

Napier University Business School

Master of Science
in
Investment Promotion and Economic Development

**AN ANALYSIS OF THE GOVERNMENT OF
SWAZILAND'S ADVANCE FACTORY
SHELL PROGRAMME: *IMPACTS AND
IMPLICATIONS FOR FUTURE INTERVENTIONS.***

by

Zizwe P. Vilane

September 2010

**AN ANALYSIS OF THE GOVERNMENT OF
SWAZILAND'S ADVANCE FACTORY
SHELL PROGRAMME: *IMPACTS AND
IMPLICATIONS FOR FUTURE INTERVENTIONS.***

by

Zizwe P. Vilane

August, 2010

**This dissertation is submitted in partial fulfilment
of the Degree of
Master of Science
in
Investment Promotion and Economic Development**

Authorship Declaration

I, Zizwe Paul Vilane, confirm that this dissertation and the work presented in it are my own achievement.

Where I have consulted the published work of others this is always clearly attributed;

Where I have quoted from the work of others the source is always given. With the exception of such quotations this dissertation is entirely my own work;

I have acknowledged all main sources of help;

If my research follows on from previous work or is part of a larger collaborative research project I have made clear exactly what was done by others and what I have contributed myself;

I have read and understand the penalties associated with Academic Misconduct.

I also confirm that I have obtained informed consent from all people I have involved in the work in this dissertation following the School's ethical guidelines

Date: September 2010

Matriculation no: 07018968

Acknowledgements

I would like to extend my sincere appreciation to all the companies, individuals, government agencies and developers that provided willingly, most of the data and advice that was crucial towards undertaking this study. A lot of thanks to some of my colleagues at the Swaziland Investment Promotion Authority, who gave me their input and time as I worked along this research paper. I cannot forget the contributions made by my dissertation supervisor, Professor Mario Vella, whom I did not consult as often as I should, but nonetheless gave valuable insight, patience and advice during this journey. I will also take time to thank the Swiss Organisation For Investment (SOFI) and the University administration for having provided one the opportunity to study this mind-opening master's degree.

Lastly, I would like to thank my family for being behind me and giving me motivating and support when the going got tough.

TABLE OF CONTENTS

Authorship Declaration	3
Acknowledgements	4
Abstract	8
CHAPTER 1 - INTRODUCTION AND PROBLEM DEFINITION	9
1.0 Introduction.....	9
1.1 Swaziland's National Development Strategy	10
1. Sound Economic Management	10
2. Economic Empowerment.....	10
3. Human Resource Development	10
4. Agricultural Development	10
5. Industrialisation	10
6. Research for Development.....	10
7. Environmental Management.....	10
8. Statement of Problem.....	12
CHAPTER 2 - REVIEW OF RELATED LITERATURE	16
2.0 Job Creation and Advance Factory Shells.....	16
2.1 Key Stakeholders in the Factory Shell Program	17
2.2 Estimating Project Impacts	18
2.3 Estimating jobs created by project.....	19
2.4 Creating Jobs Through Subsidies – The Case of Swaziland.....	22
2.4.1 Background on the Factory Shell Program in Swaziland	22
2.4.2 Before the Factory Shell Program - The Swazi economy before South Africa's Liberation.....	24
CHAPTER 3 - RESEARCH METHODOLOGY	31
3.0 Study Design	31
3.1 Research Design & Data Collection	32

3.2	Area, Population and Sample of Study.....	33
3.4	Pilot Survey	38
3.5	Validity & Reliability	39
3.6	Scope and Limitations of the Study	40
3.7	Ethical Considerations.....	41
CHAPTER 4 - ANALYSIS.....		42
4.1	Linking Data to Objectives of Study	42
4.2	What has been the experience of Government, Investors and the Investment Agency in the developed locations?	42
4.3	What has been the impact of the development on commercial/private developers?	49
CHAPTER 5 - FINDINGS & RECCOMENDATIONS		51
5.1	FINDINGS	51
5.2	RECOMMENDATIONS	53
5.3	CONCLUSION.....	57
APPENDICES.....		60
	APPENDICE 1: LIST OF FACTORIES	61
	APPENDICE 2: RESEARCH QUESTIONNAIRE	62
	APPENDICE 3 - DCF FINANCIAL WORKINGS	71
REFERENCES AND BIBLIOGRAPHY.....		80

LIST OF TABLES & FIGURES

Table 2.4.1: Foreign Direct Investment Stocks in Swaziland (1998 – 2008).....	25
Table 2.4.2: Foreign Direct Investment Flows into Swaziland (1998 – 2008).....	26
Figures 3.2.1: Map of Swaziland showing factory locations.....	33
Table 4.2.1: Responses of Government regarding the Objectives of Factory Shell Programme.....	43
Table 4.2.2: Responses of Investment Promotion Agency regarding the objectives of factory shell programme.....	43
Table 4.2.3: Responses from Government regarding the actual impacts of the factory shell programme.....	43
Table 4.2.4: Responses from Investment Promotion Agency regarding the actual impacts of the factory shell programme.....	44
Table 4.2.5: Responses from Government regarding problems faced by factory shell programme.....	44
Table 4.2.6: Responses from Beneficiary companies regarding their major cost items.....	45
Table 4.2.7: Rating of infrastructure by Beneficiary companies.....	46
Table 4.2.8: Ranking of costs in Swaziland against competitor countries.....	47
Table 4.2.9: Importance of factory shells to location decision.....	48

Abstract

This paper documents a research study into the impact of an employment creation intervention, undertaken by the Government of Swaziland from 1999 to 2004, which entailed the delivery of advance built factory shells to attract foreign direct investment (FDI) and create employment. The study has a narrow focus, looking specifically at the cost benefit analysis (CBA) of industrial infrastructure development in Swaziland, based on the factory shell program that was delivered by the Government over a four (4) year period, commencing in 1999 to 2004. The study, using data like employment figures, number of new investments (FDI) and applying a discounted cash flow technique on rental income against the initial investment into factory shells shows that the program delivered positively against the set primary objective of employment creation. The programme was also successful in attracting foreign direct investment (FDI). From a cost recovery and inter-alia sustainability perspective, i.e. rental income and economic efficiency, the programme does not perform well, as labour intensive, low skill textiles were the major beneficiaries under the programme. Much as the factory shells helped in attracting FDI the impact of their presence has not gone beyond job creation, with few benefits flowing to the local economy. Factory shells alone cannot however be an incentive for companies to invest as many other issues that entail the investment climate are crucial. Through surveys with key stakeholders, the study concludes that the differences that have arisen concerning different stakeholder expectations are as a result of lack of planning and documentation prior to projects being undertaken, hence no common measures of acceptable project costs and benefits.

CHAPTER 1

INTRODUCTION AND PROBLEM DEFINITION

1.0 Introduction

The Government of the Kingdom of Swaziland's factory shell program was developed and implemented as a means to attract foreign direct investments (FDI) in a bid to create employment. This project was part of a set of infrastructure projects under the Ministry of Economic Development and Planning that were aimed at enhancing local infrastructure and included amongst its components;

	PROJECT	STATUS
1.	International Trade and Exhibition Centre;	Completed. 100% Government funded.
2.	Sports Complex entailing outdoor track, football field and indoor swimming pools and other sporting facilities;	Complete. 100% Government funded.
3.	International Convention Centre and Hotel Complex;	Looking for private participation
4.	Amusement	Looking for private participation
5.	International Airport.	90% complete. Technical Assistance, Developmental loans and Government funding

The program ran between 1999 to 2004 and entailed expenditure in excess of US\$43.75 million in developing subsidised, advance factory shell units as a catalyst to attract labour intensive FDI and thus address the high unemployment in the country. The program was wholly funded by the government, with the expectation that investors occupying these industrial buildings would create jobs that will help reduce unemployment in the country. Thus the program was targeted at all unemployed citizens of Swaziland, with specific focus on unskilled and semi-

skilled workers. In return for jobs, investors (tenants) were offered rentals that were about 30% of prevailing market rates.

Indeed the issue of using subsidies to generate employment or attract FDI has been an issue of much debate, with few studies having satisfactorily shown a positive relationship between incentives/subsidies and FDI (Bronzini, 2006; Lim, 2005; Porter, 2003). With global competition for FDI, countries continue to use incentives to attract investments, with this competition in most poor countries becoming a race to the bottom. Other studies have gone further to consider the relationship and impact of performance requirements on subsidised companies, which governments have tended to tie to the incentives (Davies & Ellies, 2007; Graham 2000).

1.1 Swaziland's National Development Strategy

The government of the Kingdom of Swaziland, realising the need to counter the impacts of an increasingly competitive environment, post the changing political dispensation in South Africa, developed the National Development Strategy (NDS) as a development framework for the country, which covered 25 years from 1997 to 2022. NDS was launched by His Majesty King Mswati III in August 1999. Amongst the key pillars of NDS was the identification of seven (7) Key Macro Strategic Areas that included;

1. Sound Economic Management
2. Economic Empowerment
3. Human Resource Development
4. Agricultural Development
5. Industrialisation
6. Research for Development
7. Environmental Management

Within the NDS, areas like sound economic management entailed improving investor confidence and creating adequate infrastructure to address job creation and poverty alleviation amongst other objectives. The factory shells were based on increased demand by investors were seen as one area that could help reduce

the time for companies to set up and the cost of doing business. To enhance industrialisation, sectors like electronics assembly and textiles were targeted although there was no specific sector that was being targeted. It was more an issue of an available investor prepared to take occupancy of the structure on completion. Industrialisation entailed diversification into other sectors and increased value addition or local beneficiation, especially of agricultural produce.

However little effort was put into the implementation of NDS hence the programme fell more into the basket of other projects that were not per se motivated by the NDS but more based on demand as expressed by the relevant Ministry, which were then included under the projects that were driven by a special unit specifically set up for these projects called the Projects Millennium Unit and the projects were referred to as millennium projects. The current Prime Minister has of late been putting a lot of emphasis and action on linking government actions to the NDS.

The factory shell programme was thus to some extent informed by the NDS which amongst its pillars focused on job creation and the attraction of FDI. But were the benefits as envisaged by this national economic strategy realised? In what form? To whom? Thus in undertaking any cost and benefits study, it is crucial to understand who the intervention impacted and in what form and what their interests in the intervention were. This indeed then allows analysts to review expectations or objectives against actual performance to measure the impact of the intervention.

The amount spent on this initiative may seem small in international terms, but was quite a bold and speculative expenditure by the Government in 1999. Within these facilities investors are offered a subsidised rental rate, usually accompanied by a free rental period, meant as compensation for relocation costs. To qualify for the factories, when available, investors have to submit their request to the Swaziland Investment Promotion Authority, which is responsible for allocating these structures. The criterion is usually biased towards the number of jobs a project will likely create, with higher labour intensive projects being favoured. These two factors can thus be considered as performance

requirements of the investment promotion authority for one to qualify for factories, a common link, when it comes to the provision of subsidies (Davies and Ellis, 2007). The rent charged to the investors is usually judged by SIPA in consultation with the investors, with regards to the amount they are willing to pay towards rent (willingness to pay). In most cases, the investors have been reluctant to pay even this subsidised rent, opting instead to request SIPA for extensions on the free rental period.

1.2 Statement of problem

On average, the factories enjoy a very high occupancy rate, mostly by textile companies of Asian origin. A number of social issues are however being raised by the employees within these factories, through their unions regarding low wages, general work environment and adherence with national labour, health and safety laws. This has resulted in some strikes within the industry, which have been a major challenge with regards to the development of the textile sector in the country. The strikes, factory maintenance challenges, environmental concerns, and rental collections have attracted the attention of government and the House of Parliament, who are calling for a review of the factory shell program.

A number of studies have been commissioned, but the questions around; cost efficiency, effectiveness and the contribution of the program to the local economy still remains unanswered and questions still persist. The situation is further exacerbated by most of the beneficiaries (tenants) of this program, sometimes closing overnight, leaving employees stranded, without terminal benefits and advance warning. All these issues have raise concerns about the quality of the tenants, i.e. investment coming into the country. In January 2010, the Ministry of Finance, appointed auditors to conduct a forensic investigation into the affairs and management of the Government owned factory shell program.

Unfortunately, there is no study that was undertaken prior to the launching of the program, although reliance was placed on the Industrial Estate Master Plan (IEMP; Banes, 2007) and the National Physical Development Plan 1996 – 2006 (NPDP). This previous work would have informed future studies about issues like,

the actual situation before the program was launched, which would help inform impact analysis and welfare studies about the impact of the program. In most cases of cost benefit analysis or impact evaluation, the issue of the without the intervention scenario and with the intervention scenario are critical to understanding the actual additionalities of a project (Jorge and Rus, 2004).

This paper contributes towards addressing the problems created by the lack of an independent evaluation of the program to help decision makers analyse the benefits and costs of the factory shell program and further provide a framework for analysing future projects. Data on the companies currently occupying the factory shells, information on labour market issues around the program and costs of delivering, administering and maintaining the program, was utilised within a cost benefit analysis framework, focusing on the net present value, internal rate of return and cost per job to government regarding the factory shell program.

Information from property developers within the main industrial estate was gathered on rental rates and the impact of the program on private developers. This helped the researcher in understanding possible crowding out effects, if any, of the intervention. The issue of additionality versus substitution, (displacement or crowding out) has been at the centre of the critic of some evaluation studies, which have failed to incorporate issues of distribution and displacement, i.e. welfare economics, into the cost benefit analysis (Foley and Martin, 2000; Campbell and Brown, 2004).

The study was thus concerned with the ex post process of identifying the extent to which the factory shell program has contributed to development objectives. This paper contributes to the literature by providing an empirical investigation into whether the controversial factory shell program aimed at creating jobs through FDI had any impact on employment, private sector and indeed the initially set objective of attracting FDI. The only previous study by Simelane et al (2010) concluded that the factory shell program was highly successful in employment creation and economic stimulation. The study did not cover the financial appraisal part of the analysis, but focused on the economic, social and environmental aspects of the program. In their approach both the economic and social analysis

was covered using national data on employment, textile exports, projected rental income, GDP growth and national FDI data to justify the conclusion of a positive impact by the program.

