

**ANALYSIS OF NAMDEB'S TURNAROUND STRATEGY TO IMPROVE
ITS FINANCIAL PERFORMANCE IN VIEW OF DECLINING CARATS
PROFILE**

**A RESEARCH REPORT SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF
SCIENCE: ACCOUNTING AND FINANCE**

**OF
THE UNIVERSITY OF NAMIBIA,**

**BY
LORNA PEYAVALI MBWALE**

9642242

OCTOBER 2010



Supervisor: Professor. Kashiram R. Sharma

Co-supervisor: Dr. Udai L. Paliwal

**NAMDEB'S TURNAROUND STRATEGY
TO IMPROVE ITS FINANCIAL PERFORMANCE
IN VIEW OF DECLINING CARATS PROFILE**

DECLARATION

I Lorna Peyavali Mbwale, declare hereby that this study is a true reflection of my own research, and that this work, or part thereof has not been submitted for a degree in any other institution of higher education. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

No part of this thesis may be reproduced, stored in any retrieval system, or transmitted in any form, or by means (e.g. electronic, mechanical, photocopying, recording or otherwise) without the prior permission of the author, or The University of Namibia in that behalf.

I Lorna Peyavali Mbwale, grant The University of Namibia the right to reproduce this thesis in whole or in part, in any manner or format, which The University of Namibia may deem fit, for any person or institution requiring it for study and research, providing that The University of Namibia shall waive this right if the whole thesis has been or is being published in a manner satisfactory to the University.

]

Date -----

Lorna Peyavali Mbwale,

Dedication

This work is dedicated to my husband Jerry and all our dearest children for standing in for my role as wife, student and working mother.

Abstract

This study reviews the effectiveness of the analysis of Namdeb's turnaround strategy to improve its financial performance in view of declining carats profile. The study was triggered by the continuous uncertainty in land operations, which is affecting Namdeb's financial profits. The study determines the extent to which the company's financial performance is attributed to its turnaround strategy, identify factors that are crucial to the company and suggest ways to improve the company's overall financial performance.

The study uses the qualitative approach, taking into consideration experience from other mining industries as a frame of reference. The sources of data include grey literature, official documentations, secondary literature, questionnaires and interviews.

The analysis done and conclusions drawn underlines the need to review the current introduced turnaround strategy and adopt strategies that might be useful to improve the financial performance and

extend the life of the mine successfully. A great emphasis need to be drawn on attracting and retaining skilled staff, determine an approach to deal with possible retrenchment, introduce and identify new technological methods. The role of management in the current situation is going to be crucial.

Acknowledgements

My profound gratitude goes to all who supported me morally, financially and intellectually during my years of study. I am grateful to the moral support provided by my friends, parents and our children. My sincere appreciation to the Almighty for giving me and surround me with such wonderful, honest, loyal and trustworthy people whose names I cannot finish mentioning.

I would also like to thank various people who responded to my questionnaires and interviews. However, I remain personally responsible for the errors and failures contained in this study.

Table of Content		Page
Declaration		i
Dedication	ii	
Abstract		iii
Aknowledgements		iv
Table of contents	v	
List of charts, figures and maps		ix
Acronomics	ix	

Chapter 1:	Introduction	
1.1	Background of the problem	1
1.2	Namdeb’s status, changes and turnaround strategy	3
1.3	Global financial crisis and diamond mining and exports	5
1.4	Statement of the research problem	6
1.5	Research objectives	8
1.6	Research questions	8
1.7	Importance of the study	8
1.8	Limitations of the study	9
1.9	Conclusions	10
Chapter 2:	Literature Review	
2.1	Introduction	11
2.2	Issues specific to mining industry	12
2.3	Handling of materials and equipments in mines	14
2.4	Investment in research and development	15
2.5	Consumption of natural capital and sustainable income	16
2.6	Environmental impact of mining	17
2.7	Skills shortage and other challenges in mining industry	18
2.8	Performance measurement with Balance Scorecard	19
2.9	Impact of turnaround strategies on financial performance	23

2.10	Country-specific literature review	27
2.11	Africa including Namibia	30
2.12	Review of cases	32
2.13	Conclusions from survey of literature	37

Chapter 3: Conceptual Framework

3.1	Introduction	40
3.2	Conceptual Model	40
3.3	Terminology Used	41
3.4	Financial Turnaround and Strategies	49
3.5	Conclusions	50

Chapter 4: Research Methodology

4.1	Introduction	51
4.2	Design of research	53
4.3	Population	54
4.4	Sample Design	55
4.5	Sampling Method	55
4.6	Instrument for data collection	56
4.7	Validation of instruments	58
4.8	Field survey and data collection	58
4.9	Data from secondary sources	60
4.10	Data Analysis	61
4.11	Chapter scheme	61

4.12	Conclusions	62
Chapter 5:	Data Analysis and Findings	
5.1.	Introduction	63
5.2	Findings from research	63
5.3	Turnaround Strategy	64
5.4	Balance Scorecard	67
5.5	Implementation of performance measures	71
5.6	Management and Leadership	73
5.7	Technology and Operations	77
5.8	SWOT analysis of Namdeb	78
5.9	Ethical issues	82
5.10	Post research period developments	82
5.11	Overall conclusions	84
Chapter 6:	Conclusions and Recommendations	
6.1	Introduction	86
6.2	Summary of findings	86
6.3	The way ahead	88
6.4	Ability to raise capital funds	89
6.5	Access to skills and Employee value proposition	90
6.6	Sustainable profitability	91
6.7	Management in general	91
6.8	Answers to Research Questions	91
6.9	Recommendations	92
6.10	Contributions of Research	95

6.11	Areas for further research	96
	References	97
	Annexure I	103
	Annexure II	105
	Annexure III	107

List of Charts, graphs and Tables

		Page
Figure 1	Conceptual Model of the Reasearch	41
Figure 2	: Ongoing Business Model to Drive Future	53
Figure 3	: Current performance levels	84

List of Tables

Table 1 :	Summary of Operating Results	82
-----------	------------------------------	----

Acronomics

AIDS = Acquired Immune Deficiency Syndrome

AIM = American Institute of Mining

BSC = Balanced Scorecard

CEO = Chief Executive Officer

CM = Consultant Manager

Cpht = Carats per hundred tons

DBMN = De Beers Marine Namibia

DRC = Democratic Republic of Congo

DTC = Diamond Trading Company

EVA = Economic Value Added

GDP = Gross Domestic Product

GNP = Gross National Product

HIV = Human Immunodeficiency Virus

KPIs = Key Performance Indicators

MSV = Managing Shareholder Value

NDTC = Namibia Diamond Trading Company

NFC = Near Filed Communication

NPV = Net Present Value

OTMC = Oranjemund Town Management Company

RBCT = Richard Bay Coal Terminal

R & D = Research and Development

SACE = South Africa Coal Estate

SDCT = South Dunes Coal Terminal

UK = United Kingdom

USA = United States of America

VBR = Value Based Remuneration

CHAPTER 1

INTRODUCTION

1.1 Background of the Problem

Globally the incidents of decline in natural resources have been increasing, causing organisational decline and turnaround management to be one of the most important topics to be addressed by business education and research in recent years, (Witteloostuijn,1998).

Namdeb Diamond Corporation, a partnership between De Beers and the Government of the Republic of Namibia, mines diamonds in the forbidden territory, known as the *Sperregebiet*, a 26,000 kilometres strip of dessert along the Namibian Atlantic Ocean shore. It is a well documented fact that diamonds have always been a sought after commodity. Those found on the west coast of Namibia are amongst the richest (in terms of quality and value) in the world. They have a high proportion of top quality gem stones (Corbett, 1989).

The diamond mining industry is like no other because the product is unique –no two diamonds are ever identical. The industry comprises a chain of independent activities, which span the globe: exploration, mining, sorting and marketing, cutting and polishing, jewellery design and manufacture (De Beers, 1998). To maintain a leading position in what has become a highly competitive business and to be ready to meet increasing demand for diamonds, mining industries are continuously searching for new diamond deposits. Using technology, the mining industry is ever becoming challenging and because of the

depletion of the scarce natural resources, more experienced staff and advanced technology remain an additional challenge to the geological surveys and explorations. Performance decline therefore, is an ever present danger and integral part of organisational reality (Jeyavelu, 2007).

The magnitude of the world's mineral consumption has increased sharply, and there are no indications that growth is likely to subside in the near future. Currently, new discoveries and technology add to the reserves of various mineral commodities at a rate that has exceeded depletion. As a result, life expectancies have remained nearly constant. However, it is questionable whether this condition is sustainable in the future, (Adachi and Nishiyama, 1995).

Namdeb's contribution to the Namibian economy through revenues generated and partnerships forged has meant that it is the country's largest contributor to gross domestic products (GDP). Diamonds remain the important generator of export earnings, accounting for more than 40% of export revenue, 7% of government revenue and more than 10% of GDP in 1989 (Corbett,1989). However, this trend has been declining due to depletion of land carat profile over the subsequent years.

Adachi and Nishiyama (1995) indicated that the potential of recovering resources for the 35 minerals in the earth's crust was estimated on the basis of the relationship between crustal abundance and the reserve of currently recoverable minerals. From the economic perspective, the price of diamond is among the top. New mining technologies and new processing methods have been developed during the 1990s as a response to high exploration demands.

Some diamond deposits in Namibia are concentrated in the north-eastern and eastern parts. Most are mined from secondary deposits located along the Orange River, and in the southern portion of the coast. Such diamonds are exceptionally of high quality, with about 90% being of gem quality. At an estimated resource potential of over 1.5bn carats, Namibia has the richest marine diamond deposits in the world (Even-Zohar, 2007).

Diamonds are Namibia's single biggest export product and the backbone of the economy, acting as a catalyst for the provision and extension of infrastructure such as roads, hospitals, houses and schools. Through its commitment to working in tandem with Government's developmental policies, Namdeb's social upliftment strategy is aimed at improving the living standard of Namibian people. This has contributed to the development of impressive corporate social investment activities over the past 25 years.

1.2 Namdeb's status, changes and turnaround strategy

Namdeb's current ore bodies consist of four principal diamond sources. These are the recovery of diamonds inland, along the shores of the Atlantic Ocean and beneath its waves; and recoveries from the deep waters (which will be the main source of future production increases) being operated by De Beers Marine Namibia, a contractor to Namdeb in its deep water lease areas. The achievements are of substantial high standards and the increase of diamonds in the area of the Namibian seabed, and efficiency improvements are continuing (Mbako, 1999).

In early March 2008, Namibia's GDP growth was expected to accelerate to 4.7% up from 4% in 2007, as a result of high metal commodity prices. When mining natural resource products such as diamonds, gold, uranium, copper or coal, the inventory of that resource diminishes with time and Namdeb is no exception. The exclusive class of alluvial deposit that has been mined for decades is depleting.

Namdeb has developed a turnaround financial strategy to counteract the effects of the declining carats profile on its profitability, sustainability and economic viability. The strategy is developed to *extend the life of the mine beyond its current lifespan of 2010*. To evaluate the present stage of the company, *new prospects and discoveries have to be identified* in order to sustain the financial profitability of operations and company administration. In its operations, the mine engineers and geologists are using the strategy of *pushing back the sea to expand its land based mining activities as well as by introducing high technological equipments to mine alongside the Atlantic Ocean*. In addition, there are many areas of the deposit that are yet to be explored and mined. Some of the landscapes present major challenges in their uniqueness, requiring high technologies and rare expertise for mining production to take place.

The year 2002 was very phenomenal for Namdeb's financial performance. The financial performance and the company's total revenue increased from N\$3.4 billion to N\$4.1 billion. However, a decrease in revenue was recorded in 2007, from N\$5,366 million in 2006 to N\$4,582 million in 2007 (*Namdeb Annual Report, 2007*). According to the Namdeb's 2007 report, 1,041mn carats had been budgeted for from the company's land operation, but the actual production came only to 969,000 carats. Decline was due to *lower productivity in mining areas, a fire at one of its plants during 2007, increases in costs,*

especially in fuel, incidents of flooding and rough sea conditions. The exceptional financial performance of Namdeb for the periods 2000-2002 was due more to the depreciation in the value of the Namibian dollar against major foreign currencies, than to any other factor. Namdeb reported that it had achieved its production goal of 2mn carats in 2006. Its annual output is generally between 1.6 – 1.7mn carats per year. Future output rates are likely to depend on offshore mining operations. The company is investing US\$119.95 m (NAD900 million) in new technological projects such as the marine dredging, replacement of earthmoving equipment, prospecting and research.

The current declining carat profile and diminishing resources is an indication that the land-based operations are becoming more and more unprofitable and unsustainable for the years to come (Namdeb *Strategic Plan, 2006*). In the past few years, the reality of fast depleting ore reserves led to a review of how to find a cost-effective method of mining the remaining low-grade deposits (Mbako, 1999).

1.3 Global financial crisis and diamond mining and exports

The 2008 global financial crisis and nose-diving commodity prices have dealt a major blow to mining-based African economies, where a recent boom is set to wither, setting back the fight against poverty. Australia's DiamondEx directors believe that the average price of US\$20 per carat received for the 10 612 carats sold on 30 October 2008, was an aberration, reflecting an abnormally depressed market (Lussier, 2008). Leading up to the 30 October 2008, diamond sale valued the parcel of 10 612 carats at US\$48 average. However, DiamondEx remains firmly of the view that, in the medium to long term, the supply deficit in world diamond production that currently exists and is expected to continue to increase over

the next decade will ensure that the market for rough and polished diamonds is strong. In short term, with the global credit crisis, prices will remain uncertain.

Analysts say that the economic downturn and its impact on commodity prices pose a possible disaster for resource-rich countries that have failed to diversify beyond the mineral wealth that fills government coffers, (Myburgh, 2008). Africa holds 30% of the world's mineral resources including 40% of gold, 60% of cobalt, 90% of platinum, 72% of chromium and approximately 65% of the world diamonds. Mining companies are scaling back operations resulting in retrenchments across Southern Africa, while others are implementing emergency measures such as extended periods of leave to prevent further job loss (Myburgh, 2008).

Diamond mining giant De Beers has implemented an extended leave period for workers as a result of the economic downturn, which has seen diamond prices fall 30% since October 2008.

This has a significant slowdown on production, export receipts, government revenue, and is placing a strain on the fiscal side of the economies. The mining companies are really failing to source working capital; their shareholders are apprehensive about investment in mining explorations (Blandy, 2008).

1.4 Statement of the research problem

The stated declining carats profile and diminishing resources at Namdeb indicate that the land-based operations would become unprofitable and therefore, unsustainable beyond 2010. Namdeb has put in place a turnaround strategy meant to ensure that it remains profitable, sustainable and economically viable. This, in return contributed to a high level of uncertainty among its workers resulting from

challenges associated with diminishing onshore ore reserves (e.g. retrenchments and voluntary separations). The fact that land-based operations are depleting is a concern for Namdeb, which resulted in the company developing a turnaround strategy that can make it profitable, sustainable and economically viable. It is against this background that this study seeks **‘to gain understanding of how and whether Namdeb’s turnaround strategy can allow it to continue to be profitable, sustainable and economically viable in future given the current challenges’.**

The turnaround strategy is meant to improve financial performance. It is aimed at improving productivity of the existing operations, the confidence levels of the total workforce and resources that could potentially be mined and ensuring that the full potential of land-based operations is achieved. Empirical studies have indicated that a company’s future can be improved by adopting a turnaround strategy (Marvasti, 2000). However, it has been difficult to establish whether a turnaround strategy can be successful in the case of diminishing diamond deposits, as current literature reveals little information regarding the successful turnaround strategies in the case of diminishing mining related deposits.

This study, therefore, also seeks to evaluate Namdeb’s turnaround strategy in relation to its past and proposed future performances using a performance measurement tool called the “Balanced Scorecard Model” (Kaplan and Atkinson, 1998). The controversial aspects of the strategy that the study seeks to analyze, is to determine whether the turnaround strategy would be sustained in the case of a diminishing natural resource such as diamonds.

The study investigates the relationship between Namdeb's performance and its turnaround strategy in the light of the fast declining carat profile. The study was initiated to explore the issues that can influence both the approach to day-to-day business, the influence of productivity on profitability and decisions that may impact the long-term future and sustainability of the organization.

1.5 Research Objectives

The specific research objectives of this study are:

- 1) To determine the extent to which Namdeb's financial performance is attributed to its turnaround strategy.
- 2) To identify the strategic factors crucial to Namdeb's financial performance.
- 3) To explore the alternatives available to Namdeb under the existing situation.
- 4) To suggest a strategy for improving Namdeb's financial performance.

1.6 Research Questions

Namdeb has developed a turnaround financial and operational strategy to cushion the possible adverse effects of declining carats on its profitability, sustainability and economic viability. Based on past performance and future projections, the study aims to address the following questions:

- 1) What is the impact of Namdeb's turnaround strategy on its financial performance?
- 2) Has the strategy ensured profitability, sustainability and economic viability given the declining diamond deposits?

3) What measures are needed to improve Namdeb's financial performance?

1.7 Importance of the Study

The study intends to use various evaluation techniques including the 'Balanced Scorecard' to determine the success of Namdeb's turnaround strategy. It is envisaged that the study will indirectly contribute to the envisaged smooth phasing out of the land-based operations at Namdeb and provide empirical evidence to Namdeb's management and stakeholders that can be used to ensure the company's profitability, sustainability and economic viability. Evaluation of the turnaround strategy is extremely important because inadequate evaluation could result in failure, which could have dire consequences for Namdeb and the country as a whole.

The study is important because it will also identify the factors that are crucial to Namdeb's financial success, as it will determine whether or not the strategy has been successful. It will also highlight the generic nature and importance of a turnaround strategy for a company that owes its existence on diminishing natural resources.

