	484,792.22	02/02/98	11.10.98	28.11.98	Delayed	15
28	GDC/26/97 D	EAST HANAHAI	1LA2	LG 127	144,436.00	141,436.00	23/02/98	13.05.98	12.08.98	Delayed	15
46	GDC/27/98E	WEST HANAHAI	1LA1	LG203	101,444.00	98,444.00	21/04/98	20.12.98	16.04.99	Delayed	15
29	GDC/01/98 B1	KOLE	1LA2,AB	LG1102	217,350.00	214,350.00	23/04/98	02.09.98	15.07.99	Delayed	15
30	GDC/01/98 C1	XANAGAS	2CL,4PL	LG1102	212,543.66	222,288.66	23/04/98	23.09.98	30.03.99	Delayed	15
31	GDC/01/98 A	KUKE D'KAR	2LA2,AB 4PL	LG1102	399,400.00	411,177.90	04/05/98	20.12.98	26.04.99	Delayed	15
32	GDC/23/97 F	WEST HANAHAI	AB	LG1102	104,958.80	101,958.80	16/05/98	04.09.98	08.10.98	Delayed	15
47	GDC/27/98D	BERE	1 LA 1	LG 203	106,630.40	103,630.40	07/09/98	01.11.98	23.12.98	Delayed	15
48	GDC/27/98C	QABO	1 LA 1	LG 203	100,387.36	100,387.36	04/10/98	09.01.99	27.05.00	Delayed	15
33	GDC/40/98 E	QABO	2CL,1LA2,2PL	LG1102	318,770.00	313,770.00	29/03/99	12.09.99	28.11.99	Delayed	15

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49	GDC/40/98 H	CHOBOKWANE KALKFONTEIN	2CL 2PL	LG1102	172,500.00	167,500.00	09/05/99	02.10.99	31.03.00	Delayed	15
50	GDC/24/99C	NCOJANE	1LA2	LG 1104 99/00	146,455.00	141,455.00	15/02/00	26.06.00	24.04.01	Delayed	15
51	GDC/26/99 A	CHOBOKWANE	2LA2	LG 1102 98/99	304,400.00	299,400.00	29/02/00	19.06.00	05.09.00	Delayed	15
52	GDC/26/99 D	BOIPELO P. SCH.	2CL,3LA2	LG 1102 98/99	677,261.25	591,010.00	06/03/00	13.11.00	21.12.00	Delayed	15
53	GDC/4/2000 A	GHANZI	4 LA2	LG 1102 98/99	651,600.00	641,541.50	01/05/00	30.10.00	17.01.01	Delayed	15
54	GDC/14/2000 C	KOLE	1 AB EXT, 4 PL	LG 1102 98/99	437,500.00	409,120.50	25/09/00	09.04.01	09.04.01	Delayed	15
55	GDC/14/2000 A	GHANZI	12CL,1AB,18TLTS,1K	LG 1102 98/99	2,567,284.11	1,946,962.65	09/10/00	15.07.01	18.02.00	Delayed	15
34	GDC/16/95	CHOBOKWANE	HP,1LA2,1LA1,2PL	LG 127	453,568.50	419,306.59	01/01/96	09.08.96	16.08.96	On time	15
35		QABO	HP, 1LA2,1LA1, 2PL	LG 127	598,815.00		01/04/96	08.12.96	11.06.96	On time	15
36	GDC/10/96 B	CHOBOKWANE	2CL,1LA2	LG 114-96/97	303,630.78	273,027.98	04/11/96	21.04.97	21.04.97	On time	15
37	GDC/11/96	CHARLESHILL	2LA2, 1LA1	LG 203	350,748.20	312,637.00	13/01/97	04.07.97	29.05.97	On time	15
38	GDC/06/97D	CHARLESHILL	4LA2	LG203	469,000.00	471,874.05	21/04/97	02.11.97	21.10.97	On time	15
39	GDC/23/97 C	KABAKAE GHANZI	2LA2, AB, 4PL 4LA2, 2CL	LG114	1,156,250.00	1,220,714.17	19/01/98	09.11.98	09.11.98	On time	15
40	GDC/23/97 D	GROOTLAAGTE	4PL	LG1102	38,350.00	35,350.00	02/02/98	31.05.98	31.05.98	On time	15
41	GDC/26/97A	NEW XADE	H/P, 2LA2, 2PL	LG1106	557,340.00	554,340.00	23/02/98	25.10.98	19.11.98	On time	15
56	GDC/27/98B	NEW XADE	5LA2	LG1106	659,772.90	678,374.21	24/08/98	02.05.99	02.05.99	On time	15
57	GDC/35/98	GHANZI	4 LA2	LG 203	546,680.00	562,039.58	25/01/99	03.10.99	03.10.99	On time	15
58	GDC/40/98 G	CHARLESHILL MAKUNDA	2LA2,2PL 4PL	LG1102	420,240.00	316,973.00	12/04/99	10.10.99	10.10.99	On time	15
59	GDC/24/99A	CHARLESHILL	2LA2	LG 1104 99/00	286,060.00	281,060.00	28/02/00	21.07.00	25.07.00	On time	15
42	GDC/10/96 C	CHARLESHILL	2CL,2LA1,4PL	LG 114-96/97	232,711.60	70,765.68	15/11/96	19.12.97		Terminated	15
43	GDC/23/97 H	CHOBOKWANE KALKFONTEIN	2CL,2LA2 1LA2,4PL	LG1102	504,090.95	445,023.97	19/01/98	13.09.98		Terminated	15
44	GDC/23/97 A	BERE	1LA2,2PL	LG114-94/95 DDF	142,750.45	103,045.97	16/02/98	05.08.98		Terminated	15
45	GDC/26/97 C	BERE KACGAE	1LA2 1LA2	LG 127	325,640.00	328,308.75	09/03/98	01.10.98		Terminated	15
60	GDC/40/98 I	KOLE NCOJANE	1LA2 2LA2,4PL	LG1102	448,985.20	105,110.99	10/05/99	18.12.99		Terminated	15
65	GDC/17/94	GROOTLAAGTE	3CL,2LA1,1LA2,2PL	LG114-94/95 DDF	499,400.00	451,000.00	06/03/95	29.09.95	26.06.97	Not included	
66	GDC/10/96	QABO	4CL,AB,2LA2,2LA1,K,4PL	LG114-94/95 DDF	921,170.80	831,695.48	04/11/96	19.10.97	07.03.97	Not included	
67	GDC/18/97 A	NEW XADE	8CL,AB,K,3PL	LG1106	836,231.00	833,187.37	08/11/97	19.07.98	14.04.99	Not included	
68	GDC/18/97 B	NEW XADE	8LA2	LG1106	999,541.00	994,541.00	08/12/97	19.07.98	19.04.99	Not included	
69	GDC/01/98 D	CHARLESHILL	2CL,2LA1,4PL	LG1102	193,566.00	189,535.75	23/04/98	01.07.98	17.09.98	Not included	
70	GDC/40/98 D	NEW XADE	2LA2,2CL	LG1106	433,450.00	433,450.00	29/03/99	12.09.99	22.02.2000	Not included	



