

TITLE

**Sustainable Private Sector
Participation in Water
Supply and Sanitation?
An Investigation of the South African
Experience with International
Comparative Case Studies**

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Submitted in partial fulfilment of the requirements for a Ph.D. in the
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DEDICATION

This work is dedicated to the many poor South Africans who still have no access to adequate water supply and sanitation services.

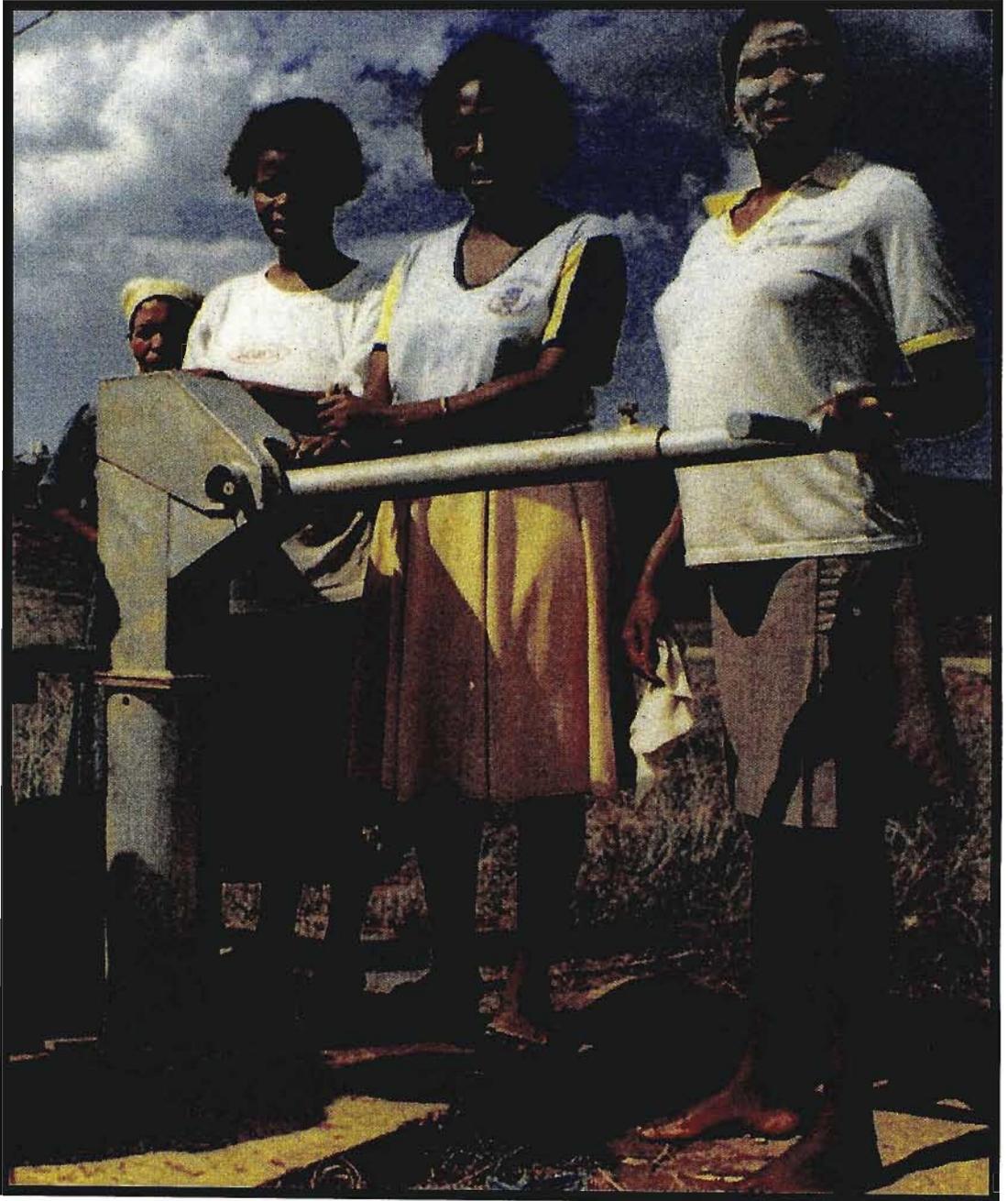


FIGURE A. RURAL AFRICAN WOMEN IN KWAZULU-NATAL ACCESSING WATER

Source: Researcher (1998)

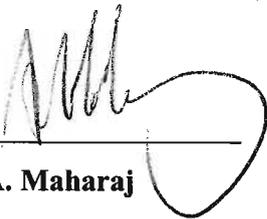
DECLARATION

This Ph.D. thesis represents original work by the author and has not been submitted in any other form to another university.

Where use has been made of the work of others, it has been duly acknowledged and referenced in the text.

The research for this thesis was performed under the supervision of Professor Vishnu Padayachee, of the School of Development Studies, University of Natal, Durban.

The findings presented and the conclusions arrived at in this Ph.D., are entirely those of the author.



A. Maharaj

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To specifically thank anyone other than these people and my family would be a difficult exercise. The number of people interviewed is extensive and the results that were obtained, would not have been possible, without the assistance of many people who were willing to complete data-research questionnaires. Somewhere as well, *somebody* needs to be thanked for providing me with the strength to persevere, despite the obstacles that faced me during the process.

I thus, would like to extend my collective gratitude to all those individuals who made it possible for me to reach this stage in my academic development. I also accept that the completion of this thesis was only made possible because I was retrenched from my previous workplace and I was given enough financial resources as compensation from the company to see me through the end of this study. Thus, sometimes, one needs the divine nudge of Providence in order to achieve what one mentally strives for, but does not have sufficient time and the resources, to attain.

LIST OF ABBREVIATIONS USED

| Acronym | Meaning |
|-----------|---|
| ANC | African National Congress |
| ATP | Ability-To-Pay |
| BOO | Build, Operate, and Own |
| BOOT | Build, Operate, Own, and Transfer |
| BOT | Build, Operate, and Transfer |
| BOTT | Build, Operate, Train, and Transfer |
| CBA | Cost-Benefit Analysis |
| CBD | Central Business District |
| CBO | Community-Based Organisation |
| CCMA | Commission for Conciliation, Mediation, and Arbitration |
| CEA | Cost-Effective Analysis |
| CEO | Chief Executive Officer |
| CMIP | Consolidated Municipal Infrastructure Programme |
| COSATU | Congress of South African Trade Unions |
| CWSS | Community Water Supply and Sanitation |
| DBSA | Development Bank of South Africa |
| DWAF | Department of Water Affairs and Forestry |
| ETOSS | Ente Tripartite de Obras de Servicios de Saneamiento |
| FDI | Foreign Direct Investment |
| GDP | Gross Domestic Product |
| GEAR | Growth, Employment and Redistribution |
| GNP | Gross National Product |
| GoS | Government of Sindh |
| HOD | Head of Department |
| ILRIG | International Labour Resources and Information Group |
| IMF | International Monetary Fund |
| ISP | Industrial Strategy Project |
| JSE | Johannesburg Stock Exchange |
| KPI | Key Performance Indicator |
| KWANALOGA | KwaZulu-Natal Local Government Association |
| KWSB | Karachi Water and Sanitation Board |
| KZN | KwaZulu-Natal |
| LDC | Less Developed Country |
| LRA | Labour Relations Act |
| MBA | Master of Business Administration |
| MBO | Management Buy-Out |

| Acronym | Meaning |
|----------------|--|
| MERG | Macro-Economic Research Group |
| MSP | Municipal Services Partnership |
| NCC | National Consumer Council |
| NGO | Non-Governmental Organisation |
| NRA | National Rivers' Authority |
| O&M | Operations and Maintenance |
| OFWAT | Office of Water Services |
| OSN | Obras Sanitarias de la Nacion |
| PCI | Per-Capita Income |
| PCT | Public Choice Theory |
| PDI | Previously Disadvantaged Individual |
| Ph.D. | Doctor of Philosophy |
| PLC | Public Limited Company |
| PPP | Public-Private Partnership |
| PSI | Public Sector International |
| PSIRU | Public Sector International Research Unit |
| PSP | Private Sector Participation |
| R&D | Research and Development |
| RDP | Reconstruction and Development Programme |
| RFP | Request for Proposals |
| SA | South Africa |
| SABS | South African Bureau of Standards |
| SACP | South African Communist Party |
| SADC | Southern African Development Community |
| SAMWU | South African Municipal Workers' Union |
| SALGA | South African Local Government Association |
| SMME | Small, Medium, and Micro Enterprise |
| SWC | Siza Water Company |
| TINA | There Is No Alternative |
| TLC | Transitional Local Council |
| TNC | Transnational Corporation |
| TSC | Transnational Service Corporation |
| UNDP | United Nations' Development Programme |
| VAT | Value-Added Tax |
| WB | World Bank |
| WSS | Water Supply and Sanitation |
| WTP | Willingness-To-Pay |
| WTO | World Trade Organisation |

ABSTRACT

This thesis is a case study investigation of the sustainability of private sector participation in water supply and sanitation in developing countries, with a particular emphasis on South Africa. It is essentially an empirical contribution, which adds to the body of literature pertaining to the privatisation of water supply and sanitation services in developing countries. South Africa, like many developing countries, faces a significant challenge in providing a sustainable water supply and sanitation service to its citizens. It has a vast water supply and sanitation infrastructure backlog, because of the previous apartheid¹ government's minimal attention to the basic service needs of the African, Indian and Coloured people. This lack of basic services has had a negative effect on people's health and their basic living conditions.

The traditional delivery vehicles for water supply and sanitation delivery in South Africa have been its municipalities. After the demise of the apartheid government, the democratic national government restructured these municipalities under various processes. They merged neighbouring towns and villages, which incorporated former rural areas to achieve economies-of-scale. The intention was to ensure service delivery to the previously disadvantaged, through a mechanism of cross-subsidisation from the affluent to the indigent.

However, these newly-demarcated non-metropolitan² municipalities, still do not have the finances to extend the water supply and sanitation infrastructure network to rural areas within their jurisdiction. They also lack the good credit ratings to borrow funds from banks to finance new water supply and sanitation infrastructure. The rural population also has low abilities-to-pay for water supply and sanitation services. With total basic infrastructure backlogs estimated to exceed R270 billion in South Africa, the challenge to all tiers of government is considerable. Just rural water supply and

¹ This refers to the legislated policy of racial segregation and state-advocated advancement of White people in South Africa to the detriment of the other race groups, through a number of mechanisms. This was legislatively and formally introduced by the National Party government upon its election in 1948, and was sustained until the 1994 democratic elections. The ramifications of this unjust system are still evident in a number of areas of society, which will be discussed throughout this study.

² Metropolitan municipalities have a special dynamic created through the economies-of-scale enhanced by a larger affluent population. See the discussion pertaining to the hypothesis-setting in Chapter 1.

sanitation over the next ten years requires R13.5 billion for the financing of new, and rehabilitation of old, infrastructure.³

Faced with this dilemma, national government has attempted to resolve it by following the route taken by other developing nations, that is, by seeking the assistance of the private sector. National, provincial, or access to it, and some local governments argue that it is only the private sector that has the financial resources to fund this infrastructure backlog. To facilitate this change in service delivery vehicles, national government developed legislation to create an enabling environment for the entry of the private sector in the arena of water supply and sanitation provision.

This transition has occurred with significant controversy and opposition. Many opponents to any form of privatisation base their argument on privatisation's fundamental drivers not being aligned with the goals of a development state. In the South African situation, these opponents include some organised labour trade unions, researchers, and labour-based research organisations. With firm pressure from this anti-privatisation coalition, private sector participation in water supply and sanitation services has been significantly staggered or impeded. Whilst this study provides evidence that this case of privatisation is not sustainable in the long-term, which is in agreement with this anti-privatisation coalition, the *reasons* underpinning the conclusion of this study, differ significantly from those of this coalition. The arguments that underpin differences in the opposition's views and this thesis are analysed throughout the rubric of this study.