There is however little evidence to justify that the increases in the national selected outputs/measures was as a result of the program. It is very possible that the same benefits or more could have accrued without the factory shell program. Considering that the study was conducted five years after the program, the analysts could have used actual data on rental than reliance on projections. This can thus easily distort the results, considering that most of the tenants were reluctant to pay rent. The approach on social aspects was more refined by the analysts, as a sample of companies was taken and employees surveyed on income and skills levels. The study thus fails to clearly identify the costs and benefits of the program, but is more a case study reflecting on some possible influences of the program in the domestic economy. The study does however provide a good basis for further research as it did make an attempt in compiling some of the program's specific data. The researcher does acknowledge the valuable information gathered from this study, which has contributed to some of the secondary data and its verification against other secondary data sources.

The study does not go into the distribution and multiplier effects of the program, which would require data beyond what is available, but seeks to provide an easy to use and adaptable template, that will help in initial project assessment. Projects that are accepted under this template can thus be subjected to further scrutiny regarding social, environmental and other effects, both direct and indirect.

This paper therefore does not suggest that the other crucial elements of a cost benefit analysis, including, environmental and social issues should be discarded, but merely offers a benchmark test in terms of a financial tool that can be used to evaluate future projects.

1.3 Objectives of the study

The study's main objectives were to;

- Determine the extent to which the intervention attained the set objectives;
- Establish areas which would benefit more from such interventions by identifying locations where private sector is keen to develop factory shells, so as to exclude them from competing government intervention programs;
- Learn from the previous intervention and hence inform future developments;

The study was thus aimed at providing answers to the following questions, which are related to the objectives of the study and seek to respond to the main problem faced by this program and similar government interventions;

- Was the impact of the project positive and were the set objectives attained?, i.e. Benefits exceeding costs;
- How was the location of the factories undertaken – centralised vs. decentralised? Why?
- What has been the experience of the investors in the developed locations?
- What has been the impact of the development on commercial/private developers?
- What can we learn for future interventions?

The rest of the paper follows with a background into the factory shell program, which is the subject of the analysis, followed by a review of previous studies that have been undertaken on the program and theory and studies on FDI location theories, attraction of FDI and impact of economic zones on locations, amongst others. The paper then goes on to look at the research methodologies applied, an analysis of the collected data and conclusion and recommendations from our study of the Swazi factory shell programme.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.0 Job Creation and Advance Factory Shells

A number of countries have used advance factory shells to create jobs successfully, like the Shannon Development Zone in Ireland, which is seen as a model in contributing towards Ireland's transition into an industrialised economy. Closer to home in South Africa, the government has focused on infrastructure projects like roads, low cost housing, stadiums etc to stimulate job creation and economic activity, amidst concerns from other political parties and economists about the sustainability, transparency and cost effectiveness of such programs in creating jobs versus other possible interventions. Factory shells were provided within South Africa in what was referred to as homelands, which were occupied mostly by disadvantaged groups (e.g. King Williams, Isitebe, Ladysmith, and Dimbadza, amongst many others). The factories were provided at highly subsidised rates with some free rental/grace period in most cases.

Surprisingly though, minimal research has been undertaken in understanding the costs and benefits of such initiatives. There are however earlier studies that focus specifically on evaluating the impact of advance factory shell programmes. Willis (1985) in his evaluation study of an advance factory shell program in Mid Wales and concludes that the impacts are dependent on additionalities, i.e. if the jobs would have been created without the advance factory shells, then investment in same would not be a viable option. Willis in his study reviews three (Hodge and Whitby, 1979; Cameron, et al. 1982, and Whitby and Willis, 1983) previous studies that applied financial appraisal techniques in evaluating advance shell programs.

Much as not much research has been conducted specifically on advance factory shells, a lot of literature exists that looks at the impact of economic zones and the benefits of subsidies in job creation (Boarnet, 2001; Elvery, 2008). Yehoue (2009) looks at the role of clusters in attracting FDI, and concludes that the development

and emergence of clusters accompanied by policy reforms can be major catalysts for FDI. The pursuit of labour intensive FDI through the factory shell programme, brings with it highly mobile, low skill jobs and with increased emphasis on the number of jobs, may fail to recognise projects that improve on the quality of labour but create a smaller number of jobs. Thus quantity with low economic benefits takes precedence over quantity with high economic benefits. This conforms to observations made in papers like that of Peters (2004), where he makes observations on clusters, which applies to other policy interventions, that if applied based on political rather than empirical merit, can result in scarce resources being invested in industries or groups that will produce little economic benefit.

From most of the studies there is agreement on the fact that the employment impact of subsidies or interventions is mostly positive if the benefits and costs of the intervention are in excess of what would (costs and benefits) have happened without the intervention (with-without scenario). Girma et al, 2008 in their study on the government of Ireland's grants, using Ireland's manufacturing industry, find that the grants do contribute to the creation of additional employment over and above what would have prevailed in the absence of the grants.

According to reports from the Swaziland Investment Promotion Authority, the factory shell program created about 30,000 jobs within 5 years of it being rolled-out. Would we then say the program was viable? This is highly dependent on the expectations of the different stakeholders who stand to benefit or suffer from the intervention. Who then were the beneficiaries of the factory shell program and what were its costs and benefits?

2.1 Key Stakeholders in the Factory Shell Program

The nature of the intervention was driven by Government in a bid to create jobs and increase economic growth through FDI and entailed the construction and delivery of factory shells to investors at subsidised rates. Thus a number of stakeholders were interested in the factory shell programme for various reasons. Politicians for example were looking at job creation and public votes, which hence put pressure on the location of factory buildings to address the varied interests; the unemployed were looking for jobs and improved livelihoods; entrepreneurs

were looking for product and services supply and the list goes on, from the construction phase up to and possibly beyond the economic life of the factory shells.

The three major beneficiaries from the above and their expectations were;

	Beneficiary	Expectation/s
1	Government	Employment creation, Foreign Direct Investment (inter-alia; corporate taxes, income taxes and other taxes, municipal charges, economic growth, other macro-economic indicators)
2	Employees	Jobs that will help them improve their current standard of living, where mostly are unemployed and assumed to have no other source of income.
3	Investors	Looking for low cost factory shells to operate labour intensive manufacturing for export markets. Location must have an adequate labour force and proper infrastructure like roads, water and electricity.
4	Local suppliers and service providers	Looking for contracts with companies to supply transport, banking, engineering and other consultancy services and business services. Other companies supply various products like stationery, fuel and other company consumables.

2.2 Estimating Project Impacts

The project of constructing the factory shells entailed expenditure of public funds with the aim of attracting foreign direct investment and hence attain the objective of poverty alleviation through employment creation. This was a capital expenditure program aimed at encouraging job creation. Willis (1985) identifies a number of benefits and costs that would flow from a factory shell program and include site acquisition costs, development costs, maintenance costs, other subsidies, housing and its development costs on the cost side and rental income, increased corporate taxes and personal income taxes from the newly employed, savings on social security and unemployment payouts on the benefits side.

In looking at the government factory shell program, the study focussed the following four impact tests;

- Number and types of jobs created to understand impact on employment;
- Number of foreign investments attracted into government factory shell program;
- Economic and Financial Appraisal of the program with specific focus on the efficiency and sustainability of the job creation programme. Sustainability in this context is defined as the factory shell programme generating enough revenue to cover all associated costs related to their operation, administration and maintenance of the economic life of the asset.
- Its impact on private developers to understand possible deadweight issues;

2.3 Estimating jobs created by project

Numerous studies have been undertaken to try and estimate job creation by projects, programs, subsidies and events in both developed and developing countries. A majority of these studies have however been undertaken in developed countries, where unemployment has a direct and burdensome financial implication to governments. There has been concerns in certain cases, that the ex ante appraisal of job creation projects or schemes aimed at the poor is usually just a tool used by politicians to get their projects approved, without due regard of cost implications of the poor, who are supposedly being helped by this programs. The emphasis in recent years is to go beyond the numbers of jobs created to also look at the quality and duration of the job.

Willis (1985) uses a discounted cash flow technique to estimate the impact of advance factory shells, where measures like NPV, IRR and cost per job created are used. This approach however fails to cater for distribution effects, economic and the social and non-quantifiable benefits of the program. Boarnet (2001) in his study on Enterprise Zones and Job Creation suggests a control group approach to try and understand the employment effects on enterprise zones, by comparing areas without zones with areas with zones. Others like Jorge and Rus (2004) and Willis (1985) propose a cost benefit analysis approach in their analysis of the impacts of airports on localities. Other studies have used the difference in

differences approach to measure the impact on employment of projects (Betcherman, et al, 2010; Romero, 2009)

In summary, in most of the studies focusing on evaluating or estimating the impacts of projects, the researcher has noted the following common issues;

- Most of the government funded job creation schemes that have been a subject of a majority of evaluations, were focused on empowering communities to improve their standard of living or aimed at creating short term jobs like the New Deal for Communities in the UK (Romero, 2009) and the German job creation schemes (Hujer et al, 2004);
- The projects have been evaluated against the cost of providing unemployment benefits and hence appraisal looked at the opportunity of cost of getting someone into employment versus claiming benefits. The situation in Swaziland and most developing countries in Africa is that there are no unemployment benefits. If you are unemployed, then you have to fend for yourself. This makes analysis of the situation in Swaziland and the most of Africa, somewhat different and easier considering that it is easy to assume in the case of Swaziland, that anyone who got employed within these factory shells wanted to be employed and voluntarily sought employment within these factories. Without the factory employment, chances of securing a job and having an alternative income would be limited, considering that most have no vocational skills and employment opportunities are very limited, with prevailing high unemployment;
- The projects have been focused on a specific region or locality, whilst our study looks at a national project, but the beneficiaries are easily identifiable as the project was a direct employment creation initiative, whose impact could be measured by the number of new jobs created;
- Due to the short-term nature of the jobs, most of the studies have placed a lot of emphasis on the duration of the job, distribution effects and migration

issues to try and understand the benefits and costs that have accrued to the local economy, excluding benefits and costs to other localities. This has been a subject of major debate; and

- Incorporating pro-poor analysis techniques and approaches to development and into the evaluation itself, such that the poor, who are supposed to be the beneficiaries of such programs are not made worse off (substitution and displacement issues).

The situation in Swaziland, regarding the factory shell program is different from most of the initiatives studied on the following;

- The project delivered infrastructure that could generate direct long term jobs, which was the focus of the intervention;
- The nature of the intervention, being the provision of buildings to foreign investors resulted in easily measurable and identifiable job creation, so long as the factories are occupied over the life of the factory shell, which is assumed to be 25 years;
- The intervention was aimed at putting people into employment across the country; hence issues of regional in-migration and out-migration are irrelevant in our case, as we are not concerned with where the employees came from within the country, but more on whether we created new employment within Swaziland, regardless of where the employed came from within the country. Furthermore, the issue of income distribution is irrelevant in our case so long as the employed are citizens of the country, as the jobs targeted were national, hence no value in the study in trying to understand how much of the salaries were spent within the localities where the factories were built.

Other concerns like incorporating pro-poor approaches to evaluations, which was raised to counter the challenges raised by politicians going after economically

viable projects at the expense of the poor, because projects targeting the poor did not pass the viability test; The factory shell program resulted in the creation of direct jobs to help reduce poverty, hence its objectives were pro-poor. This could be a challenge however, where governments raise conflicting objectives like poverty alleviation and economic sustainability of the program, which would thus make the project fail to deliver on the objectives (Buss and Yancer 1999)

2.4 CREATING JOBS THROUGH SUBSIDIES – THE CASE OF SWAZILAND

The government of Swaziland has over the years applied different policy mechanisms to encourage FDI and inter-alia create jobs. From five year tax holidays, concessionary interest's rates to accelerated depreciation allowances, incentives have and continue to play a key role in the investment promotion kit of Swaziland.

2.4.1 Background on the Factory Shell Program in Swaziland

The Government of the Kingdom of Swaziland in 1999 decided to embark on a program to deliver advance built factory shells for subsequent subsidised leasing to companies, on the understanding that such infrastructure would help attract export-oriented FDI. Historically, industrial development in Swaziland, with regards to locating and developing industrial estates was guided by the Industrial Estate Master Plan (IEMP) of 1986 to 1996, which was however only updated in 2004. Indeed a number of countries have used such approaches successfully in attracting FDI, for example Ireland (Shannon Development).

In the Swazi context, a majority of these factories were located in the largest and most established industrial estate in the country, which sits less than 20 minutes from the city centre, in Matsapha. The rest of the factories were placed ranging from one (1) unit per site to a maximum of three (3) units per site, mostly in rural and some small towns around the country.

By March of 2003 the total number of factory shell units stood at 25, providing 213,400 m² of floor space at a total cost to Government of about

E320 million (US\$43.75 million) following an expansion of the program, under Cabinet Paper 134 of September 2001.

The responsibility for the factory shells program was transferred from Ministry of Enterprise and Employment (MEE) in 2000 to the Millennium Project Unit (PMU) under the Ministry of Economic Planning and Development (MEPD). Certain functions within, or related to, the program remained with the Ministry of Enterprise and Employment and its agency, the Swaziland Investment Promotion Authority (SIPA), as the key agency that interfaced with the investors. This was as a result of a verbal agreement between MEPD and SIPA to continue collecting factory shell rentals until a strategy on the management of the factory shells is developed, which would also identify the ideal management institution or approach.

The factories, as mentioned earlier, were targeting manufacturing entities by offering ready to occupy buildings and incentivised rental rates to investors engaged in labour-intensive activities. Phase one of the project entailed the development of 120,000 m² of factory shell space. A further phase of 150,000 m² was to follow, set out in Cabinet Paper 134 of 20 September 2001. The total project cost was expected to amount to E457 million (US\$61 million), all to be funded by Government. Due to limited funds and perceived low returns on project, the program stopped at 213,400m², including 4 refurbishments, at a total cost of E319.4 million. Having given background on the program, the paper shall in turn consider evaluation aspects of such projects. By 2004 the factories were employing about 30,000 people and by 2009 about 15,000 people were employed within the factories, due to retrenchments resulting from the end of the multi fibre provisions and the expiry of quota restrictions on Mainland China exports under the Africa Growth and Opportunities Act (AGOA). AGOA is a market access agreement guaranteeing duty free access into the United States market of more than 6,500 eligible products from AGOA beneficiary countries in Africa.