1.8 Limitations of the study

A major limitation faced by the researcher in the present study has been limited information pertaining to information of confidential nature for the study. The fact that the researcher is a member of the Board of Namdeb didn't totally diminish this limitation. Rather it introduced the possibility of bias, which the researcher was sensitive to during the course of the research. Ethical issues in the use of any such

information were also adequately considered and full care was taken to ensure that only publically available information was used for research. Further due to remoteness and severe restrictions on access to the company's operational areas at Oranjemund, difficulties were encountered in reaching a significant number of the employees. Communication was therefore, mostly carried out through telephone conversations and e-mails. These factors led to difficulties in capturing personal views of the people on various issues relevant to present research.

Extreme care however, was taken to avoid measurement error, which is "one of the most significant sources of error in survey research" (Grover, 2002:4). Measurement error is caused by poorly worded questions, length of the instrument, bias, etc. One of the ways to reduce the measurement error included the use of multi-item measures that can average out individual items, make better distinctions and have higher reliability (Grover, 2002).

Considering the above aspect a pilot study was undertaken for validation of research instruments and survey methodology. Before the final form of questionnaire was administered to the respondents in this study, a pilot study was conducted to determine whether the items would in fact yield the kind of information needed to answer the research questions, and if there were any ambiguities or difficulties in reaching the respondents. The knowledge gained was used to design appropriate approach for survey and data collection.

In recent years, the economic, social and environmental dimensions of diamond mining have been the subject of wide-ranging consultations, critical comments, research and analysis, most notably the future

sustainability of the ore body. However, much of the critical commentaries about diamond mining sector have focused on problems rather than solutions. This limited their practical use in designing a turnaround strategy or filling gaps in knowledge.

1.9 Conclusions

The introductory chapter started with the background of research mentioning that like growth decline is natural in the life of a business enterprise. Namdeb, a premier diamond company of Namibia passed through a similar phase during this decade due particularly to declining carats profile. The global financial slowdown also added to their difficulties. The company had a turnaround strategy in place to meet the situation and went ahead with it. It used Balanced Scorecard to continuously monitor the internal and external developments. In this background the objectives and research questions of the present research have been set. The main objective of the research is to analyse the situation, find alternative and suggest possible solutions to the problems faced by the company. Review of literature has been undertaken in the next chapter to use the findings of other researches and develop a basis for the present research.

CHAPTER 2:

LITERATURE REVIEW

2.1 Introduction

The literature on firms' decline and turnaround management seeks to address several questions such as why firms fall into decline, (Hambrick and D'Aveni, 1988; Hanna and Freeman, 1977; Singh, 1986), the social, psychological, economic, and political consequences of firm's decline (Harris and Sutton, 1986) and how firms respond to a decline, etc. The problem of decline, though widespread to all industries, sectors of economy and in all parts of the world, has been viewed and tackled differently in different industries, and in different countries. There have been varied responses to the problem.

The literature available on the subject was reviewed to draw guidance for the study, to find answers to research questions and to conceptualize and organise ideas to suggest an appropriate strategy to meet the challenge. Besides the conceptual framework the literature review has been undertaken first for different issues and dimensions of the problem, then country specific problems have been examined and finally cases of two mining companies that faced similar turnaround situations have been reviewed.

2.2 Issues specific to mining industry

Apart from the issues common to all industries mining has certain unique features. Literature on these issues is reviewed here.

Mining and diminishing returns: A substantial amount of economic literature has been devoted to mining since Adam Smith's Digression on Silver (Marshall, 1920). The literature has reviewed many controversies on various aspects of mining and economic concepts. One such controversy is the problem of diminishing returns in mining. It is argued that diminishing returns is applicable to mining. This means that the marginal yields from mining diminish as mines of poorer quality are brought into production.

Marshall (1920) stated that the performance of a mine has to be distinguished between the returns achieved from increasing the current rate of recovery and the yields, which are achieved in successive time periods from the mine. The former, he felt, cause no increase in the expenses of recovery other than those which would occur even if recovery were carried out at a slower rate by a smaller amount of capital and labour. In other words, Marshall believed that costs of production in mining are entirely neutral with respect to the rate of recovery. Large capital and labour only expedite the process of recovery; the total returns to the factors are achieved sooner than it would be with lower amounts at a lower level of production, but the return per unit of factor is the same regardless of the rate at which recovery takes place or the number of factors employed. As the minerals diminish, it becomes complicated and difficult to recover them. Under such conditions the yields of the mine also diminish.

Mining and sustainable development: In the first fifty years of the twentieth century, the total production of minerals in the world was far greater than the total of the materials produced during the previous history. While implementing the concept of sustainable resource management, part of the challenge in exploration and geological research could be ascribed to technological resources. Thus, in the meantime, both the satisfaction of demand for mineral resources and the impact on the environment of extracting minerals are of increasing public concern. From this point of view, extracting

activity raises concerns such as, qualitative changes in the environment, and depletion of non-renewable mineral resources (Eisenhardt, 1989; Youngquist, 1997).

Gasiuniene (2001) emphasises that environmental impact may include the effect on stability of the underground, creation of artificial cavities in the subsurface, destruction of natural habitats, as well as non-attractive visual impact on the landscape in the vicinity. The scale of environmental changes caused by extraction could bear consequences for the future generations (Christensen, 1997; Pfeffer and Salancik, 1974).

Further, as for depletion of mineral resources, it should be noted that pessimistic forecasts have not proved to be true. The point is that in economics the notion 'stock of mineral resources' is used as a geological-economical category closely with scientific and technological advance (Gasuniene, 2001). In addition, modern economics and environmental policy accept the idea that the earth does not just belong to the present generation, and the minerals should also be fostered for future generations too. This means that issue of achieving sustainability should be dealt with in the extraction of mineral resources.

2.3 Handling of materials and equipments in mines

Researches indicate that the biggest cost in mining operation today is the logistics bill based on getting the right goods at the right time to the right place. More attention and detail should be applied, but it rarely is. According to various researches, most mining companies will spend a fortune on recruiting highly qualified personnel in all other operations, however, when it comes to materials handling and logistics, often someone who lacks professionalism is placed in charge, which ultimately proved costly, (Bruton, Ahlstrom and Wan, 2001).

Most mining companies still do not recognise the importance of implementing the correct methods of materials handling in an open and cost-effective manner, (Stone, 2001). While mines have managed to bridge the divide between the high number of employees and mechanisation, the industry is a conservative one and for changes to take place it needs to undergo a culture shock. The number of mines has re-engineered their logistical processes they have started and will probably be fully developed within the next ten years. Mines that implemented the strategies earlier will however, have the advantage, (Maheshwari and Ahlstrom, 2004).

The importance of materials handling does not only lie with cost savings, but it is also imperative to realize that equipments play a vital role in the mine and any lack thereof can cause problems from slower production, delayed discoveries, to low employee morale. Maheshwari and Ahlstrom (2004) explained that mining is all about Dollar per gram, thus, margins are very much smaller than what they used to be due to high employee-costs as people who run mines today are qualified accountants, and not engineers, because the bottom line is crucial.

2.4 Investment in research and development

Despite the downturn in the economy, R&D dollars continue to be invested in technologies that will take drilling and production. According to the report by Infield Systems Inc. dropping oil prices are likely to bring down the overall number of projects per annum and reduce capital expenditure levels, but unless the oil prices fall dramatically, planned projects will not be hugely impacted, (Maksoud, 2008). McDonald (1994) indicated that the underground mining precious stones reserves are getting thinner, deeper, and

more difficult to mine. However, suppliers to the industry continue to push the technological progress to improve safety, increase productivity, and reduce costs. Further analysis indicated that companies that invested in R&D when the prospects for applying new advances were scarce, finally got the advantages and benefits they have been waiting for to show what their innovative solutions could achieve.

The world diamond market is facing declining production and in spite of a strong increase in worldwide diamond exploration expenditure and activity, new projects, which could lead to significant new production capacity, are in short supply (Bristow, 2007)."

2.5 Consumption of natural capital and sustainable income

Hicks' (1946) definition of sustainable income is understood as the level of consumption that can be sustained indefinitely without diminishing the asset stock. This in return, does not necessarily mean that the assets are maintained constant, but rather their capacity to generate the same stream of income in the future remains intact. The research furthered that the technological progress and the degree of substitution between natural and other assets (manufactured and human capital) are critical assumptions in support of the concept of sustainable income. Strong sustainability can only be maintained if natural as well as human-made capital is kept intact, because they are complements, (Daly, 1996). Unlike the case of renewable resources, where optimal resources programs can be designed for sustainable rates of harvesting, the same programs cannot be implemented in case of the decline with extraction of non-renewable resources in the absence of new discoveries, (Blignaut and Hassan, 2002). Consequently, the capacity to generate the same stream of income and employment for the future is reduced with depletion. Thus, the net implies from the sale of exhaustible assets contain an element of

capital consumption that needs to be set aside or reinvested to compensate for the depletion in the stock of the asset, (El Serafy, 1989; Hartwick, 1990).

Mining has always been the important economic contributor in Southern Africa. Despite its importance, (Daly, 2000), the contribution of mining to national income and employment followed the general trend of decline in primary sector activities observed worldwide. The contribution of mining to GDP fell from 13.2% in 1970 to 6.5% by 1998. Similarly the contribution of mining to employment declined from 14.2% of employment (Blignaut and Hassan, 2002).

2.6 Environmental impact of mining

The process of mineral resources management deals with ways of managing the environmental impact of mining and related operations, through an understanding of the processes that cause environmental degradation, and protecting mineral exploitation. By innovative use of technology, computer aided design this could enhance the mine productivity and reduce energy consumption, (Bruton and Rubanik,1997).

There has been much controversy whether the concept of sustainable development is at all applicable to mining sector, which is based on the production of non-renewable resources from finite deposits. Mining takes out the ore, but leaves nothing in its place, in other words, mining is inherently unsustainable, (Bruton and Rubanik, 1997). Early research indicated that community accept mining for social and economic development. Experiences showed that once the mine is exhausted, the mine-dependent

community is left environmental problems, (Aswathanarayana, 2002). It is further stated that, in the past, companies simply closed the mine and walked out. However, nowadays the mining companies do indeed have a responsibility for the well being of the community once the mining ceases. A sensible approach would be for the mining company in cooperation with the government and community concerned, to plan for a long-term development of the area to enable the sustainable development to continue after the depletion of mineral resources.

The developing countries think that sustainable development as defined by the Brundland Commission seems to imply a low rate of economic growth that impedes the development of energy and mineral resources. According to Bruton and Rubanik (1997), they regard mining as the engine of development to promote technological and economical development of the country. Since mining accounts for 80 – 90% of GNP in some countries in Africa, a country such as Botswana with a population of over a million, earns almost US\$ 3000 per capita per annum from the mining sector, principally diamonds. The mineral resources that mining are exploiting are non-renewable. Sustainable mining has thus to be understood to mean that the mining has to be carried in a manner that is ecologically sustainable, (Aswathanarayana, 2002).

2.7 Skills shortage and other challenges in mining industry

The severe shortage of skilled mine workers will persist for several years to come (Smuth,2007), increasing costs, delaying new mine projects through delayed explorations, and crimping supply of mineral resources. Mining companies are experiencing increased difficulty to attract qualified workers and hold on to those they have amid fierce competition for geologists, drillers, and mine managers (Blechner and Nail, 2000). The South African mining report (Smuth,2007) indicated that most companies

are forced to lure retired mining workers back into service to help ease shortages, which has not been successful.

Mergers and acquisitions are flying unabated, and it is not just the big companies taking over the small ones, but big companies are also implementing strategies to sustain their operations through mergers and acquisitions. Some of the activities are done by transforming themselves from explorer to intermediate producers and other projects for sustainability and financial performances of the entities (Smuth, 2007).

2.8 Performance measurement with Balanced Scorecard

Kaplan and Norton (1992), after a year- long research project on performance measurement, came to the conclusion that traditional performance measures, having a financial bias and being centred on issues of control, ignored the key issue of linking operational performance to strategic objectives and communicating these objectives and performance results to all levels of the organization. Realizing that no single measure can provide a clear indication of performance against targets or focus attention on all the critical areas of business, they proposed the concept of Balanced Scorecard as a more sophisticated approach for meeting these shortcomings.

Michael Kantor, (1997) wrote “Modern business depends upon measurement and analysis of performance.” Measurements must derive from the company’s strategy and provide critical data and information about key processes, outputs, and results. Analysis entails using data to determine trends,

projections and cause and effect that might not be evident without analysis. Data and analysis support a variety of company purposes, such as planning, reviewing company service performance, improving operations, and comparing company performance with competitors or with best practices benchmarks.

A comprehensive set of measures or indicators tied to customer and/or company performance requirements represent a clear basis for aligning all activities with the company's goals. Through the analysis of data from tracking processes, the measures or indicators themselves may be evaluated and changed to better support such goals (Ross, Westerfield, and Jordan, 2003).

Kaplan and Norton (1992) are of the opinion that the Balanced Scorecard has its greatest impact when deployed to drive organizational change. In a rapidly changing environment, the Balanced Scorecard can be used to identify and communicate key factors that drive future values that can give better indicators of where an organization is going. If companies are to survive and prosper in a competitive environment, they must use measurement and management systems derived from their strategies and capabilities.

By developing a set of measures that give managers a fast and comprehensive view of the organization (Kaplan and Norton, 1993), the Balanced Scorecard method strives to focus the whole organization on what must be done to create breakthrough performance. The Scorecard takes the company's vision, translates each key statement into measurable steps and then presents information so that the critical success factors can be evaluated and compared.

By measuring organizational performance across four balanced perspectives, the Balanced Scorecard complements traditional financial indicators with measures for customers, internal processes, and innovation and improvement activities (Kaplan and Norton 1996) – which in turn must all be linked to the organization's strategic vision.

The grouping of performance measures in general categories (perspectives) is seen to aid in the gathering and selection of appropriate performance measures for the enterprise. Four general perspectives have been proposed by the Balanced Scorecard as: Financial perspective; Customer perspective; Internal process perspective; and Learning and growth perspective, all of which are crucial and imperative to this study.

The *financial perspective* examines whether the company's implementation and execution of its strategy and long-term decisions are contributing to the bottom-line improvement of the company. It represents the long-term strategic objective of the organization and thus, it incorporates the tangible outcomes of the strategy in traditional financial terms. One of the most common financial measures that are incorporated in the financial perspective are economic value added (EVA).

The *customer perspective* defines the value proposition that the organization will apply in order to satisfy customers and thus generate more sales from the most desired (i.e. the most profitable) customer groups. The measures that are selected for the customer perspective should measure both the value that is delivered to the customer (value position), which may involve time, quality, performance and

service and cost and the outcomes that come as a result of this value proposition (e.g., customer satisfaction, market share), (Ross, Westerfield and Jordan,2003).

The *internal process perspective* is concerned with the processes that create and deliver the customer value proposition. It focuses on all the activities and key processes required in order for the company to excel at providing the value expected by the customers both productively and efficiently. These can include both short-term and long-term objectives as well as incorporating innovative process development in order to stimulate improvement (Ross, Westerfield and Jordan, 2003). In order to identify the measures that correspond to the internal process perspective, Kaplan and Norton propose using certain clusters that group similar value creating processes in an organization. The clusters for the internal process perspective are operations management (by improving asset utilization, supply chain management, etc.), customer management (by expanding and deepening relations), innovation (by new products and services) and regulatory and social responsibilities (by establishing good relations with the external stakeholders).

The *learning and growth perspective* is the foundation of any strategy and focuses on the intangible assets of an organization, mainly on the internal skills and capabilities that are required to support the value-creating internal processes. The learning and growth perspective is concerned with the jobs (human capital), the systems (information capital), and the climate (organization capital) of the enterprise (Ross, Westerfield, and Jordan, 2003). These three factors relate to what Kaplan and Norton (1996) claim is the infrastructure that is needed in order to enable ambitious objectives in the other three perspectives to be achieved. This of course will be in the long term, since an improvement in the

learning and growth perspective will require certain expenditures that may decrease short-term financial results, whilst contributing to long-term success.

2.9 Impact of turnaround strategies on financial performance

Sometimes due to internal factors such as incompetent management or external factors such as recession, a company falls short of its target performances. Sustainable recovery needs to be implemented to achieve durable increase for growth and profitability (Heany, 1989). At this stage the researcher would like to look at the turnaround strategies on financial performance implemented by companies such as Malaysian Marble Company and Starbucks Corporation.

Starbucks Corporation: Starbucks Corporation is known for its world class premium coffee, whereby it has established a strong brand name targeting trendy customers using information technology. During the 2008 financial year, the company was highly rated, but it also experienced unfavourable financial results. Revenue grew by 11%, but stock price decreased by almost 50%, which in return indicated a negative company performance. Its revenue declined from \$10.4 million in 2008 to \$9.8 million in 2009. This was attributed to the company's move to open too many stores too quickly. While the decline in revenue was not obvious, the decline in the stock price by 50% from \$110.97 in 2007 to \$63.36 in 2008 indicated abnormal company performance (Starbucks Corporation, 2009).

The economic condition experienced during 2008 and 2009 has been referred to as "the worst financial crisis since the Great Depression" by three notable economists – "Nouriel Roubini, Professor of Economics and International Business at New York University, Kenneth Rogoff, Professor of Economics and Public Policy at Harvard University, and Nariman Behravesh, Chief Economist and Executive Vice President for IHS Global Insight (Starbucks Corporation 2009). It is a known fact that during recession,

people become price sensitive and exercised high cutting down spending on premium products regarded luxury. Starbucks Corporation incurred high expansion costs and it also lost its unique atmosphere of “high-end”. It continued to seek for operational excellence and focused on customer intimacy using digital media. The company relied heavily on IT to implement its turnaround strategy.

The technology called Near-Field Communication (NFC), using contactless credit and debit cards was not readily available to cater for the company needs, as the technology was not widely adopted in the United States. The technology required significant investment and cooperation among device manufactures, network providers, and financial companies. Instead of waiting for the NFC activation, the company introduced a mobile payment system called “Starbucks Card Mobile”, adopted from another advanced company called mFoundry Inc.(Starbucks Corporation, 11,p1). By September 2009, the company had tested the introduced technology at its 16 locations. In March 2010, Starbucks had deployed the mobile payment system over 1000 locations. While the company simplified the payment by customers, the mobile payment system also assisted the company to obtain the customers’ buying behaviours through data mining. This in return provided information on what products to promote as well as which new products to introduce.