Three elemental constructs underpin the theoretical framework of this study. These constructs are compartmentalised into the nature of public goods and their natural monopoly status, the efficiencies of privatisation and its relation to ethics, and globalisation issues specifically dealing with the roles of transnational companies.

The study will show that the transfer of water supply and sanitation service delivery to the private sector in South Africa has not been sustainable due to various factors. These

³ These are 1994 estimates according to the Municipal Infrastructure Investment Framework, which is a document issued by the Municipal Infrastructure Investment Unit (MIIU), a public agency in South Africa.

factors are investigated through the medium of empirical and case study analyses at a national and global comparative scale. Factors investigated include the reasons behind the privatisation, its transition period and procurement of public and other stakeholder buy-in to the change in service delivery, the role that the state has played in providing the enabling environment for privatisation, and the effectiveness of the opposition in delaying or impeding the pace of privatisation.

The study also reveals that pilot projects have a special status and access to greater institutional support, which *might* facilitate its success. This extra attention might not be realisable in successive projects.

Factors underpinning a successful privatisation include issues of efficiency, regulation and financial issues. These are also investigated within the rubric of the empirical and case study analyses.

The impact of globalisation and the role of transnational companies with apparently “new technologies” and foreign direct investment, which pervade water supply and sanitation privatisation in developing countries, are also discussed. The case study examinations also provide evidence that in the South African situation, these apparent foreign technological innovations have yet to be confirmed. For South Africa and the other developing nations, the foreign direct investment has also been minimal in comparison to the profits that leave these host countries from the water supply and sanitation sector.

The primary case study that underpins this research is the pilot project test case for the South African national government, the Dolphin Coast concession in its KwaZulu-Natal province⁴. A comprehensive investigation of this concession provides evidence of the project’s commercial failure. However, the concession remains in the hands of a private sector operator, due to the municipality controversially renegotiating the terms of the contract to facilitate the concession’s continuity. This “municipal intervention” trend is noticeable in some international case studies.

⁴ See Chapter 8 for a discussion on the Dolphin Coast concession.

The English privatisation case is also investigated to provide a contrast between privatisation in a developed nation and a developing one. It also provides an insight into the facilitative environment of the English privatisation case, as compared to that of developing nations. The English privatisation, although not without controversy, was a decision taken by the government on efficiency grounds, whilst developing nations have taken the privatisation step based on reasons of infrastructure deficiency and a lack of finance. Essentially, the former is a push factor, whilst the latter has been a pull factor.

This thesis includes a case study investigation conducted at the World Bank in New Delhi, India, which provides evidence of the opposition from state bureaucrats to privatisation in India. This serves as a contrast to the organised worker opposition in South Africa, and highlights some of the differing impediments that face privatisation attempts in each respective country. It shows that the reasons underpinning the opposition to privatisation in developing nations facing similar crises are, in fact, dissimilar.

The study also investigates the success that can be achieved through the economies-of-scale of a public sector utility in South Africa, shown by the Umgeni Water case study. This is essentially a public agency that has corporatised⁵ along business principles and employed economies-of-scale to become a successful example of public sector water supply and sanitation provision in a developing country.

Cumulatively, this study provides evidence that, in South Africa, the transfer of water supply and sanitation services to the private sector is *not sustainable* without some degree of state intervention. This is especially evident in cases where there are no economies-of-scale to be exploited, and a lack of affluent people to ensure a critical degree of payment of tariffs or cross-subsidisation to the indigent. In effect, by transferring these services to private hands, this would serve only to *postpone* the eventual lack of sustainability that these services are currently experiencing in public sector hands. The evidence reveals that the privatisation of water supply and sanitation services in South Africa is not a commercially viable option in the long-term, under the normal mechanisms of supply and demand of the market. Concomitantly, the South

⁵ See Chapter 2 for a discussion on corporatisation.

African national government and its municipalities are faced with a *new* dilemma. The private sector can provide immediate sources of financing for urgent water supply and sanitation infrastructure development that cannot be similarly procured from limited state funds or other sources. Considering the urgency to provide water supply and sanitation infrastructure, because of the health-related effects that no access creates, privatisation, with strong regulation, may be a more amicable alternative to the current financial restrictions on municipalities, until a more comprehensive and sustainable solution is found.

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PART A: DEVELOPMENT OF THE RESEARCH QUESTIONS AND THEORY

Part A provides an introduction to the thesis. Chapter 1 includes the background that is pertinent in understanding the water supply and sanitation field. It discusses private sector water supply and sanitation provision at a global and local level. A broad outline of the research methodology that frames the study is also discussed in Part A. Chapter 2 surveys the literature on the privatisation⁶ of former public sector goods. This includes an investigation of the supportive and opposition literature pertaining to privatisation. There are key issues that emanate from the literature survey in Chapter 2, which serve as a framework for the theoretical discussion in Chapter 3. Chapter 4 dovetails the generic theory on privatisation from Chapter 3 into an integrated discussion on the water supply and sanitation arena. The theoretical framework from Chapter 3 is applied to issues of privatisation and globalisation in terms of water supply and sanitation.

⁶ The term “privatisation” is used generically in the text as an enveloping term to describe any form of private sector participation in water supply and sanitation provision. These models are described in Chapter 2.

CHAPTER 1: INTRODUCTION

1.1. Brief Outline of the Topic

In order of immediacy and the need for human survival, water only plays a secondary role to that of air. It is a life-giving force that nourishes the human body and serves as the substrata through which the bodily functions of animals and plants are harmonised. However, due to its liquidity, unlike air, its consumption can be controlled and regulated by external institutional agencies.

Water in its natural state in lakes, rivers, streams and as precipitation, is generally not palatable or fit for human consumption and has to undergo a purification process. Drawn from natural or man-made water catchments, it flows through lands that generally belong to the state or a private entity. Due to the nature of the flow through gravitational force along the topography of lands that belong to different entities, the water molecules are not static, and ownership rights thus become a policy and regulatory mandate of the state.

With the combination of water as a life-giving force and the need for it to be transformed into a potable liquid, the provision of water becomes a complex process. This is especially evident if one looks at the manner in which it eventually reaches the customer as an end-product. In essence, it provides the impetus for regulation by government and the advent of the water supply industry.

The water supply industry cannot be looked at in isolation, as it also has a “poor cousin” in the sanitation industry, which generally needs to be ring-fenced with the water supply industry as a joint service provision in order to be commercially viable. Whilst water supply is generally perceived to be a profitable commercial undertaking by all private sector water utility companies, sanitation is not regarded as a lucrative venture. Sanitation relies on more complex infrastructure, especially with the incorporation of water-borne sewerage and its treatment and eradication. To ensure adequate sanitation provision, governments decree that these two public health services to be provided within one industry. In essence, sanitation service provision is generally subsidised by the water supply service.

It is at this point that the debate emerges about water supply and sanitation (WSS) provision. Since water is clearly an essential aspect of human survival, it becomes a question of ethics as to whether a profit should be made out of, what many people believe, is a God-given source of nourishment. The private sector advocates may argue, however, that this water supply is not potable in its natural state and is only fit for human consumption after it has been treated by industry. It could also be argued that water in its precipitative form and in rivers would have been naturally potable, had it not been due to the pollution that emanates from industry itself, such as acid rain and the pollution of water-ways by industrial effluent.

Traditionally, urban WSS provision, was generally provided as a municipal service. However, in developing countries, questions of financial sustainability have been raised. This situation is characterised by various factors such as high water losses, poor infrastructure maintenance, spiralling population growth with their resultant increased WSS demand, and poor tariff-collections for service provision. Thus, municipal WSS services are generally subsidised by rates, taxes or government subsidies.

In South Africa, there are two distinct camps in the privatisation debate. One end of the spectrum includes the private sector WSS utility companies and national government embarking on a supposedly “sweeping” privatisation campaign. At the other end, there exist many concerned members of the academic fraternity and worker unions citing empirical evidence of privatisation failures globally, which strengthen their case against privatisation.

Besides the failure of many privatisation attempts at a global scale, anti-privatisation opponents question whether the private sector can provide services comprehensively and still generate a profit. The customer fear of privatisation is that of increases in tariffs of former public goods⁷. The state would be cautious about any signs that that it would still have to subsidise these services to some extent, which has been the case in some past privatisation attempts. This straightforward mathematical allegory seems highly plausible as, if the rates-paying base is constant, the service rates are constant, and the

⁷ Also referred to as public services.

service does not deteriorate, then there *must* be an external agency that would need to bridge this apparent financial gap.

This apparently *one-dimensional* view is disputed by the private sector providers. They believe that synergy features extensively in the reduction of cost. Water losses can be minimised as the private sector has the experience and the technology to control such impediments. They have sophisticated software and hardware, state-of-the-art technological equipment, and a high rates-paying culture from their communities. However, privatisation opponents argue that this high rates-paying culture is also said to be one based on the fear of the disconnection of services. (See case study investigation on Dolphin Coast in Chapter 8 for a discussion on disconnections and tariffs.)

Customers are forced to pay for their WSS regardless of the tariff values, for fear of losing access to two vital services that co-exist as a “natural monopoly”⁸. In defence of possibly higher tariffs, private sector providers argue that for water losses to be kept to a minimum, infrastructure has to be maintained to a maximum possible standard. For this to happen, a high tariff-collection is needed to fund such maintenance.

Whether these maintenance costs are greater than the savings that are generated through the minimisation of water losses, varies from one place to another and can also depend on the state of the physical infrastructure. If it is greater, then it is the customer, who will have to pay for the shortfall. In South Africa the WSS infrastructure in most municipalities has not been adequately maintained, and requires large-scale rehabilitation. This is just the tip of a complex web of scenarios facing private sector service provision in South Africa. Added to this, the South African national government’s emphasis on providing services to the previously disadvantaged, provides more difficulties for the private sector, especially when juxtaposed against the poor rates-paying culture that exists within these communities. The fact that South Africa has a strong, integrated anti-privatisation coalition, considerably adds to the privatisation initiation challenge.

⁸ See Chapter 3 for an explanation of the term.

This thesis seeks to determine as to whether developing countries and specifically, South Africa, is adequately prepared for the privatisation route, whether the prevailing conditions justify the transition of municipalities from service provider to service regulator in terms of WSS provision, and whether privatisation would be sustainable in the long-term.

1.2. Problem Description: The Developing World

At the end of the twentieth century and for the first time in history, more people lived in metropolitan cities than in rural areas. In developing countries, the urban population has tripled in the last three decades. Thus, with growing urbanisation, poverty has risen and environmental hazards have increased, affecting human health, productivity and the general quality of life. About one billion people still lack access to potable water and two billion people still have inadequate or no sanitation schemes. This inadequate access to two basic and fundamental human rights has a direct negative effect on living standards, and an indirect effect by exacerbating poverty-related problems. Reasonable access to proper WSS schemes could reduce the vast amount of time that is lost in finding adequate water supply sources and practising inefficient sanitation management. The use of untreated water and poor sanitation measures greatly increases the incidence of life-threatening diseases, especially amongst the urban poor in developing countries. (World Bank Website 2000: www.worldbank.org)

With the onset of disease, governments are under pressure to allocate large amounts of their budgets to treating debilitating diseases. Consequently, they utilise funds that could have been earmarked for economic development and other strategic self-sustaining upliftment endeavours. In effect, rather than instituting adequate planning methodologies towards effective governance, developing countries are entrenched in damage-control measures to combat the burgeoning, negative health-related effects of inadequate WSS infrastructure and services.