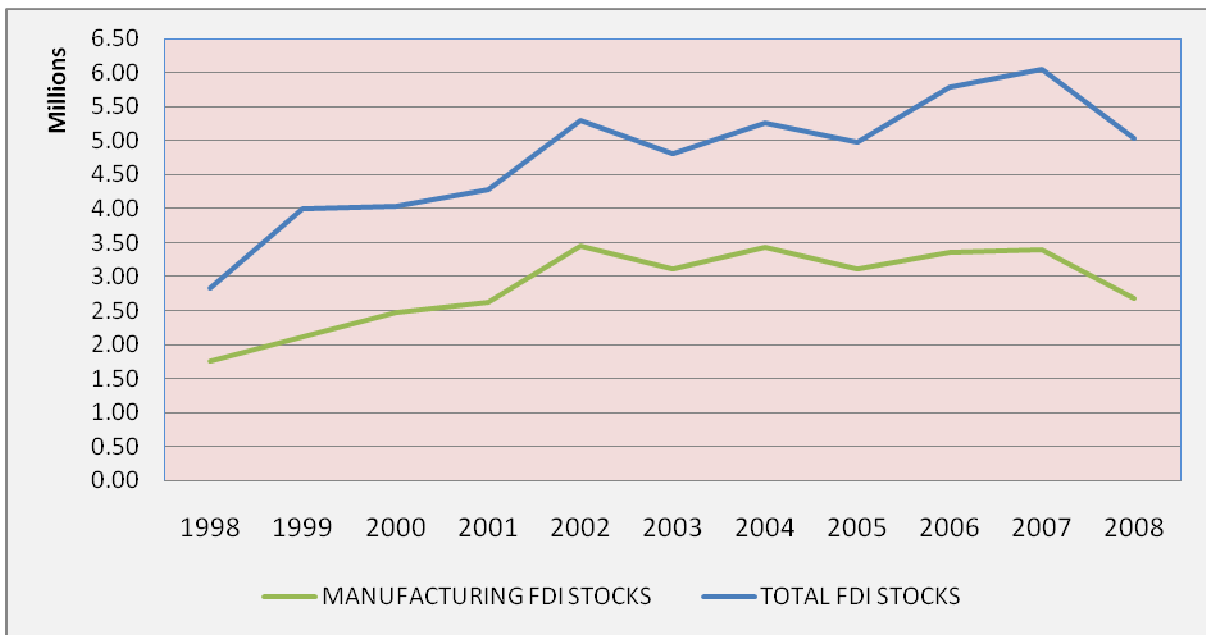
2.4.2 Before the Factory Shell Program - The Swazi economy before South Africa's Liberation

In the early 1980's doing business in southern Africa was indeed a challenge for numerous companies, as a result of the political tensions in South Africa, the civil war in Mozambique and tensions in Zimbabwe amongst others. One of the biggest and most attractive markets for these international companies was South Africa and indeed the rest of the continent. In 1910, four members states, namely Swaziland, South Africa, Lesotho and Namibia decided to form a common market, which was later to include Botswana, in what is called the Southern African Customs Union. Under this union, goods originating from within each member state can access the other member states market duty free. With South Africa under international sanctions, some companies became reluctant to locate their production in some countries within Southern Africa. This situation presented Swaziland with an opportunity, where foreign companies looking at supplying Southern Africa and beyond utilised Swaziland as a base for their operations.

A number of international companies from footwear production, television assembly, food processing and various manufacturing activities were located in Swaziland supplying the regional and international markets. The country at this point enjoyed a healthy and stable economy and had a healthy trade surplus. The gross domestic product (GDP) per capita was amongst the highest in the region, being higher than those of Zambia, Malawi, Democratic Republic of Congo and Tanzania combined and higher than that of Malaysia, Thailand, and Singapore.

The weakened growth as a result of the gradual erosion of the country's relative advantage as an investment destination following the end of the political and economic ban on South Africa and increased competition for FDI within the region, became a key challenge and priority to the government, which culminated in the creation of an investment promotion agency in 1998 to help attract FDI into the country. With technical and financial support from the European Union (EU), the Swaziland Investment Promotion Authority (SIPA) was established.

Table 2.4.1: Foreign Direct Investment Stocks, 1998 - 2008



Source: Central Bank of Swaziland, 2000, 2008 Annual Report.

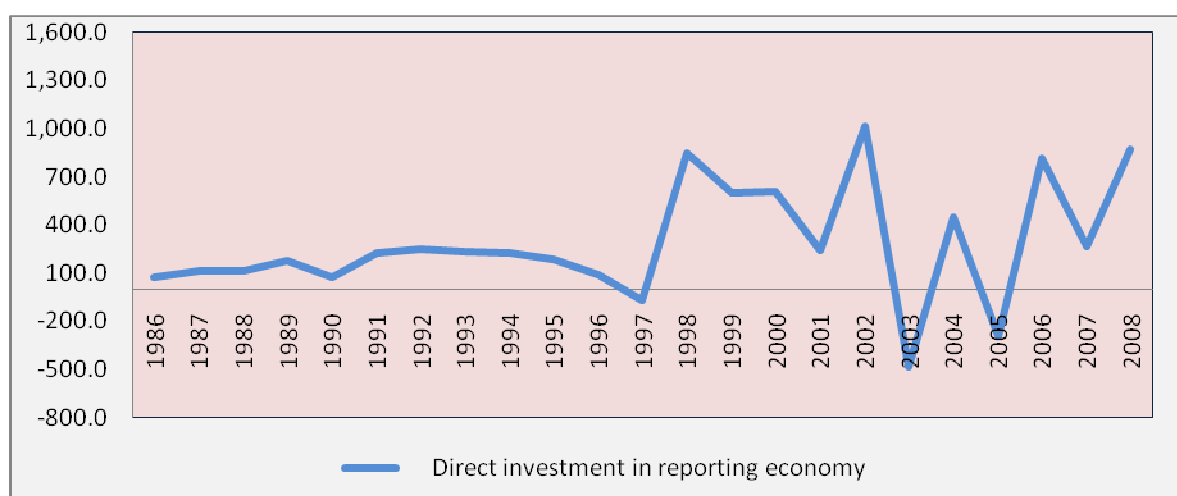
Table 2.4.1 above shows FDI into Swaziland during the period 1998 to 2008, which show increased stock of FDI from 1998, which is further confirmed by Table 2.4.2, depicting FDI Inflows, which shows marked improvement from the slump of 1997. Before the 1997 period, FDI was steady into Swaziland. This confirms previous assertions that the Swazi economy slowed down after the creation of a new government in South Africa and the end of the apartheid regime in 1994. From 1998 upwards, the entry onto force of AGOA saw entry of export oriented garment factories, which saw increased entry of FDI into Swaziland. Major disinvestment in the sector was witnessed towards and beyond 2005 due to the end of the multi fibre agreement and the imminent end of China's quota restrictions into the US markets, which increased competitive pressure for African textiles into the US markets and reduced FDI stocks and flows into the sector.

The political tensions in South Africa came to an end in 1994, when a new democratically elected government came into power. This period saw a significant exodus of investment from Swaziland into South Africa, which resulted in lay-offs, company closures, a decrease in the stock of FDI and increased unemployment. During the periods after 1994 Swaziland struggled to attract foreign direct investment which could help create jobs and reduce unemployment, a situation that still prevails

today. In 1998, with support from the European Union, the government established, through an act of parliament (Swaziland Investment Promotions Act of 1998) the Swaziland Investment Promotion Authority. The authority's mandate is to attract foreign direct investment, develop local enterprise and hence create employment opportunities for the unemployed in the country. Official statistics have put unemployment at 26%, with un-official statistics placing this number higher, at around 36%.

In the year 2000, the Government of the United States Government (US), passed legislation the African Growth and Opportunity Act (AGOA), which amongst its objectives was to expand U.S. trade and investment with Sub-Saharan Africa, stimulate economic growth, promote a high-level dialogue on trade and investment-related issues, encourage economic integration, and to facilitate sub-Saharan Africa's integration into the global economy, thus giving this countries benefits beyond the 1976 US Generalized System of Preferences (GSP) in terms of market access preferences. This saw an increased appetite for low cost locations to produce products for the US market, by mostly companies of Asian origin. Swaziland was amongst the countries that attracted investors in the textile sector from Taiwan. Most of this were what is referred to as cut, make and trim operations (CMT). According to the motives behind FDI by Dunning, this is efficiency seeking FDI, which is looking at reduced costs of operations through low cost labour and higher efficiencies.

Table 2.4.2 – FDI Inflows into Swaziland between 1986 - 2008



Source: Central Bank of Swaziland, 2000, 2008 Annual Report.

The increased appetite for factory shells by the CMT companies, against a shortage of such buildings in the country prompted the Government to consider providing such buildings to the investors. Indeed the issues to be considered were between action and non-action. With economic growth at its lowest levels and unemployment high, the risk of non-action was too high. Furthermore, the CMT companies were not willing to pay the market rates charged by companies within the main industrial estate. With rising unemployment, slow economic growth and investors offering to create thousands of jobs, the government decided to embark on the development of factory shells. Some of the buildings were developed after having reached an agreement between the government and the investor, although some were speculative by nature, developed with the hope of securing an investor. Besides constructing new factories, there were about five existing building that were acquired from a now defunct national development finance institution, National Industrial Development Corporation of Swaziland (NIDCS).

2.5 Estimating the impact of the program

The methods adopted in various studies which have been highlighted earlier in this paper are indeed varied, but mostly a function of the type of data to be analysed, the amount of data available and the type of study being undertaken (cross-sectional, longitudinal, control or trial study) amongst others variables. Based on the data available, which will be discussed in the following chapter and the capital nature of the intervention, the researcher believes the Cost Benefit Analysis was the ideal technique to apply in trying to estimate the quantifiable benefits and costs of the programme.

The Cost Benefit Analysis (CBA) has long been held as an appropriate tool for appraising public sector projects (Campbell et al, 2004). Much of the attention though has been focused on the CBA as a tool for ex-ante project appraisal i.e. pre-project phase (e.g. Jorge and de Rus, 2004). CBA can be used as a tool for ex-post project evaluation (post project evaluation phase), which will be the context of our study. The CBA is seen as the public sector equivalent of the discounted cash flow model which is applied by the private sector in project appraisal or evaluation (Campbell and Brown, 2004).

The same technique was used in the evaluation of a program similar to the one being reviewed by this paper; an advance factory shells programs in the UK (Willis, 1985). According to Jarwoski (2008), CBA can be defined as the most comprehensive form of economic appraisal which seeks to quantify in money terms as many of the costs and benefits of a proposal as possible, including items for which the market does not provide a satisfactory measure of economic value.

Buss and Yancer (1999, pg.29) give us an understanding of the sentiments and judgements on the CBA:

“Cost-benefit analysis (CBA) is a powerful tool for state and local policy makers trying to select the best, or more accurately rationalize, economic development policies and projects to alleviate poverty. But policy makers and policy advisers restrict CBA so that it loses its evaluative power, becoming mostly political rather than economic. Consequently, CBA in practice gives short shrift to poverty alleviation”

In any evaluation, the key issue is being able to identify the benefits (including indirect and induced) and costs that have been as a result of the project, from those that would have been created even if the project had not been undertaken. This is where the difficulty arises, as in most cases, it becomes difficult to identify the costs and benefits that are as a result of the intervention or project from those that would have happened even without the intervention. CBA also assumes that the project is mostly public funded and hence needs to be handled with caution in cases of high private to public sector leverage (high percentage of private sector investment as a percentage of public sector funding).

The issue of leverage raises challenges in the computation of measures like cost per job as high private sector investments may give a lower cost per job spend by the government (Jaworski, 2008, Foley, 1992). Much as there are critics, the CBA is still held as an indispensable technique for project evaluation, which needs to be considered as part of the basket of tools and needs to be complemented with other measures for one to get a clearer picture on the possible costs and benefits of the programme. The author will thus endeavour to identify and highlight the

non-quantifiable project costs and benefits with the hope that future studies can delve further into such issues.

Like all other methodologies techniques CBA has its restrictions as has been highlighted earlier, the researcher feels it will be suitable under this particular case based on the following;

- The project was fully funded by government hence no leverage issues to consider, which makes CBA ideal as a tool; and
- The project was aimed at addressing unemployment at a national level so little consideration of where the labourers came from nationally, so long as the unemployed were getting employed. This further limits some of the issues that one may need to discount for in the financial appraisal of the intervention.

This study is concerned with measuring or evaluating the impact of the program initiated by government to attract FDI and inter-alia create employment, with the following key measures; Job creation, Development of economic and social welfare and Environmental improvement.

2.6 Evaluating advance factory shell program – previous work

When the factory shell programme was initiated, no ex ante study was undertaken to evaluate the project in a bid to understanding and influencing its design and implementation. The value of proper and early planning cannot be emphasised. The Government would have benefitted immensely from undertaking an assessment and developing their strategy based on empirical analysis prior to the development of the factory shell programme. With no previous reference period or study that informed the intervention, there has been to date only one study (Simelane, et.al, 2010) that has been done on the programme and has been briefly discussed in previous sections.

The study (Simelane, et.al, 2010) has helped a great deal in providing some of the project data, which had been well compiled by the previous study. A lot of emphasis therefore has been placed on external studies either on similar

programs or other job creation and infrastructure programs aimed at influencing economic growth and output, which inter-alia should impact positively on job creation.

Similarly some old journal studies have been cited in this study as the author has found little recent studies specifically on advance factory shells (Willis, 1985), which could be attributed to a majority of advance factory shell programs having been undertaken about 30 years ago in developed countries like Ireland and the UK, although they continue to be a practice to this day. Recent interventions have tended to incentivise productivity, training and efficiency although the political fixation with jobs created still favours subsidies directed at immediate jobs.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Study Design

As the study entailed analysis and understanding of a real life situation, to try and inform future actions, it is more evaluative in style. Part of the study meant responding to issues like the cost efficiency of the programme, which required comparison of costs against actual jobs created, whilst other parts touched on interpreting observations and understanding behaviour. This thus meant a combination of qualitative and quantitative approaches to the research. As the study entails the collection of data and evidence about an intervention with a view of improving future actions or interventions, it relies more on applied research approaches. This combines financial analysis techniques in the form of a discounted cash flow method and descriptive research methods to gather information from respondents and tabulate this data. The discounted cash flow method applies discounting techniques on future cashflows to help estimate the financial viability of a project. In the context of the programme, the two major income streams to Government would be net of rental income and taxes after accounting for administrative expenses, maintenance costs and rates. A social discount rate, which in this project is taken to be equivalent to the cost of raising capital for Government, benchmarked against the coupon rate on treasury bills issued on behalf of the Government of Swaziland, which for this study has been averaged at 8.5%.