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71	GDC/4/2000 B	GHANZI	8 LA2	LG 1102 98/99	1,222,000.00	1,224,846.76	01/05/00	27.11.00		Not included
72	GDC/29/2000 C	CHARLESHILL	3 LA2	LG 203	492,616.00	111,702.38	08/01/01	22.05.01		Not included
73	GDC/29/2000 A	GHANZI	5 LA2	LG 203	807,040.90	505,476.46	15/01/01	10.09.01		Not included
64		GHANZI	WATER WORKSHOP & OFFICES	LG 148	1,766,848.83			09.11.97		Not included
74		CHARLESHILL	3LA2, 1LA1	LG203	414,800.00	411,479.34		17.10.97	09.11.97	Not included
75		GHANZI	4LA2	LG203	434,520.00			07.11.97		Not included
76		CHARLESHILL	3LA2	LG203	394,031.20					Not included
77		CHARLESHILL	1LA3,1LA2	LG203	261,608.00			15.10.97		Not included
78		CHOBOKWANE	1AB, 2CL,1K/S, 10PL,3LA2		551,200.00			02.02.95		Not included
79	GDC/26/99 B	NEW XADE	1LA2	LG 1106	150,903.00	0.00				Not included
80	GDC/23/97 B									

## Annexure C: Council officers’ questionnaire

### THE BENEFIT OF THE ADVANCE MOBILIZATION LOAN ON BUILDING PROJECTS IN LOCAL AUTHORITIES IN BOTSWANA COUNCIL OFFICERS QUESTIONNAIRE

1. Approximately what percentage of citizen (qualifying) contractors apply for the mobilization loan on your projects? (Please tick).

Category OC	Less than 10%	Between 10-25%	Between 25-50%	Between 50-75%	Between 75-100%	100%
Category A						
Category B						
Category C						
Category D						
Category E						

2. Approximately what percentage of loan recipients fall in the following contractors’ categories? (Out of 100%)

OC	A	B	C	D	E
.....%	.....%	.....%	.....%	.....%	.....%

3. Approximately what percentage of contractors receiving the loan would you say suffer from cash flow problems on your contracts? (Tick)

Less than 10%	Between 10 - 25%	Between 25 - 50%	Between 50 - 75%	Between 75- 100%	100%

4. Approximately what percentage provides security for the advance mobilization loan? (Tick)

Category OC	Less than 10%	Between 10-25%	Between 25-50%	Between 50-75%	Between 75-100%	100%
Category A						
Category B						
Category C						
Category D						
Category E						

5. How do you disburse unsecured advance mobilization loans to qualifying contractors?

(Tick)

A	5% cash only	
---	--------------	--

B	5% cash and 10% direct payments to suppliers on the satisfactory incorporation of materials into works	
C	5 % cash and 10% direct payments to suppliers on satisfactory delivery of materials to site	
D	15 % cash	
E	Other (please specify).	

.....  
 .....  
 .....

6. How would you rate the risk in providing unsecured loans to qualifying contractors in general?

Tick

A	Very risky	
B	Fairly risky	
C	Little risk	
D	No risk	

7. How would you rate risk as a consideration in issuing loans to contractors?

Tick

A	Major consideration	
B	Minor consideration	
C	Not a factor	
D	Other (Please specify)	

.....  
 .....

8. Do you encourage qualifying contractors to take up the advance mobilization loan?

Yes	No.
-----	-----

Why?

.....  
 .....  
 .....

9. Rank the importance of the advance mobilization to contractors on your projects on a scale of 1 (very important) to 5 (not important).

(Tick)

1	2	3	4	5
---	---	---	---	---

Please qualify your answer.

.....  
 .....  
 .....

10. Rank the effectiveness of the advance mobilization loan to contractual performance on a scale of 1 (very affective) to 5 (not effective).  
 (Tick)

1	2	3	4	5
---	---	---	---	---

Please qualify your answer

.....  
 .....  
 .....