During the 1980's, the world's urban centres experienced a significant expansion of their water supply infrastructure. The absolute number of urban dwellers who gained access to clean drinking water during this period cumulatively increased, which emanated from an increased focus on new investments to the magnitude of

approximately \$US 100 billion. However, the exponential rise in urban populations during the same period offset these gains, and by 1994, more than 220 million people or 13 percent of the developing world's urban population still did not have access to clean drinking water. (World Bank Website 2000: www.worldbank.org)

In addition, proper sanitation services are even more limited throughout many urban areas and are often absent in squatter settlements. Approximately a third of city dwellers in developing countries lack hygienic means of disposing human waste, and even more, lack hygienic means for wastewater disposal. (United Nations Website 2000: www.undp.org)

Keeping up with urban population growth is not the only challenge. In addition, there is increasing dissatisfaction with the service-levels currently provided by municipal-owned service utilities, creating a challenging task for urban WSS service providers.

Traditionally, developing countries have used municipal monopolies to meet public needs in the provision of basic services. Significant research by various development aid organisations such as the World Bank (WB) have revealed that there may be a negative work ethos in some of these public sector organisations, which exacerbates chronic problems in the WSS sector. (See literature survey in Chapter 2 for a discussion on the World Bank perspective.) There have been inadequate levels of service provision, limited extension of services to the poor, high amounts of lost water and wastages through improper technology, and basic technical inefficiencies with resultant negative health hazards.

Furthermore, in trying to meet WSS needs, government monopolies in many developing countries have subsidised the cost of WSS provision, so that these services have historically been under-priced and resultantly not financially sustainable. These subsidies have been aimed at helping the poor, but it is the rich who *have* access to water supply and sanitation schemes, unlike the poor, who ultimately benefited from these subsidies.

Municipalities have continued this subsidy practice in the belief that they are instituting a socially appropriate practice. Proposed tariff increases have also met with vociferous

opposition from the middle and upper classes, who generally have a louder political voice and who serve as the intelligentsia of urban communities.

Without infrastructure access, it is estimated that about 20 percent of city dwellers, who are essentially the poor in developing countries, obtain drinking water from vendors at very high prices, sometimes spending as much as a quarter of their income on it. Faced with these financial and social responsibilities, the developing world is compelled to bring in new and innovative practices to meet these challenges. (United Nations Website 2000: www.undp.org)

1.3. The Challenge: The South African Context

Post-apartheid South Africa, with its racially polarised First World / Third World concentric socio-economic contrast rings in service delivery areas, has seen the emergence of a new challenge that has placed obstacles to former “efficient” and comprehensive municipal WSS provision.

Under the apartheid regime, most municipalities focused on the development of the mainly elite, White urban areas within their domain. Within this system, municipalities functioned adequately in providing relatively efficient WSS schemes to these areas, with a resulting detrimental effect on the peripheral Black⁹ areas. The cross-subsidisation of taxes from Black to White, with the latter additionally receiving generous government grants for infrastructure development, created significantly high standards of infrastructure and service delivery in White areas with contrasting poor services and infrastructure in Black settlements.

With the demise of formal apartheid in 1994, the newly-elected democratic government attempted to bridge this gap under the auspices of various development paradigms. One of these was the introduction in 1995 of new municipal boundaries, that is, the amalgamation of neighbouring municipalities to form larger municipalities called Transitional Local Council’s (TLC’s).

⁹ The contextual use of the collective term “Black”, refers to the people of African, Indian, and Coloured descent, who live mainly in townships and informal settlements, the majority of whom are the African people.

This first amalgamation was the predecessor to the subsequent demarcation process in November 2000. In the 1994 amalgamation, it was national government's intention that these TLC's would achieve the economies-of-scale that was needed to provide an increased extension of basic services, to service the previously disadvantaged communities. Cross-subsidisation from the affluent to the indigent was anticipated to be a natural wealth-transfer mechanism that would result from this municipal restructuring process.

Now, many formerly "well-functioning, White-focused" municipalities are "burdened" with a much larger and poorer population base to render WSS services. With national government's emphasis on addressing past imbalances, TLC's have been pressurised to find adequate sources of funding to provide efficient municipal services, including adequate WSS infrastructure to its new constituents.

Coupled with the above, is the inability of most Black communities to pay for rates, considering their generally indigent status. It is vital then, that most TLC's implement innovative capital infrastructure financing methods, and employ best practices in providing essential services such as adequate, potable water and proper sanitation schemes to its populace.

By November 2000, there was a second municipal boundary restructuring process, which is commonly referred to as the demarcation of municipalities in South Africa. National government expected to achieve even greater economies-of-scale by condensing the number of TLC's through further amalgamation processes and the restructuring of their foci towards developmental issues.

With the absorption of poorer communities, TLC's are now faced with greater challenges of increased WSS service provision and a static tariff-paying base.

The following diagram depicts the development of a vicious cycle effect due to inadequate WSS provision to urban communities in South Africa: -

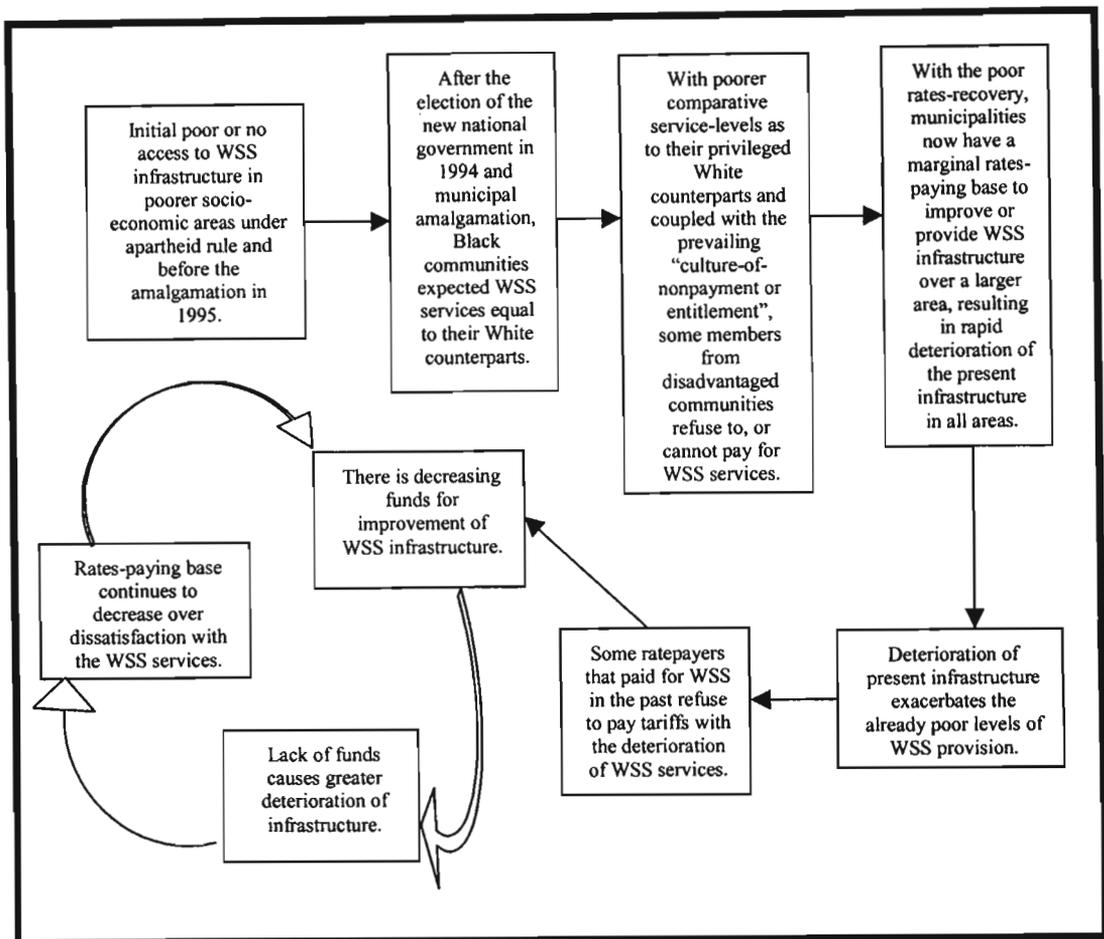


FIGURE 1.1. RETROGRESSION VICIOUS CYCLE CHART

Source: Researcher's Analysis

Before 1994, there existed two extremes in terms of reasonable access to WSS provision. At the centre of the municipality, were the well-served, White communities with first world service-levels in terms of WSS provision. These communities had high quality, potable water reticulated to their households and water-borne sewerage and wastewater removal systems. Adjacent to these White communities, were the townships and peri-urban African communities, made up of migrant labour from the rural homelands¹⁰ created under apartheid laws. They had poor or no access to WSS, although they were liable to pay rates and taxes. With the election of the democratic

¹⁰ Homelands were regional areas created by the apartheid government as semi-autonomous states for each linguistic group in the African communities.

government in 1994, came the expectations from disadvantaged communities that they would obtain parity in terms of urban service delivery. (See Dolphin Coast case study in Chapter 8.)

After the first amalgamation of municipalities in 1995, national government created service delivery strategies that concentrated on disadvantaged communities receiving acceptable service-levels for WSS. This realignment became a major focus of national government under the auspices of its 1994 development infrastructure and service delivery strategy called the Reconstruction and Development Programme (RDP). National government used the RDP as a conduit for distributing funds for capital projects such as the construction of WSS schemes to these disadvantaged communities¹¹.

By 1994, South Africa's population had reached 44 million people, with the split being 52 percent urban to rural dwellers. Of these urban dwellers, 12 million people had only a minimal or no water supply, and about 22 percent did not have access to adequate sanitation. With the demarcation, about 12 million people were added to the urban poor fold. (RDP Policy Document 1994: 28-30)

With the mammoth task of addressing these imbalances, progress has been slow in achieving a parity of standards in WSS service provision, using the services to former White neighbourhoods as a benchmark. Differences in standards are still experienced in terms of the potability, accessibility, cost and rates-of-flow of water; method of eradication of wastewater and sewerage, containment of sewerage, and environmental implications. Added to this, is the problem of abilities-to-pay (ATP) amongst disadvantaged communities as well as the "culture of non-payment" that pervades them. These newly-built schemes are not self-sustaining in terms of operations and maintenance (O&M). New TLC's are effectively in a "catch-22" situation, in that constitutionally, they have to provide all their citizens with these essential WSS services, yet the delivery mechanisms and financial resources are not adequate or sustainable.

¹¹ See Chapter 7 for a discussion on the legislation pertaining to WSS in South Africa.

With a lack of revenue to maintain schemes, tariff increases are generally the most obvious and easiest solutions to meet this shortfall. This measure is not sustainable in the long-term however, as some community members, both White and Black, feel aggrieved about cross-subsidising non-paying members and also start to withhold payment for services. With rapidly dwindling revenues to operate and maintain schemes, infrastructure begins to decay resulting in water losses, poor water quality and the inefficient eradication of sewerage. With the service-levels declining, ratepayers are increasingly dissatisfied and the number of non-paying members rises. A vicious cycle is thus formed.

An immediate solution in combating the phenomenon indicated in Figure 1.1., would be to obtain financial aid from national government reserves or foreign financial institution resources. These measures, however, are not financially prudent or self-sustaining in the long-term. Financial aid would thus, always be needed and the idea that this sort of aid would or should be continuous, is not feasible.

Ostensibly, there is some degree of funding for capital projects available from national government, but this is limited. These funds are accessible directly through the Department of Water Affairs and Forestry (DWAF) and the government-funded Consolidated Municipal Infrastructure Programme (CMIP) (Hemson 2003). National government has indicated that these funds are not fully utilised by the municipalities due to constraints and bottlenecks. However, this view is challenged by some municipalities who indicate that WSS capital infrastructure provision is retarded by uncertainty about funding. (Researcher's Experience 1996-2003: Appendix 8)

In 1996, national government embarked on its Growth, Employment and Redistribution (GEAR) strategy¹². In terms of WSS, this strategy, described as essentially neoliberal (Michie and Padayachee 1997), focused on private sector funding and expertise in financing technology for construction, operations and maintenance. National government had made clear its commitment to exploring private sector participation further.