The main beneficiaries under this programme were the ultimate occupants, which was investors. These were easy to identify during the sampling process, as all those occupying government owned factory shells were part of the sample. About three primary targets were used in the study comprising of Government and its responsible agencies, companies occupying the factory shells and private developers in one of the main areas. Due to lack of resources and time, the study could not be extended to cover the employees, who would have been valuable in

helping inform the study of possible jobs that could be assumed to be new, whilst in essence, would have been transferred from other companies, hence not new to the economy. This is all the more relevant as more employers have cited losing employees to other textile companies within the country as one of the challenges. But considering the high levels of poverty and unemployment in the country, one can assume that there was and continues to be a high population of people looking for jobs and thus limited labour crossing over to other companies, especially in low-skilled jobs, hence all jobs to be considered as being new to the economy. For secondary data collection, the researcher utilised government reports and statistical data, labour reports (for employment figures), factory employment records and responses from beneficiary and related firms and agencies. Data on rental income was secured from the investment agency that manages the factories on behalf of Government which agreed to disclose the data for the purposes of this study. Cost of delivering the factory shells was secured from the Project Millennium Unit, which was responsible for the delivery of the factory shells and monitoring of same.

3.1 Research Design & Data Collection

The main method of data collection for this study was a survey questionnaire coupled with secondary data analysis. The survey was primarily concerned with collecting real time data on employment figures in the factories, rental income collected, expectations of key stakeholders from the program amongst other key variables. Secondary data regarding variables like the costs associated with the factory shell programme, structures built under the programme, previous research work and the state of the economy prior to the intervention formed part of the analysed variables.

The researcher sought and secured advance face to face meetings with all 18 companies occupying Government factories, 5 major property developers in the major industrial estate of Matsapha, the Swaziland Investment Promotion Authority and the Ministries of Commerce, Industry and Trade and that of Economic Planning and Development. Advance letters detailing the purpose of the study and a questionnaire were sent in advance to the companies requesting for an appointment to come and meet with them to go through and complete the

questionnaire. The researcher subsequently followed up by telephonic calls to confirm receipt and confirm the appointment. This was further aimed at improving the response rate.

The researcher designed a single questionnaire that was used to solicit responses and data from the various population targets. The questionnaire was structured mostly with close-ended questions, which seek to address the questions raised earlier in this report. The questions were grouped into three sections, corresponding to the different respondents, which included the investors, Government and agencies (Ministry of Economic Planning and Development, Project Millennium Unit, Labour Department under the Ministry of Commerce the Swaziland Investment Promotion Authority) and property developers within Matsapha, the main industrial estate, where the researcher interviewed five (5) major developers, which is adequate considering that the country has few large private developers of industrial buildings.

A semi-structured questionnaire with a bias towards more structured questions was used, which made it easy for the researcher to analyse the data. This structure allowed the researcher to dig deeper and follow-up interesting and relevant issues with more questions. The questionnaires were designed by the researcher. Most of the data collected through the surveys was related to employment figures, operational costs, behaviours, attitudes, characteristics and perceptions, hence the questionnaire design was a combination of checklists, tables, rating scales and general closed questions that allowed for more in-depth follow ups.

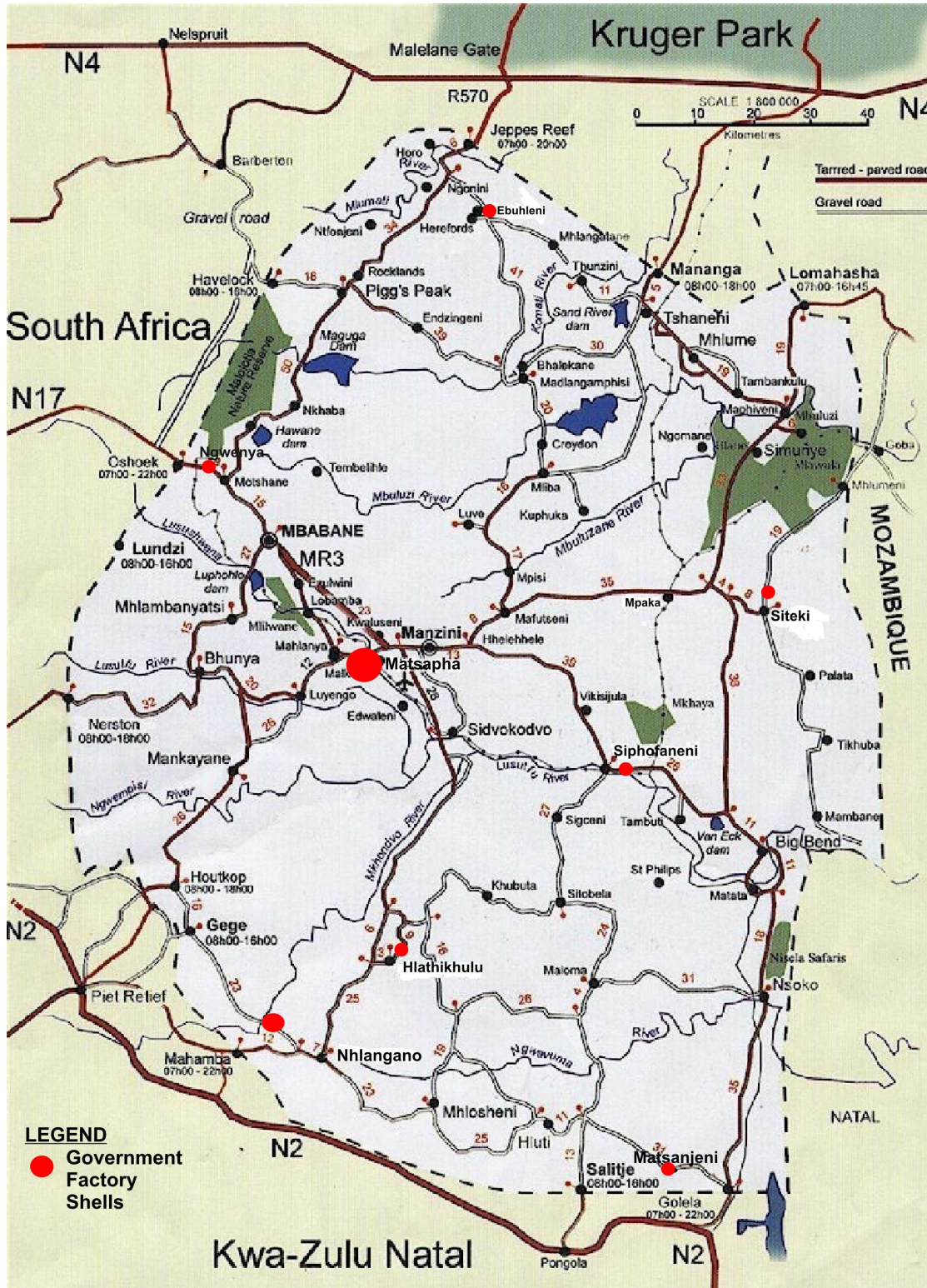
For example, Government ministries were asked as to their ranking of rental income, job creation, FDI attraction amongst other variables, in order of importance to try and gather from them their expectations from the programme.

3.2 Area, Population and Sample of Study

The factory shells were developed across the country; hence the study was national, although in total nine (9) locations in various parts of the country were used in developing the factories. These were Ebuleni, Hlathikhulu, Matsanjeni,

Matsapha, Mpaka, Ngwenya, Nhlanguano, Siphofaneni and Siteki, which are marked in orange on the map below.

Figure 3.2.1 Map of Swaziland depicting location of Factory Shells



Map Source: Swaziland Surveyor General's Office

Table 3.2.1 Factory Location Attributes

Location	Demography	Utilities	Services	Other Industries
Ebuhleni	No census, but estimated below 3,000	Water and electricity is challenge. Good roads. Telecoms a challenge. No municipal services.	No banking services, small shopping complex.	Only manufacturing company in the area. Only industrial activity.
Hlathikhulu	No Census. Small town with about 10,000.	Fairly good supply of water, electricity and telecoms services. Limited municipal services.	Small town with basic goods. No fuel station, which is about 10 km from bigger town.	Only manufacturing facility in the area. Only industrial activity.
Matsapha	Less than 15 minutes from city centre. More than 20,000 population	Good supply of utilities. Full municipal services.	All services available, including airport, dry port and transport providers.	Mixed industries and major industrial area in Swaziland
Matsanjeni	Near a very under-developed small town. Less than 3,000 population, on	Unreliable power and challenging water supply. No municipal services.	No banking and other essential services. Closest small town	Only manufacturing and industrial activity in the area, with minimal commercial activity as well.

	the border to Africa's busiest port (Durban)		with most services about 80km away.	
Mpaka	Initially a mining town developed through availability of coal. Closer of mine impacted more than 2,000 jobs. Population about 5,000	Good water and electricity supply. Close to railway station. No municipal services.	Small town with basic goods. No banking services. New airport about 10km from factory being developed.	Railway station in proximity, but only industrial activity in the area.
Ngwenya	Another old mining town, used to mine asbestos. Population of about 3,000 kilometres. Less than 10 minutes from border to Johannesburg, South Africa and on major highway.	Good supply of water and electricity.	Fuel stations, small village (used to be mining village). No shops.	Glass recycling factory, plastic extrusion and various other activities. About 10 Smaller metal shops, block yard and two large manufacturing factories in area.
Nhlangano	Border town towards South Africa, about 30 minutes to the border. Population in	Reliable electricity and fairly good supply of water. Telecoms	Small town with banks, shops and most basics services and goods,	About 6 other factories engaged in manufacturing in the area. Rest is wholesalers/retailers, repairs shops

	excess of 20,000.	services fairly well developed.	although not like the bigger cities of Mbabane and Manzini.	etc.
Siteki	Small but fast growing town. No census, but estimated around 7,000	Water is challenge. Good roads and electricity supply. Limited municipal services.	Banking services, shopping, hotel, and less than 30 minutes to Mozambique border.	Only manufacturing company in the area. Only industrial activity.
Siphofaneni	No census, but estimated below 5,000	Fairly good supply of Water and electricity fairly Good roads. No municipal services.	No banking services, small shopping complex and shops. New dam for agriculture just completed at about US\$150 million.	Only manufacturing company in the area. Only industrial activity.

Source: Compiled from Ministry of Health and Social Welfare Annual Reports (2008, 2009) and the Ministry of Housing and Urban Development 2009 Annual Report.

The target population for this study was all companies that had benefitted from the factory shell programme and the government ministries responsible for the factory shell programme from conceptualisation, planning, construction to operational

stage. The facilities developed (factory shells) is less than 30 in number and hence the researcher felt that there was no need in being selective to generating a sample, but chose to interview all the companies that are occupants of the factory shells. This obviously meant that if a few fail to respond, the results of the study could give a different meaning altogether, if those that absconded are bigger companies, hence the need for face to face interviews to administer the questionnaire and increase response rates. Fortunately the researcher had a 100% response rate, aided by prior e-mails and follow-up calls prior to the interview. .

For other data that was collected, the research relied on non-probability sampling techniques, using purposive sampling as the respective data sources are specific entities and individuals. Here interviews with public and private sector players, mostly those in value adding activities that occupy government factories, were conducted. In total about 19 companies occupy the factory shells, with 14 of them in textiles and the balance in industries like corrugated packaging, plastic extrusion and oil cold pressing.

Interviews with employees within these factories were conducted, targeting at least 50 people in each factory, with about 900 people in total being interviewed, which represents about 6% of the entire employed population in these factories, based on the 15, 101 currently employed here.

3.4 Pilot Survey

To improve on the questionnaire, the researcher piloted the questionnaire twice amongst ten (10) colleagues and a smaller (five – 5) number of companies. This helped in addressing some issues which became apparent during this pilot study and includes;

- Questions where initially the researcher had used Likert scales were replaced with numerical rankings from 1 to 5, which helped solicit more focused responses with questions that are mostly prone to personal judgement, e.g. ranking of infrastructure in the country, importance of factory shell programme on location decision etc;

- The pilot study also helped in repositioning questions for better follow-up; and
- Eliminating questions that are not clear, collect unnecessary data or those that seek similar responses.

Thus the pilot was quite beneficial and made the questionnaire more focused.

3.5 Validity & Reliability

Firstly the data collection instrument (questionnaire) was validated through the pilot survey that was initially undertaken and a copy was also provided to the Director of Research and Policy at SIPA. The cost benefit analysis has been based mostly a simultaneous collection of similar data utilising secondary and primary data collection methods. Data like number of people employed was collected from SIPA reports and directly from employers. Thus primary quantitative data was collected to validate secondary quantitative data and vice versa. In terms of the measured/required outputs, cost per job created and the other factors, there are clearly stated techniques for calculating such and the data required is easily identifiable.

Thus the author believes that the data collected and the subsequent analysis has allowed the researcher to adequately respond to the questions raised in the introduction of this paper. The pilot survey also ensured that the data collection instrument could produce the same result, as unclear questions were identified, which ensured that the questions were measuring exactly what they were supposed to measure, hence the researcher is convinced that the instrument is reliable and inter-alia the results of the study.

The research is also focused on a real life situation, hence limited control and bias of results as per the case in control studies. The data used has been sourced from the responsible entities and is as recorded in government expenditure reports. The researcher thus feels that the study can easily be repeated later with almost similar results as more than 5 years has passed since initiation hence most of the

benefits have filtered through. There challenge has always been quantifying them and how such can be attained.