The Malaysian Marble Sdn. Bhd. The Malaysian Marble Sdn. Bhd.was established to quarry and process marble from the limestone quarries. When the company started their commercial process in 1983, the company failed to achieve its financial results. The company experienced losses during the first year and subsequent years. By 1986, the company was almost auctioned for a price of \$5 million. Turnaround strategy was proposed to bring in Consultant Managers (CM) to assist the ailing company in 1987 (Bibeault 1982).

According to (Comerford & Callaghan 1985) certain factors (internal and external) examined by CM indicated the problematic areas such as management, production and marketing.

(a) Management –

(i) Research indicated clear lack of competent leadership. The inability of top management to provide proper sense of direction or to verbalise expectations set employees up for failure in performances. It also was evident that lack of communication created a wide gap and tension in the working environment. Weak industrial relations caused low work ethic and slashed confidence among employees.

(ii) The research and investigation of CM also indicated that there was a lot of political influence in its recruitment and selection process. As such many employees were not competent with the nature of the job offered. There was also an acute shortage of competent technical manpower.

(iii) The performance appraisal was not clear. The appraisal was very blurred and subjective in nature, as measurement was not objective as there were issues of bias and favouritism associated with the appraisal system.

(b) Production

(i) Most of the machines acquired were not suitable for quarry production. Some were found to be obsolete and frequently down due to poor maintenance and handling. As a result, production was readily disrupted by the unsuitable machines. The volume produced did not meet the volume required to break-even the operational costs of the quarry.

(ii) Lack of technical expertise affected the types of marbles contained in the quarries. Therefore, there was high rejection rate because of poor surveying and prospecting.

(c) Marketing

The company failed to capture the major part of the market although the marble industry had good potentials. The management of the company lacked such knowledge, which led to financial disaster (Johari and Daud, 1992).

(d) Finance

Besides the starting capital of \$16 million, the company had additional loans to assist the high operation costs, which were estimated to be lower according to incorrect costing done by management. According to Johari and Daud, (1992) the sales turnover was very high before the CM came in. The CM put off the sales and marketing activities to concentrate on the internal problems. The losses were clear as the company faced acute financial problems. The CM instructed the holding company to inject more capital. By the end of 1991 financial year, the company firstly acquired profits. Current assets were evaluated high than the current liabilities. The loans acquired were cleared and share capital increased subsequently.

(e) Follow up action after induction of Consultant Managers

Consultant Managers took a confident and diagnostic approach to safe turnaround of the company with the hope to bring advantages to the fore. One of the approach was to remove and replace the old

management with experienced executives from CM. Handling of the labour force was also critically considered in the aftermath of the takeover. The newly appointed executives were sent to various units and plants to acquaint themselves on efficient ways to manage the situations. With improved morale and emphasis on training programmes, the production improved. New machines suitable for the situations and advanced in technology were also acquired to suit the requirement of productions operations.

Marketing problems were resolved by providing adequate training to human resources. Emphasis was put on promoting the company itself. Diversification was introduced catering for artistic handicraft creations. In addition, CM took an additional loan to cover defined requirements of the company. Repayment method was carefully discussed with bankers. By 1992 the company was valued at \$60 million, more than 12 times the value it was intended to be auctioned for.

2.10 Country-specific literature review

Exploration is the backbone of mining (Smuth, 2007). In recent years, gold and other precious metals' production have been declining. In some cases, new developments of large, low grade gold, diamonds and /or copper are placed on hold due to lower prices in the market and political conflicts, (Ogden, 2007). It is imperative to identify and compare mining scenarios, which have experienced decline with little hope of discovery of new mineral resources in different countries.

It may be interesting to understand how other countries have applied turnaround methods and strategies in their mining industries to improve financial performance. The literature on mining in Egypt, South Africa and Africa including Namibia is reviewed here.

Egypt:

During the Pharaonic, Roman and British period mining efforts, several areas were hoisted for production in Egypt. Work has been continuing in these areas with initial mapping, rock sampling and trenching to be followed by drilling. Mapping and rock chip sampling is currently under way at various mining prospects. The prospects, though, have been given the highest priority due to the proximity to the imminent mining operations, (African Mining Journal, 2007).

Current interpretations indicate that the drilling in the indicated areas is bigger than expected, and the previous pit optimisations, which had bottomed data rather than a lack of mineralisation or pit economics against the previous indications based on limited drilling at depth, suggested that the porphyry hosting the gold mineralisation was depleting. Geological interpretations were limited in the areas due to lack of drilling as well as lack of modern technological equipment. The discovery led to more drilling being planned in the future, which would clearly lead to further significant resource growth (African Mining Journal, 2007).

South Africa- Kumba Coal Mine:

According to Robinson (2001), Kumba Coal aimed to triple its cash from operations within the timeframe of four years. In order to create value to its shareholders, the company identified what needs to be done to extract maximum value out of the operations and actively pursuing strategic alliances with others in the coal industry.

The memorandum of understanding signed between South Dunes Coal Terminal (SDCT) and the Richards Bay Coal Terminal (RBCT) represents a major breakthrough for Kumba Coal. The company produces the widest range of different coals of all South African coal producers, ranging from blend coking coal to low grade steam coal with high ash and low calorific value, coal for domestic power stations. Being the largest producer of metallurgical coal in South Africa with supplies of about 50% of the total production of metallurgical coal, the company had a chance to improve its financial performance within the stipulated period (Robinson, 2001). Iscor's motivation for acquiring coal assets was to supply its own steel operations, while other markets were developed as a consequence of the need to sell large quantities of non-metallurgical coal produced as a co-product together with the metallurgical coal.

Two factors – resources and demand – determined the percentage of Kumba's coal production, which is sold for metallurgical application. The production of metallurgical coal boosted Kumba's earning as it usually commands a premium over steam coal, while coking coal commands the largest premium, (Robinson, 2001). With the remaining coal reserves available in the Waterberg coalfield, Kumba Coal's Grootegeluk is continuously striving to increase its production and sustain its production, (Robinson, 2001). The unbundling of Iscor provided the freedom to pursue partnership with other companies and organisations.

With the depletion of the underground reserves at Anglo Coal's Landau Colliery in 1990, a new opencast mine – the fourth generation Landau Colliery was developed in the northern South African Coal Estates

(SACE) reserve block on a reserve previously mined by Kromdraai Colliery, using underground board and pillar methods, (Robinson, 2001).

In many parts of the world, any significant mineralisation may already have been investigated or, in some cases, drilled by another company or national organization. However, the results were not followed up for various reasons such as the prevailing metal prices and market at the time, the risk situation in a particular country, expiration of exploration licence or simply a lack of available funds to continue the work, (De Beers, 1998). In some cases, if no previous information on the area is available, the plan can be discounted. Using old analysis data in current modern technology is not always reliable (Bowman, 2008).

2.11 Africa including Namibia

African continent's GDP growth was 5.8%, with the best performers closer to 7% during 2006, as compared to the performance of the Euro zone's GDP growth of 2.7% and USA's GDP growth of 3.2%. Yet, Africa is dismissed as the "hopeless" continent too commonly in Europe and the USA. It is certainly true that Africa faces great challenges of poverty, disease, unemployment, poor education, housing, and in particular, the challenge of HIV/Aids. However, declining mineral resources of the continent need a new approach of added value to minimise the social-economic impact for the future (De Beers, 2006).

It is evident that in the diamond producing arena, Africa has seen truly remarkable changes with presidential elections in the DRC, Sierra Leone and Liberia. All of these translate into new determination by the African diamond producers to ensure their natural resources add maximum value to the benefit of their people with as much added value as is commercially viable (De Beers, 2006).

For the African diamond producing countries, beneficiation is not optional, not a passing whim motivated by political correctness, but an imperative, an absolutely essential and critical part of the macroeconomic policy designed to uplift the economies to provide education, jobs, and healthcare for the people, and to make poverty a history (De Beers,2005).

Mining in Namibia:

Besides diamonds Namibia has rich deposits of other minerals. The report by Mining Magazine (2007), stipulated that Scorpion Zinc was discovered by the 1970s by Erongo Mining & Exploration (an Anglo American subsidiary), but was not mined due to metallurgical complexities associated with the unconventional silicate carbonate ores. The ore itself was considered too small to be economic in the market at the time. The UK's Reunion Mining entered an agreement with Anglo American under which it could earn a 60% interest in the deposit for conducting further drilling, geological work and producing a bankable feasibility study to develop a mine by September 2000. The study was completed by end of 1998 and the metallurgical problems were solved through an innovative hydrometallurgical testing and other equipments designed from Spain and Belgium.

Based on research done (Day,2008) managing the company's data hub, a growing corporate map database that stores and provides not only information, but knowledge embedded in plan maps, dimensional exploration maps, drilling plan maps, and drilling sections for advance analysis, provide a platform for company growth. It is advisable to establish simple corporate guidelines, and common

exploration platforms to support project development. Key to this effectiveness is finding local personnel with experience and knowledge of the country, its administrative policies and local geology (Day, 2008).

Day further stated that collecting the historical data and obtaining the data products from outdated exploration history one will encounter many different formats that are not relevant to current technology and findings. Sharing geological information makes the geologists to see and quickly understand what is being presented and add advice where necessary in terms of appropriate technology to be deployed and comparing past experiences.

2.12 Review of Cases

It is also considered pertinent to review the literature on two cases of mining companies, viz., **Helam diamond mine and Weatherly International** that have passed through turnaround experience.

Case 1- Helam diamond mine

Helam diamond mine has been in continuous production since 1933. Declared depleted by 1985, Crown Diamonds, subsequently sold to Petra Diamonds including Helam, gave the operations a new lease of life (Davidson, 2008).

During the 1950s Mallin Diamonds and Helam Mining consolidated into two major operators. Mallin controlled the first, second and third lease areas, which today comprise John Shaft and Third Lease, while Helam Mining, which was registered in 1953 controlled Edward and Canada shafts. By 1965, Millan ran into financial problems and its assets were bought out by Helam Mining.

The Mallin Diamonds and Helam diamond mine continued to operate as one entity, even though, these were managed by different individuals. Helam was sold again in 1984 and the new owners sold it to a consortium of European investors in 1989. The European investors realised that the mine lacked profitability and latter that year they approached Johan Dippenaar, current CEO of Petra Diamonds, to see how he can turn the mine into a profitable, economic and sustainable company (Davidson, 2008).

There has been a government mining engineer's certificate from the early 1980s stating that Helam mine's resources would be depleted by 1985 and the mine would close early 1986. Dippenaar approached Davidson who had done his honours thesis on the mine and made recommendations in regard to distinguishing between profitable and sub-economic fissures. The two, studied the then current scenario, in order to bring the mine back into production. The company acquired Messina and Star Diamonds and later merged into Petra Diamonds. Helam became part of Crown Group. Petra Diamonds was formed in 1995 around the Angola Alto Cuilo deposits and listed on American Institute of Mining (AIM) in 1997. Crown and Petra merged in 2005.

Dippenaar stated that Halem consists of fissures dated approximately 155-million years ago. The main fissure was economically viable at an *in situ* 294cpht (carats per hundred tons), Changehouse fissure was sub-economic graded at 20 cpht and the Muil fissure was barren. All the fissures were of similar look and experience was required to mine the correct one.

The mine was flooded in 1984, whereby it became a necessity to de-water and re-equip the shafts (Dippennar, 2008). Getting to the bottom of the country rock of the fissure consists 245m of Hekpoort andesite, which finally provided good mining conditions. Carbonaceous shales were not conducive to robust fissure development, and it was also difficult to mine. Conventional thinking, kimberlites are carrot –shaped bodies, and miners thought that the mine was petering out with depth. As a result, the western side was closed down due to difficulties in mining the carbonaceous shale. Andesitic country rock's grades were lower than expected and the sale of the property became inevitable.

Davidson stated in his thesis that “From my knowledge and experience, fissures are pressure driven systems in a tensional environment. If the fissure rolls and pinches out, it means that there was an ‘obstruction’ preventing the fissure’s upward progress to the surface. The carbonaceous shale serves a pressure relief plane between two rock types of different competence. This is also indicated by a thrust fault within the carbonaceous shale, hence the erratic nature of the fissure intrusion in this host rock.” Thus, the previously closed Edward shaft was re-established.

The major constraints in improving profitability were operations, which were mainly labour intensive, and based on inherited mine design (Swarts, 2008). In modern mines, production is in the range of 7t per person per day, and Helam extracted 0,7t per person per day.

To alleviate the problem, the mine used gravity. Mining is the business of breaking and transporting ore. Instead of using hand tram ore, the company shifted to mechanised means such as conveyor belts and locomotives to increase productivity and yield positive profits, stated Swart as mine engineer.

In order to progress, and bypass some restrictions, a state-of-the-art winder was installed, which was sourced and refurbished by the management in 2005. In November 2006, the skip was installed to increase capacity. The shaft has two compartments to establish a haulage that can accommodate a locomotive and hopper capable of hauling 22t per trip. In principle, this resulted in reduction in labour costs, but it didn't result in retrenchments (Swarts, 2008).

The biggest cost at Halem was double-handling, a situation that ate into profits, whereby 56% of staff worked underground, while 44% double-handled the ore. The workforce used to be 80% from Mozambique, but development in that country gave these people an opportunity to work closer to home, that resulted in indirect reduction of staff (Swarts, 2008).

During December 2008, Petra Diamonds indicated that the global financial environment required a change in commercial approach, and that has been recognised and acted upon by its Board. It also stated in a statement to the Johannesburg Stock Exchange, that it has carried out a strategic review of its exploration activities, taking into account the global weakness in financial markets and the production and revenue growth that can be achieved by investment into the group's production portfolio, as compared to continued spend on exploration. The focus was to continue building on cash-positive production, while maintaining rigorous cost control (Dippenaar, 2008).

A critical aspect of profitable mining is linked to safety and waste delusion. Thus, the drilling pattern and explosive controls are very crucial (Davidson, 2008). For future revenue generation, Halem has two significant facilities. The first is an indicator mineral laboratory, in which heavy mineral concentrates from various Petra projects are processed. The second is the extensive workshop, where considerable portion of the plant equipment is built and maintained, not only for Halem, but also for other operations such as Sierra Leone, Koffiefontein and Kimberley mines.

Case 2- Weatherly International- Kombat Cooper Mine

According to Njini (2008), London-listed integrated base-metals producer, Weatherly International suffered a \$1.2 million pre-tax loss for half year to 31 December 2007 due to formerly flooded Kombat underground copper mine. The company identified options to minimise reliance on Namibia's national grid for power supplies to its mines and smelter. Weatherly International also started negotiating with water utilities, following Kombat's 2007 shutdown and 2500-t production loss, through power and water shortages.

Despite the loss, the company turned-around by introducing on the course to become a long-term, sustainable, and fully integrated copper producer, its revenues rising to \$41.54 million from \$31.2 million in the half year ended 2006. Considerable time and resources were spent during the period on the substantial mine development, which provided a platform for increased and more efficient, sustainable mining in future. The company also created a revenue generation method to sustain its operations by importing copper from neighbouring Zambia, and used its unique smelter to add value to its ores.

The company (Njini, 2008) re-commissioned its operations at its head office mine in Tsumeb, where its primary assets were situated. The re-commissioning was scheduled for mid-2008, with expectation to lead to improved copper recoveries. Even though its output from its prime operation, Otjihase mine fell to 2687 tons during 2007, the company remained optimistic that output would rise in 2008. The expectations were that increase in the milling capacity of the Northern operations will reach 800 000 tons per year. The outcome of mining development came out positive during the financial period, as production costs increased largely due to underground development work at Otjihase mine.

The message from the two cases described above is that turnaround strategy can succeed if right approach is adopted and right type of technology is used, even in a hopeless scenario.

2.13 Conclusions from survey of literature

Most of the turnaround literature focuses on Western countries (Bruton, Ahlstrom and Wan, 2001). It may be questioned whether the model of turnaround of large publicly traded companies in developed countries could be applied to similar firms in other countries, since there were major differences, in part based on culture in the business environment in which the organisations operate, which in turn has an influence on the turnaround actions to be taken.

Organisational restructuring changes the experienced reality as the changes in the organisation structure, systems and processes change role expectations and behaviour and the experiencing of the organisational context. In some cases, members will disassociate with the company, they don't participate in the process of restructuring. Substantial changes in downsizing of the organisation change the sense of collectiveness itself, lead to lack of confidence, and lack of self-esteem. In certain situations

where there is an implicit assumption of life time employment, collective demonstration, anger and frustration will be experienced (Jeyavelu, 2007).

Resources are the backbone of every economy and provide functions for raw materials, for production of goods and services and environmental services (Erekson, 1999). While the focus of retrenchment as a strategy is on cost reduction and identifying and correcting inefficiencies within the organisation, the focus of reposition strategy is on revenue raising (Blechner and Nail, 2000). The focus of retrenchment strategy is on growth and innovation. Thus, it is identified as an entrepreneurial strategy (Schendel and Patton, 1976), because it involves several sub-strategies such as moving into new markets, seeking new sources of revenue, developing new products and altering the mission and image of the company.

The literature refers to re-organisations where Schendel and Patton (1976) includes sub-strategies such as changes in planning systems, the extent of decentralisation, style of human resources management or organisation culture. This also includes replacement of leadership and other senior managerial staff. Turnaround literature mainly focuses on how the top leader and other senior managerial staff exert positive influence on organisational recovery. Similarly, wider overhaul of human resources strategy by employing skilled staff is the key to lead to, among others, financial performance enhancement (Blignaut and Hassan, 2002).

All organisations operate in an economic, socio-political and regulatory environment that impacts their financial performance. Blechner and Nail (2000) grouped these factors as environmental factors. Favourable environmental factors may impact the organisational financial performance positively. For example, export incentives may positively impact financial performance of an organisation dependent upon foreign markets and vice versa.