¹² See Chapter 7 for a discussion of GEAR.

In fact, the GEAR policy document states: “Recognising the limited capacity of the fiscus, government is committed to the application of public-private sector partnerships based on cost-recovery pricing, where this can practically and fairly be effected.” (GEAR Policy Document 1996: Section 8)

1.4. Structure of this Thesis

The thesis is divided into four parts. Part A provides an introduction to the issue of private sector participation in WSS and the controversy that surrounds this transition, which is specifically found in Chapter 1. There is a brief discussion on the areas of controversy in other developing countries, and the specific challenges that face South Africa. Chapter 1 continues with the development of the hypothesis and the subsidiary research questions that will be used in the analysis to provide a conclusion to this study. Chapter 1 also sets out the research methodology that is used for the data-gathering in the study, and the tools that are used to measure qualitative and quantitative data. The research methodology discussion provides an explanation of the case study and action research methodologies and how it is applied to this study. Appendix 8 also provides an insight into the researcher’s experience in WSS and the application of action research techniques.

Chapter 2 is a survey on the current literature pertaining to privatisation and its development. It introduces the paradigm shifts that have been experienced in macro-economic contexts concerning the transition of the developed world from Keynesian economics towards the neoliberal market-based society that has now emerged. Chapter 2 discusses the history behind this move and the various issues and challenges that limits privatisation. Emanating from this introductory literature are the key issues of public goods and their nature, the ethics of state and market processes and drivers, which includes issues of poverty, and globalisation and transnational corporations (TNC’s).

Effectively, the literature survey in Chapter 2 sets-out and develops three broad themes. These are: - (i) The Emergence of Privatisation; (ii) Globalisation Issues; and (iii) Privatisation Efficiencies and Ethics. Table 1.1. overleaf, depicts the segmentation of these issues.

TABLE 1.1. SEGMENTATION OF DISCUSSION POINTS AND MAJOR THEMES

| General Segmentation | Research Questions: Hypothesis, Case Studies and Conclusion | Supporting Theory |
|--|--|---|
| The Emergence of Privatisation | <ul style="list-style-type: none"> • The Reasons for Privatisation • The Transition Period into Privatisation • Public Support for Privatisation • The Role of the State in Privatisation • The Opposition to Privatisation • The Pilot Project as an Indicator of Success | <ul style="list-style-type: none"> • Public Choice Theory • Public Goods • Natural Monopolies • Rent-Seeking • The Role of the State in Privatisation |
| Privatisation Efficiencies and Ethics | <ul style="list-style-type: none"> • Financial Issues • Privatisation Efficiencies • The Role of Regulation in Privatisation | <ul style="list-style-type: none"> • Efficiency and Equity in Business: The Link to Ethics • Competition and Failures • Benefits Analysis • The Role of Regulation in Privatisation • Transaction Costs • Poverty, Inequality and Willingness To Pay |
| Globalisation Issues | <ul style="list-style-type: none"> • Transnational Companies and Foreign Technology • Foreign Direct Investment | <ul style="list-style-type: none"> • Globalisation as an Analytical Concept • The Entry of Transnational Corporations in Developing Countries • Conflicts of Interest • Foreign Direct Investment • The Micro-Economic Perspective • Transnational Service Corporations • The Role of Subsidiary Companies in Transnational Corporations |

Source: Researcher

Chapter 3 discusses these three broad segments within a theoretical framework. It investigates the issues of public goods and the special status that such goods hold. At a theoretical level, the expected role of the state is also discussed in providing a facilitative environment for privatisation to occur. It also discusses issues of efficiency and its effects on ethics. The final segment focuses on globalisation issues and the role of TNC's in bringing investment into developing countries.

Chapter 4 provides a link between the generic theoretical discussion of Chapter 3 and WSS. It also introduces the main TNC's that pervade most of the privatised WSS systems in the developing world.

Part B discusses the global comparative case studies to the South African situation. Discussions include both empirical and case study evidence. The English privatisation case provides a contrast of a privatisation example of the developed world and its period of ease into privatisation, to the developing countries' attempts at privatisation. These studies are found in Chapter 5 of the thesis, which provides the empirical evidence for comparison to the South African experience. This chapter also includes the case of Buenos Aires, which is similar to South Africa in terms of their lower socio-economic status and high infrastructure challenges.

Chapter 6 continues with global case study examples, which includes the Indian subcontinent and the city of Karachi in Pakistan. India is chosen due to privatisation not having advanced as far as that of South Africa and to assess the commonalities and differences found in the approach of the opposition to privatisation. Karachi, on the other hand, provides a comparison concerning the strength of the unions in both countries.

Part C outlines the South African experience. This includes Chapter 7, which discusses the development of macro-economic policy in South Africa from 1910. A brief discussion ensues on the current legislative documents that bind privatisation and development in South Africa, especially about providing the enabling environment for privatisation to occur. Chapter 7 also discusses the criticisms from the opposition levelled against privatisation in South Africa. Effectively, their collective stance has had

the effect of delaying the privatisation process in South Africa, so an understanding of their role is vital.

Chapter 8 discusses the major case study investigation of this thesis, the Dolphin Coast WSS concession. This chapter discusses the historical significance of using the Dolphin Coast as a pilot project and is a comprehensive study of the concession three years after implementation.

Chapter 9 looks at other South African case studies. It focuses on two municipal public sector service providers in KwaZulu-Natal (Estcourt and Newcastle). This follows with a discussion on the successes that have been achieved by the parastatal¹³, Umgeni Water.

Part D provides the concluding chapter (Chapter 10) and recommendations. The conclusion maintains the segmentation and framework found throughout this study, and provides a conclusion to the hypothesis and research questions. This is followed by the possible alternative approaches to WSS delivery, which discusses the various options that can be initiated by the South African national government in order to provide a more sustainable, long-term solution to the current WSS crisis.

1.5. Development of the Hypothesis and Research Questions

The following hypothesis and its subsidiary research questions that guide this study have been developed: -

Private sector participation in South Africa's water supply and sanitation sector can ensure a sustainable service delivery.

A Brief Explanation of the Research Question

In delineating the hypothesis, its various components need to be expanded to prevent a possibility of ambiguity in meaning. Although reference is made to examples of

¹³ This is a quasi-government structure, which abstracts water from its natural catchments, purifies, and sells the water to water service providers, such as municipalities or private companies.

privatisation of WSS in metropolitan¹⁴ areas globally, for the South African cases, the focus of the investigation is on non-metropolitan municipalities. These non-metropolitan municipalities face the biggest crisis, as they do not have economies-of-scale from a large, affluent customer base to subsidise WSS tariffs that are charged to the indigent.

The term “*private sector participation*” refers to a range of options that are available for utilisation when the full, or aspects of, the “public good”¹⁵ (in this case, it is WSS services) is transferred from public to private hands¹⁶. These options range from small service contracts, where minor aspects such as operations and maintenance may be outsourced to the private sector for a set fee, or, at the other end of the spectrum, the entire operations, and assets are fully-divested to the private sector. In this *particular* case, private sector participation specifically refers to the degree of involvement from the private sector that requires it to lease the assets, provide capital works finance with operations and maintenance of the assets, render the WSS service within a jurisdictional area, and maintain its commercial viability through tariff collection from its customers. Essentially, the private sector is tasked with providing the comprehensive WSS service that is ring-fenced, and expected to be sustained from tariff-collections, over a period (generally thirty years.) The private sector operator is also subjected to a certain degree of regulation in tariff-setting. This type of private sector participation is referred to as “*concessioning*” or “*grande privatisation*”.¹⁷ This option is evident in the Dolphin Coast, Buenos Aires, and Karachi studies. The English privatisation went further in that it was a total sale of the assets. In essence, for both options, the private sector operator bears a certain element of financial risk, as opposed to being paid a set fee by the municipal authority for services rendered.

“*Sustainability*” of a privatisation operation is also paramount as these privatised operations generally last for thirty-year periods, and are mandated to provide a vital service to communities. Many private sector providers are unable to recoup sunk costs

¹⁴ For this thesis, a metropolitan city is defined as a city area with a population greater than one million people, which in the South African case include Johannesburg, Cape Town, Pretoria, Bloemfontein, Port Elizabeth, East London, Pietermaritzburg, and Durban, amongst other perhaps smaller areas that may also have high industrial bases.

¹⁵ See Chapter 3 for a discussion on public goods.

¹⁶ See Chapter 2 for a discussion on possible options.

¹⁷ See Chapter 2.

from financing initial capital works expenditure resulting in possible commercial failure. The sustainability of these privatised operations require facilitative external environments. Besides the internal mechanisms of good corporate governance and fiscal control that is required from any commercial entity, in the case of WSS privatisation, such operations are subjected to independent regulation, customers' abilities-to-pay, and tariff-capping, amongst other considerations. In South Africa, there is a significant indigent population who might not be able to pay the full commercial value for WSS services. If there is no affluent community to subsidise WSS for the indigent in the area of privatised operations, then the operation becomes a considerably risky venture. Factoring in the vast backlog of WSS infrastructure in South Africa that has to be financed initially through equity-debt financing by the private sector operator, further increases the risk-potential of such projects. In many cases in developing nations (as some of the empirical studies will reveal), many private sector operators faced certain failure when the project seemed unviable financially. At this point, the state (either national, federal, or local tiers of government) may choose to allow an increase in tariffs that might be seen as excessive by indigent communities. In effect, the state authority "bails" the private sector operator from commercial failure of the market. The operation has then been *unsustainable*, as the WSS service was not commercially viable under the normal processes of supply and demand. Thus, although the private sector operator may *continue* with the operation because of the state acting as a stopgap to failure, in essence, for the purposes of this study, the project will be viewed as *unsustainable*.

There are eleven subsidiary research questions that have been developed and segmented into three key areas¹⁸ to support the hypothesis. These research questions are used as discussion points in the theoretical chapters and the case study examinations. The first segmentation is primarily focused on issues that lead-up to the privatisation stage. The second segmentation discusses issues of privatisation efficiency and the implications it may have for ethics and welfarism. The third segment focuses on issues of globalisation and its effects for developing countries.

¹⁸ Due to the overlap of certain issues across these three key areas in each specific case study, the segmentation into the three compartments discussed here, is not always possible in the *same* sequence, however, the subheadings are kept constant.

These research questions are as follows: -

A. The Emergence of Privatisation

- 1) The Reasons for Privatisation: *Does the reasons for the privatisation affect the sustainability of the operation?* As part of this investigation, the case studies examine the adequacy of the driving forces behind the privatisation campaign, and the envisaged financing mechanisms that affect the privatisation process.
- 2) The Transition Period into Privatisation: *How does the duration of the transitional period into privatisation affect the sustainability of the operation?* Case studies are examined for the manner in which privatisation is phased-in and the dissemination of information to stakeholders that are affected by this impending change. Also investigated is the difference in approach that is taken between the developed and the developing countries.
- 3) Public Support for Privatisation: *Is cognisance taken of public opinion and their support for privatisation and what implications does it have for the sustainability of privatisation?* Case studies are examined for the public's interest in the nature (private or public sector) of the service provider as against their interest in the quality of the service itself, and the tariffs that each sector may charge.
- 4) The Role of the State in Privatisation: *How important is it for the state to provide the enabling legislative environment and institutional support for privatisation to occur?* Case studies are examined for the capacitative and enabling environment provided by the state to ensure privatisation sustainability. Also examined is the degree of involvement of the state post the privatisation.
- 5) The Opposition to Privatisation: *How does the general opposition affect the privatisation process and its success before and during the privatisation?* Case studies are examined for the strength that the opposition may display in impeding privatisation attempts. The opposition in different countries is also investigated to check for the institutional nature (and strength) of the opposition and whether there is a common factor that pervades their opposition. The alliances of different opposition organisations are also investigated to assess the effect of such unity on privatisation. The jurisdictional power and cumulative effect on communities by such opposition is also examined through the case studies.