3.6 Scope and Limitations of the Study

The primary purpose of the study was to undertake a cost benefit analysis of the government factory shell program, looking at the initially set objectives and deliverables to date. This study does not claim to have answers to this issues, but tried as much as was possible to identify the tangible and intangible benefits and costs associated with this project focusing on the key initial objectives of job creation and attracting FDI.

3.6.1 Data Availability: To date only was study has been done on the factory shell programme (Simelane, et.al) hence limited points of reference. Limited data availability has been one of the challenges in undertaking this study, although some data with key agencies like the Swaziland Investment Promotion Authority and the Project Millennium Unit proved helpful during the compilation of this study. Relationships on the impact and distribution of income could not be undertaken as requires data like multiplier tables which are not available for Swaziland, hence creating difficulty in trying to estimate additional and indirect benefits through say income multipliers.

3.6.2 Time: The time available for the study, being five (5) months was limited for the task at hand considering the data that had to be collected and the geographic spread of the investors to be visited. Most of the data was of a confidential nature and the researcher under-estimated the time it would take to secure that data.

3.6.3 Resources: The researcher was the only one available to undertake the study, from personal resources thus time and cost limitations. The researcher has had sufficient financial resources to undertake the study.

3.7 Ethical Considerations

There are minimal issues related to ethics within this study, although the researcher had to request for confidential data and figures like salaries, rental incomes and other financial information of a sensitive nature. The researcher signed a confidentiality clause with all respondents in a bid to assure them of the safety of the data. Most of the data would have been difficult for any researcher to secure, but the author was aided by his employment within SIPA, hence all the investors knew the author very well. The clause was attached to the questionnaire and basically guaranteed respondents that the information received will be treated in the strictest of confidence and purely for the purposes of this study and nowhere else.

CHAPTER 4

ANALYSIS

4.1 Linking Data to Objectives of Study

Statistical analysis tools were mostly used. The main primary tool was the Cost benefit analysis, which was undertaken using Microsoft Excel to calculate costs per job created, NPV and IRR of the intervention basing it on employment figures, rental income, costs incurred by Government in structures and expenditure on utilities, service providers, etc. The data analysed was mostly qualitative, including employment figures, taxes and rental income, hence a financial analysis approach was used. From the analysis the key measures were;

4.2 What has been the experience of Government, Investors and the Investment Agency in the developed locations?

Some factories were located in areas where there was no adequate infrastructure in place. This became visible, when about 90% of the companies said they preferred locating in Matsapha, versus being anywhere else. Matsapha is visibly the most developed industrial estate in Swaziland.

In discussions with SIPA, there are certain factories that have always been a problem with regards to high tenant turnover. Most investors in this locations distance to services like banking, lack of and reliability of water and electricity and availability of labour. Thus most investors in these locations rarely last over two years at most.

Before we consider the project impacts, it is important to understand the objectives of the project viewed from the perspective of the project promoter, being Government and the motivator, SIPA who currently uses the factories as an instrument to attract investors. The questionnaire included questions that sought the solicit the views of the stakeholders with certain deliverables of job creation

projects, further based on the issues that have formed much of the debate around the delivery of the factory shell initiative. The results are tabulated below;

Table 4.2.1

ORDER OF IMPORTANCE OF OBJECTIVES

Question 21 - Government Response

OBJECTIVE/PRIORITY	RANKING
Job Creation	5
Rental Income	5
Improved Standard of Living	5
Quality of jobs	5
Quantity of jobs	5

N=2 1 very low 5 very high

Table 4.2.2

ORDER OF IMPORTANCE OF OBJECTIVES

Question 21 - IPA Response

OBJECTIVE/PRIORITY	RANKING
Job Creation	5
Rental Income	3
Improved Standard of Living	3
Quality of jobs	3
Quantity of jobs	5

N=2 1 very low 5 very high

The responses clearly varied between the two stakeholders with government placing equal emphasis on all objectives, meaning they wanted the factory shell programme to be able to run itself from the rental income whilst creating a huge number of quality jobs that will improve the standard of living of those employed within these structures. On the other hand the IPA believed that because of high unemployment in the country, the focus was on job creation. Here they concede that the quality of jobs is important, whilst rental income should be adequate to cover maintenance and ensure that each facility is sustainable over its life span.

The researcher also tried to solicit the views of the above respondents with regards to the delivery of the project against the set objectives. The responses from the two responding institutions (Ministry of Economic Planning and SIPA) are tabled below (table 3 & 4).

Table 4.2.3

ACTUAL IMPACT AGAINST OBJECTIVES

Question 22 - Government Response

DELIVERABLE	IMPACT
Job Creation	3
Rental Income	1

Improved Standard of Living	1
Quality of jobs	1
Quantity of jobs	2

N=2 1 Very Low 5 Very High

Table 4.2.4
ACTUAL IMPACT AGAINST OBJECTIVES
Question 22 - IPA Response

DELIVERABLE	IMPACT
Job Creation	5
Rental Income	3
Improved Standard of Living	3
Quality of jobs	2
Quantity of jobs	5

N=2 1 Very Low 5 Very High

The researcher also asked for the Government’s opinion with regards to the major problems they have faced under the programme. The results are presented in Table 5 below.

Table 4.2.5
PROBLEMS FACED BY GOVERNMENT UNDER FACTORY SHELL PROGRAMME.

Problem Area	Rating
Rental Income	1
Poor Quality of jobs	2
Low Return to Government & country	3
Maintenance Issues	4
Fly by night investors (Quality of Investors)	5

By magnitude of problem with 1 being major problem and 5 being least problem

Government feels that the project has failed to deliver on the objectives, as the people employed are paid quite small salaries that do not contribute much to improving the standard of living. From the government perspective, most of the money earned as wages in this factories was spent on transport and accommodation, will little remaining. They thus felt that the programme had not contributed as per their expectations and had in essence underperformed. The IPA however had a somewhat different view. They felt that the project had in its life had created more than 30,000 jobs, with about 15,000 jobs currently being

housed under this factories. The agency (IPA) does however concede that most of the investors are reluctant to pay the subsidised rent and efforts to try and push them to pay sometimes become futile. Those that enjoy a free rental period always apply for an extension when their time to start paying rent kicks in, threatening closure if such rental free period is not extended.

The researcher also sought to find out why the investors fail to pay the rentals or why they are reluctant to pay the rentals. In this review, investors occupying these facilities were asked as the percentage contribution of rent to their monthly operating and overhead costs. From this question the following results are presented.

Table 4.2.6

% CONTRIBUTION OF COST ITEMS TO COST STRUCTURE

Question 9 – Response from Investors

COST ITEM	% contribution to costs
Electricity costs	15% - 20%
Water costs	5% - 15%
Telecommunication costs	3% - 5%
Labour Costs	30%
Raw Materials	40%
Factory Rent	5% - 10%

N = 19 1 Very Low 5 Very High

Rent seems to contribute between 7% to 10% to total operating and overhead costs, which is far less than the contribution of raw materials or labour. The researcher probed further with regards to why the investors place so much emphasis on rent free periods, when rent seems to be small percentage of their running costs. Investors in rural areas also had little concerns with only one type of infrastructure, being roads (Table 6). In most cases they had issues with water, electricity and services, which they said were unreliable or of poor quality in their areas. A majority of those in rural areas also cited challenges with securing good labour, as most had migrated to urban areas like Matsapha. Besides the infrastructure some investors complained that their locations were far from services like shopping, banking and entertainment, thus making it very costly to

undertake such services in terms of both time and money to travel to major centres.

Table 4.2.7

RATING OF INFRASTRUCTURE

Question 8 – Response from Investors

ITEM / PRODUCTIVE FACTOR	RATING - URBAN	RATING – RURAL
Road Infrastructure	5	4
Water Supply	4	2
Electricity	4	3
Telecommunications	2	2
Labour Supply	3	2

N = 19 1 Very Low 5 Very High

Both investors in urban and rural areas concur on telecommunication costs being too high with very slow speeds and unreliable service. Both this groups also felt that labour absenteeism was a major problem which further increased their costs of operation, with some companies citing absenteeism rates in excess of 10%, which became a major problem, especially in areas like quality control, where the staff compliment is small. Most employees cite health issues regarding the reasons for absenteeism. Another contributing factor was high movement between factories/companies by employees, especially those experienced in quality control and machinists. This skills are in shortage and are thus in high demand amongst the factories, hence the employees seemingly have no loyalty to any employee are highly mobile, become increasingly not reliable. This could be easily addressed through offering vocational training in such areas for willing citizens, either employed or unemployed, which will increase the pool of available labour.

Investors cited high production costs in Swaziland, especially for the textile sector in terms of costs of electricity, water and labour than countries like Lesotho. From a desktop analysis of this input costs in Swaziland, Botswana, Lesotho and South Africa, the findings are presented in table 7 below;

Table 4.2.8

Ranking of Costs in Swaziland against Competitor Countries

ITEM / PRODUCTIVE FACTOR	BOTSWANA	LESOTHO	SOUTH AFRICA
Cost of Water	Provincial Tariffs. In most cases Less than , except Gaborone, where it's almost equal to.	Less than	Less than
Cost of Electricity	Less than	Less than	Less than
Cost of Telecommunications	Less than	Less than	Less than
Cost of Labour	Greater than	Less than	Greater than

Source: Websites of Botswana Export Development and Investment Agency (BEDIA), Lesotho National Development Corporation (LNDC) and the South African Department of Trade and Industry (DTI). NOTE ON RATING: ALL COUNTRIES COMPARED AGAINST SWAZILAND, WITH COUNTRIES THAT HAVING A RATING OF LESS THAN, EQUAL TO OR GREATER THAN SWAZILAND IN TERMS OF ITS COSTS, e.g. Cost of Labour in Botswana is greater than in Swaziland.

The investors assertions that Swaziland is more expensive compared to some of its neighbours seems to hold some truth from this desktop research and could validate the investors statements that much as rental income was not a major contributor, they are paying more in other areas in the country, hence any cushion is key to their bottom line (profitability). The factory shells, being under the direct control of the investment agency become the only tool they can leverage to reduce their costs. This view was confirmed by the investment agency that cited increased competition for FDI in the region. Specific reference was made on South Africa that provides cash grants to such investments, relocation grants to help cushion costs of relocation and rebates on duties for bringing in key inputs that are dutiable under the customs union (Southern Africa Customs Union – SACU).

To counter such competitive pressures the IPA offers investors subsidised rental rates with options for a free rent period of on average 24 months (2 years). Thus the factory shells are seem to be an important consideration for the investors, which was further confirmed by their response to the question on importance of the factory shell in the decision to locate in Swaziland. It should be noted however that the question was followed by an exploratory question into the response, which showed that the factory shells in isolation did not attract them into the

country. It was the low cost of labour and general cost of doing business which was the main attraction and the factory shells ensured that their decisions to relocate were quick. So in essence they did influence the decision to locate in Swaziland. Most investors were quick to point out however that such cost advantages have been eroded, making it more expensive to do business in the country.

Table 4.2.9: IMPORTANCE OF FACTORY SHELLS TO LOCATION DECISION

Question 10

N = 19

RANKING	DEFINITION OF RANKING	NO. OF RESPONDENTS	%
5	very important	13	68%
4	Important	2	11%
3	Amongst other contributing factors	1	5%
2	not very important	2	11%
1	not at all important	1	5%
TOTAL	IMPORTANT	19	100%

Having explored the objectives, expectations, opinions and perceptions of the different stakeholders, the researcher will try to quantify the benefits of the project from the collected data. Issues that were considered within the financial and economic impacts by the researcher as indicators were;

Factories in locations like Ebuhleni, Hlathikhulu, and Matsanjeni are in rural areas. Much as other locations like Mpaka, Ngwenya, Nhlangano, Siteki and Siphofaneni are in areas outside of the main urban corridors, they are located closer to certain facilities or within small towns. Ngwenya, Nhlangano and Mpaka could fall under peri-urban, whilst Ebuhleni, Hlathikhulu and Matsanjeni are in rural communities. In most cases the factory location was influenced by the investors who preferred the more developed Matsapha. The next attractive area was Nhlangano, which however needed some infrastructure strengthening in the form of roads, treatment plant and electric sub-station to improve on it. The balance of the structures (24%) were speculative without much analysis on the available infrastructure and factor inputs in that particular area where they

were developed influenced mostly by politicians motivated by creating jobs in the constituencies and gaining political mileage.

4.3 What has been the impact of the development on commercial/private developers?

Before the program was initiated by Government, the provision of industrial buildings was undertaken by private developers and in some cases the investing companies. After Government initiated the program and introduced a much lower rental rate, the investing companies became reluctant in paying any higher or developing their own facilities, which the author has observed in his involvement as an employee of the investment authority.

In one particular case, the investor was looking at vacating a privately owned building to move into a cheaper government owned facility. It was thus important for the researcher to try and understand how this program has impacted private developers, as we may assume that the benefits are positive, without understanding the negative impact on others, as no institutions in Swaziland reviews the market demand of buildings and possible options and their impacts.

From the responses, where respondents were asked on changes with regards to their rental fee escalation rate, it became clear that developers have responded by lowering their rental rates on bigger factory shells, although smaller units of up to 1,000 square metres still attract a higher rental rate. This could be attributed to the high appetite even by domestic investors for warehouses, service centres and light industrial buildings. It should be noted however that private sector has focused mostly on smaller units (500m² to 1,500m²) which is quite small in comparison to the requirements of most investors. The large facilities have are mostly owned by the company/investor who owns the facility and are mostly before the programme was initiated. From the new investments, few have been willing to construct their own facilities, which could be explained by the type of industry that was attracted, being low cost and highly mobile, hence reluctance to take debt or entrench themselves in any particular location, unless the low cost drivers are sustainable over the long term.

From interviews with private developers their rental rates range from E15 to E25 per square metre, with smaller units attracting higher rates. Institutions like the Swaziland Industrial Development Corporation (SIDC), which is a development finance institution charges between E10 to E15 per square metre. Most concede that they are keeping their rates at the same levels, especially for bigger units as there was competition with other landlords like Government and SIDC. SIDC on the other hand feels that the government factory shells have put pressure on their pricing as they are still in some cases compelled to offer rentals of E10 per square metre as tenants would compare with government rental rates.