11. Rank the following parameters on a scale of 1 (very significant) to 5 (not significant) as major factors negatively influencing the effective utilization of the advance.

	<b>Parameter</b>	<b>Score</b>
A	Manner in which it is disbursed	
B	Funds diverted to other uses by recipients	
C	Loan funds not adequate	
D	Difficult repayment schedule	
E	Lack of management skills	
F	Other	

Please qualify each of the above responses.

Qa.....  
 .....

Qb.....  
 .....

Qc.....  
 .....

Qd.....  
 .....

Qe.....  
 .....

Qf.....  
 .....

12. How in your view could any of the above be avoided or minimized in the application of the advance mobilization loan scheme?  
(If not significant write N/A.)

.....  
.....  
.....  
.....  
.....

13. Would you rank unrealistically short tendered construction periods as a major factor influencing late completion on your contracts?

Yes/No

Please qualify your answer

.....  
.....  
.....

14. In general, what other factors would you rate as causing late completions on your contracts? (Please rank in terms of importance beginning with the most important)

- a).....
- b).....
- c).....
- d).....

15. To what extent do you view delays on your projects as costing the Government in monetary terms or otherwise?

.....  
.....  
.....  
.....

Please record your details below to facilitate contacting you, in the event that a query should arise (the data provided in this questionnaire will be treated in the strictest confidence)

COUNCIL.....PHONE .....

ADDRESS.....FAX.....

.....CELL.....

.....E-MAIL.....

NAME.....

DESIGNATION.....

## Annexure D: Contractors' questionnaire

### BUILDING PROJECTS IN LOCAL AUTHORITIES IN BOTSWANA: CONTRACTORS' QUESTIONNAIRE

1. What Central Tender Board (CTB) category do you fall under? (Please tick).

Category OC	
Category A	
Category B	
Category C	
Category D	
Category E	
None	

2. How often do you apply for Advance Mobilization Loan when you win a Council tender? (Please tick)

1	Always (100%)	
2	Often (50-100%)	
3	Sometimes (25-50%)	
4	Rarely (0-25%)	
5	Never (0%)	

3. How important is the Advance Mobilization Loan in the success of your project? (Please tick)

1	Very important	
2	Important	
3	Fairly important	
4	Not important	
5	Not sure	

4. How often do you provide securities for the Advance Mobilization Loan? (Please tick)

1	Always (100%)	
2	Often (50-100%)	
3	Sometimes (25-50%)	
4	Rarely (0-25%)	
5	Never (0%)	

5. How do you prefer to receive your Advance Mobilization Loan? (Please tick)

1	5% cash only	
2	5% cash and 10% direct payments to suppliers on the satisfactory incorporation of materials into works	
3	5 % cash and 10% direct payments to suppliers on satisfactory delivery of materials to site	
4	15 % cash	
5	Other (please specify).	

Please qualify your answer.

.....

.....

.....

.....

.....

.....

6. How many projects in total have you undertaken for Councils in Botswana to date? .....

7. Please state the number of projects with Councils that you have completed within the originally agreed contract period.

Tick

1	None	
2	Between 0 & 25%	
3	Between 25 & 50%	
4	Between 50 & 75%	
5	Between 75 & 100%	

8. What in your view is the biggest cause of your not completing projects on time?

Tick

1	Delay by Councils i.e. No information, delayed inspections, late payments, variations etc.	
2	Site conditions i.e. Excavation in rock, deep sand, on-site services, high water table etc.	

3	<i>Logistical reasons eg poor roads, lack of water, labour and services.</i>	
4	<i>Lack of plant e.g. transport, equipment etc</i>	
5	<i>Inclement weather</i>	
6	<i>Condemned works</i>	
7	<i>Delay by material suppliers and sub contractors</i>	
8	<i>Acts of God e.g. strike, personal tragedy, death etc.</i>	
9	<i>Other (Please specify below)</i>	

.....

.....

.....

9. Do you have credit facilities with your suppliers? (Please tick)

<i>Yes</i>	<i>No.</i>

If yes, approximately what percentage of suppliers offer you credit? (Please tick)

<i>Less than 10%</i>	<i>Between 10 % 25%</i>	<i>Between 25 &amp; 50%</i>	<i>Between 50 &amp; 75%</i>	<i>Between 75 &amp; 100%</i>	<i>100%</i>

Is there any reason why this number?

.....

.....

.....

10. Are you in favour of the system of direct payments to suppliers by Councils? (Please tick)

<i>Yes</i>	<i>No</i>

Please qualify your answer.

.....



.....  
 .....  
 11. Rank the effectiveness of the Advance Mobilization Loan to contractual performance on a scale of 1 (very affective) to 5 (not effective).  
 (Tick)

1	2	3	4	5
---	---	---	---	---

Please qualify your answer

.....  
 .....  
 .....

12. Rank the following parameters on a scale of 1 (very significant) to 5 (not significant) as major factors negatively influencing the effective utilization of the Advance Mobilization Loan.

	<b>Parameter</b>	<b>Score</b>
A	Manner in which it is disbursed	
B	Funds diverted to other uses by recipients	
C	Loan funds not adequate	
D	Difficult repayment schedule	
E	Lack of management skills	
F	Other	

Please qualify each of the above responses.

Qa.....  
 .....  
 Qb.....  
 .....  
 Qc.....  
 .....  
 Qd.....  
 .....  
 Qe.....  
 .....  
 Qf.....  
 .....