Organisations that undertake change initiatives may still decline owing to faulty actions (Hambrick and D'Aveni, 1988). To minimize genuine error in action choice, organisations adopt mechanisms such as environment scanning, competitive profiling, and strategic action choice making process. There are two streams to investigate and examine decision-making. The normative stream explores 'how decisions should be made in different contexts (Donaldson and Davis, 1991) and the descriptive stream explores 'how decisions are taken in organisations and what the influencing variables are?' Both streams do not take into cognisance that all decisions may not result into actions, thus, inconsequential for the organisational performance (Hammond, Keeney, and Raiffa, 1998).

The literature reviewed brought out that even though turnaround strategies existed in various mining industries and other commercial entities, the researcher did not come across a scenario where the depletion of precious metals has been at the root of building up a turnaround strategy. Thus, different cases, situations and experiences were analyzed to identify the approach adopted by management and understand how these industries and enterprises effectively dealt with the depletion, decline and viability related issues in the past. This knowledge has been used to develop conceptual framework and methodology of research given in subsequent chapters.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1. Introduction

This chapter describes the theoretical framework and approach adopted in the research. In this process first the conceptual model of the study has been described. The conceptual model was considered useful for identifying the issues to be explored during interviews with the respondents and for developing the questionnaire. It was also considered useful for deciding the methodology of research. This is followed by the definitions of the terms used in the research. Though only standard terminology has been used in research, some terms not so common have been defined here. Conclusions from the conceptual framework are given at the end.

3.2. Conceptual model:

The researcher did not come across a conceptual model from some previous study, which could be used for the present research with or without modifications. The subject matter and the focus of the situations and the cases reviewed in the literature review being different, no such ideas could be used as such here. In view of this constraint it was considered necessary to develop a conceptual model as per the requirement of the present study. The model is based on the exploration of 24 issues, which include 6 relating to turnaround strategy, 5 relating to balanced scorecard, 5 relating to technology, mining exploration and operations, 3 relating to management and leadership and 5 issues relating to external

environment and social aspects. These were the issues that were explored during the interactions with respondents through interviews and questionnaire. The conceptual framework model is given in figure 1.

Turnaround Strategy

(6 items)

Balanced Scorecard

(5 items)

Technology, Mining exploration
and Operations (5 items)

Analysis of Turnaround
Strategy

Management and Leadership
(3 items)

External environment and
Social aspects (5 items)

Figure1. Conceptual Model of the Research

3.3 Terminology Used:

It may be useful to describe the terminology used in the research.

Turnaround: The context indicates a deviation from achieving organizational objectives and hence a threat to the continued existence. In addition, the context constitutes changes in the organizational configuration – change in asset, resource configuration, change in top management, change in organizational membership due to retrenchment or downsizing, change in organisational strategy, structure, systems and processes and change in organisational image and reputation (Albert and Whetten, 1985). As a concept turnaround can be defined as a process that a “sick” company goes through in order to attain sustainable recovery.

Turnaround strategy: Whetten (1987) defined turnaround strategy as a process to analyze the current position and define a target position. Turnaround strategy has been defined as ‘performance decline followed by performance improvement’ (Barker III and Patterson, 1996). Blechner and Nail (2000) have defined it as ‘a process that takes a company from a situation of poor performance to a situation of good sustained performance’.

Decline: It is commonly defined as a decrease in profit or budget. Most theorists agree that decline negatively impacts individuals and the organisation as a whole. Cameron, Whetten and Kim (1987) believe that decline results in decreased morale, innovativeness, participation, leader influence, and long-term planning. Researchers also associate decline with conflict, secrecy, rigidity, centralization, formalization, scapegoating and conservatism.

According to Trewolla, (2005) businesses that experience declining financial performance are required to come up with new ideas in order to improve the companies' performance- doing so can be sometimes possible in a short span of time and sometimes under intense pressure. These challenges are caused by:

- Lack of demand from customers,
- Lack of financial resources and not meeting target returns,
- Not meeting the cost of capital so that capital could be more effectively deployed elsewhere,
- Company's under-performance against other competitors,
- Diminishing products or services, and
- Management problems.

Turnaround approach: In order to meet the challenges, Trewolla (2005) indicated the steps the company should implement and focus upon under turnaround approach:

1. **Develop the turnaround strategy objectives, define success and identify the key problem to fix.**
This step is based on sound analytical understanding of which activities of the business can create value for the future, and is also based on good understanding of value creation linked to both inherent market attractiveness and competitive strength.
2. **Focus on execution of activities that eradicate value destruction.** The implementation thereof should be clearly defined and constructed. The nature of the projects could include divesting under-performing businesses, implementing a new pricing strategy, selling under-utilised assets, pruning unprofitable product lines, forced retrenchment, and overhead cost reduction.

3. **Stabilise and nurture the value creating businesses.** This phase involves the nurturing of management talent to guide value creating businesses to the next stages of development. In parallel, turnaround must be embedded by consistent, visible management against value driving key performance indicators (KPIs).

For the strategy to work effectively, objectives and goals should be clearly identified, accountabilities have to be aligned with objectives and performance of management should be measureable against objectives. The exercise includes Managing for Shareholder Value (MSV), Value Based Remuneration (VBR), governance, balanced scorecard, benchmarking, capability development, and management development.

Managing for Shareholder Value (MSV): In some companies, full accountability for long-term profit growth is rested with unit managers. In such cases, strategy formulation runs through formulating programmes that not only link investment decisions to long-term shareholder value, but also establish performance management objectives, targets and measurements linked to economic profit performance.

Value Based Remuneration: Discretion should be made in order to comprehend and connect ways in which managers' decisions, supervision and communication impact the economic profitability. Based on that, managers are to be remunerated. This may be different for different industries as every industry is different from the other.

Governance: Management should have a proper structure in place not just providing decision support but also structures that help develop guidelines and processes for complex, long-term decision making. Although corporate governance is defined and governed differently all around the world, generally organisations of every size, industry and country agree on its ultimate goal - to help maintain sustainable

organisations that are accountable to shareholders, capable of returning value to them and worthy of marketplace trust (Kramer, 2007).

Balanced Scorecard: In cases where a high level of interdependency exists in terms of individual roles, accountability and the effect of planning, decision making, supervision and communication, a company can establish a tailor-made “balanced scorecard”. The combination includes quantifiable, with more qualitative but leading indicators of success such as customer feedback, process efficiency and human resource measures. Effective planning and management processes should be implemented to establish specialised system support both for operational and planning performance.

Economic value added (EVA): Economic value added is a measure of company’s true profitability, and a strategy for creating corporate and shareholder wealth. EVA is not only the best measure of corporate performance, but also a complete management system that changes corporate priorities and behaviour, focusing effort on the creation of wealth, to the benefit of everyone, revenue growth, costs, profit margins, cash flows, net operating income, etc (Ross, Westerfield, and Jordan, 2003).

Capability development: Under capability development shortcomings are identified and new business initiatives, performance management programmes and strategies are used to identify options for closing the gaps and taking the best option forward.

Sustainability: Sustainability is the process suggested to improve the quality of human life within the limitations of the global environment. It involves solutions for improving human welfare that do not result in degrading the environment, or impinging on the well-being of the people. Although there is no general agreement about the precise concept of sustainability, there seems to be a general consensus that three basic concepts are involved in sustainable measures such as living within limits of the earth’s

capacity to maintain life, understanding the interconnections among the economy, society and environment, and maintaining a fair distribution of resources and opportunities for this generation and the next, (Mensa and Castro, 2004).

Organizational decline: This has economic, psychological and sociological perspectives (Argenti, 1976). The common threat in the identified turnaround strategies has been the issue of management approach and the management failures that lead to the resource depletion. From the observation or perspective action, the decline of the organisational performance can be attributed to certain reasons such as (a) lack of action in response to environmental changes, or (b) inability to account for environmental uncertainty, (c) sudden changes in technological environment and technological equipment, and (d) faulty action choices, (Weitzel and Johnson, 1989). Corporate managers undertake action choices that might lead to decline. The agency theory (Eisenhardt, 1989), and resource dependent model of the firm (Pfeffer and Salancik, 1974) explain the causes of inertial pressure. Inertial pressure appears due to sunk investment, specialised assets, bureaucratic control, internal political and cultural constraints, and managerial commitment to status quo due to long tenure of managers in the organisation (Hambrick and D'Aveni, 1988).

Many companies are caught off sight for the occurrences of declining scenarios. Organisational decline or turnaround situation may be caused by internal or external factors (Barker III and Patterson, 1996). Internal factors may be due to erosion of efficiency, managerial mistakes, erosion of competitiveness, non-availability of resources and so on. External factors include change in customer preferences, changes in socio-economic-political environments, technological discontinuities, industry life cycle, depletion of natural resources and so on (Barker and Duhaime, 1997).

When the financial downturn hit the Asian countries during 1997-98, many of the companies were not prepared and failed to respond to economic downturn (Clifford, 2000). The situation led to the

organisational financial performance decline, which was often attributed to macroeconomic causes. Evidence from various studies on managerial decision making to strategic management suggests that managers often prove unable to account for environmental changes in their plans owing to resource constraints, inadequate information, or blindness to environmental changes (Mezias and Starbuck, 2003). Gupta and Sathye (2008) ascribed the enterprise downturn to managerial leadership and often that environmental factors also contribute to the financial downturn.

Turnaround strategy models: Researchers have been fascinated with turnaround strategies. There are many different models of turnaround strategies. A dual strategy model depicts turnaround strategies as strategic and operational. Schendel, Patton and Riggs, (1976), identified revenue generating, product-market refocusing, asset reduction and cost cutting turnaround strategies among successful firms.

Research in the private sector context ascribes successful turnarounds to appropriate application of managerial strategies. The review of literature identified actions that are commonly appearing in descriptions and empirical tests of the turnaround process such as recognition of decline problem (Bruton, Ahlstrom and Wan, 2001), retrenchment (Barker III and Patterson,1996), matching the solution to the cause of the decline (Bruton, Ahlstrom and Wan, 2001), replacement of the Chief Executive Officer or top management team (Barker III and Barr, 2002), ownership change (Bruton and Rubanik, 1997), repositioning and reorganisation (Barker III and Patterson, 1996).

Short-term plan: Proper planning is very vital and crucial to the inception, maintenance and sustenance of every business. It is of importance to provide a short-term plan that can assist the company to study the external and internal environments of the business. Short-term plan would help the company to produce more at the same rates, produce the same output at lower rates, ways to reach and motivate employees to deliver more. Equally, it also helps to guard against the adverse pressures of the environments and move towards financial improvements and sustainability by drawing plans making use

of mathematical and statistical models. The short-term plan would also provide breathing space for identifying a strategy for the future.

Cost Reduction: Cutting costs has become the slogan of every company in recent economic recession period (Feng, 2009). It is also the key driver of profitability and competitiveness in supply chain. For the turnaround strategy to be effective, the company have to concentrate on the following:

- Reduction in operating costs,
- Reduction in working capital costs,
- Reduction in product inventory (unsold stock),
- Improving techno-economic parameters,
- Differentiated sourcing,
- Effective supply chain management, and
- Social infrastructure costs.

Retrenchment: The most common response to organisational decline is retrenchment. Retrenchment includes sub-strategies like 'quitting difficult markets, deleting unprofitable product lines, selling assets, outsourcing non-core activities, and downsizing' (Blechner and Nail, 2000). Barker III and Patterson (1996) stated that divesting assets and cutting costs are the foundations of business recovery, while Hambrick and D'Aveni (1988) are of the opinion that retrenchment as a turnaround strategy has efficiency orientation.

3.4 Financial turnaround and strategies:

The turnaround strategy aims to ensure immediate sustainability of the company. The purpose is to identify keys that ensure long term financial turnaround that will provide financial liquidity required to run the company successfully. Benchmarking can be used as a measurement to achieve the primary goal of financial turnaround for the depleting diamond land operations (Mazumder & Ghoshal, 2003). Advanced and best practices in specific areas and processes are required to identify existing practices and compare them against best practices to enable adoption thereof. By identifying best practices it will enable the company to identify cost measures in cost reduction and control from operations to delivery stage.

The financial turnaround strategy aims to generate adequate internal resources through operational efficiency for sustainable growth. Hence, effort should be made to engage in long term financial planning. Focus should be given to repayments of large borrowing capital expenditures, manage the costs and ensure sufficient future cash flows to meet debt servicing and projects requirements. The important components of the financial strategy should be:

- Realistic projections of liquidity, costs and expenditures.
- Mobilizing short/long term external funds at minimum costs.
- Ensure maximum return on investments through financial analysis and project evaluations.
- Improve profitability through regulation and control expenditure.
- Develop a cost-consciousness by inculcating sense of ownership, and
- Outsourcing of non-core activities.

Continual improvement will be the key process to achieve long term growth. Continual improvements can be attributed to production and intangible areas such as attitudes and commitments towards certain objectives.

3.5 Conclusions

Conceptual framework provides a theoretical basis, which facilitates the process of research. In the present chapter therefore, at the outset the model of conceptual framework used by the researcher has been given. Following this the terms used in the research have been described. These are the terms, which have been used throughout the research report. Next chapter describes the methodology of research.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

Namdeb has a special place in the economy of Namibia. Being one of the largest employers, the company creates multiple opportunities for stakeholders. However, the events between 2004 and 2008 when the company passed through certain difficulties firstly due to declining carat profile and later due to slow down in the international markets jolted the company. It was in this background that a turnaround strategy was thought of and introduced. The present work is based on 'an analysis of Namdeb's turnaround strategy to improve its financial performance in view of declining carats profile'.

It is considered appropriate to give a brief profile of the company at the outset to highlight important features of the company so that the methodology adopted by the scholar in research may be properly appreciated.

Name of Company: Namdeb Diamond Corporation (Pty) LTD

Founded: 1994

Ownership: Equally owned (50/50 partnership) by the Namibian Government and the De Beers Centenary AG.

Head office: Windhoek

Operation centres: Oranjemund town
Lüderitz town

Core business: Diamond mining in Namibia.

Subsidiary: NamGem, a diamond cutting and polishing centre, established as part of beneficiation strategy. This is a wholly owned subsidiary and is based in Okahandja and Oranjemund Town Management Company (OTMCo).

Marketing: All diamonds mined at Namdeb's operations are sold to the Namibia Diamond Trading Company (NDTC) for resale on both the local and international diamond markets. The main purpose is job creation and economic value addition. Other non-Namdeb cutting and polishing were also opened during the recent years. These operations buy from the NDTC, their financial performance is minimal to the sustainability and economic viability of Namdeb.

Operations: The Company holds six mining licenses for the following areas:

- 1. Bogenfels and Elizabeth Bay licenses** -The license is extending from the Orange River in the south to Lüderitz in the north, and from few kilometers offshore in the Atlantic Ocean to around 20 to 35 kilometers inland.
- 2. Douglas Bay mining license** - Extends north of Lüderitz for some 60 kilometers and approximately 15 kilometers inland of Atlantic high-water mark.
- 3. The Orange River mining license and Daberas mining license** - Extends along north of the Orange River for about 50 kilometers inland from the Mining Area 1 Boundary.
- 4. Atlantic 1 Mining license** - This license encompasses a portion of the middle shelf of the Atlantic Ocean, from the boundary of Mining Area 1 to about 65 kilometers from the shore.

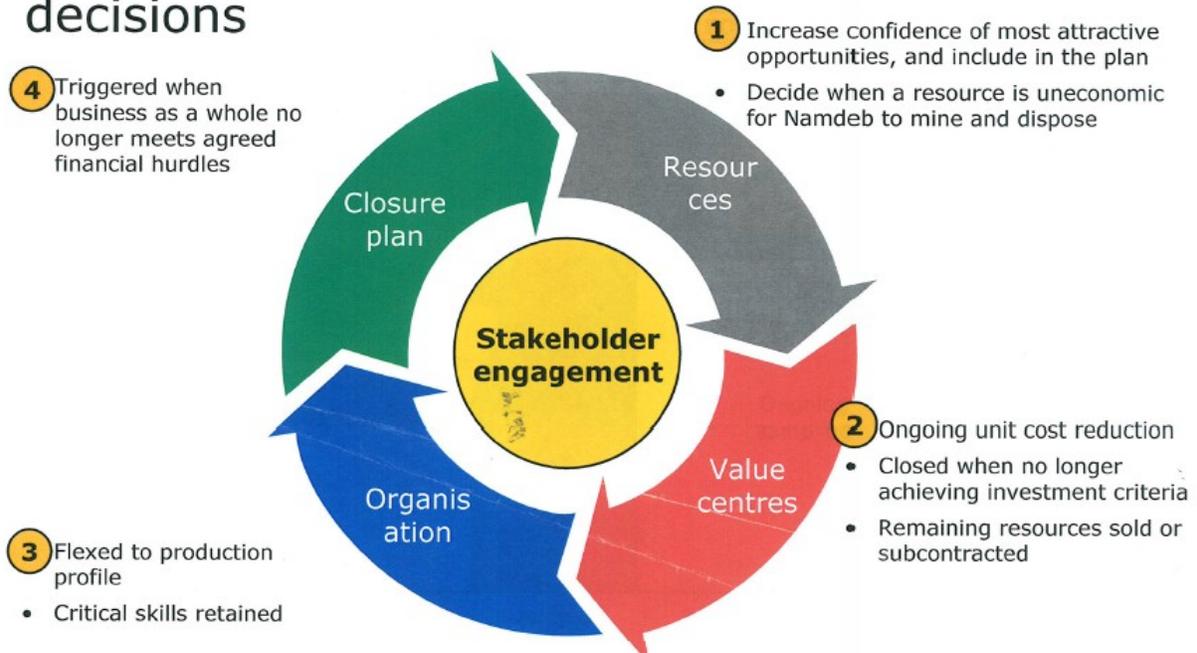
Other services Namdeb Hospital, Oranjemund Private School. Town management (Social Responsibility) services are run by Oranjemund Town Management Company (OTMCo), a full subsidiary of Namdeb whose responsibility amongst others is to prepare the town for proclamation.