These institutions have not developed any new structures and have some of the buildings vacant, with increased preference being for Government factory shells, especially by manufactures. Most private sector buildings end up being warehouses or engineering shops as the government factories are not available for trading industries but more for value adding industries like manufacturing. Most private sector developers are not keen in developing structures outside Matsapha, citing vacant structures in Matsapha, which they are struggling to fill.

From discussions with the developers, they are keen to partner with Government in the delivery of such facilities, but feel that compromise must be reached between what Government charges on these buildings versus what they charge. They were firm in stating that they can only be involved if it makes economic sense for them, where they are able to recoup their investment in 10 to 15 years on a building.

CHAPTER 5

FINDINGS & RECCOMENDATIONS

5.1 FINDINGS

The project has had a positive social impact in terms of jobs creation and the multipliers that come with increased employment and incomes. The project will however fail to recoup the cost of investment, even over a 50 year period from rental income.

IMPACT OF THE FACTORY SHELL PROGRAMME: The project has created more than 30,000 jobs, with the number currently at 15,101. Due to the lack of set objectives and responsibilities prior to commencement of project, there is no understanding of what is the expected number. Over and above the 15,101 jobs, the programme has housed more the 40 foreign companies, with currently 19 being housed under the programme. The structures currently enjoy a 100% occupancy level. On an aggregate level, the programme has delivered positively, but an analysis of individual developments reveals a different picture. For example it cost about E18, 650 to create one job where a company called Fashion International, whilst it cost about E200, 000 to create one job under a company called Tex Ray (TQM), where government had to deliver a factory and treatment plant, which ultimately employed about 150 employees. Most of the attracted companies (76%) are in textiles, specifically, cut, make and trim operations. This are low skill, labour intensive operations that seek for manufacturing efficiencies, often motivated by low labour costs. There is a consensus on the need to improve the quality of the jobs. The companies on the other hand complain that the country is not competitive; hence their operations are not profitable. This is one of the reasons why most are reluctant to pay rentals.

There researcher observed that the expectations of government and the investment promotion authority (IPA) are not convergent, which could be due to the lack of clearly spelled out objectives and expectations from the programme. The IPA considers rental income to be a bonus, with job creation being the main

focus, whilst government puts a lot of emphasis on rental income as well, which could conflict with the social objective of job creation. There is consensus; however on the fact that the programme should generate enough revenue to be able to sustain the investments into the factory shells, hence rentals should cater for maintenance and other related running costs like insurance of the buildings, which are currently not insured.

LOCATION DECISION: The location of the factories was mostly influenced by the ultimate tenants, which tended to focus on the main developed area of Matsapha (48%). Second on number of industrial buildings was Nhlngano (20%). Little can be said of these structures, as most are in well developed areas. Those that have been placed outside of this area, especially in rural areas like Matsanjeni and Ebuhleni, have had problems with occupancy, mostly as a result of in-adequate infrastructure like electricity and water. In some cases the IPA has found itself having to finance contingency measures in this areas to make investors comfortable, but in essence, this structures struggle to keep tenants for long. The major challenge for this structures is their total isolation, where in most cases only one building was put out in a rural settlement, making leasing there a very lonely experience. In some areas, which were demarcated as industrial, land seems to have been availed for only a few industrial buildings, before becoming full (e.g. Ngwenya Industrial Site). If an area is indentified as developmental, why do you put just one factory? Why not try and achieve some critical mass of structures, that if occupied would impact positively on the location. The lone existence does not make much impact; tenants don't stay long and costs more to government as expensive infrastructure that could cater for more is only provided to one (e.g. substations, water treatment etc). Some operations that needed facilities like treatment plants ended up locating in an area where such did not exist, and they had to construct their own make shift handling process, which the community suspects to be seeping through their natural waters.

In general though, most of the waste from the textile companies is cotton rags which are handled by the local municipality. There are thus limited environmental issues arising from this initiative, except in a number of factories like the cardboard making factory mentioned above, some water treatment plant

challenges in Nhlanguano. The country would benefit from modernising its industrial planning approaches and practices to keep pace with modern times.

IMPACT ON PRIVATE DEVELOPERS: The project has impacted negatively on private developers especially in the one area where they are concentrated, Matsapha. From discussions with developers they are not too keen on developing in the rural areas, but are keen on locations like Matsapha and Ngwenya. Those in business in Matsapha, have had to reduce their rental rate escalations, especially for facilities above 2,000m², which tend to be demanded by foreign companies. As investors become aware, through other investors, that companies can get free rental options and subsidised rates after that initial rent free period, they come in with such expectations and demands.

Commercial rates become a difficulty to sell under these conditions. This area was identified by the researcher as the main unintended effect of the intervention.

5.2 RECOMMENDATIONS

IMPACT OF THE FACTORY SHELL PROGRAMME

For future interventions government must ensure that before any interventions are undertaken, the researcher proposes the following framework (Jaworski, P, 2009);

- Specification of strategy including objectives,
- Formulation of proposals including market analysis,
- Ex *ante* appraisal of proposals including financial economic and environmental appraisal,
- Selection of project,
- Design of delivery system,
- Identification of expected outcomes including specific effects of proposals e.g. Impact on employment, performance of firms, incomes, social welfare and environment, market efficiency'
- Delivery of treatment to target population
- Monitoring of delivery of policy inputs to targeted population

- Monitoring of intermediate outputs in target population,
- Ex *post* evaluation of outcomes,
- Comparison of *ex ante* appraisal and *ex post* evaluation, and consideration of the extent to which project has met original proposal objectives.
- Publication of results of evaluation
- Reassessment of strategy and objectives.
- Re-specification of strategy and objectives to start the cycle again.

This process will allow for the systematic conceptualisation and evaluation of projects as most of the conflicts on performance are as a result of lack of predetermined success criteria.

With the financial analysis returning negative at the current rate of rental, what then would be the ideal rental rate that would allow for cost recovery? Utilising a substitution process, the researcher comes up with the following options;

With the urban rental rate at E9.00 per square metre and maintaining the rural rental rate at E6.00 per square metre yields the following results in terms of return to the national economy.

NPV (NET FLOWS TO GOVERNMENT)	E -21 257 463.96	-\$2 911 981
IRR	9%	

The return to the factory shell under this scenario gives us the following option;

NPV (NET FLOWS TO FACTORY SHELLS)	E -141 823 046.34	-\$19 427 814.57
IRR	4%	

The returns to the factory shells start becoming positive as we move closer towards commercial rates of rental with urban rental rate at E13.00 per square metre and rural rental rate at E10.00 per square metre.

NPV (NET FLOWS TO FACTORY SHELLS)	E -23 613 129.78	-\$3 234 675.31
--	-------------------------	------------------------

IRR	9%	
-----	----	--

These rates are still below market rates, although closer to those charged by development finance institutions like SIDC. The option then rests with Government to choose a rate between market rates but still above E5 for rural areas and E7.50 for urban areas, but not exceeding E10 (which is the minimum charged by SIDC). Thus the range would be anything between E5 to E7.5 for rural areas and E7.5 to E9 for urban areas. This would allow government to almost recoup its initial investment.

The researcher thus proposes that projects be benchmarked against an economical cost of E25, 000 per job. This should only be applied to labour intensive projects. Capital intensive projects usually bring in expensive technology and need design specific structures, so one can further assume that such will want to own the structure. Overall our analysis and model has shown that the project contributed positively to Job creation and attraction of FDI, housing currently 15,101 full time jobs. It should be pointed out however that factory shells alone will not bring FDI into the country. A number of other areas must be in place for FDI to take place. The programme has succeeded in attracting jobs. But of what quality? Indeed the quality of the jobs is low. This cannot simple be blamed on investment promotion efforts, but can be looked at more from a position of asking – “Why is the country failing to attract FDI and indeed quality FDI?” From interviews with investors the issue of high cost of doing business, i.e. competitiveness of the country came up. Indeed the country is competing for FDI and in our matrix of utilities in the region, Swaziland was amongst the expensive locations, couple with higher labour costs.

Addressing the competitiveness of country will take more than subsidised factories to investors. Swaziland must act urgently to usher reforms that will make it easy for investors to do business in the country. This should address cross border issues and operating times, licensing and company registration, visas and work permits, quality education and various other key issues. National Competitiveness covers various issues like the availability and development of managerial expertise and other general skills, growth of products and services, which talks to issues like access to technology, markets and inputs, quality of infrastructure, quality of life, legal

framework, including investor protection and many other variables that need to form part of the nations competitive agenda. With globalisation, multinationals are no longer confined to specific geographic locations and countries have to compete and be attractive to FDI and indeed local investors as well.

The cost of creating the jobs was also much lower in most of the factories than in neighbouring South Africa, although some factories were excessively expensive, but we have been able to set a benchmark against which future projects can be compared.

LOCATION DECISION

The issue of locating factories needs to be further developed and a master-plan put in place that is in line with Swaziland's industrial aspirations and resource location. Such plans should be linked to development programs of other institutions like the electricity and water company. This will ensure that problems of locating a factory in an area where there is inadequate water or electricity are avoided. In some cases, the utility companies are not even planning to develop that area because its not part of their growth areas. This then creates a problem where government must fund expensive infrastructure to cater for that single tenant, who will end up vacating the facility which is isolated.

Government must seriously consider the issue of clustering the structures or co-locating them such that they can leverage of the provided infrastructure, whilst reducing cases of isolation. This co-location creates a spiral that will attract more people and activities thus creating an economic node. Secondly, Swaziland is a small country: much as it helps to being jobs closer to the people, such should not translate to actual factory shells in every constituency, where lone structures are created at a huge expense, as they require the same infrastructure that five or ten other factories would have required (roads, telecommunications, electricity etc). The country currently has four regions and locating factories within these regions would make a lot of sense and bring the jobs closer to the people, thus stimulating growth in the whole region.

IMPACT ON PRIVATE DEVELOPERS

From discussions with private developers, there is clearly lots of private sector interest in developing industrial buildings in Matsapha. The unintended effects of government crowding out private sector in this area needs to be also addressed. It is therefore recommended that government focuses on the other three regions of the country as Manzini, through Matsapha has private sector resources prepared to provide the same facilities to investing companies.

Government can then direct its resources to depressed areas, where private sector is not prepared to go. For example, the recent population census (2007) identifies the Shiselweni region as the most depressed in terms of employment opportunities. If government were to direct its factory shell programme to expand more factories in Nhlanguano, Hlathikhulu and Matsanjeni, it would also help stabilise some of the current lone investors, building upon them to turn those depressed areas that have high unemployment into economic nodes.

5.3 CONCLUSION

The researcher has through this paper demonstrated the financial and economic impacts of the factory shell programme developed by the Government of Swaziland. The project contributed positively to job creation and attraction of low skill, labour intensive FDI. But the lack of pre-determined measures and objectives makes it difficult for stakeholders to agree on the outcomes. It should be very clear that without any pre determined objectives and measures; it makes it even difficult to evaluate projects. Our financial analysis shows that the project is seriously underperforming and will never generate its equivalent in value over its lifetime. The other plausible option would be to raise rental income, which would unfortunately scare the investors and work against the primary objective of job creation.

Even government concedes that job creation and preservation command greater importance than rental income, although the temptation to stress both as equal targets is too great. The only positive financial indicator in the project (more economic) is the cost per job created, which shows that the amount spent

against the jobs created was quite lower compared to our immediate neighbour (South Africa) within the same industry, implying that the intervention was a cost effective way to create jobs. Future interventions just need proper planning and prior agreement on deliverables between Government and the implementing agency (SIPA).

Applying a discounted cash flow technique to a stream of net cash flows to government, comprising of rental income, taxes, net of subsidies etc, at a social rate of discount shows that the project is financially a disaster. The main challenge is the consistency and levels of rental collection, which are below the economically viable rate, with high default rates.

The researcher feels that he has contributed towards a better understanding of the factory shell programme in Swaziland, which could apply to other public initiatives and their appraisal in the context of Africa. The information required for such an analysis is generally available making it easy for any government agency to undertake evaluations without any sophisticated tools. The analysis was undertaken in excel which is generally available. It should be understood that financial appraisal is not the only tool that should guide the decision making process and hence, social, environmental and economic appraisal of a project must be undertaken prior to undertaking projects, which later becomes the measures of a post-evaluation exercise.

The main challenge in the financial performance of the factory shells is the reluctance by tenants to pay rentals, which they attribute to generally high costs of doing business in Swaziland. Thus the factory shells alone would not address the unemployment problems. A holistic approach that addresses the competitiveness of the country should be looked at into the long-term. This will take precise identification of sectors that are compatible with Swaziland and developing strategies covering a long-term period of say 20 years, to be able to steer the economy into a particular direction.

As Paul Krugman puts it, national competitiveness is a marathon and everything matters from roads, to hospitals to schools. Instead of trying to host every sector

available, the government through economic studies should come up with a roadmap that will move towards the attainment of the stated vision or identified economic path. Promoting a sector without the necessary policy support and coherence makes it very difficult to convince the investors that the sector is indeed a priority to the government, if they receive little support from setting up locally. Take the issue of agriculture for example, where about 99% of irrigation water is allocated to sugar cane. For investors this spells out a message that the priority crop in Swaziland is sugar cane, hence they will not get water to irrigate other produce, implying limited support to that sector. The factory shell programme should be developed parallel to a programme of reforms aimed at improving national competitiveness and making it easy to do business in Swaziland. This will translate to the programme being refined around parameters like;

- Type of economic activity to be housed under such structures
- Number of jobs that the programme or factory will be expected to contribute;
- Projected contribution of the investment to government coffers (taxes etc);
- Investment amount associated with the project.

This will ensure that when the need to review the intervention, there are clearly defined parameters and measures to link the outcomes to.