13. How in your view could any of the above be avoided or minimized in the application of the Advance Mobilization Loan scheme?  
 (If not significant write N/A.)

.....  
.....  
.....  
.....  
.....

14. Would you rank unrealistically short tendered construction periods as a major factor influencing late completion on your contracts? (Please tick)

Yes	No

Please qualify your answer

.....  
.....  
.....

15. To what extent do you view delays on your projects as costing the Government in monetary terms or otherwise?

.....  
.....  
.....

16. Do you usually get discounts on your purchases under direct payment arrangements as compared to cash payments? (Please tick)

Yes	No

17. Is there any alternative system you would propose to be put in place other than direct payments to suppliers? (Please tick)

Yes	No

Please qualify your answer

.....  
.....

18. How often do you use the Advance Mobilization Loan on the specific project for which it is given as opposed to sharing it out amongst other competing uses? (Please tick)

.....

1	Always (100%)	
2	Often (50-100%)	
3	Sometimes (25-50%)	
4	Rarely (0-25%)	
5	Never (0%)	
6	Not sure	

19. In your view, is the loan amount adequate? (Please tick)

Yes	No

Please qualify your answer

.....

.....

.....

Please record your details below to facilitate contacting you, in the event that a query should arise (the data provided in this questionnaire will be treated in the strictest confidence)

COMPANY.....PHONE.

ADDRESS.....FAX.....

.....CELL.....

.....E-MAIL.....

NAME.....

DESIGNATION.....

THANK YOU FOR YOUR CONTRIBUTION TO THIS RESEARCH PROJECT DIRECTED TOWARDS IMPROVING CONTRACTORS' PERFORMANCE ON LOCAL AUTHORITY PROJECTS.

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MAY 2002

**Annexure E: Suppliers’ structured questionnaire**

**THE INFLUENCE OF DIRECT PAYMENTS ON THE PERFORMANCE OF CONTRACTORS ON LOCAL AUTHORITY PROJECTS IN BOTSWANA**

1. Do you offer credit facilities to contractors on council projects generally? (Please Tick)

Yes/No

2. If yes, approximately what percentage of council contractors do you give credit to? (Please tick)

Less than 10%	Between 10-25%	Between 25-50%	Between 50-75%	Between 75-100%	100%
---------------	----------------	----------------	----------------	-----------------	------

3. Do you prefer receiving direct payments from councils on their projects as opposed to other forms of payments?

Yes/No.

Please qualify your answer.

.....

.....

.....

4. Please rank the risk of providing credit facilities to the following categories of contractors, on a scale of 1(very high) to 5 (no risk).

	1	2	3	4	5
OC					
A					
B					
C					
D					
E					

5. Do you normally offer discounts on your products to contractors if they pay cash? (Please tick)

Yes/No

6. When you agree on direct payment arrangements, do you offer contractors discounts as you would on cash payments or otherwise? (Please tick)

Yes/No

7. How often do you extend the discount to contractors when you receive direct payments from the Councils? Please tick one

A	Always	
B	Often	
C	Sometimes	
D	Rarely	
E	Never	
F	Don't know	

8. On a scale of 1 (very important) to 5(not a factor), please rank the following factors as having the most influence when accepting arrangements for direct payments.

		Rank
A	Particular council's payment record (i.e. promptness)	
B	Contractor's credit rating	
C	Size or value of order	
D	Nature of materials	
E	Personal knowledge of contractor	
F	Other	

If other, please specify

.....

.....

.....

.....

9. In your view, are there any other benefits to the contractor in direct payment arrangements other than easier access to materials required?

Yes/No.

Please qualify your answer.

.....



14. In general, how often do you deliver materials to contractors within the promised delivery period?

		Tick
A	Always (100% of the time)	
B	Often (75% of the time)	
C	Sometimes (50% of the time)	
D	Rarely (30% of the time)	
E	Never	

15. What is the biggest cause of the late delivery of materials from you to the contractors?

.....

.....

.....

.....

Please record your details below to facilitate contacting you in the event that a query should arise. The data provided in this questionnaire will be treated in the strictest confidence).

Company:..... Phone: .....

Address: ..... Fax: .....

..... Cell: .....

..... E-mail:.....

Name: .....

Designation: .....

Thank you for your contribution to this research project directed towards improving contractors' performance on Local Authority Projects

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## Annexure F: Suppliers' response

### SUPPLIERS' RESPONSES

Question	A	B	C	D	E	F
1	Yes	Yes, if Councils assure payment	Yes, on assessment	Yes	Yes	Yes
2	50-75	50-75	10to25%	50-75	25-50	10 to 25%
3a	Yes	Yes	Yes	Yes	Yes	Yes
3b	High risk	Prompt payments assured/ relieves contractor of payment burden	Assurance of payments, Councils knowledgeable about procedures	Council doesn't take the responsibility for payment.	Contractors not trusted	
4						
OC	1	2	1	Don't know	1	
A	2	2	2	Don't know	1	
B	3	1	3	Don't know	2	
C	4	3	N/A	Don't know	4	
D	5	3	N/A	Don't know	4	
E	N/A	3		Don't know	5	
5	Yes-on request	Yes	Yes, on request	Yes	Yes	Yes
6	No	Yes, provided this is for <u>MOS</u>	Yes, but discount as per credit	Yes	Yes	Yes
7	E	A	A-cash 20%, otherwise 15% for all	A	A	A
8a						
A	5	1	1	1	5	1
B	4	2	4	1	1	1
C	5	4	3	5	5	2
D	5	5	5	5	5	5
E	4	1	1	N/A	1	1
F	N/A	N/A	2	N/A		
8b	N/A		Project progress			
9a	Yes	Yes	Yes	No	Yes	Yes
9b	Instill discipline	Shifts burden from contractor	Further 2.5% discount on early a/c settlement		Timely compl.	Security
10a	Yes	Yes	No	No	No	Yes
10b	Contractor denied free use of his money & discretion	No self-improvement	Many contractors can't raise credit			
11	Legally unenforceable arrangement	Promises not kept (by Councils)	Late payments, non payment, change of instructions to Council, failed promises	Delayed inspections thus payments, late completions, release of funds to contractor without notifying supplier, materials not delivered to site	None	