- 6) The Pilot Project as an Indicator of Success: *Is the sustainability of a pilot project indicative of future success in other projects?* Case studies are examined to assess the degree of external support that a pilot project receives during the privatisation process in terms of funding and institutional capacity that may not be realisable in successive projects.

B. Privatisation Efficiencies and Ethics

- 7) Financial Issues: *How does the high indigent rate of developing nations affect the sustainability of the operation?* Issues that are critical to privatisation success include communities' willingness-to-pay (WTP) or abilities-to-pay (ATP) for WSS services. For the private sector to achieve any commercial sustainability, there has to be a critical mass of tariff-collection.
- 8) Privatisation Efficiencies: *Is the financial savings that are generated from the synergies that privatisation may bring, of reasonable quantum to provide a succinct development-orientated service in a developing nation, and still provide a profit to the private sector?* Also examined in the case studies are the efficiencies that privatisation may bring, including access / quality of services to communities. These efficiencies are compared to similar indicators when services were in public hands.
- 9) The Role of Regulation in Privatisation: *How does regulation impact on the success of privatisation?* Case studies are investigated for various cases of regulation, which include occurrences of over-regulation and under-regulation. The implications for each scenario are examined through different case studies.

C. Globalisation Issues

- 10) Transnational Companies and Foreign Technology: *How critical is foreign technology from the developed nations, to ensure successful urban WSS provision in host countries?* Case studies are examined for actual examples of improved technology and the benefits to the communities that such companies serve. The use of foreign companies also has implications for local development and innovation and resultant effects on national sovereignty, which might be shadowed by these large foreign companies.

11) Foreign Direct Investment: *Does foreign direct investment in the WSS sector have long-term negative effects?* The case studies examine the net effect that such investment has in the WSS sector. Also investigated, is the actual degree of foreign investment that is brought into a host country initially to finance critical infrastructure backlogs.

1.6. Research Methodologies Used

Two research methodologies were used for the research process; the case study methods and the action research methods. The case study method underpins the fabric of the study, whilst the action research method is the supporting research methodology used primarily in the pre-research phase, in the context of this study. (See Appendix 8 for a description of the researcher's role in the WSS sector and the primary use of action methodology research.)

(a) The Case Study Method

The case-study method involves the use of intensive research, which includes participant observation and ethnographic research. It usually involves an in-depth study of a particular milieu like a community, village, or institution rather than a random sample of individuals drawn from a wide base. There is little consensus as to what constitutes a case study and the term is used broadly. A case study could be a "point-in-time" or "period-in-time" study or a study of an entity over a lifetime. Its analysis covers four stages. The first stage involves the comparison of incidents applicable to each category of research in their component forms. The second stage involves the integration of views that have been formulated independently in the first stage, and reviews any empirical relations that can be surmised between the various component aspects. The third stage involves the delimitation of the theory, where, as the patterns of the relationship become clearer and take on a much more coherent form, the researcher can now sift out irrelevant concepts and material aspects. The final stage requires the completion of the research in its written form.

Donmoyer (2000: 63) states that the case study method provides an opportunity for the

reader to experience vicariously what the researcher has experienced. It also provides the reader with an opportunity to “visit” a case study and link this to a direct experience where applicable.

According to Gomm et al. (2000: 5-6), in conducting a case study investigation, the following issues become pertinent: -

- There seems to be opposing views on whether case studies can be used in the generalisation of conclusions. Does a case study use a predictive method to assess the success of a project, even *before* it has begun? If this is not the case, it may at least serve as a criterion to test for, or a factor to be aware of, in future projects of a similar nature.
- Case study investigators also believe that by using a select number of cases, it is possible to identify causal processes or glitches in the system, which are not apparent from other data-gathering techniques such as the survey analysis.
- A case study can also reveal the peculiarity of conditions that govern one particular type of case study, which may not necessarily affect other similar case studies.

In bringing about any conclusion, the case study allows the researcher to make an absolutely true conclusion, a conclusion that is compelling, or a conclusion that is probable based on induction or inference. Thus, the case study does not necessarily provide an absolute proof of what to expect, but rather, a probability of what could occur, because no system of case study analysis is entirely closed. In fact, Lincoln and Guba (2000: 30) emphasise the fact that, the only generalisation in a social inquiry should be that there is *no generalisation*. Lincoln and Guba favourably quote Cronbach (1975: 124-5) with: “When we give proper weight to local conditions, any generalisation is a working hypothesis, not a conclusion.”

With so many variables to take cognisance of in the comparative and predictive analysis, the question of the transferability of expectations is very sensitive and is almost directly proportional to the similarity of the two subjects, as most pilot projects are single case study tests on projects, Donmoyer’s work on: “Generalizability and the Single Case Study” (2000: 45-68), becomes very important. He states that when

governments formulate policies using such case studies, it is not the policy itself that should be drawn-up from the data of pilot projects, but rather, *policy questions* that need to be asked. He continues asking as to whether intuition serves as an indicator of the project's success. The unfortunate situation is that there is no lexical equivalent of intuition as it is neither measurable nor quantifiable. (Donmoyer 2000: 45-68)

The importance that a case study provides then, is inherent in what can be inferred or extrapolated from it. The application of a case study's conclusion to other examples is not only based on its uniqueness or similarities, but rather the threads that may run through it. Mitchell describes this by cryptically using the phrase "...the plausibility or upon the logicity of the nexus between the two characteristics". (Mitchell 2000: 175)

A case study may not be a conclusive factor that serves as an indicator of success. If the situational variables of another example are better than that of the studied case, this does not mean that the new case study will be a success. However, if the situational variables are *worse*, than the *probability* of failure increases dramatically¹⁹. In using the analytical induction tool of a case study as proof, it is not necessarily more circumspect a method than that of a quantum investigation. Robinson (2000: 194) quotes Hume (1945: 64), who was investigating the necessary connection between casual relations, when he states that: "...one event invariably followed the other. Considering analytical deduction as an operational definition of essentiality, then, leads us to the conclusion that those characters that are essential to a phenomenon are those whose appearance is followed by the phenomenon and whose non-appearance is not followed by the phenomenon..."

In choosing the case study method, the comparison of characteristics becomes inherent in the likelihood of more than one case study under analysis. Case study work generally requires a larger number of cases to become more probable and to infer a conclusion. However, due to the intensity that is required of case studies in terms of rigorous investigation, analysis, and comparisons; this route becomes restrictive. Added to this, the case studies, if smaller in size, have a proportional relationship to the volume of case studies that can be investigated. This effectively means that researchers are forced to build on one another's work. This facilitates the comparative method, that is, by

¹⁹ This scenario has relevance to the special case of pilot projects in WSS privatisation.

allowing the use of empirical data to serve as a basis for comparison. Follow-up studies can then be used to test hypotheses that have been concluded under new or different means to add support to the new theory that is developed. (Hammersley et al. 2000: 249)

(b) The Action Research Method

Action research is learning by doing, where an individual or collective research group identifies a problem, attempts to resolve it, evaluates their efforts, and then reattempts to resolve it, if satisfaction is not achieved. While this is the essence of the approach, there are other key attributes of action research that differentiate it from conventional research methods. In other forms, research is the primary focus and the action is then often a follow-up process. Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. There is a commitment in action research to study a system and concurrently to collaborate with members of the system in moving it towards an acceptable outcome. This highlights the importance of global learning as an important aspect of the research process. Added to the above, what separates this type of research from general conventional research practices is the emphasis on scientific study, that is, the researcher studies the problem systematically and ensures that the intervention is informed by theoretical considerations. Much of the researcher's time is spent on refining the methodological tools to suit the realities of the situation and then collecting, analysing and presenting data on an ongoing basis. Several other attributes separate action research from other types of research. It focuses on enabling all stakeholders to become researchers. People learn best and more willingly apply what they have learned, when they do it themselves. It also has a social aspect, where the research takes place in actual situations and aims to solve real problems. The initiating researcher, unlike in other disciplines, makes no attempt to remain objective, but openly acknowledges their bias to the other participants. (Susman 1983: 93-113)

Susman (1983: 93-113) highlighted five phases to be conducted within each research cycle. Susman proposed the following schematic to represent the action learning cycle: -

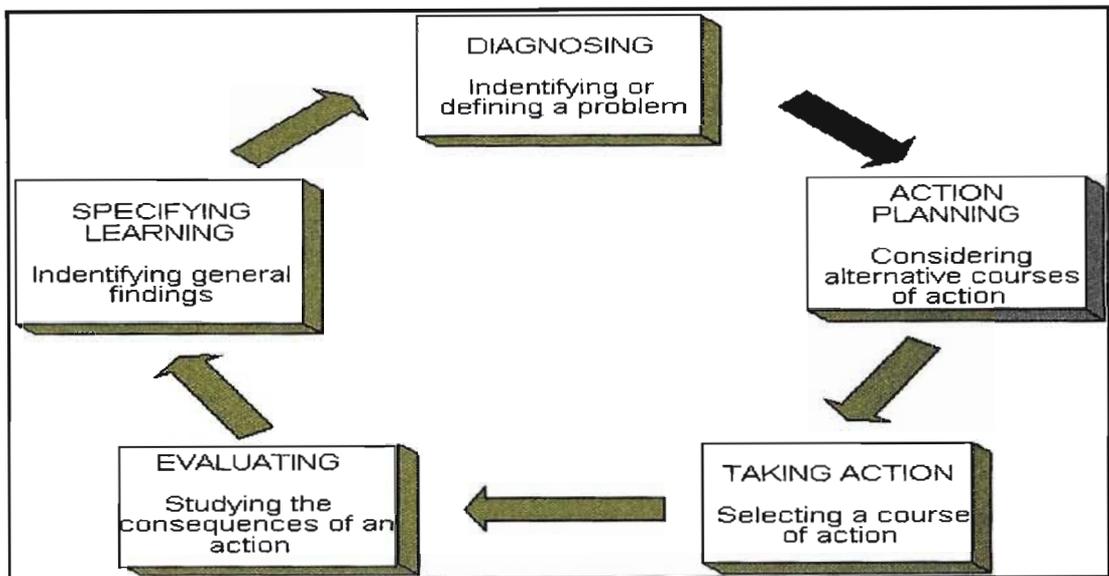


FIGURE 1.2. ACTION PHASE CYCLE

Source: Susman (1983: 93-113)

Figure 1.2. schematically describes the process of action research. Initially, a problem is identified and data is collected for a more detailed diagnosis. This is followed by a group spectrum of several plausible solutions from which a collective plan of action emerges and is implemented. Data on the results of the intervention are collected and analysed and the findings are interpreted as part of the research. At this point, the problem is re-assessed and the process begins another cycle. This process continues until the problem is resolved.