APPENDICES

APPENDICE 1: LIST OF FACTORIES AND TENANTS

FACTORIES ATTRACTED UNDER PROGRAMME AND INTERVIEWED					
No.	Name of Respondent	Closest Town	Industry Activity	Size (sqm)	Cost (E)
1	Far East Textiles	Matsapha	Textile	7400	10 000 000
2	Fashion International 1	Matsapha	Textile	9500	14 000 000
	Fashion International 2	Matsapha	Textile	3500	6 700 000
3	Leo Garments	Matsapha	Textile	6000	7 800 000
4	Tex Ray 1	Matsapha	Textile	4500	7 000 000
	Tex Ray 2	Matsapha	Textile	4200	7 900 000
	Tex Ray 3 (Kartat)	Matsapha	Textile	7650	13 000 000
	Tex Ray 4 (Kasumi)	Matsapha	Textile	12500	15 800 000
	Tex Ray 5 (Proton)	Matsapha	Textile	12500	17 000 000
	Tex Ray 6 (TQM)	Matsapha	Textile	25000	13 000 000
5	Master Garments	Matsapha	Textile	8000	11 500 000
6	New Life Garments	Matsapha	Textile	2400	4 200 000
7	FTM Garments	Nhlangano	Textile	9400	12 000 000
8	Ho's Enterprise	Nhlangano	Textile	15000	31 000 000
9	Zheng Yong	Nhlangano	Textile	25200	62 500 000
10	Juris Manufacturing	Nhlangano	Textile	8000	11 500 000
11	SUB	Nhlangano	Steel fabrication	1250	2 000 000
12	Chuang Yi Paper	Hlathikhulu	Corrugated packaging	7400	10 800 000
13	Swazi Amarula Products	Siphofaneni	Amarula Processing	1250	2 100 000
14	Swazi Secrets	Mpaka	Amarula Processing	1250	2 400 000
15	Texland	Siteki	Textile	6000	6 000 000
16	Swazi Blankets	Ebuhleni	Textile	1250	2 000 000
	Swazi Blankets	Ebuhleni	Textile	3000	5 500 000
17	Swaziland Polypack	Ngweya	Plastic Extrusion	24000	40 000 000
18	Peterstow Aquapower	Ngweya	Steel fabrication	6000	1 400 000
19	Ample Manufacturing		Textile	1250	2 300 000
TOTAL				213 400	319 400 000

APPENDICE 2: RESEARCH QUESTIONNAIRE

QUESTIONNAIRE ON GOVERNMENT FACTORY SHELL PROGRAMME

COSTS, BENEFITS AND EXPECTATIONS OF THE GOVERNMENT FACTORY SHELL PROGRAMME

This survey is being undertaken in partial fulfilment of the MSc Degree in Investment Promotion and Economic Development with Edinburgh Napier University in Scotland. All information provided will be used within the confines and solely for undertaking this academic research and as such will be treated in the strictest of confidence by the researcher.

Please kindly spare 20 minutes of your time to respond to this questionnaire. Your time and responses will be most valuable and will enable the student to undertake the research into the Government Factory Shell Programme, with results expected to contribute positively to the welfare and value to Government, Investors and Employees within supported facilities and across country.

INFORMATION PROTECTION AND CONFIDENTIALITY AGREEMENT ENTERED INTO BETWEEN

ZIZWE PAUL VILANE

and

.....

PREAMBLE

The researcher, being an employee of the Swaziland Investment Promotion Authority, is currently pursuing a Master's degree in Investment Promotion and Economic Development. As part of the degree's requirements, students are expected to undertake a research project in fulfilment of the course requirements. The attached questionnaire seeks to solicit information from your company/institution to allow the student to undertake his research.

The researcher acknowledges that some of the requested information is of a confidential nature and has developed this agreement to be entered into between the researcher and your company/institution to protect the information provided.

SCOPE OF AGREEMENT

It is hereby agreed that all data provided by your company/institution will be used solely for the purpose of the academic research and shall only be disclosed within the confines of this study. In this regards, the research study will not reveal the identity of the provider of the data, except where such information is already public knowledge. All efforts will thus be made to report the data in aggregates and where numbers will replace individual institutions on reporting of confidential data.

The researcher thus assures that company that all efforts shall be made to protect the identity and confidentiality of the data as defined within the scope above.

Thus signed inon this day.....of2010.

Researcher
Zizwe Vilane

Authorised Company Respondent

SECTION A - DEMOGRAPHICS OF RESPONDENTS

1. Name of Establishment or Responding Entity.....

2. Involvement with factory shell programme

a) Developer

b) Facilities Manager

c) Tenant

d) Responsible Ministry

NOTES

- If you have chosen option a) above, please proceed to SECTION D of this questionnaire
- If you have chosen option b) and d) above, please proceed to SECTION C of this questionnaire
- If you have chosen option c) above, please continue with rest of SECTION A and proceed to SECTION B of the questionnaire

3. Date of Establishment.....

4. Type of Activity Involved in (e.g. Furniture).....

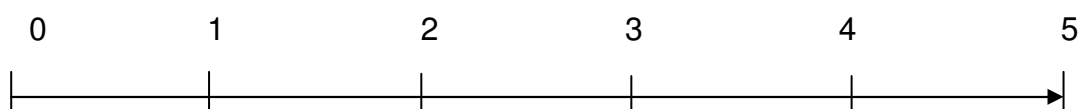
5. Which is your closest service town (e.g. for Banking etc).....

SECTION B – COMPANIES OCCUPYING THE FACTORY SHELLS

6. How long have you been in the current premises?

7. Less than 1 year 2 years 4 years more than 5 years

8. How important are the subsidised Government factories to your companies continued operations? (One (1) being less important and five (5) being very important)



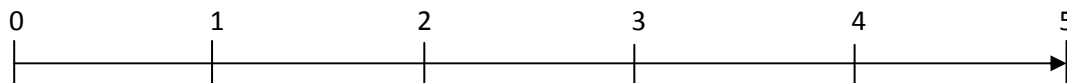
9. Please rate quality of the following in your current location; (one (1) being very bad and five (5) being very good)

ITEM / PRODUCTIVE FACTOR	1	2	3	4	5
Road Infrastructure					
Water Supply					
Electricity					
Telecommunications					
Labour Supply					

10. Please state in percentages the contribution of the following to your cost structure.

COST ITEM	% contribution to costs
Electricity costs	
Water costs	
Telecommunication costs	
Labour Costs	
Raw Materials	
Factory Rent	

11. How important was the Government factory shell in your decision to locate in Swaziland? (1 being not important and 5 being very important)



12. Please Explain:

.....

13. How many Swazi citizens do you employ?

14. Of this number, how many are permanent employees and how many are casual employees?

15. Of your total Swazi staff compliment, how many were unemployed prior to joining your company. Which percentage came from other factories? Please give number and percentages:

Status	No. of Employees	Percentage (%)
Previously Unemployed		
Previously Employed		
TOTAL		

16. Please kindly break the number of your employees by position and average monthly salary.

Position	No. of Employees	Average Monthly Salary
Managerial		
Supervisory		
General factory worker		
Support (cleaning, security, etc)		
TOTAL		

17. Where are the markets for your finished products?.....

ENVIRONMENTAL CONSIDERATIONS FROM ATTRACTED INVESTMENTS

18. What are your major outputs in terms of waste?.....

19. How is this waste being handled?.....

20. Have there been any concerns either by government, community or other stakeholders about waste from you factory?.....

21. Does your project have environmental clearance (i.e. got approval from Swaziland Environmental Authority)?.....

SECTION C – GOVERNMENT AND INVESTMENT AGENCY

22. How many factories did the factory shell programme entail?.....

23. What was the cost of delivering factories and related infrastructure, including support services?.....

24. What was the cost attributed to the factory shells and other accompanying infrastructure like water treatment plants, but excluding costs of bulk services like roads, sewer, etc.....

25. Please rank the following in order of importance with regards to the factory shell initiative expectations? (Rank order from 1 to 5, with 1 being very important and 5 being least important)

- a) Job Creation/Reduced Unemployment
- b) Rental Income
- c) Improved Standard of Living
- d) Quality of jobs
- e) Quantity of jobs

26. How do you rate the impact of the project on the following objectives/deliverables?; (1 being very low and 5 being very high attainment of set objectives/expectations).

DELIVERABLE	1	2	3	4	5
Job Creation/Reduced Unemployment					
Rental Income					
Improved Standard of Living					
Quality of jobs					
Quantity of jobs					

27. How were the decisions on the following arrived at?

- When to build a particular factory and the size of factory:.....

- How were the locations determined? (e.g. like a factory in Matsapha or Matsanjeni):.....
 - Funding of Projects.....
28. Where did the funds for the initiative come from?
29. If borrowed, what was the cost of capital/funds?.....
30. What were the terms and conditions of the loans and current status in terms debt servicing?.....
31. What is the current rental rate per square metre for your factories and what influences this rate?
32. Besides subsidised rentals, what other benefits do these investors enjoy?
33. What are some of the problems you have faced with the program? (Please list major five issues);
- a)
- b)
- c)
- d)
- e)

SECTION D – PRIVATE FACTORY SHELL DEVELOPERS/OWNERS

34. How many industrial buildings do you have?.....
35. What is the size in square metres and the location of your structures? (Please add more rows should you have more than the listed number of factory shells).

BUILDING NO.	SIZE (m2)	LOCATION	OCCUPIED (YES/NO)	RATE/m2
1.				

2.				
3.				
4.				
5.				

36. How much do you spend on maintenance as a percentage of the cost of the building?

37. Are you aware of the government factory shells?.....

38. What do you think about the program?.....

- a) Excellent
- b) Good
- c) Ok
- d) Bad
- e) Very Bad

39. Please explain your answer to 5 above:.....

40. What has been the impact of the government factories on your business or properties in areas like rent and occupancy levels.....

41. Have you considered lowering your rate to attract tenants coming through government or SIPA?.....

42. At what rate does your rental rate escalate per year?.....

43. Are you planning to develop any new factories?.....
44. Have you considered developing factories in other parts of the country?.....
45. Please kindly explain your answer to above?.....

46. Are you aware of Public Private Partnerships?.....
47. Would you consider entering into a PPP to deliver factory shells for foreign investors?.....
48. What would your expectations be from such a partnership in terms of the following?
- a) Return on investment;.....
 - b) Rental rate per square metre;.....
 - c) Rental or lease period with tenants;.....
 - d) Other considerations.....

END OF QUESTIONNAIRE

APPENDICE 3 - DCF FINANCIAL WORKINGS

CONTENTS:

- 1.0 Financial performance of factory shells – cashflow projections
- 2.0 Financial contribution of attracted firms to national economy
- 3.0 Assumptions
- 4.0 Actual factory shell rental income (2001 – 2010)
- 5.0 Actual costs - project delivery , operational and administrative costs
- 6.0 Rental income projections (2011 – 2020)
- 7.0 Projected factory shell operation costs

FINANCIAL PERFORMANCE OF FACTORY SHELLS				
YEAR	CASH INFLOW	CASH OUTFLOW	NET CASHFLOW	CUMULATIVE CASHFLOW
0	0	329 740 000	-329 740 000	-329 740 000
1	9 755 100	6 696 755	3 058 345	-326 681 655
2	10 242 855	7 031 593	3 211 262	-323 470 393
3	10 754 998	7 383 172	3 371 825	-320 098 567
4	11 292 748	7 752 331	3 540 417	-316 558 151
5	11 857 385	8 139 948	3 717 437	-312 840 713
6	12 450 254	8 546 945	3 903 309	-308 937 404
7	13 072 767	8 974 292	4 098 475	-304 838 929
8	13 726 405	9 423 007	4 303 399	-300 535 531
9	14 412 726	9 894 157	4 518 568	-296 016 962
10	15 133 362	10 388 865	4 744 497	-291 272 465
11	15 890 030	10 908 308	4 981 722	-286 290 744
12	16 684 531	11 453 724	5 230 808	-281 059 936
13	17 518 758	12 026 410	5 492 348	-275 567 587
14	18 394 696	12 627 730	5 766 966	-269 800 622
15	19 314 431	13 259 117	6 055 314	-263 745 308
16	20 280 152	13 922 073	6 358 080	-257 387 228
17	21 294 160	14 618 176	6 675 984	-250 711 245
18	22 358 868	15 349 085	7 009 783	-243 701 462
19	23 476 811	16 116 539	7 360 272	-236 341 190
20	24 650 652	16 922 366	7 728 285	-228 612 905
21	25 883 184	17 768 485	8 114 700	-220 498 205
22	27 177 344	18 656 909	8 520 435	-211 977 770
23	28 536 211	19 589 754	8 946 456	-203 031 314
24	29 963 021	20 569 242	9 393 779	-193 637 534
25	31 461 172	21 597 704	9 863 468	-183 774 066

NOTES:

- Flows to Government are net of all charges related to factory shells, which are administered by SIPA
- No taxes or other fees are paid by Government from Factory Shells
- Finance for Factory shells came from Government budget

NPV (NET FLOWS TO FACTORY SHELLS)	E -261 536 937.88	-\$35 826 977.79
IRR	#NUM!	IRR Way Below Zero

FINANCIAL CONTRIBUTION OF ATTRACTED FIRMS TO NATIONAL ECONOMY				
YEAR	CASH INFLOW	CASH OUTFLOW	NET CASHFLOW	CUMULATIVE CASHFLOW
0	0	329 740 000	-329 740 000	-329 740 000
1	9 755 100	-	9 755 100	-319 984 900
2	10 242 855	-	10 242 855	-309 742 045
3	10 754 998	-	10 754 998	-298 987 047
4	11 292 748	-	11 292 748	-287 694 300
5	11 857 385	-	11 857 385	-275 836 915
6	12 450 254	-	12 450 254	-263 386 660
7	13 072 767	-	13 072 767	-250 313 893
8	13 726 405	-	13 726 405	-236 587 488
9	14 412 726	-	14 412 726	-222 174 762
10	15 133 362	-	15 133 362	-207 041 401
11	15 890 030	-	15 890 030	-191 151 371
12	16 684 531	-	16 684 531	-174 466 839
13	17 518 758	-	17 518 758	-156 948 081
14	18 394 696	-	18 394 696	-138 553 385
15	19 314 431	-	19 314 431	-119 238 954
16	20 280 152	-	20 280 152	-98 958 802
17	21 294 160	-	21 294 160	-77 664 642
18	22 358 868	-	22 358 868	-55 305 774
19	23 476 811	-	23 476 811	-31 828 963
20	24 650 652	-	24 650 652	-7 178 311
21	25 883 184	-	25 883 184	18 704 873
22	27 177 344	-	27 177 344	45 882 217
23	28 536 211	-	28 536 211	74 418 428
24	29 963 021	-	29 963 021	104 381 449
25	31 461 172	-	31 461 172	135 842 622

NOTES:

- Flows to Government are net of all charges related to factory shells, which are administered by SIPA
- No taxes or other fees are paid by Government from Factory Shells
- Finance for Factory shells came from Government budget
- Net Flows to Government from Factory Shell include, Net Rental Inflows, Corporate Taxes paid by attracted companies, Taxes paid on Income (PAYE) and Transaction Taxes (Sales Tax, Duties).