Employees: As the largest employer in Namibia it provides employment to about 3000 persons at Namdeb, De Beers Marine Namibia (DBMN), NamGem and the Namibia Diamond Trading Company (NDTC). Out of these about 1600 persons work in Namdebs.

Business Model: The company uses a four step business model to drive future decisions, which emphasises upon – increase confidence in most attractive opportunities and include in the plan - on going unit cost reduction – flexed production profile, and – trigger when business as a whole no longer meets agreed financial hurdles.

Fig 2: Ongoing Business Model to Drive Future Decisions

Ongoing business model to drive future decisions



4.2 Design of research

In view of the special nature of the research work, which required a mixed approach to data collection and data analysis, a qualitative design was adopted. Gary D. Shank (2006. p 4) has defined qualitative research as a “systematic empirical inquiry into meaning.” He emphasized that qualitative research is systematic. It is not haphazard, nor idiosyncratic, nor even subjective. It is planned, ordered and public. According to Creswell (1998) qualitative research is built around such research tools as interviews, focus groups, participant observation, ethnography, case studies, narratives and oral history, and the like. These techniques have been used in the present work.

Under the qualitative approach therefore, a research design was prepared to capture the widest possible spectrum of views on the problems faced by the company. This was considered necessary as the information collected was going to be in the form of views, opinions and observations by knowledgeable persons from different levels, functions, and representing different interests in the company.

To cover the widest possible views from people associated at various levels and functions in the company the design was suitable for establishing contacts and capturing the views through interviews and structured questionnaire. Information was collected in a subtle manner with the help of probing questions and follow up discussions on details.

4.3 Population

The universe for the study consisted of the Company's board of directors, managerial personnel and employees. There were 1600 employees in the company working in operations and management of the company at various levels from top management to shop floor.

The profile of the human resource with the company broadly consisted of the following:

Top management: The top management of the company consisted of board of directors. There are 12 directors on the board, out of which 6 are executive directors and 6 are non executive directors. The Government of Namibia and De Beers Centenary AG being equal partners appoint 6 directors each on the board. Alternative directors are also appointed in place of Directors.

Mr. Nicky F. Oppenheimer is chairman of the company, deputized by Mr Joseph S. Iita, Inge Zaamwani-Kamwi is Managing Director and Mr. M. Mundell is General Manager of the company.

Managers and administrative personnel: The managers and other personnel with the company consisted of managers, supervisors, administrative staff in operations, finance, marketing, human resource and general administration departments.

Mining workers: Mining workers are the largest group and consisted of supervisors, foreman and contract-workers working at six mining licences of the company.

4.4 Sample Design

With a view to capture all shades of views about the present state of affairs and future prospects a comprehensive sample design was prepared. The sample for field investigations consisted of 200 respondents representing about 12.5% of the population and human resource with the company. This represented all segments in the population.

The profile of the sample drawn for research thus consisted of 2 directors of the company, 4 senior managers of the company, 2 representatives from Mine Workers Union, 2 supervisor, 1 foreman and 189 other employees working in administration and in mining operations.

4.5 Sampling method

The stratified random sampling method was considered appropriate for the selection of the sample. Under this approach in the first stage different strata constituting the population were identified. The different strata identified were directors, senior managers, managers, supervisors, foreman, administrative personnel, mine workers and leaders of mine workers.

In the second stage a sample was selected from each of the above segments. Among the 12 directors on the board 2 were selected. Among the senior managers four, namely Manager for Human Resources, Manager for External Affairs & Corporate Communications, Manager for Operations, and Manager for Finance were selected. Among senior level mining executives 2 supervisors and 1 foreman were selected.

Besides the above 80 administrative personnel and 120 mine workers were selected for field investigations. It was also considered necessary to include 2 representatives of the mine workers union in the sample. Thus, a representative sample of respondents was selected from each of the segments of the population, so that it may represent all the segments in the company.

4.6 Instruments for data collection

For field survey and collection of primary data a two-fold strategy was to be adopted. This consisted of conducting personal interviews with directors, senior managers, mining executives and representatives of mine workers and collecting information through a structured questionnaire from

others. Accordingly two interview schedules and one structured questionnaire were designed for the field survey.

Interview Schedule I: The first interview schedule was designed for conducting interviews with 2 directors and 4 senior managers of the company. The interview schedule contained 12 questions out of which 6 were about turnaround strategy, 5 were about balanced scorecard and 1 was general. This is given as appendix I.

Interview Schedule II: The second interview schedule was designed for conducting interviews with 2 representatives of the Mine Workers Union, 2 supervisors, 1 foreman and some workers. This interview schedule contained 9 questions 1 about turnaround strategy, 3 about balanced score card, 4 about training and welfare of workers and 1 about general awareness of declining carat profile and its implication. This is given as appendix II.

Structured Questionnaire: A structured questionnaire was designed for the collection of information from administrative personnel and mine workers. The questionnaire contained 24 statements, which were divided into three parts. Part one contained 6 statements about turnaround strategy, part second contained 10 statements about balanced scorecard and part three contained 8 statements about general awareness about the change and its implications.

All the 24 statements given in the questionnaire provided 5 options to the respondent – strongly agree, agree, neutral, disagree and strongly disagree. A respondent was to pick up one among these five alternatives. An instruction was given at the top to guide the respondents in recording the response.

A written 'appeal' was made to all the respondents and enclosed with the questionnaire explaining the objective of the survey with an assurance of complete confidentiality about the information provided. A request was made in the appeal to the respondents to complete the questionnaire and return it to the researcher on the address given. This is given as appendix III.

4.7 Validation of instruments:

The questionnaire and the two schedules were validated through testing to ensure that the respondents may grasp the subject matter and information may be obtained from them. For validation of the interview schedules an interview was organized with a senior manager of the company and the questions were put to him to check how it worked with him. In the light of the experience gained certain modifications were made in the content as well as the style of interview. The questionnaire was tested by picking up two workers and two other employees of the company and administering the questionnaire to them. It was observed that they could understand the items and record their responses against the items given in the questionnaire.

4.8 Field survey and data collection

Data for research were collected from both the primary as well as the secondary sources. The primary data were drawn through a field survey. Two different approaches were adopted in the field survey – one of interviews with selected respondents and the other of collection of data through a structured questionnaire.

Interviews:

Directors, senior managers of the company, representatives of mine workers union and senior mining personnel were covered through interviews.

Directors of company: Interviews were conducted with two director of the company after obtaining their consent. A pre designed interview schedule was used for this purpose.

Senior managers: Interviews were conducted with four senior managers of the company - the Human Resources Manager, Manager for External Affairs & Corporate Communications, Manager for Operations, and Manager for Finance after obtaining their consent and as per their convenience.

Representatives of Mine Workers Union: Interviews were conducted with 2 representatives of the Mining Workers Union. Some workers were also present at this interview.

Supervisors and foreman: Interviews were also conducted with 2 supervisors and 1 foreman working in the mine after obtaining their consent and as per their convenience.

All interviews were conducted after fixing an appointment with the persons concerned on telephone as per their convenience. A copy of the interview schedule was supplied to them through e-mail. Interview was conducted in an open unstructured manner. However, every care was taken that the subject matter remains in focus and the necessary details may emerge in the process. Full convenience was provided to the respondents to deal with the subject matter as per their convenience. In some cases researcher had to use soft skill to get full cooperation from the respondents.

Questionnaire:

A copy of the structured questionnaire was distributed to each of the respondent selected for the field survey. All these persons were from administrative personnel and mine workers. Adequate copies of the questionnaire were made. A copy of the questionnaire was given to each of the identified respondent in person or through e-mail. Every effort was made to get back the filled questionnaire. However, it could not be possible in all cases and out of 200 respondents only 90 questionnaires could be received and found complete and usable instruments for acceptable response. The analysis was based on these responses. Non response may be attributed to lack of interest, lack of time and lack of education in case of mining workers.

4.9 Data from secondary sources

Information considered useful for research was also collected from secondary sources. This was in the form of both published and non-published information about mining sector in Namibia and other countries, research on mining sector in general and working of the diamond industry, government policy as affecting the diamond industry. Annual reports and other reports on the working of the company, its finance, production, marketing and human resource departments were also collected from the authorised sources. Literature was obtained from various web sites.

Information related with mining operations in general, mining operations in different countries of Africa and particularly about southern Africa and Namibia was also collected from other sources including the departments of the Government of Namibia, Ministry of Mines and Energy library and library of the University of Namibia.

Information about the company was collected from the publications of the Government of Namibia, as well as other sources including government publications, news reports and internet.

4.10 Data analysis

The study examined the data for the period of five years from 2004 when the turnaround strategy was started until 2008. The period captured the downtrend in the Namdeb financial performance and its recovery to improved organizational performance in terms of production and exploration. Descriptive approach was used and putting the information collected from various sources together conclusions were drawn.

The information gathered helped in identifying the impact of the critical factors on the working of Namdeb's, turnaround strategy and the influence it had on the sustainability and economic perseverance of depleting carats profile.

4.11 Chapter scheme

The results of the study have been presented over six chapters besides the preliminary and concluding details given at the beginning and at the end of the main text. The chapter scheme is as under

Chapter 1: Introduction

Chapter 2: Survey of Literature

Chapter 3: Conceptual Framework

Chapter 4: Research Methodology

Chapter 5: Analysis of data and their Interpretation

Chapter 6: Summary of findings and recommendations

4.12 Conclusions

Research is a unique experience for a researcher. It requires exploration and analysis and also a creative approach for obtaining the required information from various people and institutions. It also requires creative approach in interpreting the information and drawing conclusions from that. The methodology of the research was developed considering these aspects. Firstly in this process, the population and its different segments were identified and then a representative sample was selected for field investigation. Instruments which consisted of two interview schedules and a structured questionnaire were designed to cover the scope and subject matter comprehensively. Using these instruments, field investigations were done. In spite of all the problems associated with field work every effort was made to collect the required information. The findings and conclusions are given in the next chapter.

CHAPTER 5

DATA ANALYSIS AND FINDINGS

5.1 Introduction

Conducting interview sessions and administering questionnaire during the field survey was an enlightening experience for the researcher. During interview sessions maintaining the time schedule and direction of the discussions required great tact and skill. However, since everybody cooperated, the task could be completed and the required information could be obtained.

Same was not the experience with the questionnaire. In spite of repeated reminders some respondents did not return the filled questionnaire. Even among those who returned the questionnaire there were gaps in information provided. Some respondents did not record their response against some of the statements. However, most cooperated to the extent they could. To a large extent the non response as well as leaving gaps in information provided may be attributed to lack of education and difficulty in

adjusting this work within their routine of life. Some expressed their views orally on telephone but did not send the completed questionnaire.

Using the notes maintained by the researcher during interviews and after taking into consideration the responses received from the respondents who willingly participated in the survey and provided information the research report was prepared.

5.2 Findings from research

It is also important to mention here that due to delay beyond the researcher's control in finalization of this document most of the people in the management had left the company in the meantime. As a result, obtaining some of the relevant information on Balanced Scorecards became a problem. However, every effort was made to obtain relevant information to arrive at valid conclusions.

The findings of research are interesting and enlightening. While some are similar to experiences in other companies and other countries as brought out by the review of literature some are different. The findings are presented first about the turnaround, then about the balanced scorecard and finally about other related issues. Descriptive approach has been adopted in presenting the findings.

5.3 Turnaround strategy:

Decline is a natural occurrence in living as well as non-living entities including business enterprises. The decline in organisational performance can be attributed to certain factors such as lack of action in response to environmental changes, or inability to account for environmental uncertainty, sudden changes in technological environment and equipment, faulty action choices etc. Businesses that experience declining in financial performance are required to come up with new ideas in order to improve their performance. Doing so can be sometimes possible in a short span of time and sometimes under intense pressure over a long period, through sustained effort and following a turnaround strategy.

The process of turnaround includes building structures that help develop guidelines for complex long term decision making. However, the common threat in turnaround strategies has been managements' approach and management failures that lead to resource depletion. Unfortunately sometimes corporate managers undertake action choices that might lead to decline rather than turnaround.

The facts and opinions emerging from the responses during interview sessions and from the views expressed on various statements in the questionnaire were very interesting and informative. Many valuable ideas and suggestions came up, which are discussed here.

(a) Decline in human resource

During the early years of 2000-2007, Namdeb had a complement of employed staff exceeding 3600. However, due to the declining carat profile, the number decreased to 1600 by 2008. The 'Voluntary Separation' was applied to avoid forced lay-off or retrenchment and apply the concept of cost saving in various areas. According to the Group Manager for Human Resources most staff from the lowest to the highest grade applied for voluntary separation due to either uncertainty about the company's future,

new opportunities within the industry, ill-health, distance from families, aging and some others. The voluntary separation process suited the company's plan to cut costs and have lesser number of employees on all operations. However, it had the side effect on Project Sida Ei!Gûs that has been tasked with developing a robust turnaround strategy to improve productivity of the existing operations, improve the confidence in the new resources that could potentially be mined and ensure the sustainability of the Namdeb land-based operations due to shortage of skills and low morale among employees.

The supervisors and foreman indicated that most employees have lost confidence in the land based operations of Namdeb, and most of the skilled workforces moved either to De Beers Marine Namibia or sister companies within the De Beers family or to new opening mines in Namibia. Since the labour force is fully aware about the condition of land operations, employees believed that there is little that Namdeb management can do to turnaround the financial performance of the company. This sentiment was also shared by the representatives of the Mine Workers Union. Uncertainty about the company's land based operations and job security did not only affect the lower grade employees but it also affected the persons in senior positions within the organization.

(b) Employee training:

Training has an important role in organisation development. Besides the development of appropriate skills and acquiring new skills as per the requirement of the work, in case of new employees it is considered necessary in orientation and team building process.

It was noticed that there was no formal orientation program for new employees and new recruits are purely trained on the job. The problem was not only lack of training programmes, but also a large intake of incompetent technical manpower. Employees are registered on the Self-study Assistance scheme to further their study in the fields of their choices, which are aligned to Namdeb business needs.

(c) Industrial relations

Weak industrial relations practices caused low work ethics and confidence in management. Conflicts persisted due to lack of proper communication channels that led to lack of co-ordination and cooperation among the managerial staff and the Unions. Amicable solution took sometimes to be achieved. This in return, has also an impact on the company productivity. In some cases the relations were based on political and racial arguments.

(d) Employment policy

It was also pointed out by some employees that favoritism was highly noticeable in the selection and promotion process. Consequently, measurement was not objective in some cases. Thus, the issues of bias and favoritism were associated with the appraisal system.

5.4 Balance scorecard

The Balanced Scorecard Model was developed to communicate the multiple linked objectives that companies must achieve to compete on the basis of capabilities and innovation, not just intangible physical assets. The Balanced Scorecard Model translates mission and strategy into objectives and

measures them into the four perspectives: financial, customer, internal business process, and learning and growth. For the purpose of the present research, customer perspective was not addressed as it required a different approach. Only three other perspectives were considered.

The, 'tailor-made' balance scorecards were established to quantify the company's success in measuring the performance. The balance scorecard system used in the organization portrays the exact financial situation to management, which also reflects the necessary actions to be identified. It reflects the organization's structure and purpose, and it is influenced to a lesser degree by the personalities of both the management and the staff concerned.

Consecutively, the Balanced Scorecard enables financial and non-financial measures to be part of the information system for employees at all levels of the organization. Front-line employees would understand the financial consequences from their decisions and actions, to articulate the strategy of the business, to communicate the strategy of the company, and help align individuals and cross-departmental initiatives to achieve the common goal, and executives to underline the drivers of long-term financial success.

It is highly commended that Namdeb used the best approach of the Balanced Scorecard model in conjunction with the robust perspectives of the Performance Prism. Balanced Scorecard performance system has an established record of success.

It was articulated by the management as well as the senior managers of the company during interview with the researcher that financial measures alone are inadequate for guiding and evaluating for economic viability and sustainability of the company. With Balanced Scorecard, a company can measure

how the business can create value from current and future operations, how the company must build and enhance internal capabilities, systems, and procedures necessary to improve future performance, how customers goodwill and capabilities can be built for long term benefit of the organisation. A follow up action is necessary to achieve them.

(a)The financial perspective

It is vital and a priority to provide timely and accurate financial data. Identifying new projects is the way forward to contribute to the bottom-line improvement of the company. Long-term strategic objectives require huge capital funding as well as excessive investment into R & D for exploration purposes. Doing explorations and identifying projects that can add value have provided the company with required rate of return. However, it is also worth stipulating for the shareholders to have a fair understanding of injecting funds whenever required, or allow or invite others to participate by providing funding for capital projects, whatever the Shareholders Agreement contains.

For instance, Namdeb created NamGem to contribute to EVA by adding value as a fully Namibian company for polishing and cutting of diamonds. The purpose of the move was to add value to locally produced commodities rather than exporting raw diamonds to a foreign company – the Diamond Trading Company (DTC) based in London. Second objective of the move was to create employment within the Namibians as well as skills transfer. Likewise, the Namibia Diamond Trading Centre (NDTC) was established in the year 2007 with an option to sell diamonds directly to Namibia-based polishing and cutting entities. This broad-based approach has contributed significantly to the wealth and profitability of shareholders, even though the other shareholder (De Beers) regarded it as not so economically viable in terms of their business strategy. Almost ten cutting and polishing companies have opened their set-up in Namibia thereafter. However, the challenge remains as no extensive research was done to determine the effectiveness of the financial benefit approach in various companies.

The study indicates fluctuations in financial performance throughout the period. The market regulated itself and the net present value (NPV) of diamond revenue like any other commodity remained uncertain, because of the unpredictable existence of resources and fluctuations in diamond prices in international market. According to the Group Financial Manager, this scenario is attributed to global economic performance such as the price of diamonds in the market, exchange rate of US\$ and other international currencies against the Namibian dollar and other economic factors. The Balanced Scorecard systems indicated non-consistent picture of sustainability. The method also indicated downturn in term of human resources, where the company was losing many of its experienced employees due to low morale and uncertain future.

Having good strategies is not enough to be successful. Operational excellence is also needed to execute them. To achieve and maintain high levels of productivity, comprehensive operations or process measurement systems are needed to manage processes, departments and work units. These systems would include measures that are strategically important. But those measures alone are insufficient for effectively managing operations, if dedication and commitment from employees is lacking.