What gives action research its uniqueness is the set of principles that guide the research. Winter (1989: 43-67) provides a comprehensive overview of six key principles: -

TABLE 1.2. PRINCIPLES OF ACTION RESEARCH

| Principle | Description |
|---|--|
| Collaborative Resource | Participants in an action research project are co-researchers where each person's ideas are equally significant, as contradictions in opinions are a part of the data. |
| Reflexive Critique | The principle of reflective critique ensures people reflect on issues and reveal the interpretations upon which judgments are made. |
| Dialectical Critique | Social reality is validated. The key elements to focus attention on are those that are unstable or in opposition to one another as these are likely to create changes. |
| Risk | One of the more prominent fears comes from the risk to ego stemming from open discussion of one's ideas. Initiators of action research will use this principle to allay fears and invite participation by showing that all stakeholders are on a learning curve. |
| Plural Structure | The nature of the research embodies a host of views, thus prompting multifarious possible actions. This structure of inquiry means that there will be many issues revealed with analysis on their contradictions and a range of options for action presented. |
| Theory, Practice, Transformation | Theory informs practice, which refines theory, in a continuous transformation where people's actions are based on implicitly held hypotheses, which strengthens the theory. The ensuing practical applications that follow are subjected to further analysis, in a cycle that continuously alternates between theory and practice. |

Source: Winter (1989: 43-67)

According to Winter (1989), action research is used in real situations, rather than in contrived studies, since its primary focus is on solving real problems. It can, however, be used by social scientists for preliminary or pilot research, especially when the situation is too ambiguous to frame a precise research question. Mostly, though, in accordance with its principles, it is chosen when circumstances require flexibility, the involvement of the people in the research, or change must take place quickly or holistically. It is often the case that those who apply this approach are practitioners who wish to improve the understanding of their practice, social change activists trying to mount an action campaign, or academics who have been invited into an organisation by

decision-makers aware of a problem requiring action research, but lacking the requisite methodological knowledge on how to deal with it.

Action research is more of a holistic approach to problem-solving, rather than a single method for collecting and analysing data. It allows for several different research tools to be used as the project is conducted. These various methods, which are generally common to the qualitative research paradigm, include keeping a research journal, document collection and analysis, participant observation recordings, questionnaire surveys, structured and unstructured interviews, and case studies. Upon invitation into a domain, the researcher's role is to implement the action research method in such a manner as to produce a mutually agreeable outcome for all participants. The main role of an action researcher is to nurture local leaders to the point where they can take responsibility for the process. This point is reached when they understand the methods and can continue once the researcher leaves. In many action research situations, the researcher's role is primarily to take the time to facilitate dialogue and foster reflective analysis among the participants, provide them with periodic reports, and write a final report when the researcher's involvement has ended. (Winter 1989; and Susman 1983)

A full description of the researcher's role in the WSS industry and his use of the action research methodology is found in Appendix 8.

1.7. Data-Gathering Techniques

In the case studies discussed in Chapters 8 and 9, source data is sourced from consultancy work material developed by the researcher as a management consultant. For the case studies, several data-gathering methods were used. The researching tools used included the following techniques: -

- Literature research.
- Interviewing.
- Questionnaire survey analysis.

According to (Burawoy 1991), the analytical techniques that are used in social research

are not necessarily mutually exclusive and can be applied across a range of social research projects, regardless of the variables involved. Methods chosen need to suit the reality of the situation and the environment within which it is encased.

In their extensive work on social research, Babbie and Moulton (2001) stated that depending on the area of study, it is also quite necessary to read up on the history, geography, culture and politics of the local area, whether it is at a micro or macro-level. Seeking appropriate background knowledge often requires crossing multi-disciplinary boundaries. It is equally important to obtain the necessary permission to carry out the research within a particular environment. In a case study investigation as polemic as privatisation, it is particularly important that buy-in and trust is garnered from all respondents. Often also, the researcher carries a somewhat “lower status” than the respondents being interviewed, because the respondent may see the researcher as receiving a favour by him, pending their time, availability and willingness to participate. The lower the status of the researcher and the more conflict-prone the environment and research topic is, the more difficult it is for the researcher to complete his data-gathering. When official permission has been given to conduct the research, it is still necessary to obtain the co-operation of the research subjects.

The techniques used for the data-gathering were as follows: -

i) Literature Research

An extensive literature research was carried out. Texts on the theory, histories of case study areas and research methods were studied. Included in this research is the empirical research material available from other academic and institutional sources.

ii) Interviews

For interviews, a general template of questions is prepared. Interviews should be administered by the researcher, rather than being completed by a respondent. This method may have a higher response than the non-contact questionnaire surveys.

The interviewing form of research minimises the chances of there being “don’t-knows” or blanks left in questionnaires. It is also general human nature to find it harder to reject the questions of a direct interviewer as compared to “throwing away a questionnaire” that has been posted or distributed. It provides the researcher with a chance to probe more pressing issues, which cannot be facilitated by a questionnaire. It also provides clarity to the respondent who might find difficulty surmising certain questions that appear in a questionnaire. In conducting the interviews, it is important that the interviewer be neutral in his approach throughout the whole interview. His questions should not be loaded or lean towards any particular side of an issue, as this tends to affect the accuracy of the research. Impartiality facilitates the receipt of accurate data without actually affecting the data itself. Thus, to minimise this possibility of influence, the interviewer must portray a neutral perspective. “Naturalism” is a tradition in qualitative research. The assumption is that the data is ready to be gleaned, but it must be naturally observed and reported as it really is. It is a system of observation and data collection that is characteristic of the “Chicago School of Thought”. (Babbie and Moulton 2001: 34; 54-56)

In part, field research is a matter of going where the action is and simply watching and listening. Qualitative interviewing and data-gathering is generally iterative in the sense that it is flexible at the point of conjecture allowing the interviewer an opportunity to steer the interview back on course if it veers too far away from the research material. The interviewer may have a general plan of inquiry with no particular order of questioning unless it serves as a build-up to more pertinent and sensitive questions that can only be asked once the relationship has been established. (Babbie and Moulton 2001: 491-495)

iii) Questionnaires

The wording of questions might be argued to be more an art than a science. In designing a questionnaire for survey analysis, Bulmer and Warwick (1993: 149) quoting Warwick and Lininger (1975: 140-148), proposed that the following questions be asked of the researcher to himself in his preparation: -

- Are the words used in questions simple, direct, and familiar to all respondents?
- Is the question as clear and specific as possible?
- Do items cover more than one point within the same question?
- Are any of the questions leading or loaded?
- Do any questions use emotionally charged words or threats to self-esteem?
- Is the question applicable to the respondents of whom it will be asked?
- Will the respondents answer the question in biased ways, such as saying “yes” to items without regard to their content or giving answers that are socially acceptable rather than the views of the respondent?
- Can the question be shortened with no loss of meaning?
- Does the question read well?

The actual questionnaire format itself should be such that it facilitates the speed of response. Ideally, the questionnaire should not require the completion of sentences. Questionnaires that require the simple choosing of alternative answers that have already been provided, are generally the questionnaires that have the highest response or rate-of-return, due to the ease of completion and minimal effort required from the respondent. The use of such a matrix-type questionnaire format also eases the evaluative analysis required later on. With high volume questionnaire returns, it is easier to analyse the various components that require evaluation, especially where there may be multivariate empirical relationships. In social science research, there is no limit to what entity can be studied, generally referred to as the unit of analysis. A representative cross-section of the entire municipal population can be derived at, either by random sampling or by the quota method. The aim of both systems is to represent the whole population on a reduced scale. The quota system is practicable only where statistics are available, to show how the whole population is divided into their different demographic

constituents and amongst the different sub-localities. The different proportions of certain structural features such as race and income within particular areas are then reduced to a smaller scale, which varies according to the sample desired. The aim is get as representative a sample of a cross-section of the community as possible. In choosing the samples, there are two types of sampling methods to choose from; the probability sampling method and the non-probability sampling technique. Probability sampling remains the best method of choosing large cross-sections of communities for analysis, whilst the non-probability method or random sampling method is used in less variegated samples without any subset bias. (Babbie and Moulton 2001: 242-259)

According to Brownlee (1975), the overall response rate is only an open guide to the success rate of the survey. If a high response rate is achieved, there is less chance of response bias, than in a low rate. Conversely, a low response rate is a danger signal, because the non-respondents differ from the respondents in ways other than their willingness to participate in the survey. The response rate differs from survey to survey. According to Babbie and Moulton (2001: 247-259), a response rate of 50 percent is adequate for analysis and reporting. A response rate of 60 percent is good and a response rate of 70 percent is very good.

The specific research methodology used in each case study is developed at the beginning of each case study. The various interviewing and survey questionnaires that are used in the data-gathering, are found in the appendices of this study.

These can be located as follows: -

- Indian Case Study: Page 152
- Karachi Case Study: Page 168
- Dolphin Coast Case Study: Page 214
- Stanger Case Study: Page 294
- Estcourt and Newcastle Case Study: Page 309
- Umgeni Water Case Study: Page 315

| Domain | Area | Key Performance Indicators (KPI's) / Factors |
|---------------------------------------|--|--|
| Privatisation Efficiencies and Ethics | Financial Issues | <ul style="list-style-type: none"> • Were tariffs increased prior to privatisation? • What was the tariff trend before and after privatisation? • Are tariffs increases in line with inflation? • Household member numbers. • Ratio of monthly accounts to total monthly household income. • Determination of Willingness-To-Pay (WTP) and Ability-to-Pay (ATP) factors. • Degree of poverty in relation to breadline income capacities. • Per-capita incomes. |
| | Privatisation Efficiencies | <ul style="list-style-type: none"> • Increase in the number of connections for water. • Increase in the number of sanitation access systems. • Increase in the length of network infrastructure per capita. • Ratio of employees to number of customers served. (Issues of retrenchment.) • Increase or decrease in water losses and how does privatisation compare to the public provision. • Issues of employee satisfaction. |
| | The Role of Regulation in Privatisation | <ul style="list-style-type: none"> • Adequacy and range of regulatory powers. • The ability of the regulator to act independently. • The ability of the regulator to enforce contract compliance. |
| Globalisation Issues | Transnational Companies and Foreign Technology | <ul style="list-style-type: none"> • Is the private sector provider a foreign-owned entity? • Have there been benefits in terms of foreign technology? • What differences have there been in terms of customer management? |
| | Foreign Direct Investment | <ul style="list-style-type: none"> • Is there investment in capital infrastructure from the private sector? • What percentage of this investment is from foreign funding? |

Source: Researcher's Compilation

Whilst Table 1.3. provides KPI's to use as benchmarks in determining measurements for quantitative and qualitative analysis, actual benchmark figures will differ for each case study. For example, the per-capita income (PCI) in South Africa and Argentina will have different implications for each country. If one compares PCI's at an international level, this may reveal very little about the *purchasing power* of the money in each country. If issues such as free water in one country as against no free water in another, are factored in, then the comparison of PCI's at a global level becomes

virtually insignificant.

Effectively, Table 1.4. provides a standardisation for determining the success of each privatisation attempt investigated in the case study. The segmentation continues with the compartmentalisation discussed in the hypothesis. Whilst it is by no means exhaustive, it provides a framework for analysing the efforts of the privatisation for each study and an equivalent framework for comparison across case studies. This table is applied at the end of each case study.

CHAPTER 2: LITERATURE SURVEY: THE DEBATE ON PRIVATISATION

2.1. The Emergence of Privatisation in the Twentieth Century

An extensive amount of literature has been written in recent years about privatisation²⁰ and its effects. It has been developed on empirical and case study investigations by many researchers involved in or investigating privatisation projects. Although this chapter is not an exhaustive review, it does provide a backdrop to the issues surrounding the privatisation debate and the arguments supporting and opposing this paradigm change in service delivery. The privatisation of public good provision, then, has its roots in the neoliberal policies that are developed and adopted by nation states.

According to Netter (1998:1), privatisation can be defined as the key mechanism to reduce and minimise state ownership. It is a term that has been used extensively since the late 1970's, and which has its roots in the new liberal economics of the West. The term "privatisation" was officially coined in Britain, under the Thatcherite government and it was initially met with great caution by the public and "old school" economists. The British public opposed the privatisation of its telecommunications wing, and it was only with the privatisation of British Gas, that there was a greater acceptance from the public.