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12a	Yes	Yes	Yes	Yes		Yes
12b	Securities to be provided	MOS payments	MOS payments-delivery notes system, payment against contractor's future payments	MOS payments, securities from contractors, direct payments to suppliers		
13a	Yes	No	Yes	Yes	No	
13b	Nominated subcontractor arrangement		JV with contractors	Screening of contractors for award, Obtain guarantees from contractors, MOS payments, timely inspections	Present arrangement best	
14	B	B	B	B	A	
15	Lack of water on site	Materials shortages	Distance	No proper address, special materials delays	Maybe during mtnce	

## Annexure G: Contractors' response

Question	A	B	C	D	E	F
1	B	B	A	B	A	C
2	1	2	1	4	1	1
3	1	2	1	3	1	1
4	1	5	5	5	3	1
5A	4	4	4	1	3	4
5B	Access cash	Options/bargaining power	Upfront payments etc speed up completion	Contractors to mnge own affairs	Reduces diversion	Material expensive on credit
6	2	4	7	12	5	3
7	5	5	4	4	5	1
8	N/A	9	7	2,3,6,7	1,3	7
9A	Yes	Yes	Yes	Yes	Yes	No
9B	100%	100%	100%	75-100	<10%	N/A
9C	Reliability from past performance	Good relationships	Reliability	Lack of trust	Small contracts	N/A
10A	No	No	Yes	No	Yes	No
10B	Funds should pass thro' own a/c for good business	Own mngmt of projects	Help purchase materials as suppliers do not trust contractors	Contractors to mnge own affairs	Access materials faster	More expensive
11A	1	2	1	5	1	1
11B		Assists in commencement	Access to funds for most contractors	Diversion	Sole source of funds	Discounts, cash flow, Timely labour payments
12						
A	2	5	5	5	5	4
B	1	1	1	1	1	1
C	5	5	5	3	5	2
D	5	5	5	2	4	5
E	1	1	1	1	1	3
F			No			
QA		No problem			Excellent	Contractor to be given 15%
QB		major problem		Contractors in difficulties	Serious problem	Major problem

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QC				Mob. Costs > 5% advance	Too much	Especially with ins. & taxes
QD				Adv. To be spread thro'out project	Satisfactory schedule	
QE		Problem		No PM & fin. Skills major problem	Major problem	Problem
QF						
13						
A	Difficult to change	Ensure loans are project specific	Direct payments to suppliers		10% adequate, otherwise all dir. Payments	Council could reintroduce dedicated a/c over which they have control
B	Contractors to improve mngmt skills	Workshops			Alt.2%+direct payments	
C						
D						
14A	No	No	No	Yes	Yes	No
14B				Lots of unknowns	To win tenders	Most awarded on realistic periods Use etc
15	Losses in rentals etc	Retendering costs	We finish on time	Inspectorate costs, inconvenience	Use, rentals	Use etc
16	No	No	No	No	No	No
17A	Yes	Yes	Yes	Yes	No	Yes
17B	Cash	Cash	Cash	Contractors to mnge own affairs	N/A	Suppliers should also tender for supply
18	1	1	1	3	2	1
19A	Yes	Yes	Yes	No	Yes	No
19B	Adequate	Adequate		Only for materials	It is too much	50% required



## Annexure H: Council officers’ response

Responses	11										
Question	A	B	C	D	E	F	G	H	I	J	K
1											
OC	100		100	100	75-100	0	75-100	100	100	100	100
A	100		100	100	100	0	75-100	100	100	75-100	75-100
B	100		100	100	100	0	75-100	75-100	100	75-100	75-100
C	100		100	100	75-100	100	bet10&25	N/A	100		75-100
D	99		N/A	100	100	100	0	N/A	100		N/A
E	N/A		N/A	100	<10	90	0	N/A	100		N/A
2											
OC	100	30	100	35	90	0	55	100	55		50
A	100	35	100	28	100	0	25	100	15		25
B	100	27	100	27	100	0	15	80	11		20
C	100	5	100	10	75	100	5		7		5
D	99	3	N/A	N/A	100	100	0		5		0
E	N/A	0	N/A	N/A	0	90	0		2		0
3	Bet 10&25	Bet10&25	Bet75&100	Bet 75&100	Bet10&25	Bet75&100	bet10&25	Bet25&50	75-100	75-100	50-75
4											
OC	0	0	0	<10%	<10%	0	<10%	<10%	100	<10%	<10%
A	0	0	0	<10%	<10%	0	10to25	<10%	100	<10%	<10%
B	0	0	0	<10%	<10%	0	25to50	<10%	100	<10%	<10%
C	0	<10%	0	<10%	<10%	<10%	25to50	N/A	100		<10%
D	0	<10%	N/A	N/A	100%	<10%	0	N/A	100		N/A
E	N/A	N/a	N/A	N/A	<10%	<10%	0	N/A	100		N/A
5	10+5cash	10+5cash	C	C	D-5+10material quotations	C	B	C	C	C	C
6	b-fairly risky	c-little risk	b-fairly risky	c-little risk	c-little risk	a-very risky	b-fairly risky	b-fairly risky	b-fairly risky	c-little risk	b-fairly risky