(b) The internal process perspective

People in management as well as the general workers were both of the opinion that the latest technology and equipments introduced in the recent years were not utilized to their optimum capacities. Huge investments were approved to acquire and introduce the sea walker and the dredge. However, the expected rates of return on these equipments were not impressive enough to sustain the purpose for which they were introduced. Tailor-made technology should be carefully designed and introduced to support new products and services through operations. Thus, management needs to re-look into the usage of the equipments to yield the best results.

(c) Learning and growth perspective

The learning and growth perspective focuses on intangible assets of an organization, mainly on the internal skills and capabilities that are required to support the value-creating internal processes. Namdeb is one of the oldest mining organizations in Namibia. The company is boasting of vast knowledge and experience of operating in harsh environment of the Namib dessert and Atlantic Ocean. Experience alone cannot be the tool, in addition to that practice, improved relations and approaches remain a key to success.

It was revealed by respondents during interviews and also in the questionnaire that while the staff complement possesses the technical know-how, combining the experience, the latest technologies and injecting new blood within its internal processes will be necessary to enable the company to achieve its ambitious objectives through extension of the life of the mine, improve and sustain its financial performance. Improvements in the learning and growth perspective will require certain expenditure that may decrease short-term financial results, whilst contributing to the long-term success of the company.

5.5 Implementation of performance measures

The findings of this research bring out a need for disciplined way of building and implementing the system to ensure that business strategies get executed and that the necessary organization- culture change gets implemented. The result is a strategic management system that is comprehensive, logically sound, and supported by the whole organization.

Perhaps the greatest challenge faced when implementing performance measurement systems is changing an organization's culture. Using performance measures requires managers and employees to change the way they think and act. For some people this is relatively easy, but for others changing old beliefs and habits is very difficult.

Overcoming such problems requires strong leadership to provide appropriate direction and support. The best measurement system in the world will yield few benefits if the right knowledge, skills, abilities, and

values are not developed in a company. An organization doesn't just interface with a measurement system; it is part of a larger social and cultural system.

As the company invested in programs and initiatives to build their capabilities, the primary evaluation system consisted of monitoring progress and sustainability of the company monthly, quarterly, and annually should be of highest priority. The financial accounting model should incorporate the valuation of the company's intangible and intellectual assets such as high-quality products and services, motivated and skilled employees, responsive and predictable internal processes. Whenever, intangible assets and company capabilities could be valued within financial model, the company would be able to determine its sustainability and economic terms in long run, as organizations that enhanced assets and capabilities could effectively communicate improvement to employees, shareholders, creditors and communities.

Developing and implementing effective measurement systems requires leadership, commitment, and hard work. Some investment is required, but it is small relative to the key benefits of a well-designed and implemented measurement system, which are:

- The ability to determine if sales and profit problems are caused by strategies, operations, or both;
- Early identification of problems and opportunities;
- Increased productivity, quality, and customer service;
- A clear understanding of what drives financial and operational performance so that resources can be allocated to the areas of greatest return;
- Immediate decision-making by shareholders and the Board and
- A cohesive organization working toward common goals.

No matter what approach is developed to performance measures, it should be borne in mind that the objective is not to have a Balanced Scorecard, Performance Prism or some other type of system, but to have the measures in place that will enable managers at all levels to address the needs.

5.6 Management and leadership

Sometimes due to internal factors such as incompetent management or external factors such as recession, the company fell short of its target performance. The inability on the part of management under such a situation to provide proper sense of direction set the company for failure in its performance. The factors that emerged from the research, to which the current state of affairs may be attributed were :

- (i) Lack of action in response to environment change,
- (ii) Inability to account for environment uncertainty,
- (iii) Change in technological environment and technological equipment,
- (iv) Acknowledgement of decline problem,
- (v) Effecting the retrenchment as a common response to organizational decline rather than as a tool to focus on growth and innovation.

(a) Employee management interface

From the research it emerged that the employees have a different perspective of how management should deal with the situation on the ground. Responding to the question how management should lead the organization, some of the employees have a hypothesis that some of the persons in top management have stayed too long in their current positions making it complex to change their attitudes

and develop new vision and ideas. The employees also have a conception that management disregards the employees in terms of information sharing, decision participation to determine the company's future and how it affects the morale and values of the employees. The indication from the analysis is that employees at the lower levels are not completely happy with the way things are being done.

It also came out strongly that most employees feel that most of the top positions are filled by non-Namibians, an issue which is out of the scope of this research.

From another angle, employees suggested a mild re-shuffle within the top management to encourage change in planning, organizing and leadership style. This idea was also supported by Lloyd (2008) when he stated that the changing face of leadership development is becoming another perspective.

(b) Retrenchment

There are conflicting findings in the literature as to the role played by retrenchment in the turnaround process. Barker III and Patterson (1996) described the objectives of retrenchment as survival and achieving a positive cash flow.

If by any chance employees might be faced with forced retrenchment, most of them seemed not ready to face the circumstance of unemployment. However, the effect of Voluntary Separation has an equally impede on employees and their families in long term. Thus, literature findings appear to regard retrenchment as a short-term tactical response, as opposed to a broad long-term strategy (Barker III and Patterson, 1996). Chowdhury and Lang (1996) supported the focus on efficiency and cost cutting rather

than strategic actions. In addition, researchers who investigated and analyzed the role of downsizing, or cost cutting via retrenchment or otherwise found that this was an important element in turnaround success. For the purpose of the study, retrenchment or voluntary separation is primarily for cost reduction and cash control.

Evidences from the research also suggest that a company can develop core competencies in terms of both capabilities it possesses and the way capabilities are leveraged when implementing strategies to produce desired outcomes. Because organizational culture dictates how the company conducts its affairs, the process of competitive advantage in communication can be regulated to control employee's behavior in case of termination of employment. Introducing radical changes that affect community's social set up and economic livelihood may create tension in the introduction of strategies. Regardless of the reasons for change, shaping and reinforcing a new strategy requires effective communication and problem solving, along with retaining the scarce skills and using appropriate reward systems. The effectiveness of process used to implement the company's turnaround strategies would improve when they are based on ethical practices.

(c) Work environment and work ethics

Both management and employees share the same thinking that ethical behavior can be achieved through establishing and communicating specific goals to describe the desired goals, create a working environment in which all people are treated with dignity, and using internal processes that are consistent with the standards.

(d) Sharing information:

It is a common practice within the organization to facilitate and monitor efficient allocations of financials in different projects and their potential by using the balance scorecard system. However as stated earlier, its importance is reduced if the models are only utilized for top management information sharing. Summary of financial measures or key performance indicators, such as capital funds, operating profits, return on capital employed, financial and physical capital, which are used by operating divisions to evaluate the effectiveness and efficiency are critical information that require both stakeholders understanding and future predictions. Non-sharing of such important information creates a gap within the organization as well as lack of understanding or misconceptions among the employees.

The less educated and uneducated employees in the company felt that they are mostly left out when it comes to development and sharing of ideas even though they are represented by Unions. That in return has an impact on the management's requirements to inspire and nurture others, provide the lead innovation and change, and provide training for soft skills of leadership instead of the outpacing hard business skills.

Hard skills refer to understanding of finance and accounting issues. However, it is imperative for the employees to understand the key performance indicators (KPI) or Balance Scorecard Model being used by the company.

Why the change?

It is evident that in five to ten years, up to 80% of skilled and experienced diamond professionals will retire, and the new generation will enter the industry. According to Lloyd (2008), human resources planners have to analyze what the companies require in term of recruiting, turnover, and retention statistics to determine whether the talent pipeline could handle the flow. According to Ernst and Young's Macartney (2008), noted that leaders in the 21st century must reflect strong ethics and values, emotional intelligence, and a cohort approach. The employee component at Namdeb propose that the existing culture should look to create an environment where leaders must be willing to be questioned, demonstrate vulnerability and not take things personal.

Change in top management team

In some cases the change of Chief Executive Officer (CEO) might be required for successful turnaround strategy and improved financial performance. In order for the company to perform and achieve its objectives, most of the employees indicated that a change of top management could turn around the perception of the company. A newly appointed CEO who has a clearer understanding of the strategies might be required to accomplish the successful turnaround, provide and introduce new vision and communicate those strategies throughout the company. Even though further studies indicated that a change of top management was not a strong predictor of turnaround, although strategic leadership was crucial, provided the decline was ascribed to internal reasons, or for external reasons that could be controlled, (Barker III and Barr, 2000).

5.7 Technology and Operations

Large investment was made for acquiring equipment and machinery, however, there was no proper research and the recommendations were based on minimal knowledge of technical know-how. New geological sampling recovery in areas such as Sendelingdrif, Mittag and Kerbehuk has been introduced with the purpose of extending the life of land mine operations. The operating budget is estimated to be 13% over spent due to increased costs in other Coastal mines, work being done to bring Elizabeth Bay into operation, abnormal electricity tariff increases and unbudgeted costs associated with the operation of other relevant activities such as Peace of Africa.

All these positive and negative indicators may have to be considered while considering the strategy for the future.

5.8 SWOT analysis of Namdeb

Since the study focused on a particular company it was considered necessary to closely look at the strengths, weaknesses, opportunities and threats faced by the company before formulating a final view and making suggestions. A SWOT analysis of Namdeb is given using the information generated during research.

(a) Strengths

Namibia is one of the richest countries endowed with a variety of mineral resources. None of the resources have played a more significant role in the history and development of the country as diamond. Diamond mined along the Orange River and its Marine has been of the highest value over the years. The

Government of Namibia and its partners have been working around the clock to ensure that the mineral wealth of the country benefits its people in improving the standard of living.

Mining of diamond in Namibia holds much promise for the future development of the country as more diamonds are discovered offshore in tandem with marine technological innovations and research. Prospecting of more diamond deposits onshore require high capital investment that can contribute to the diversification into downstream activities such as diamond cutting and polishing, jewelry design and manufacturing and the prospects for branding of Namibian diamonds.

Namdeb at present is the only company in Namibia that industrially mines diamonds from the sea bed. It is a global leader and trend setter in the area of Marine Diamond Mining and Technology.

(b) Threats

Discovery of new deposits have been declining due to either lack of modern technological equipments or poor surveying and prospecting. Lack of technical expertise to ascertain the type of exploration and prospecting expected to contribute to financial and sustainable company performance. The cost affiliated to production equipments ran into millions of dollars, which aggravated the company's financial situation when it was unable to generate sufficient income from the operations for working capital.

Offshore diamond in Namibia and at the sites where Namdeb is working in particular has surpassed onshore production, as 2001 marked the record breaking 1.6 million carats from the seabed, with 99% being of gem quality. During the past millennium most of the diamonds were siphoned out of the country to help economies outside Namibia and benefit people elsewhere, leaving most Namibians in severe poverty. Thus, places like Kolmanskop and Bogenfels have few to contribute to the land operations due to the legacy of exploitation. As a result, the land operations carats are mostly affected by the pre-independence mining in the areas.

(c) Opportunities

The diamond mining operations have developed over the years. The diamond industry employs innovative exploration techniques to detect and assess the potential of land based and other targets. Rough diamonds still have to go through the processes of manufacturing, which can be broken into sorting, cutting and polishing. The added value remains a significant aspect for employment creation for the people of Namibia.

Sorting of diamonds, categorize the gem quality into size, shape, quality and color makes each piece unique. Cutting on the other hand, adds value by how the diamond should be shaped to best retain the utmost weight with most brilliant effect.

As one of the pioneer countries that initiated the Kimberly Process, the processes of Namdeb and the country at large is a model for proper regulation and oversight in the global mining industry. Thus, the resources generated from diamonds can be used to develop the country, its infrastructure, education, health and socio-economic structures of the communities.

The Namibia Diamond Trading Company, an equal joint venture between the Government of the Republic of Namibia and De Beers Group, initiated the supply of rough diamonds to manufacturers in Namibia. It is expected that in years to come millions worth of diamonds will be available for local diamond manufacturing. The forecast of availability of diamond to local manufacturers represents almost five percent of Namibia's GDP and nation building.

Thus, diamond mining and processing hold great promise and are expected to provide a strong base not only for local enterprise and employment of local youth but also of revenue to the Government, De Beers and contribution to GDP.

(d) Weaknesses–

Systematic deficiencies: Mining processes are highly capital intensive and require long gestation period. Results start coming after a long period of wait, while there can be no certainty about the extent of the result. In the success of an enterprise the quality of the manpower has an important role. Accordingly, the company has to initiate the process of recruitment, training and development of manpower. In this process it has also to provide for training and skill development.

The investment has a cost and in the long run the company has to meet not only the cost of operations but also the capital cost. Namdeb like any other mining companies in Namibia has to provide for interest on the investment and pay royalty on the product as per the terms and conditions of the lease.

High administered price of essential basic input and services such as electricity, maintenance and fuel products is an added disadvantage to mining industry to which is attributed about 40% of the input costs.

Other factors that have contributed to the weakness of the company are

- The remoteness of Namdeb and accessibility thereof;
- Lack of recreation facilities that deter participation of young skills;
- High level of taxation and royalties;
- Separation from family for the worker ;
- Lack of house ownership;
- Requirement of modern and high technological equipments; and many others.

Taking an overall view it can be concluded that diamond mining holds great promise in the economy of Namibia. However, for harnessing the opportunities, there is a need for not only exploration and development of sites and deployment of right type of technology, but also development of appropriate skills, attitudes and policies.

4.9 Ethical issues

The study was conducted in a free, legitimate and conducive environment. The researcher explained fully the purpose of conducting such a study. The employees and the management both were given full discretion to provide information for research assuring that their doing so would not jeopardize or compromise the quality of the organization trade-off.

4.10 Post research period developments:

There have been certain developments during the post research period. It may be pertinent to present them here.

Table 1: Summary of Operating Results for Period ended 30 Dec 2010.

	2010				2009	
	Forecast N\$'000	Revised Budget N\$'000	Variance N\$'000	Variance %	Actual N\$'000	Variance %
Carats Sold (Thousands)	1,3731,159	21418			1,363	1
US\$/NS\$ Exchange Rate	7,53277,8000	(0.26726)	(3)		8.1222(7)	
Diamond Sales	4,133,061	3,011,764	1,121,297	37	3,371,985	23
Opening Stock	535,894		124,160	(411,735)	921,543	42
	(332)					
Production	2,856,082	2,769,136	(86,947)	(3)	2,561,709	(11)
Closing Stock	(512,058)	(410,665)	101,393	25	(124,161)	312
COST OF SALES	2,879,918	2,482,631	(397,289)	(16)	3,359,091	14
Gross Diamond Acc Profit	1,253,143		529,133	724,010	12,894	9,619
	137					
Selling & distribution Costs	7,808	6,692	(1,116)	(17)	7,040	(11)
Net Diamond Account Profit	1,245,335	522,441	722,894	138	5,854	21,174
Other Income	17,064	8,,515	8,549	100	19,639	(13)
Off Mine Costs	(56,164)	(53,435)	(2,729)	(5)	(36,620)	(53)
Interest Paid	(6,824)	(28,424)	21,600	76	(45,931)	0
Income before Appropriations	1,199,411	449,097	750,314	167	(57,058)	(2,202)
Appropriations	(119,958)	(90,742)	(29,216)	(32)	(31,416)	(282)
Retained Earnings/Accumulated Loss b/f	0	0	0	0	0	0
Distributable Amount	1,079,453	358,355	721,099	201	(88,474)	(1,320)
Allocated as follows:GRN	71%	85%			-379%	
DBC	29%	15%			5%	
Profit ratio	26%	12%			-3%	

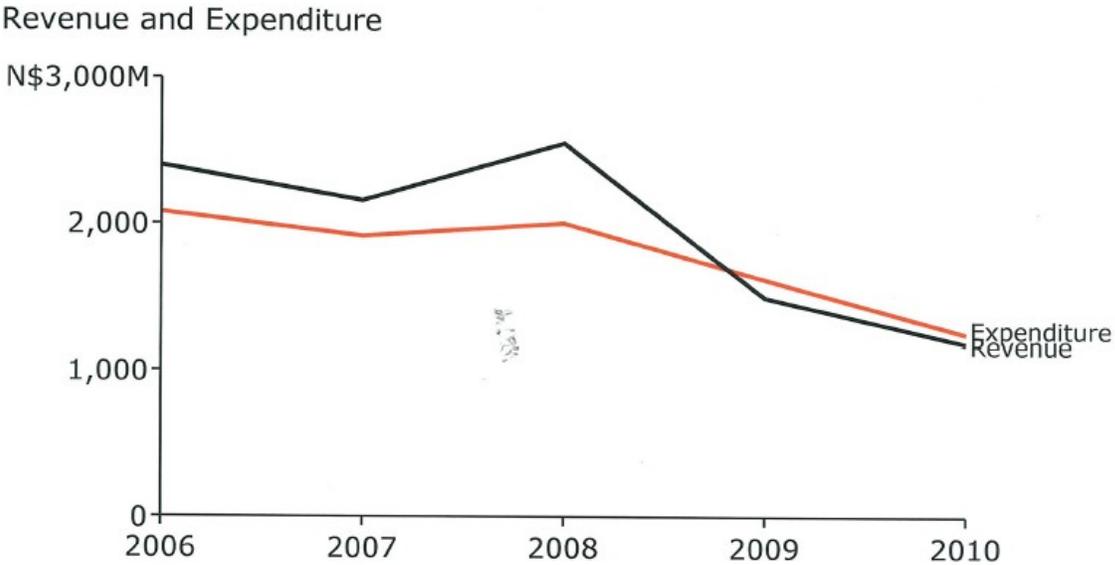
The forecast of operating results indicated positive results with the introduction of new capital projects. The initial financing of the company as portrayed in the table above represents the whole Namdeb operations. Research indicates that change in total market may have an impact on business. Findings indicate that Namdeb shall need huge capital investment to prolong the life of the mine. The company will require estimated capital of N\$72 million to sustain its new capital projects beyond 2012.