Ten years earlier, Starr (1988: 4-41), in his essay: "The Meaning of Privatisation", defined privatisation as being "a withdrawal of the state, *but not individual involvements*²¹, but of assets, functions, indeed entire institutions". This implicitly suggests that even post-privatisation, there is still the extensive involvement of the state in controlling the privatisation procedure through regulation.

In the general development of private sector participation in former public sector services, there is an increasing devolution of power from state to market. Privatisation involves an increase in the responsibility of the market to deliver former public goods

²⁰ For the purposes of this study, the increasing trend towards any form of privatisation is treated as a single, macro-economic directional change in understanding the theory behind the migration towards private sector participation. Privatisation is underscored by various forms, which include public-private partnerships (PPP's), neoliberal economics, and structural adjustment programmes, amongst others. See Chapter for a comprehensive discussion.

²¹ Researcher's emphasis.

and services. Essentially, privatisation of any form is founded on similar paradigms, certainly at a theoretical level. Privatisation has its foundation in the arguments underpinning the neoliberal paradigm. Neoliberalism is a set of economic policies that became widespread during the last thirty years. “Liberalism” refers to the new wave of thinking or re-emergence of ideas in economics, politics, and religious thought. The addition of the prefix “neo” implies that this is a new kind of liberalism. The main thrust of neoliberalism includes the rule of the market, that is, the liberation of private enterprise from any restrictive regulations imposed by the state. The fundamental belief is that an unregulated market is the best way to increase economic growth, ultimately filtering through to benefit everyone. (Sturgis 1994: 1-3)

The whole premise of the neoclassical economists that the economy was self-adjusting and that the only problems that existed, consisted of market imperfections, could not be substantiated in the early twentieth century. There were long periods of depression and high levels of mass, long-term unemployment. The market system seemed incapable of correcting this burgeoning situation. Prior to the 1970’s, then, a strong state was the focus of most first world economies. The growth of the public sector was linked to the “supposed failure” of the market, which was at its nadir during the years of the Great Depression. Structured interventions of the state under Keynesian initiatives were developed in order to stimulate the growth required to counteract the effects of fallen economies. Through this, the world regained a semblance of economic momentum that it once had prior to the Great Depression. (Sturgis 1994: 3, George 2001:1; and Smithin 1996: 33-34)

The first World War destroyed international trade, debilitating markets, and states expanded to meet military needs required for the War. The American government was engaged in wage and price controls, rationing, censorship, and war propaganda rather than trade. After both World Wars the West developed an interest in Keynesian economics. People were now more supportive of the state’s burgeoning role and expected economic and social needs to be met by appropriately enabling legislation. (Sturgis 1994: 19)

Keynesian economics added a new dimension to state macro-economic policy, whereby

governments were able to intervene in the economy at an aggregate level whilst economic decisions were still made at an individual level. (Friedman 1997: 1-8)

However, by the 1970's an array of economic problems beset governments globally, within a simultaneous rise in unemployment and price levels. It was at this point that a gathering of politicians and members of the academic fraternity from European and American countries occurred, in an attempt to unravel these problems and to bring about new ideas on national macro-economic governance. (Sturgis 1994: 29)

It took about a decade for these new, more free-market theories to take prevalence over state-centric policies. The backlash of the economics establishment against Keynesian ideas was encapsulated in the ideologies of Friedman. Friedman established a link between money supply and inflation. In order to control inflation, he felt that governments must control the money supply and public expenditure should be decreased. The resources thus freed, would be transferred back to the private sector. These economists depicted the market as the most efficient information system. State intervention only created misleading signals leading to misallocation. The only way for efficient allocation to occur was through maximum freedom for individuals to receive and to respond to market signals. (Zabohne 2001: 1-9; and Sturgis 1994: 29)

2.2. The Debate on Privatisation

The literature pertaining to the various forms of private sector participation has been extensively developed since the early 1990's. The anti-privatisation literature has emanated mainly as a result of the seemingly "all-pervading" neoliberal reach of the World Bank. The World Bank promotes increasing private sector participation in former public sector services as a mechanism to leverage private sector finance, initiative, and knowledge systems. The reach of the World Bank is now widespread in the developed and developing world. (World Bank Website 2000: www.worldbank.org)

According to Williamson (1993: 1329-1330), the World Bank in the early 1990's (policy of the Washington consensus) was steeped in "neoliberal orthodoxy". The World Bank advocated policy reform, meaning "fiscal austerity and control over

inflation; trade and capital account liberalization; and privatization and deregulation of product and factor markets.” (Hart 2001: 651)

However, the neoliberal advocacy of World Bank in the mid-1990’s began to diminish with increasing evidence that despite “good neoliberal policies” (Sachs 1997: 22), some regions seemed unable to increase its rate of growth. In fact, there was a move towards the revival of development-focused economics, under the leadership of Joseph Stiglitz, the World Bank’s chief economist (Hart 2002: 816).

In fact, according to Hart (2001: 649), the World Bank and other Bretton Woods organisations seem to be bowing to the pressure from anti-capitalist protests at the turn of the twentieth century.

Currently, many critics of World Bank stress that the World Bank continues to attach privatisation as a prerequisite to developing nations receiving aid disbursement. However, although the World Bank does seem to actively promote an increase in private sector reliance, a survey of the World Bank literature reveals that this sweeping perception may not be wholly true. Whilst there are many of their papers that attest to the cumulative benefits of privatisation, there is no *conclusive* evidence to support such *all-encompassing* views on the prescription of these organisations when nations access their development aid funding, to have private sector participation as a prerequisite. There is evidence to *suggest* that at an operational level, there has been extensive private sector participation. The perception created by critics, is that these organisations will promote private sector delivery *despite* any circumstances that may be disabling to it. The strongest opponents of privatisation are generally trade unions, allied efforts from some anti-privatisation theorists, and from the mobilised efforts of the general public, where issues of national sovereignty seem paramount and resistance against transnational corporations (TNC’s) is growing. One of the key bodies that has mobilised its resistance campaign against the spread of privatisation and has been at the forefront of criticism against the World Bank, is an organisation called the Public Sector International Research Unit (PSIRU), which is linked to a number of global union bodies and labour research organisations. The unit has its headquarters stationed at the University of Greenwich in England. The PSIRU has written extensive anti-

privatisation literature and criticised the World Bank for its apparent inability to deliver a suitable development paradigm to the developing nations of the world.²²

The PSIRU focuses its efforts on basic services such as public good provision and has written extensively on TNC's and the apparent corruption that such companies have been accused of practising. The allegations put forward by Hall, a key researcher at the PSIRU, in his paper on these TNC's (1999: 135-146), do not address instances of increases in service delivery after privatisation has occurred in some cases. The emphasis is focused on isolated areas of corruption by employees in some parent TNC's. With TNC's of this size, it is plausible that such companies would have some degree of corruption, not unlike that of the state. Hall extensively criticises these TNC's through sensationalism rather than providing a balanced report that investigates both sides of the spectrum. (Hall 1999: 135-146)

The World Bank literature focuses on private sector participation in service delivery as a means of harnessing both technical skills and technology in instituting rapid service delivery. Presumably, it is easier (and more accepting by the public) for the World Bank to hold a private sector company accountable for its funds than poor governments. Public outcry generally increases when the World Bank adopts a non-altruistic attitude towards a poorly performing state institution as compared to a poorly performing private sector organisation, which has borrowed World Bank funds. For the World Bank to remain a fiscally sound body, its lending procedures would also have to be financially prudent from a risk point of view. However, critics may argue that the World Bank is a development organisation as opposed to a commercial entity, and should not focus on financial returns. (World Bank Website 2000: www.worldbank.org)

As the case studies will later reveal, the World Bank is optimistic with regards to the power and jurisdiction of regulation over the privatised entities. The World Bank supports private sector participation, as long as there is an extensive monitoring facility built into any privatisation contract. This facility should be both independent and credible enough to fulfil its monitoring function with sufficient capacity from a

²² See papers by Sheshinski and Lopez-Calva (1998) and papers by the UNDP / Yale University Collaborative programme on Public Private Partnerships: 2002 www.yale.edu; and Bayliss (2000). Also, see Bond (2001).

jurisdictional, legal, manpower, financial and infrastructure perspective. (World Bank Website 2000: www.worldbank.org)

Critics, in opposing the World Bank on their apparent “privatisation-only” agenda, also neglect to mention that the World Bank has been vociferous in challenging some TNC’s corruptive governance procedures, especially in developing countries. What has emerged is that the World Bank is acquiescing on their mainly-privatisation agenda is being made, if the feasibility study deems privatisation unsustainable. Unfortunately, many feasibility studies cannot accurately predict the success or failure of a privatisation project and this may only be determined during the actual operation of the project. Market imperfections are also key issues that seem to promote the failure of these privatisation attempts, especially in countries where welfare needs exceed the ability of the masses to pay for services, which leads to an imperfect market situation. The current consensus view of the World Bank now looks at the role of creating competition rather than the ownership of an entity.²³

Many economists challenge the influence of the more affluent developed nations in trying to impose their current neoliberal macro-economic strategies onto the developing nations. Ha-Joon Chang (2002) provides extensive evidence in his book “Kicking Away the Ladder”, of how the West developed under Keynesian economics before embarking on the neoliberal path. Chang questions the idea of imposing neoliberal systems onto developing countries so early in their economic development²⁴, as opposed to allowing their growth under more development-centric policies. These views are reinforced in part by other economists such as Ajit Singh, a renowned Cambridge economist and paradoxically, from within the annals of the World Bank itself, from its former chief economist, Joseph Stiglitz. Stiglitz asserted publicly that in his post-Washington consensus speech that financial market liberalisation had led to instability, and called for a reversal of neoliberal advocacy of the World Bank.

²³ [World Bank Website (2000: www.worldbank.org) and see papers by Sheshinski and Lopez-Calva (1998) and papers by the UNDP / Yale University Collaborative programme on Public Private Partnerships: 2002 www.yale.edu; and Bayliss (2000). Also, see Bond (2001).]

²⁴ Meaning that there was still also a vast basic infrastructure challenge, amongst other factors.