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	d-policy issue	b-minor	a-major	b-minor	b-minor	a-major	a-major	a-major	a-major	c-not a factor	a-major
7	d-policy issue	b-minor	a-major	b-minor	b-minor	a-major	a-major	a-major	a-major	c-not a factor	a-major
8a	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No
8b	Boost cash flow	Boost cash flow	Usually unable to commence without	Most already aware	Speed up mobilization, time value of cash	Diversion	Speed up works	Most already aware	Avoid high int.	Most already aware	Affects profits and bank standing
9a	1	1	1	1	5	5	2	1	3	1	4
9b	Access cash, reduce contract prices	Access to cash,	Only 10% able to perform without	Access to cash		Diversion	Speed up works	Access to cash	Access to cash	Experience shows most req. advance	Don't learn to control costs
10a	1	1	3	3	4	4	3	3	4	2	4
10b	Improve cash flow-performance	Improves cash flow	Diversion of funds	Diversion	Diversion	Not used for intended purpose	Diversion/Relaxation on receipt	50% don't finish on time	Treat advance as profit in advance	75% of contractors still req. further assistance	Suppliers tend to cheat contractors
11											
A	5	5	1	5	5	5	1	3	5	4	5
B	2	3	1	3	1	1	1	2	1	2	1
C	5	5	5	5	4	5	4	4	4	3	5
D	5	5	5	5	3	4	3	5	3	5	5
E	2	1	1	4	2	1	1	1	2	1	1
F	N/A	N/a	N/A				5				1
QA	No problem	Choice, Better negotiating base	Tempts misuse			Okay	Delays in payments processing	No security	Timely disbursement	Reasonable formula	Timing of disb. Just right
QB		Puts projects in deficit					Major cause of failure	No control by client-helpless	Common	From evidence, major problem	Temptation to buy plant etc not profit oriented
QC		Good amount	More than adequate		Short projects costly	Adequate	20% best	Adequate	Not so	Not sure, from actual experience	More than enough

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QD	Fair	Reasonable			Depends on size of project	Grace period?	Spread over whole contract	Flexible repayment	Reasonable terms	Very soft repayment terms	Easy schedule
QE						No skills and knowledge	Misuse etc	Important factor	Opportunity not appreciated	Main problem	Lack basic business management skills e.g. cost balancing
QF						N/A			N/A		Regard const. As easy source of finance, not specialized industr
12	Improve skills	Education, Mngmnt, Discipline, Qualified staff	Security mandatory to remove opportunists	AML to suppliers wholly, trained staff	N/A	Security/Direct payments only	N/A	Training, breed independence	Training/ trainer to be paid directly from AML	Commitment/ mngmt training	Registration of qualified firms
13a	No	No	No	Yes	No	No	Yes	No	Yes		Yes
13b	Problem=poor mngmt		Council fairly estimates periods		Mngmnt	Misuse, lack of skills etc	Quoted to win tenders only, seek extension after	Too long	Ignorance of req. period		
14											
A	Poor fin. Mngmt	Lack of info.	Lack of mgnmt skills	Delayed ordering of materials	Inadequate design	Lack of mngmt skills	Disregard work programme	Poor site planning/organizati on	Incompetence		Monopoly of supplie
B	Poor cost mngmt	Tenderers' site visit	Diversion of AML	Lack of plant	Misunderstanding contractor vs. Project team	Lack of skilled labour	Lack of PM skills	Lack of commitment	Mismanagement		
C	Poor pricing	Pricing	Lack of tech know-how	Mismanagement	Late info	Lack of equipment	Unskilled(cheap) labour	Overextended			
D	Materials shortage	Lack of skills, knowledge & mngmt	No knowledge of bldg contracts	Lack of supervision	Late payments	Financial mismanagement	Non payment of staff	Material and labour supply			

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15	Retendering costs- extra 5%	Programme delay	Denied use of resources, no LADs charged	Affects annual plan, flow of Govt. funding, slows development	Funds held up/ LADs mitigate	Use of facilities, social impact etc	Retendering overruns	Use of facilities, inflationary costs	Overruns, use etc	Retendering costs high
	Time(25%)	Service delivery interruption					Delay in service provision			
		Cost overruns Effect on economy etc					Backlogs			



# Annexure I: Reasons for failure to complete projects on schedule

Legend p132

Table CENTRAL DISTRICT COUNCIL PROJECTS

1995-2000

ADVANCE TAKEN (As % of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8		
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c
Frequency of delays																									
15%	3	12	8	11	0	15	1	1	1	4	24	2	4	8	0	0	26	0	4	10	45	14	1	3	0
Sub Total	34					18				34				8			26		14		59		4		
10%	2	2	1	4	0	6	0	0	1	1	13	0	0	3	1	0	10	0	0	5	31	10	0	3	1
Sub Total	9					7				14				4			10		5		41		4		
5%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	0					0				0				0			0		0		0		0		
0%	4	11	4	1	0	4	0	0	0	1	6	0	0	2	0	0	9	0	0	0	15	1	0	1	0
Sub Total	20					4				7				2			9		0		16		1		
<b>Total</b>	<b>9</b>	<b>25</b>	<b>13</b>	<b>16</b>	<b>0</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>43</b>	<b>2</b>	<b>4</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>45</b>	<b>0</b>	<b>4</b>	<b>15</b>	<b>91</b>	<b>25</b>	<b>1</b>	<b>7</b>	<b>1</b>
	<b>63</b>					<b>29</b>				<b>55</b>				<b>14</b>			<b>45</b>		<b>19</b>		<b>116</b>		<b>9</b>		