RESULTS

NPV (NET FLOWS TO GOVERNMENT)	E -140 971 355.50	-\$19 311 145
IRR	4%	

ASSUMPTIONS	2011	2012	2013	2014	2015
Annual escalation on rent	5%	5%	5%	5%	5%
GDP Growth rate (10 year GDP Average)	2.50%	2.50%	2.50%	2.50%	2.50%
Inflation	6%	6%	6%	6%	6%
Cost of Capital (5 Year Government Bond)	10%	10%	10%	10%	10%
Market Growth = GDP Growth + Growth Premium	5%	5%	5%	5%	5%
Maintenance (1% of value of building/year)	1%	1%	1%	1%	1%
Annual Escalation on Maintenance Charge	5%	5%	5%	5%	5%
Annual Escalation on Municipal Rates	5%	5%	5%	5%	5%
Value of Land as per Government Gazzette:					
Land at Government rate of E20/sqm*	20	40	41	42	43
* Rate applicable during project phase					
Total Land space utilised for factories	213 400				
Total Value of Land as per Government rate	4 268 000				
Admin Fee Payable to SIPA (% of Rental Income)	5%	5%	5%	5%	5%
Escalation on General Costs/Expenses	5%	5%	5%	5%	5%
Discount Rate	10%				
Current Contribution through Sales Tax/Duties (E)	12 000 000				
Current Rental Rate (E/m ²) – Urban	4.50				
Current Rental Rate (E/m ²) – Rural	3.00				
Increase in Duties = GDP Growth	2.50%				

ACTUAL FACTORY SHELL RENTAL INCOME (2001 – 2010)

TENANT	PERIOD	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Far East Textiles		111 000				55 500					
Fashion International 1					142 500		71 250	128 250	213 750	128 250	142 500
Fashion International 2						52 500					
Leo Garments		90 000						90 000	54 000		
Tex Ray 1 (Proton)		67 500									
Tex Ray 2 (Kasumi)				63 000							
Tex Ray 3 (Kartat)			114 750								
Tex Ray 4 (TAITEX)				187 500							
Tex Ray 5 (Union Industrial)				187 500							
Tex Ray 6 (Dyeing House)											
Master Garments			120 000			180 000	108 000	72 000	36 000		
New Life Garments		36 000				43 200	72 000		43 200		
FTM Garments		141 000				70 500	141 000		94 000		
Ho's Enterprise					225 000	135 000	90 000		90 000		
Zheng Yong			378 000			113 400	113 400	151 200	75 600		
Juris Manufacturing			60 000				96 000	72 000	48 000		
SUB		18 750					37 500	45 000			
Chuang Yi Paper					111 000	166 500	88 800	111 000	66 600	22 200	
Swazi Amarula Products		18 750				18 750		45 000	45 000		
Swazi Secrets					18 750			22 500	45 000	18 750	
Texland					90 000	108 000	36 000	72 000	54 000	36 000	
Swazi Blankets			63 750				25 500				
Swaziland Polypack									180 000		
Peterstow Aquapower		90 000									
Ample Manufacturing			18 750					18 750			
RENTAL INCOME		573 000	556 500	636 750	251 250	444 000	906 600	1 026 450	877 200	905 650	219 450

NOTES:

- Shaded areas indicate free rental period, rent is expected to commence at that period;
- Tenants reluctant to pay rent citing affordability whilst others are discouraged by low compliance
- Tex Ray occupies about 6 buildings which are supposed to start paying rent from 2010 but company has asked for extension on free rental
- Tenants are expected to pay about 2 times monthly deposit as commitment fee on occupation
- Fee was calculated at rate of E7.5 per square metre and formed most of the revenue in early years (2001, 2002);

ACTUAL COSTS - PROJECT DELIVERY , OPERATIONAL AND ADMINISTRATIVE COSTS											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
OPERATIONAL & ADMIN COSTS											
Maintenance							973897		41082	406640	134745
Municipal Rates											
Land (213,4000m ² @ E20/m ²)	4 268 000										
Admin/General Oper. Costs									104322	148381	66121
Audit Fees									15000	15000	15000
PROJECT COST											
Construction	319 400 000										
Improvements & Support											
- Sewer Pump Station	2 472 000										
- Diesel Generator									382000		
- 10 MVA Power Supply	3 600 000										
- Portable Water Treatment								252000	252000	252000	252000
TOTAL COSTS	329 740 000						973 897	252 000	794 404	822 021	467 866

PERIOD	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ACTUAL NET INCOME		573 000	556 500	636 750	251 250	444 000	-67 297	774 450	82 796	83 629	-248 416

RENTAL INCOME PROJECTIONS (2011 – 2020)

PERIOD	SIZE IN M ²	CURRENT RATE / M ² (E)	PROJECTED RENTAL INCOME									
			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TENANT												
Far East Textiles	7400	4.5	399 600	419 580	440 559	462 587	485 716	510 002	535 502	562 277	590 391	619 911
Fashion International 1	9500	4.5	513 000	538 650	565 583	593 862	623 555	654 732	687 469	721 843	757 935	795 831
Fashion International 2	3500	4.5	189 000	198 450	208 373	218 791	229 731	241 217	253 278	265 942	279 239	293 201
Leo Garments	6000	4.5	324 000	340 200	357 210	375 071	393 824	413 515	434 191	455 901	478 696	502 630
Tex Ray 1 (Proton)	4500	4.5	243 000	255 150	267 908	281 303	295 368	310 136	325 643	341 925	359 022	376 973
Tex Ray 2 (Kasumi)	4200	4.5	226 800	238 140	250 047	262 549	275 677	289 461	303 934	319 130	335 087	351 841
Tex Ray 3 (Kartat)	7650	4.5	413 100	433 755	455 443	478 215	502 126	527 232	553 594	581 273	610 337	640 854
Tex Ray 4 (TAITEX)	12500	4.5	675 000	708 750	744 188	781 397	820 467	861 490	904 565	949 793	997 282	1 047 147
Tex Ray 5 (Union Industrial)	12500	4.5	675 000	708 750	744 188	781 397	820 467	861 490	904 565	949 793	997 282	1 047 147
Tex Ray 6 (Dyeing House)	25000	4.5	1 350 000	1 417 500	1 488 375	1 562 794	1 640 933	1 722 980	1 809 129	1 899 586	1 994 565	2 094 293
Master Garments	8000	4.5	432 000	453 600	476 280	500 094	525 099	551 354	578 921	607 867	638 261	670 174
New Life Garments	2400	4.5	129 600	136 080	142 884	150 028	157 530	165 406	173 676	182 360	191 478	201 052
FTM Garments	9400	3	338 400	355 320	373 086	391 740	411 327	431 894	453 488	476 163	499 971	524 969
Ho's Enterprise	15000	3	540 000	567 000	595 350	625 118	656 373	689 192	723 652	759 834	797 826	837 717
Zheng Yong	25200	3	907 200	952 560	1 000 188	1 050 197	1 102 707	1 157 843	1 215 735	1 276 522	1 340 348	1 407 365
Juris Manufacturing	8000	3	288 000	302 400	317 520	333 396	350 066	367 569	385 948	405 245	425 507	446 783
SUB	1250	3	45 000	47 250	49 613	52 093	54 698	57 433	60 304	63 320	66 485	69 810
Chuang Yi Paper	7400	3	266 400	279 720	293 706	308 391	323 811	340 001	357 001	374 852	393 594	413 274
Swazi Amarula Products	1250	3	45 000	47 250	49 613	52 093	54 698	57 433	60 304	63 320	66 485	69 810
Swazi Secrets	1250	3	45 000	47 250	49 613	52 093	54 698	57 433	60 304	63 320	66 485	69 810
Texland	6000	3	216 000	226 800	238 140	250 047	262 549	275 677	289 461	303 934	319 130	335 087
Swazi Blankets	4250	3	153 000	160 650	168 683	177 117	185 972	195 271	205 035	215 286	226 051	237 353
Swaziland Polypack	24000	4.5	1 296 000	1 360 800	1 428 840	1 500 282	1 575 296	1 654 061	1 736 64	1 823 602	1 914 782	

Peterstow Aquapower	6000		0	0	0	0	0	0	0	0	0	2 010 521
Ample Manufacturing	1250	3	45 000	47 250	49 613	52 093	54 698	57 433	60 304	63 320	66 485	69 810
RENTAL INCOME			9 755 100	10 242 855	10 754 998	11 292 748	11 857 385	12 450 254	13 072 767	13 726 405	14 412 726	15 133 362

PROJECTED FACTORY SHELL OPERATION COSTS											
ANNUAL MAINTENANCE	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Maintenance Charge	3 194 000	3 353 700	3 521 385	3 697 454	3 882 327	4 076 443	4 280 265	4 494 279	4 718 993	4 954 942	
Others Costs											
Municipal Rates	3 000 000	3 150 000	3 307 500	3 472 875	3 646 519	3 828 845	4 020 287	4 221 301	4 432 366	4 653 985	
Admin/General Oper. Costs	487 755	512 143	537 750	564 637	592 869	622 513	653 638	686 320	720 636	756 668	
Audit Fees	15 000	15 750	16 538	17 364	18 233	19 144	20 101	21 107	22 162	23 270	
TOTAL COSTS	6 696 755	7 031 593	7 383 172	7 752 331	8 139 948	8 546 945	8 974 292	9 423 007	9 894 157	10 388 865	
NOTES:											
<ul style="list-style-type: none"> - Current arrangement is that Municipal rates are not paid from rental income - Municipal Rates currently being paid for by Ministry of Housing & Urban Development - Maintenance currently responsive, hence no maintenance plan in place; - Government Policy currently makes no provision for insurance, so structures are un-insured - Need to build insurance costs in future evaluations 											
YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
NET INCOME FROM RENT	3 058 345	3 211 262	3 371 825	3 540 417	3 717 437	3 903 309	4 098 475	4 303 399	4 518 568	4 744 497	

PROJECTED NET CASH FLOW TO GOVERNMENT										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NET CASH FLOW TO GOVERNMENT	1	2	3	4	5	6	7	8	9	10
Initial Capital Outlay										
Net Rental Income	3 058 345	3 211 262	3 371 825	3 540 417	3 717 437	3 903 309	4 098 475	4 303 399	4 518 568	4 744 497
Corporate Taxes	0									
PAYE (Pay As You Earn)	0									
Duties (Sales Tax,etc)	12 000 000	12 300 000	12 607 500	12 922 688	13 245 755	13 576 899	13 916 321	14 264 229	14 620 835	14 986 356
TOTAL CASHFLOW TO GOV	15 058 345	15 511 262	15 979 325	16 463 104	16 963 192	17 480 208	18 014 796	18 567 628	19 139 403	19 730 853
NPV	13 689 405	12 819 225	12 005 504	11 244 522	10 532 808	9 867 122	9 244 439	8 661 935	8 116 975	7 607 098
NET DIRECT CASH FLOW FROM FACTORIES	1	2	3	4	5	6	7	8	9	10
Initial Capital Outlay										
Net Rental Income	3 058 345	3 211 262	3 371 825	3 540 417	3 717 437	3 903 309	4 098 475	4 303 399	4 518 568	4 744 497
NET RETURN FROM FACTORY	3 058 345	3 211 262	3 371 825	3 540 417	3 717 437	3 903 309	4 098 475	4 303 399	4 518 568	4 744 497
NPV	2 780 314	2 653 936	2 533 302	2 418 152	2 308 236	2 203 316	2 103 166	2 007 567	1 916 314	1 829 209

References and Bibliography

Banes, C., 1987. Development of a National Industrial Estate Strategy for Swaziland – Technical Aspects and Costs. UNDP/World Bank Project, March 1987.

Betcherman, G., Daysal, N.M., Pagés, C., 2010. Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey, Labour Econ.

Buss, T.F. and Yancer, L.C, 1999. Cost-Benefit Analysis: A Normative Perspective. Economic Development Quarterly 13 (1); 29 – 37.

Hujer, R., Caliendo, M., Thomsen, S.L., 2004. New evidence on the effects of job creation schemes in Germany – a matching approach with threefold heterogeneity. Research in Economics 58, 257–302.

Jaworski P., 2008. Project Appraisal, School of Accounting, Economics & Statistics, Edinburgh Napier University

Masuku, B.M.; Dlamini T.S., 2009. Determinants of foreign direct investment inflows in Swaziland. Journal of Development and Agricultural Economics 1(5), 177-184.

Foley, P., Martin, S., 2000. A new deal for the community?: Public participation in regeneration and local service delivery. Journal of Policy and Politics 28 (4), 479–491.

Foley, P., 1992. Local Economic Policy and Job Creation: A Review of Evaluation Studies, Journal of Urban Studies Vol.29, Nos. 3/4, 557-598.

Girma, S., Görg, H., Strobl, E., Walsh, F. (2008) Creating jobs through public subsidies: An empirical analysis. Journal of Labour Economics 15, 1179-1199.

Graham, E.M., 2000. Fighting the Wrong Enemy: Antiglobal Activists and Multinational Enterprises. Institute for International Economics, Washington, DC.

Barrios S., Gorg H., Strobl E., (2004). Foreign Direct Investment, competition and industrial development in the host country. European Economic Review 49, 1761-1784.

Harry, F. Campbell, Richard P.C. Brown, 2005. A multiple account framework for cost-benefit analysis. Journal of Evaluation and Program Planning 28, 23–32.

Jose´-Doramas Jorge, Gine´ s de Rus, 2004. Cost-benefit analysis of investments in airport infrastructure: A practical approach, Journal of Air Transport Management 10, 311–326.

Musgrave, R. A., & Musgrave, P. B. (1989). Public finance in theory and practice. New York: McGraw-Hill.

Willis, K.G, 1985. Estimating the Benefits of Job Creation from Local Investment Incentives. Journal of Urban Studies 22, 163 – 177.