As per the financial reports for the period ended June 2010 operating results indicated a favourable 11% to budget, due to higher US\$/carat price. The revenue of land operations will decrease as from end of 2010. This will require new injections of capital from sources still to be identified. This was not included in the existing turnaround strategy.

Figure 3: given below also indicates decreased revenues and negative cash flow for 2009.

Fig 3:Current performance levels

At current performance levels land operations will be cashflow negative from 2009



Source: Namdeb Strategic Plan, 2009

5.11 Overall conclusions

The period between 2004 – 2008 selected for the present study has been not only eventful but also stressful for the company for its management and employees. Some of the highly profitable assets have turned loss making, costs have gone up while the revenues have shrunk. To an extent this was due to external factors beyond the control of the management, however, some factors were internal to the company. This created a challenging opportunity for the management to move ahead with hope and new vision.

Problem solving shall require cooperation from people with different backgrounds, with different talents, from diamond industry and from other industries, universities, researchers, and people who deal with funds and markets. Ideas from all these sources may be pooled to find a solution to the situation. The present research can provide some useful background material for any such exercise.

It will be also pertinent for the management to avail information with regard to environment changes and latest geological dimensions, which may be advantageous to the company.

CHAPTER 6:

CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

Namdeb has an important place in the economic history of Namibia and continues to have an important role in its economy. The company has put a turnaround strategy in place and is working on it. It uses Balance Scorecard for performance measurement. In this background the present research was an attempt to analyse the situation and understand it in a clear perspective, so that a way out may be suggested.

6.2. Summary of findings

The analysis indicates that the implementation of proper strategies plays an important role in the organizational dynamics during turnaround. Thus, managers need to assess and understand the processes and linkages and be clear of the impact of the anticipated turnaround actions. It has become increasingly apparent that Namdeb needs a different business model to replace the existed Sida Ei!Gûs if it wants to remain profitable and continue to exploit its future resource opportunities. Management needs to identify operating model and business management structure to maximize shareholder value through improved financial performance and ensure sustainability.

According to the findings of this study, it is also important for the management to review ancillary items such as mining licenses, statutory taxes and royalties that need to be addressed in addition to the corporate structure and operating model to ensure sustainability of its business.

Taking the unanticipated global financial crisis into consideration, the effect was very detrimental to the diamond industry as it caused reduction in diamond price and in return that contributed to reduction in sales revenue.

Taking the issue of declining carat profile under review in this study, this reduced Namdeb and its subsidiaries' profitability and highlighted some inefficiencies within the introduced business model.

The study also revealed that the introduced turnaround strategy restricted future development and compromised the long-term sustainability of the organization. This in return brought the researcher to the conclusion that Namdeb's land-based operations need significant capital investments to secure their medium and long-term future. This will require capital injection either from borrowed funds or from shareholders or some other businesses that exceed the current cash generating ability from existing operations.

Namdeb holds licenses over the following areas:

- Orange River,

- Mining Area 1
- Bogenfels
- Elizabeth Bay
- Douglas Bay
- Offshore Midwater and Atlantic 1 (marine)

This gives Namdeb a total of 15 790km² of mining license areas. It is estimated that the total original resource contained in these areas was approximately 250 million carats, of which approximately 90 million have been extracted in the last 100 years (some of which were mined by the Germans). Thus, there remain a considerable untapped potential in its licenses that requires extensive skills, technology, modern equipments and a focused top management.

Some of the areas although mined for many years continue to make significant contribution to the Namdeb's land operations. Mining conditions have become challenging over time, thus the existence of those carats require high technical approach before sufficient resource confidence and technological development have been developed to exploit the existing opportunities. Mining along the Orange River produces large stones with Sendelingsdrift being the major contributor. This in return provides average carats with concomitant revenue that will ensure that the deposit along the river can continue to make a significant contribution to the financial performance if managed responsibly.

Some of these areas such as Bogenfels have only a lifespan up to 2011. The technical and harsh environmental obstacles remain a challenge for resources to be exploited. In assessing the alternatives, management needs to consider the issues such as the regulatory, social and economic environments.

The following alternatives should be evaluated in this respect:

- Namdeb current licences to be extended beyond 2020;

- A more competitive and flexible taxes regime to be introduced;
- Current shareholder agreements to be renegotiated and amended in order to facilitate the implementation of best future business model.

6.3 The way ahead:

The evidence presented above when examined in the light of the first specific research objective of the study, which was to determine the extent to which Namdeb's financial performance is attributed to its turnaround strategy clearly brings out that the two cannot be separated and the company's performance has resulted from the turnaround strategy. In view of the above the strategic factors crucial to Namdeb's financial performance are its resources including brand image and experience built over a long period of time. Building over these strengths the company is to move forward.

The various alternatives available to Namdeb's under the existing situation are that either the existing mining licences can be split up to sell off, or to form different companies. However, it is also evident that the Namdeb ore bodies and infrastructures are intertwined and with that the removal of any part might lead to a significant loss of opportunity and synergies. The mid and shallow water ore bodies are simply extensions of the land resources, splitting them might hinder the geological understanding, and further exploration.

Turnaround strategies often fail when they focus on achieving longer-term vision without getting out of the immediate causes of distress first. On the other hand, prolonged focus on getting out of the cause of

distress without a strategy for sustainable recovery is doomed to failure. In order to implement a successful turnaround strategy, certain longer-term sacrifices often need to be made.

6.4 Ability to raise capital funds

The financial objective of a turnaround is to achieve improved cash flow, profitability, solvency and financial returns. Financial turnaround strategy refers to financial restructuring with a view to strengthening the balance sheet and/or providing funding. Operational turnaround implies changes to the value chain, which in turn require changes in the organizational structure of the underperforming or distressed business, including changes to the leadership team, improving effectiveness and efficiency may not be enough. Thus a combination of all factors should be employed for better accomplishment.

The ability to raise capital will be a requirement to solicit funds for explorations and funding of new projects on remaining land based areas. The combination of land and marine operations would therefore, be advisable, as it is appealing and attractive to investors who would like to have business that continues to provide independent revenue streams, while raising capital for new projects.

6.5 Access to skills and Employee value proposition

Namdeb embarked upon the voluntary separation exercise where employees had an option to apply for voluntary separation rather than forced retrenchment. This saw the staff complement shrinking from 3600 employees to 1472 at 15 August 2009.

It is important to highlight that retaining and retention of skills go along with best rewards. Thus, Namdeb should recognize the importance of offering a compelling employee value proposition to attract and retain a diverse and talented workforce by providing an environment conducive to personal development, best work life balance, providing equal chances to both its expatriates and local employees and introduce the reward and recognition scheme. Additionally, the option of offering employees share-based incentive schemes or any other incentives should also be considered.

6.6 Sustainable profitability

In the long term, the diversity of operations will mean that some part of the operation will be “cash cow” that provide profits to funds development in other parts of the business. The current situation and base restructuring will not provide sustainable profitability, as the turnaround strategy has the inevitable risk of creating of cross subsidization in access to capital.

It is generally recognized that the different operations require very specific management focus and different approach to operational efficiencies.

6.7 Management in general

Communication and sharing of information remains the key to every successful business. Thus, it is best to keep management that is acquainted with the operational model of the company. However,

- 1) management must be sensitive to identifying and addressing the problems when they appear,
- 2) management must communicate a clear message of the organisation’s situation and instill confidence in its ability to meet the crisis, and
- 3) management must implement downsizing strategies when required.

6.8 Answers to research questions

Having discussed the findings of the research it may be pertinent to give answers to the research questions one by one.

Question 1: Effective of turnaround strategy on financial performance?

The period of research (2004-08) was difficult period for the company. Even when the turnaround strategy was in place, the financial parameters of the company deteriorated. To an extent it may be attributed to internal factors and to some extent to external factors including the deteriorating carats profile and slowdown in the international financial markets.

Question 2: Turnaround strategy ensuring profitability, sustainability and economic viability?

The basic objective of turnaround strategy was to ensure profitability, sustainability and economic viability of the company in the changing scenario. However, as the financial results show the objective was not fulfilled. However, as stated earlier to an extent this was the reflection of external factors.

Question 3: Measures needed to improve financial performance of Namdeb?

As the results of 2009 and 2010 the company is turning the corner. However, the company has to make continuous efforts in this direction. Some specific suggestions in this respect are made under para 6.9

6.9 Recommendations

For the turnaround strategy to work, the following recommendations are provided;

- Use the Balance Scorecard to compare the company's performance with competitors or with 'best practices benchmarks'

- Innovation in processes and research and development are necessary to increase the ability for new discovery. New technologies and explorations should be carried on with full zeal and direction,
- Brainstorming should be done to help generate ideas for evaluation and implementation. Inviting brainstorming sessions from different ideas outside the Namdeb management will evolve into revenue enhancement opportunities, identifying new ways to create sustainable and economical operations by providing new ways of discoveries as well as improving exploration procedures in existing business.
- Identify new projects to extend the life of the mine beyond 2030,
- Consider process of mergers and acquisitions,
- Provide a situation of attracting investors with access to knowledge and funds to provide future growth beyond existing shareholders.
- Reduce materials at the mine store by identifying redundant stock and dispose it off,

Use Just-In-Time to reduce storage costs.

- Implement a clear segregation of duties in materials and equipments handling, and

Operation management processes – in-bound logistics, operations, out-bound logistics- to increase performance on quality and lead time, thereby improve the supply chain.

- Transfer talented and skilled staff to profitable extended projects,
- Align the salary packages and benefits to the market to create an enabling environment,
- Provide professional growth and good leadership quality,

- Align the remuneration policy with new company vision and business direction,
- In order to retain and attract the scarce skills the following should be considered:

Market-related packages	Reduced career development/further opportunities	Inclusiveness	Prioritizing/Planning to be improved via corporate calendar
Housing Allowances	On-the-job training focus/Training on New equipment	Lead by example	Reduced complements post restructuring impact on delivery
Incentive Schemes	Limited career-paths especially in Mining, Align career matrix across disciplines to current business	Improve communication channels	Alternative effective systems/methods to be explored within Supply Chain to enable/support end-users
Recognition for Experience	Streamline developmental opportunities, Continuous Improvement encourages growth and knowledge transfer	Coaching and Mentoring, Facilitate and co-ordinate supportive relationships	Drive/embrace change and encourage agility with regards to process and systems

6.10 Contribution of the research:

It may not be correct for a young researcher to make a claim of significant contribution through research, rather I have benefitted from the works of a number of researchers, which has been acknowledged at appropriate place. Yet the present research has attempted to make some contribution to existing literature on the subject.

The problem identified for research was new. No work done on this and similar problem could be identified in Namibia and in existing literature. Researcher therefore, has tried to break new ground in this respect.

Namdeb has an important place in the history of economic development of Namibia. It has made significant contribution to the economy of Namibia in terms of contribution to GDP, exports, foreign exchange earnings, employment and skill development, and to revenue of the Government of the Republic of Namibia. The company has passed through difficult times during this decade, which has been a matter of concern and anxiety for all stakeholders. An effort has been made through this research to identify the problems faced by the company and throw up ideas for rebuilding and creating a growth momentum in the company. It is hoped that these ideas may be useful for the management of the company.

The methodology adopted for research has been purposely kept simple and non quantitative, so that the results may be comprehensible for people not so well versed in research techniques besides the research community.

6.11 Areas for further research

No research is comprehensive enough to explore all aspects of a problem. While some issues are explored some remain unexplored. It is therefore, necessary that the process of research is carried forward.

From the findings of the present research it may be clearly observed that the stock of natural resources is finite and at some point of time that stock is exhausted, leaving a trail of problems. Research should be undertaken to develop 'alternative plans', to take care of these expected developments so that economic development of the region and economic viability of related businesses may be maintained and livelihood of the people may be protected.

Human-relations are the most challenging field in management. In this research paper it was observed that it was the biggest casualty - employees losing confidence in management and looking for alternative employment. Research may be undertaken to identify the measures necessary for building confidence and commitment of employees, so that good relations may be maintained even under the stress of turnaround.

RERERENCES

Adachi, T and Nishiyama,T. (1995). *Resource depletion calculated by the ratio of the reserve plus cumulative consumption to the crustal abundance of gold*. Natural Resources Research Journal, Vol.4, No.3. Sept, 1995.

African Mining. Vol.12 No.6. November–December 2007.

Albert, S, and Whetten, D. A. (1985). *Organizational Identity*. Research in Organizational Behavior, 7: 263

Argenti, J. (1976). *Corporate Collapse: The Causes and Symptoms*. McGraw- Hill, Maidenhead, UK.<http://www.springerlink.com>. Access 09/02/2009.

Aswathanarayana, U. (2002). *Mineral Resources Management and the Environment*. Academy of Management Journal, Vol,14, No. 4

Barker III, L.V. and Duhaime, I.M. (1997). *Strategic Change in the Turnaround Process: Theory and Empirical Evidence*. Strategic Management Journal, Vol.18. No.1 pp 13-38.

Barker III, L.V. and Patterson, P.W. (1996). *Top management team tenure and top manager casual attributions at declining firms attempting turnarounds*. Group and Organization Management, Vol.21, No.3. pp 304-336.

Barker III, L.V. and Barr, P.S. (2002). *Linking top manager attributions to strategic reorientation in declining firms attempting turnarounds*. Journal of Business Research, Vol.55, pp 963-979

Bibeault, D.B. (1982). *Corporate Turnaround*. New York: McGraw Hill

Blandy, F. (2008). From Boom to Bust, Africa reels as economic crisis hits mines. <http://uk.biz.yahoo.com/23122008/323>. accessed 19/01/2009.

Blechner, T. and Nail, L. (2000). *Integration problems and turnaround strategies in a cross border merger: A clinical examination of the Pharmacia-Upjohn merger*. International Review of Financial Analysis, Vol.9 No.2, p219-234.

Blignaut, J.N., Hassan, R. (2002). *A natural Resource Accounting Analysis of the Contribution of Mineral resources to Sustainable Development in South Africa*. South African J. Economic Management Science Supplement. Ser.3.

Bowman, T. (2008). *Solving industry's tough challenges – together*. E&P. Global Exploration & Production News. Technology Update. Analysis. Vol.81. Issue 12. Dec 2008.

Bristow, J. (2007). *Diamonds in Kimberley*. Mining Mirror. Vol, 19. No.12. June 2007.

Bruton, G.D., Ahlstrom, D., and Wan, J.C.C., (2001). *Turnaround in East Asian Firms: Evidence from ethnic overseas Chinese communities*. Strategic Management Journal, Vol.24, pp 520-540.

Bruton, G.D. and Rubanik, Y.T. (1997). *Turnaround of high technology firms in Russia. The case of Micron*. Academy of Management Executive, Vol.11, No.2

Cameron, K.S. Whetten, D.A., and Kim, M. (1987). *Organizational dysfunctions of decline*. Academy of Management Journal, Vol. 30, pp 126-138.

Christensen, C. (1997). *The Innovator's Dilemma*, Harvard Business School Press: Cambridge, MA.

Chowdhury, S.D. and Lang, J.R (1996). *Turnaround in small firms: An assessment of efficiency strategies*. Journal of Business Research, Vol.36.

Clifford, M. (2000). *Meltdown: Asia's Boom, Bust and Beyond*. Prentice Hall: Paramus, NJ.

Comerford, R.A and Callaghan, D.W. (1985). *Strategic Management*, Boston Kent. P.6

Corbett, A. (1989). *Diamond Beaches. A History of Oranjemund 1928-1989*. South Africa; Ace Printers, Parow.

Creswell, J.W. (1998). *Quantitative inquiry and research design: choosing among five traditions*. Thousand Oaks, CA. Sage

Daly, H. (2000). *When smart people make dumb mistakes*. Ecol. Econ.34

Donaldson, L. and Davis, J.H. (1991). *Stewardship theory or agency theory: CEO Governance and Shareholder Returns*. Australian Journal of Management, Vol.16, June, 1991.

Davidson, J. (2008). *Helam Diamond Mine – Quick eyes – skilled hands*. Mining Mirror.Vol.20.No.7.January 2008.

Day, G. (2008). Etruscan raises the bar at its Youga Mine in Burkina Faso. Inside Mining. Published by, 35 Media, Pentad House, Wynbedrg, Sandton. South Africa

De Beers, (1998). *The Role of South Africa in the International Diamond Industry*.

De Beers, (2005/6). *A diamond is forever. Living up to Diamonds: Report to Stakeholders*.

Dippenaar, J.(2008). *Helam diamond Mine –Telling the good from the bad*. Mining Mirror.Vol.20.No.7. January 2008.

Eisenhardt, K.M. (1989). "Agency Theory: An Assessment and Review," Academy of Management Review, Vol. 14, No.4. <http://www.springerlink.com>. Accessed: 09/02/2009

El Serafy, S. (1989). *The proper calculation of income from depletion natural resources*. In: Ahmad,Y., El Serafy, S., Lutz, E. (Eds), Environmental Accounting for Sustainable Development, World Bank, Washington, DC.

Erekson, O.H.(1999). *Sustainability and Economic Well-Being*. In: Sustainability perspectives for resources and business. USA p41-62.

Even-Zohar, C. (2007).*From Mine to Mistress: Corporate Strategies and Government Policies in the International Diamond Industry*. Gutenberg Press Ltd.

Feng, B.(2009) Key Drivers of Profitability and Competitiveness in supply chain. <http://gsmotion.wordpress>. Accessed 03/12/2010

Gary D. Shank. (2006). *Quantitative Research. A Personal Skills Approach*, Second Edition, New Jersey, Pearson Education Inc.

Gasiuniene, V.E. (2001). *State Mineral Resources Policy* Geological Survey of Lithuania, Swets & Zietlinger Publishers Lisse, ISBN 90 2651 846 3, Lithuania.

Grover, V. (2002). *A tutorial on survey research: From constructs to theory*. Accessed on 21st June, 2008. <http://dmsweb.badm.sc.edu/grover/survey/MIS-SUVy.html#what>.

Gupta, D. and Sathye, M. (2008). *Financial Turnaround of the Indian Railways*. A case study. Faculty of Business & Government, University of Canberra, Canberra, Australia.