POPULATION SIZE (TOTAL NO. OF PROJECTS DONE)

341

SAMPLE TAKEN %

71.55%

GHANZI DISTRICT COUNCIL PROJECTS

1995-2000

ADVANCE TAKEN (As % of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8		
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c
Frequency of delays																									
15%	2	7	4	6	0	5	0	0	0	0	7	0	0	0	0	0	7	0	3	6	16	1	0	0	2
Sub Total	19					5				7				0			7		9		17		2		
10%	1	2	1	2	0	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	4	1	0	1	0
Sub Total	6					2				1				0			1		0		5		1		
5%	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1
Sub Total	0					1				0				0			0		2		0		1		
0%	3	4	1	0	0	0	0	1	0	0	2	0	1	1	0	0	0	0	1	0	3	0	0	0	1
Sub Total	8					1				3				1			0		1		3		1		
<b>Total</b>	<b>6</b>	<b>13</b>	<b>6</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>23</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>4</b>
	<b>33</b>					<b>9</b>				<b>11</b>				<b>1</b>			<b>8</b>		<b>12</b>		<b>25</b>		<b>5</b>		

POPULATION SIZE (TOTAL NO. OF PROJECTS DONE) 80

COMBINED TOTALS, CENTRAL AND GHANZI

ADVANCE TAKEN (As % of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8		
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c
Frequency of delays																									
15%	5	19	12	17	0	20	1	1	1	4	31	2	4	8	0	0	33	0	7	16	61	15	1	3	2
Sub Total	53					23				41				8			33		23		76		6		
10%	3	4	2	6	0	8	0	0	1	1	14	0	0	3	1	0	11	0	0	5	35	11	0	4	1
Sub Total	15					9				15				4			11		5		46		5		
5%	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1
Sub Total	0					1				0				0			0		2		0		1		
0%	7	15	5	1	0	4	0	1	0	1	8	0	1	3	0	0	9	0	1	0	18	1	0	1	1
Sub Total	28					5				10				3			9		1		19		2		
<b>Total</b>	<b>15</b>	<b>38</b>	<b>19</b>	<b>24</b>	<b>0</b>	<b>33</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>53</b>	<b>2</b>	<b>5</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>8</b>	<b>23</b>	<b>114</b>	<b>27</b>	<b>1</b>	<b>8</b>	<b>5</b>
	<b>96</b>					<b>38</b>				<b>66</b>				<b>15</b>			<b>53</b>		<b>31</b>		<b>141</b>		<b>14</b>		

POPULATION SIZE (TOTAL NO. OF PROJECTS DONE)

421

# Annexure J: Proportionate reasons for failure

Legend p132

**PROPORTIONATE REASONS FOR FAILURE**

(%)

CENTRAL DISTRICT COUNCIL PROJECTS

1995-2000

ADVANCE TAKEN (As % of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8			TOTAL NUMBER OF DELAYS
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c	
% Frequency of delays	1.5	6.1	4.1	5.6	0.0	7.6	0.5	0.5	0.5	2.0	12.2	1.0	2.0	4.1	0.0	0.0	13.2	0.0	2.0	5.1	22.8	7.1	0.5	1.5	0.0	197
Sub Total	17.26					9.14				17.26				4.06			13.20		7.11		29.95		2.03			
10%	2.1	2.1	1.1	4.3	0.0	6.4	0.0	0.0	1.1	1.1	13.8	0.0	0.0	3.2	1.1	0.0	10.6	0.0	0.0	5.3	33.0	10.6	0.0	3.2	1.1	94
Sub Total	9.57					7.45				14.89				4.26			10.64		5.32		43.62		4.26			
5%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub Total	0					0				0				0			0		0		0		0			
0%	6.8	18.6	6.8	1.7	0.0	6.8	0.0	0.0	0.0	1.7	10.2	0.0	0.0	3.4	0.0	0.0	15.3	0.0	0.0	0.0	25.4	1.7	0.0	1.7	0.0	59
Sub Total	33.90					6.78								3.39			15.25		0.00		27.12		1.69			
<b>Total</b>	<b>2.6</b>	<b>7.1</b>	<b>3.7</b>	<b>4.6</b>	<b>0.0</b>	<b>7.1</b>	<b>0.3</b>	<b>0.3</b>	<b>0.6</b>	<b>1.7</b>	<b>12.3</b>	<b>0.6</b>	<b>1.1</b>	<b>3.7</b>	<b>0.3</b>	<b>0.0</b>	<b>12.9</b>	<b>0.0</b>	<b>1.1</b>	<b>4.3</b>	<b>26.0</b>	<b>7.1</b>	<b>0.3</b>	<b>2.0</b>	<b>0.3</b>	

University of Pretoria etd – Adolwa, M

18.00	8.29	15.71	4.00	12.86	5.43	33.14	2.57	350
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TOTAL PROJECTS DONE 341  
Population Percentage 71.55%