Heany, D.F. (1989). *Business in Profit Trouble*, Journal of Business Strategy.

Hambrick, D.C. and D'Aveni, R.A. (1988). *Large Corporate Failures as Downward Spirals*. Administrative Science Quarterly, Vol.33. pp 1-23.

Hammond, J.S., Keeney, R.L., and Raiffa, H. (1998). *The hidden traps in decision making*. Harvard Business Review, Vol.76, No.7. pp 47-58.

Hannan, M.T. and Freeman, J.H. (1977). *The population ecology of organizations*. American Journal of Sociology, Vol. 82.

Harris, S.G. and Sutton, R.I. (1986). *Functions of parting ceremonies in dying organizations*. Academy of Management Journal, Vol. 29, No.1, pp 5-30.

Hartwick, J. (1990). *Natural Resources, National Accounting and Economic Depreciation*. J. Public Econ, 43, Environmental Accounting for Sustainable Development, A UNSTAT-World Bank Symposium. The World Bank, Washington, DC.

Hicks, J.R. (1946). *Value and Capital*. Oxford University Press, Oxford.

Jeyavelu, S. (2007). *Building a case for inclusion of organizational identity in turnaround research*. Indiana Institute of Management Kozhikode

Johari, H. and Daud, R.M.(1992). Turnaround Strategy- The Case of Malaysian Marble Sdn.Bhd. Malaysian Management Journal1 (1),99-105.[http://eprints.uum.edu.my/934/1/turnaround strategy](http://eprints.uum.edu.my/934/1/turnaround_strategy). Accessed 16/06/2010.

Kaplan, R.S. & Atkinson, A.A. (1998). *Advanced Management Accounting*. 3rd Edition. Prentice-Hall. New Jersey.

Kaplan, R.S., & Norton, D.P. (1992). *The Balanced Scorecard: Measures that drive performance*. Harvard Business Review Jan- Feb pp 71-80

Kaplan, R.S. and Norton, D.P., (1993). *Putting the Balanced Scorecard to Work*. Harvard Business Review Sep- Oct, 1993, Vol. 10, pp2-16.

Kaplan, R.S. & Norton, D.P. (1996). *Using the Balanced Scorecard as a strategic management system*. Harvard Business Review, Jan- Feb 1996, Vol. 3, pp 75-85.

Kantor, M.(1997). "*Criteria for Performance Excellence:*" Malcom Baldrige Quality Award (Paperback).

Kramer, I.(2007). *Capital markets dig for consistent financial reporting*. Mining Mirror. Vol. 19.No.10. April 2007.

Lloyd, F.R.(2008). *The Changing Face of Leadership Development*. E&P. Global Exploration & Production News. Technology Update. Analysis. Vol. 81.Issue 12. Dec 2008.

Maheshwari, S.K. and Ahlstrom, D.(2004). Turning Around a State Owned Enterprise: The Case of Scooters India Limited. *Asia Pacific Journal of Management*, Vol.21, pp 75-101.

Maksoud, J. (2008). *R&D efforts target offshore operations*. E&P, Global Exploration & Production News. Technology Update.Analysis.Vol.81.Issue 12. Dec 2008.

Marshall, A. (1920). *The Principle of Economics*.8th ed. Pp438-439. The Macmillan Company, London.

Marvasti, A. (2000). *Resources Characteristics, Extraction Costs, and Optimal Exploitation of Mineral Resources*. *Environmental and Resource Economics Journal*, Vol. 17, No.4. December 2000.

Mazumder, Mitra S and Ghoshal, T. (2003). Strategies for Sustainable Turnaround of Indian Steel Industry. August 2003. <http://www.ieindia.org/publish/mm/1003/oct'03>. Accessed 03/12/2010

Mbako, H. (1999). *Namdeb at the Core*. Manager of Corporate Affairs, Namdeb Diamond Corporation.

Mensah, A.M. & Castro, L.C. (2004). *Sustainable Resources Use and Sustainable Development: A Contradiction?!*Center for Development Research, University of Bonn. Accessed: 01 /02/09

Mezias, J. and Starbuck, W. (2003).*What do managers know, anyway?* Harvard Business Review, Vol.81. No.5.

Murray, R. (2006). *Namibia's Namdeb diamond operations: Namdeb mulls over next moves*.

Mining Magazine. Vol.195.No.6. Dec, 2006. Estab.1909-ISSN 0308-6631.

Myburgh, L.(2008). *Africa Reels As Economic Crisis Hits Mines*. <http://news.morningstar.com/newsnet>. Accessed 19/01/09.

Namdeb,(2005& 2007).*Annual Report*.

Namdeb, (2007). *Management Report*.

Namdeb, (2001, 2006). *Strategic Plan– June 2001, 2006*

Namibia Mining Report Q2, 2008. Published by Business Monitor International, Mermaid House, London, EC4V 3DS, UK.

Njini,F (2008). *Unarmed Kombat: Loss-making Weatherly seeks power for copper mine's reopening*. Creamer Media's Mining Weekly. Vol. 14 no 13. April 11-17 , 2008.

Ogden, R.W. (2007). *West Africa's Birimian trend- the next Carlin/Cortez*. African Mining Journal.Vol.12 No.6. Nov-Dec 2007.

Robinson, I. (2001). *Kumba aims for critical mass*.SA Mining, Incorporating Mining in Southern Africa. Published: Johnnic Publishing Ltd. JHB. South Africa.

Ross, S.A., Westerfield, R.W, and Jordan, B.D. (2003). *Fundamentals of Corporate Finance*. McGraw-Hill Companies Inc.1221 Avenue of the Americans, New York,NY,10020.

Pfeffer, J. and Salancik, G.R. (1974).*Organizational decision making as a political process: The case of a University budget*.Administrative Science Quarterly, Vol.19.

Schendel, D, Patton, G.R., and Riggs, J. (1976).*Corporate Turnaround Strategies: A Study if Profit Decline and Recovery*. Journal of General Management, Vol.3, No.3.

Shine, V. (2006). *How can companies best contribute to a sustainable future?* Report to stakeholders. De Beers Group of Companies.

Singh, J.V. (1986). *Performance, slack, and risk taking in organizational decision making*. Academy of Management Journal, Vol. 29.

Smuth, W. (2007). *So much to do – so few good men*. African Mining. Vol. 12. No. 6 Nov-Dec 2007.

Starbucks Corporation (2009). Starbucks Turnaround Strategy Using IT. www.studentwebstuff.com/mis/showthread.php? Accessed 19/06/2010

Stone, A. (2001) *Culture shock for materials handling industry*. SA Mining Incorporating Mining in Southern Africa. Published by Johnnic Publishing Ltd. JHB. South Africa..

Swarts, B.(2008). *Helam Diamond Mine- Quick eyes – skilled hands*. Mining Mirror.Vol.20.No.7. January 2008.

Trewolla, J. (2005). *U-Turn-Tools – Performance Turnaround Tactics: Learn how to turn around sagging financial performance with these fast-acting remedies*. Retrieved April 2008, from <http://www.marketinganalyticsgroup.com/U-turn-tools=performance-turnaround-tactics>.

Youngquist, W. (1997). *GeoDestinies. The Inevitable Control of Earth Resources Over Nations and Individuals*. Portland; National Book Company.

Weitzel, W. and Jonsson, E. (1989). *Decline in organizations: A literature integration and extension*. Administrative Science Quarterly, Vol 34.

Wheelen, T.L. & Hunger, J. (2000). *Strategic Management: Business Policy*. 7th Ed. Prentice Hall International, Inc.

Whetten, D.A. (1987). *Organizational Growth and decline processes*. in Readings in Organizational decline. Cameron, K.S, Sutton, R.I. and Whetten, D.A. (1988). Cambridge, MA: Ballinger.

Dear Sir

I **Lorna Peyavali Mbwale** student of Master of Science in Accounting and Finance of the University of Namibia, am conducting a survey to produce a mini thesis on '**NAMDEB's TURNAROUND STRATEGY TO IMPROVE ITS FINANCIAL PERFORMANCE IN VIEW OF DECLINING CARATS PROFILE**' in partial fulfillment of the requirement of the studies of the degree.

I seek your cooperation in this academic venture for understanding some of the issues that are important for the research. A list of such issues is enclosed for your reference. The information being collected will be used for this academic work. Complete confidentiality shall be maintained about the information provided and information given shall not be shared with any other person.

Please inform me about the time convenient to you for the visit on the address given below.

Lorna Peyavali Mbwale

Student M. Sc. Accounting and Finance

Department of Accounting, Auditing and Income Tax

University of Namibia, Windhoek, Namibia

Interview schedule for directors and senior managers

1. As diamond mining makes a significant contribution to the economy of Namibia and revenue of the Government, has a sound mining strategy been planned?
2. Has Namdeb's turnaround strategy to improve its financial performance in view of declining carats profile been fully deliberated and details been worked out?

3. How full implementation of the turnaround strategy will ensure potential sustainability and economic viability of the company?
4. Has the turnaround strategy been explained to all stakeholders including employees and their commitment has been obtained for its successful implementation?
5. As exploration is backbone of mining, has enough exploration been done to determine future developments?
6. Does the company possess high technology equipment to cater to modern exploration projects?
7. Is closing down some of the exploration areas expected to contribute to future financial performance of the company?
8. Has the Balanced Scorecard Model been well explained and comprehended by the employees?
9. Are the objectives aligned with the strategy and management performance?
10. Has a strategy been planned for training of the employees as per the turnaround requirements?
11. Is training provided to employees at all levels without the consideration of level, race and creed?
12. Are the key performance indicators expected to be achieved on designed Balanced Scorecard model?
13. Has the Balanced Scorecard Model been well explained and comprehended by the employees?
14. Are the objectives aligned with the strategy and management performance?

Dear Sir

I **Lorna Peyavali Mbwale** student of Master of Science in Accounting and Finance of the University of Namibia, am conducting a survey to produce a mini thesis on '**NAMDEB's TURNAROUND STRATEGY TO IMPROVE ITS FINANCIAL PERFORMANCE IN VIEW OF DECLINING CARATS PROFILE**' in partial fulfillment of the requirement of the studies of the degree.

I seek your cooperation in this academic venture for understanding some of the issues that are important for the research. A list of such issues is enclosed for your reference. The information being collected will be used for this academic work. Complete confidentiality shall be maintained about the information provided and information given shall not be shared with any other person.

Please inform me about the time convenient to you for the visit on the address given below.

Lorna Peyavali Mbwale

Student M. Sc. Accounting and Finance

Department of Accounting, Auditing and Income Tax

University of Namibia, Windhoek, Namibia

Interview schedule for Trade Union Leaders, Supervisors and Foreman

1. Are Namdeb's employees well aware about declining carat profile?
2. Any fall in diamond production may seriously impact the government and thereby the social development programmes.

3. Has the company's turnaround strategy been explained to all stakeholders including employees and their commitment has been obtained for its successful implementation?
4. Fuller implementation of the turnaround strategy will guarantee potential sustainability and economic viability of the project.
5. Has a strategy been planned for training of the employees as per the turnaround requirements?
6. Are the objectives of the organisation aligned with the strategy and management performance?
7. Is closing down some of the exploration areas expected to contribute to future financial performance of the company?
8. Has the Balanced Scorecard Model been well explained and comprehended by the employees?
9. Is training being provided to employees at all levels without the consideration of level, caste and creed?

Questionnaire for managers, administrative personnel and mine workers

Dear Respondent -----

I **Lorna Peyavali Mbwale** student of Master of Science in Accounting and Finance of University of Namibia am conducting a survey to produce a mini thesis on '**NAMDEB's TURNAROUND STRATEGY TO IMPROVE ITS FINANCIAL PERFORMANCE IN VIEW OF DECLINING CARATS PROFILE**' in partial fulfillment of the requirement of the studies of the degree. The information being collected will be used for this academic work.

Complete confidentiality shall be maintained about the information provided and information given by an individual shall not be shared with any other person.

Please complete the questionnaire mailed and return it on the address given below.

Lorna Peyavali Mbwale

Student M. Sc. Accounting and Finance

Department of Accounting, Auditing and Income Tax

University of Namibia, Windhoek, Namibia

A questionnaire on '**NAMDEB's TURNAROUNDSTRATEGY TO IMPROVE ITS FINANCIAL PERFORMANCE IN VIEW OF DECLINING CARATS PROFILE**'

Name of respondent -----

Designation -----

Instruction to Respondents: Please tick in appropriate column to indicate your response to the following statements:

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Turnaround Strategy					
1. Namdeb's employees are aware of the declining carats profile.					
2. Turnaround strategy is well defined and communicated to members					
3. The strategy is designed to improve financial performance and fix current challenges.					
4. Fuller implementation of the turnaround strategy will guarantee potential sustainability and economic viability of the company.					
5. The objectives are aligned with the strategy and management performance of the company.					
6. Land-based leadership provides an appropriate business model that will enable the organization to meet its objectives in an efficient and profitable manner.					
Balanced Scorecard					
1. The Balanced Scorecard model is well explained and comprehended by employee.					
2. Key Performance Indicators will be achieved based on designed Balanced Scorecard Model.					
3. With current situation prevailing,					

Namdeb should learn from other companies.					
4. Shareholders have the interest of employees as priority.					
5. Training is readily provided for employees irrespective of the levels, color or creed.					
Technology and Operations					
1. Modern technology has been useful to realize the future dream of discoveries					
2. If exploration is the backbone of mining, enough has been done for future developments.					
3. Sidelineing some of the exploration areas will contribute to future financial performance of the company.					
4. Maintenance and handling of assets are crucial to the company					
5. The company possesses high tech equipments to cater for modern exploration projects.					
Management and Leadership					
1. Sharing of ideas with companies outside the mining industry will yield complementing results.					
2. Senior management should be the catalyst and instrument of change.					
3. The management style provides quantitative and simple benchmark scenarios to guide policy decisions.					
External Environment & Social Aspects					
1. The diamond industry is the major contributor to Namibia's growth.					
2. The net present value of diamond revenue is uncertain because the unpredictable existence of resources and diamond prices changes.					
3. End of diamond production will have a social impede on employees					

	and their families.					
4.	Without diversification, government revenue would fall and post mining plans will have little effect on social development.					
5.	Post mining effects are not disadvantaging the Oranjemund community.					

Appendix 5.1

Results of survey through questionnaire

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Turnaround Strategy					
1. Namdeb's employees are aware of the declining carats profile.					
2. Turnaround strategy is well defined and communicated to members					
3. The strategy is designed to improve financial performance and fix current challenges.					
4. Fuller implementation of the turnaround strategy will guarantee potential sustainability and economic viability of the company.					
5. The objectives are aligned with the strategy and management performance of the company.					
6. Land-based leadership provides an appropriate business model that will enable the organization to meet its objectives in an efficient and profitable manner.					
Balanced Scorecard					

1.	The Balanced Scorecard model is well explained and comprehended by employee.					
2.	Key Performance Indicators will be achieved based on designed Balanced Scorecard Model.					
3.	With current situation prevailing, Namdeb should learn from other companies.					
4.	Shareholders have the interest of employees as priority.					
5.	Training is readily provided for employees irrespective of the levels, color or creed.					
Technology and Operations						
1.	Modern technology has been useful to realize the future dream of discoveries					
2.	If exploration is the backbone of mining, enough has been done for future developments.					
3.	Sidelining some of the exploration areas will contribute to future financial performance of the company.					
4.	Maintenance and handling of assets are crucial to the company					
5.	The company possesses high tech equipments to cater for modern exploration projects.					
Management and Leadership						
1.	Sharing of ideas with companies outside the mining industry will yield complementing results.					
2.	Senior management should be the catalyst and instrument of change.					
3.	The management style provides quantitative and simple benchmark scenarios to guide policy decisions.					

External Environment & Social Aspects					
1.	The diamond industry is the major contributor to Namibia's growth.				
2.	The net present value of diamond revenue is uncertain because the unpredictable existence of resources and diamond prices changes.				
3.	End of diamond production will have a social impede on employees and their families.				
4.	Without diversification, government revenue would fall and post mining plans will have little effect on social development.				
5.	Post mining effects are not disadvantaging the Oranjemund community.				

Appendix 5.2

Weighted Scores of the Responses

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Turnaround Strategy					
1. Namdeb's employees are aware of the declining carats profile.					
2. Turnaround strategy is well defined and communicated to members					
3. The strategy is designed to improve financial performance and fix current challenges.					
4. Fuller implementation of the turnaround strategy will guarantee potential					

sustainability and economic viability of the company.					
5. The objectives are aligned with the strategy and management performance of the company.					
6. Land-based leadership provides an appropriate business model that will enable the organization to meet its objectives in an efficient and profitable manner.					
Balanced Scorecard					
1. The Balanced Scorecard model is well explained and comprehended by employee.					
2. Key Performance Indicators will be achieved based on designed Balanced Scorecard Model.					
3. With current situation prevailing, Namdeb should learn from other companies.					
4. Shareholders have the interest of employees as priority.					
5. Training is readily provided for employees irrespective of the levels, color or creed.					
Technology and Operations					
1. Modern technology has been useful to realize the future dream of discoveries					
2. If exploration is the backbone of mining, enough has been done for future developments.					
3. Sidelining some of the exploration areas will contribute to future financial performance of the company.					
4. Maintenance and handling of assets are crucial to the company					
5. The company possesses high tech equipments to cater for modern exploration projects.					

Management and Leadership					
1. Sharing of ideas with companies outside the mining industry will yield complementing results.					
2. Senior management should be the catalyst and instrument of change.					
3. The management style provides quantitative and simple benchmark scenarios to guide policy decisions.					
External Environment & Social Aspects					
1. The diamond industry is the major contributor to Namibia's growth.					
2. The net present value of diamond revenue is uncertain because the unpredictable existence of resources and diamond prices changes.					
3. End of diamond production will have a social impede on employees and their families.					
4. Without diversification, government revenue would fall and post mining plans will have little effect on social development.					
5. Post mining effects are not disadvantaging the Oranjemund community.					

--