GHANZI DISTRICT COUNCIL PROJECTS

1995-2000

ADVANCE TAKEN (As Percentage of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8			TOTAL NUMBER OF DELAYS
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c	
Frequency of delayed																										
15%	3.0	10.6	6.1	9.1	0.0	7.6	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0	0.0	0.0	10.6	0.0	4.5	9.1	24.2	1.5	0.0	0.0	3.0	66
Sub Total	28.79					7.58				10.61				0.00			10.61		13.64		25.76		3.03			
10%	6.25	12.5	6.25	12.5	0	12.5	0	0	0	0	6.25	0	0	0	0	0	6.25	0	0	0	25	6.25	0	6.25	0	16
Sub Total	37.5					12.5				6.25				0			6.25		0		31.25		6.25			
5%	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	25	4
Sub Total	0					25				0				0			0		50		0		25			
0%	16.7	22.2	5.6	0.0	0.0	0.0	0.0	5.6	0.0	0.0	11.1	0.0	5.6	5.6	0.0	0.0	0.0	0.0	5.6	0.0	2.8	0.0	0.0	0.0	5.6	18
Sub Total	44.44					5.56				16.67				5.56			0.00		5.56		16.67		5.56			
<b>Total</b>	<b>5.8</b>	<b>12.5</b>	<b>5.8</b>	<b>7.7</b>	<b>0.0</b>	<b>7.7</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>9.6</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>7.7</b>	<b>0.0</b>	<b>3.8</b>	<b>7.7</b>	<b>22.1</b>	<b>1.9</b>	<b>0.0</b>	<b>1.0</b>	<b>3.8</b>	<b>104</b>
	<b>31.73</b>					<b>8.65</b>				<b>10.58</b>				<b>0.96</b>			<b>7.69</b>		<b>11.54</b>		<b>24.04</b>		<b>4.81</b>			

CENTRAL AND GHANZI DISTRICT COUNCIL PROJECTS

1995-2000

ADVANCE TAKEN (As Percentage of Contract Sum)	R1					R2				R3				R4			R5		R6		R7		R8			TOTAL DELAYS	
	1a	1b	1c	1d	1e	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	6a	6b	7a	7b	8a	8b	8c		
Frequency of delays	15%	1.9	7.2	4.6	6.5	0.0	7.6	0.4	0.4	0.4	1.5	11.8	0.8	1.5	3.0	0.0	0.0	12.5	0.0	2.7	6.1	23.2	5.7	0.4	1.1	0.8	263
Sub Total		20.15					8.75				15.59				3.04			12.55		8.75		28.90		2.28			
Sub Total	10%	2.7	3.6	1.8	5.5	0.0	7.3	0.0	0.0	0.9	0.9	12.7	0.0	0.0	2.7	0.9	0.0	10.0	0.0	0.0	4.5	31.8	10.0	0.0	3.6	0.9	110
Sub Total		13.64					8.18				13.64				3.64			10.00		4.55		41.82		4.55			
Sub Total	5%	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	25	4	
Sub Total		0					25				0				0			0		50		0		25			
Sub Total	0%	9.1	19.5	6.5	1.3	0.0	5.2	0.0	1.3	0.0	1.3	10.4	0.0	1.3	3.9	0.0	0.0	11.7	0.0	1.3	0.0	23.4	1.3	0.0	1.3	1.3	77
Sub Total		36.36					6.49				12.99				3.90			11.69		1.30		24.68		2.60			
<b>Total</b>		<b>3.3</b>	<b>8.4</b>	<b>4.2</b>	<b>5.3</b>	<b>0.0</b>	<b>7.3</b>	<b>0.2</b>	<b>0.4</b>	<b>0.4</b>	<b>1.3</b>	<b>11.7</b>	<b>0.4</b>	<b>1.1</b>	<b>3.1</b>	<b>0.2</b>	<b>0.0</b>	<b>11.7</b>	<b>0.0</b>	<b>1.8</b>	<b>5.1</b>	<b>25.1</b>	<b>5.9</b>	<b>0.2</b>	<b>1.8</b>	<b>1.1</b>	<b>454</b>
		<b>21.15</b>					<b>8.37</b>				<b>14.54</b>				<b>3.30</b>			<b>11.67</b>		<b>6.83</b>		<b>31.06</b>		<b>3.08</b>			

**Legend**

**CONTRACTORS' REASONS FOR FAILURE**

- R1 DELAY BY CLIENT
  - 1a No site
  - 1b Council Secretary's Instructions and Variation Orders
  - 1c Delayed information e.g. unfinished drawings, specifications etc
  - 1d Delayed inspections and payments
  - 1e Underpayment
  
- R2 SPECIFIC SITE CONDITIONS
  - 2a Excavation in rock
  - 2b Excavation in deep sand
  - 2c Site encumbrances e.g. utility services to be relocated etc
  - 2d High water table
  
- R3 LOGISTICAL PROBLEMS
  - 3a Poor roads
  - 3b Lack of water
  - 3c Lack of services
  
- R4 CONTRACTOR'S PLANT
  - 4a Lack of transport
  - 4b Lack of equipment
  - 4c Other
  
- R5 WEATHER
  - 5a Rain
  - 5b Other
  
- R6 DEFAULT OR BREACH BY CONTRACTOR
  - 6a Reworks and condemned works
  - 6b Mismanagement
  
- R7 SUPPLIERS AND SUBCONTRACTORS
  - 7a Delay by material suppliers
  - 7b Delay by subcontractors
  
- R8 ACTS OF GOD/FORCE MAJEURE
  - 8a Strike
  - 8b Personal tragedy
  - 8c Other