2.3. Deconstructing the Various Private Sector Participation Options

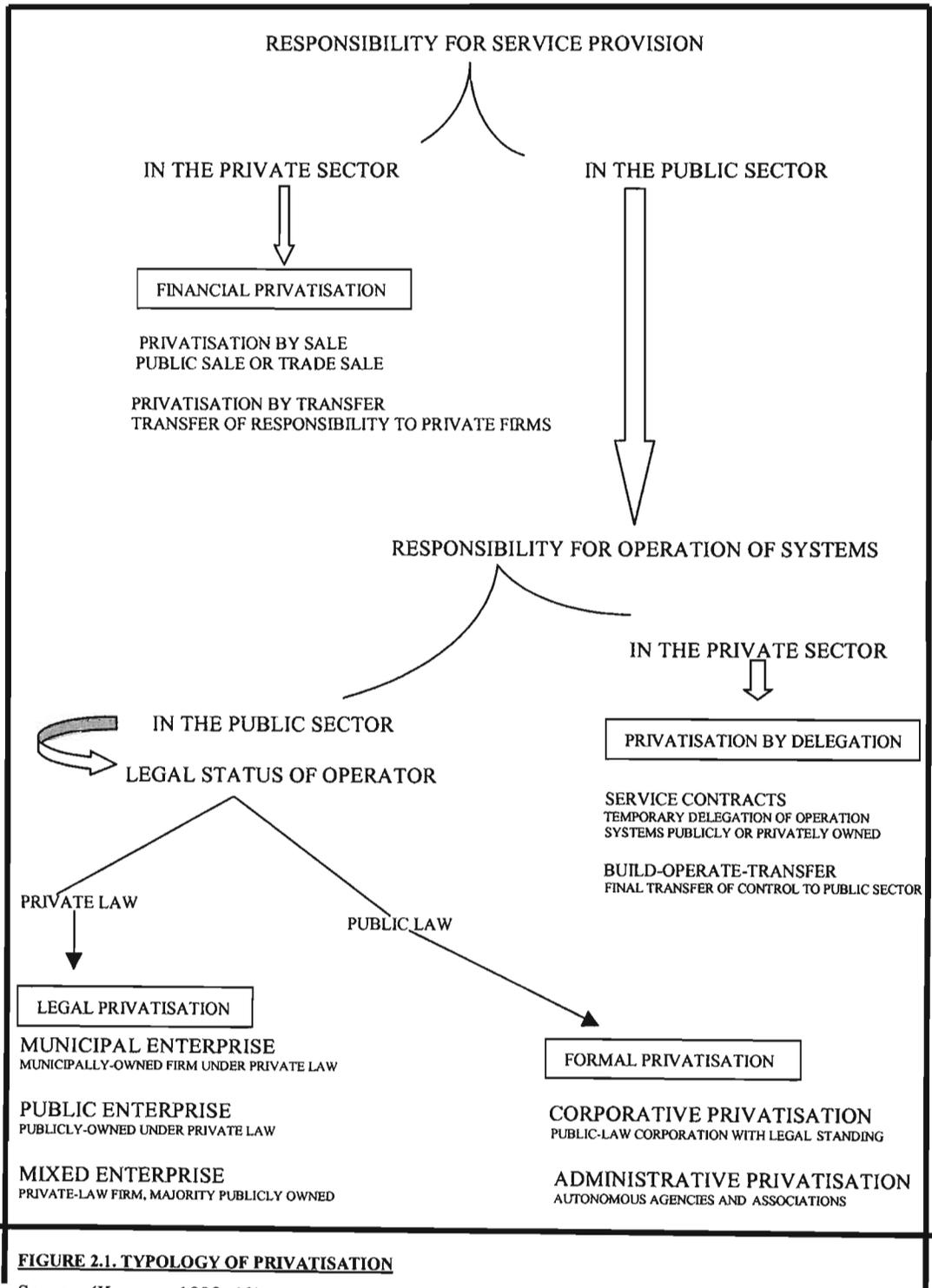
Gomez-Echeverri's (1997: 1) work on privatisation discusses the complementary role between the private and public sectors, and cautions against the high expectations placed on private sector delivery: "The potential role of the private sector in most parts of the developing world will not be realised automatically or easily unless a number of steps and attitudinal changes take place. The private sector is neither saviour nor villain, as often attributed by policy-makers, but rather, it is an important source of talents, skills, and resources to be tapped in support of sustainable development. More importantly, the best instances of private sector participation will happen when there is good and strong governance, which in turn, leads to strong partnerships between the two sectors. The private sector cannot, and will not, replace the state, but rather, should complement and strengthen it by working in those areas in which the state does not have the resources, management skills, or technology to attend to the needs of the population." (Gomez-Echeverri 1997: 1)

This idea of partnerships is a new exhortation, developed to describe the relationship shared between the state and the market in trying to achieve a common goal through the exploitation of various synergies. However, the developing governments who are seeking private sector assistance are keen to emphasise that private sector partnerships differ from privatisation. The unions and other opposition groups still view this as a euphemism for rampant privatisation through stealth²⁵. On the other side of the spectrum, most of the pro-privatisation or private sector partnership literature state that government often expends too much energy on *providing* services. It should rather *facilitate* or *ensure* that service provision occurs, encapsulating a transformation from provider to regulator. (Osborne and Gaebler 1997:1)

As the term public-private partnerships (PPP's) will be used in this study, according to the Institute of Private Public Partnerships Website (2000: www.ip3.org), the following is a concise definition of the term "PPP": "A co-operative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly-defined public needs through the appropriate allocation of risks, rewards and responsibilities."

²⁵ See SAMWU Website (2002: www.samwu.org.za) and PSIRU Website (2002: www.psiru.edu).

Figures 2.1. and 2.2. and Table 2.1. provide the various options in bringing the private sector into the traditional municipal service areas: -



The following schematic indicates the various degrees of increasing private sector participation contracts in former municipal service delivery contracts: -

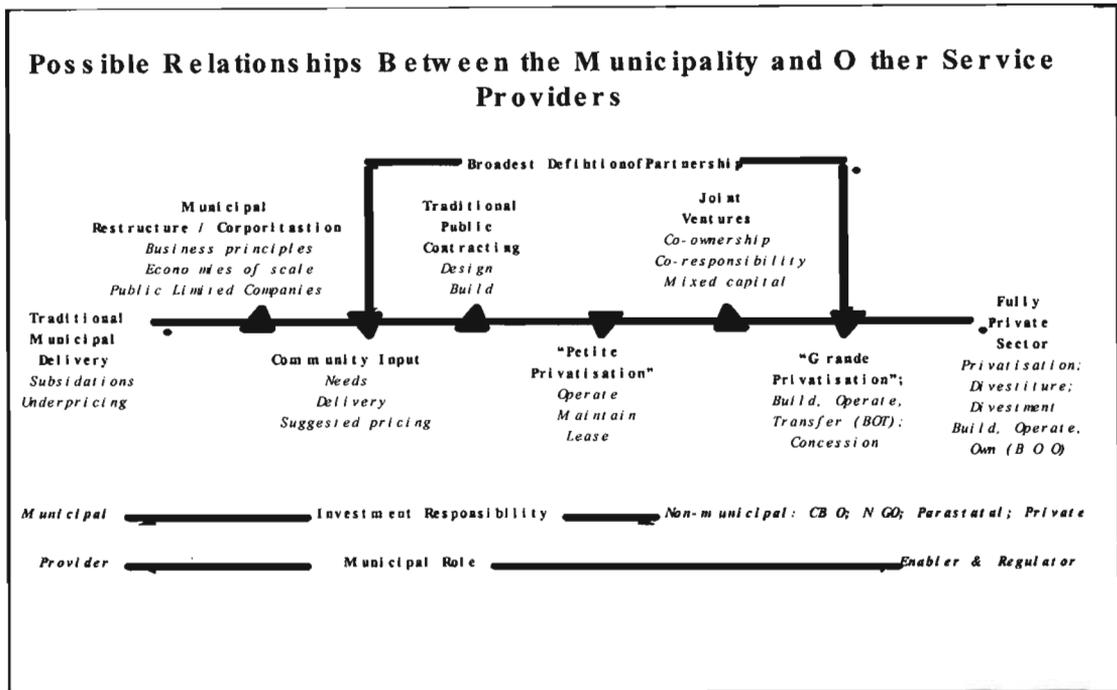


FIGURE 2.2. RANGE OF POSSIBLE MUNICIPAL SERVICE PARTNERSHIPS

Source: Adapted from the model by Gentry and Fernandez (1997: 9) by the researcher.

Private sector participation ranges from short-term, service-based contracts, which tend to be more prevalent because they are more risk-neutral, to the sale of all assets to a private firm. Table 2.1. overleaf discusses the various options depicted in Figures 2.1. and 2.2.

The following list provides a spectrum of options for service delivery indicating the degree of municipal responsibility: -

TABLE 2.1. OPTIONS OF PRIVATE SECTOR PARTICIPATION DELIVERY

| Option of Service Delivery | Description of Contract |
|---|---|
| Traditional Municipal Delivery | Service delivery is purely a municipal function with no partnership contracts from design to construction and operations and maintenance (O&M) of infrastructure schemes. |
| Municipal Restructure | Management of the municipal service by municipal authorities along business principles. Service delivery is still a public sector responsibility with no partnerships. Also considered are economies-of-scale by establishing regional municipal supply networks. |
| Corporatisation | Many municipalities look at converting its departments into corporatised entities by ring-fencing all their activities from a financial, legal, social, and operational perspective. In effect, they become a wholly-owned public-limited company (PLC), managed as a sustainable business and able to gain easier access to financing from banking institutions for capital projects. |
| Community Input | Residents, municipal officials, and business leaders work together to develop solutions to urban problems and needs, whilst service delivery is still a sole municipal responsibility. |
| Traditional Public Contracting | Community-Based Organisations (CBO's), managers, and operators work with Non-Governmental Organisations (NGO's) and other public utilities to improve access to services in neglected neighbourhoods left-off the municipal service-provision grid. Informal participants can refer to unregistered individuals, families, community groups, NGO's, and small enterprises. This could also be referred to as small-scale PPP's. |
| "Petite privatisation / 'Affermage' / French Model" / Management / Service / Lease | The municipality retains ownership of the infrastructure and responsibility for capital investment, financing, regulation, and tariffs; whilst a private operator assumes responsibility for O&M, quality of service, and tariff-billing and collection. The duration of these arrangements tend to be from 5 to 15 years. These are also referred to as management, service, or lease contracts. |
| Joint Ventures | This is a joint undertaking by the public sector and a parastatal or private sector participant to deliver services. The government acts as sole regulator, but also owns shares in an operating company together with private shareholders. The arrangement is based on commercial principles, with complete autonomy and allows the public sector to act more flexibly by earning profits for re-investment. |

| Option of Service Delivery | Description of Contract |
|--|--|
| <p align="center">“Grande Privatisation” / Concessions</p> | <p>There are two forms of private sector participation at this level. One is the model of Build-Operate-Transfer (BOT), in which the private company completes a new segment of the infrastructure system, usually requiring substantial sunk investments, manages it over a fixed period, and then hands it over to the public sector. The second model is a concession contract in which the concessionaire assumes responsibility for operating and maintaining and providing new investments in the system, but ownership of the assets remains with the government. These arrangements tend to be longer-term, as sunk costs will amortise over an extended period.</p> |
| <p align="center">Fully Private Sector / Divestiture / Divestment</p> | <p>The government divests all infrastructure assets and maintains a role as regulator. Another example would include the Build, Operate, Own (BOO) contracts with the government being a regulatory body.</p> |

Source: Researcher’s Compilation²⁶

2.4. Arguments for Market Provision of Public Goods

Private sector participation emerged due to the failure or inability of the state to deliver basic services. The following is a consolidated list of motivations for private sector participation in former state commercial enterprises and utilities²⁷: -

- As state organisations are generally publicly-owned natural monopolies, there are no independent entities to regulate them.
- Prices paid by the public for goods provided by the state are set artificially low as a way to control inflation.
- State-run organisations are typically monopolies and rarely work effectively.
- The deficit that the state seems to be able to absorb, is continuous.
- The state often has a bloated labour force and pays excessive wages with large-scale benefits.

²⁶ See Gentry and Fernandez (1997); Anton (1993); Ayles (1987); World Bank Website (2000: www.worldbank.org); Brook-Cowen (1997); and Megginson and Netter (2000).

²⁷ See the Institute for Public-Private Partnerships (2000: www.ip3.org); Fishlow (1990: 61-74); Shambaugh (1999: 17); and Bergström 1999 (1999: 3-4).

- There is a limited degree of public investment by the state due to low motivation and incentivisation, as operating expenses are generally not covered by the tariffs charged for services provided.

The state has a lock on the delivery of a wide range of services and is not only a monopoly, but also an effective form of monopoly, as the following consolidated reasons reveal: -

TABLE 2.2. REASONS FOR PRIVATE SECTOR DELIVERY

| Reason | Explanation |
|--|---|
| Over-Extension | Governments realise that they are involved in too many service areas. |
| Spreading Ownership | Partnerships make governments accessible to people. |
| Increased Accountability | Governments are more directly accountable to their customers. |
| Improved Productivity | Governments have realised that improving economic performance locally will mean improvement for the national economy. |
| Fiscal Stress | Governments are selling enterprises and assets to pay-off debt and turning net losses into net gains. |
| Government Cannot Go Out of Business | Every citizen is a customer for government services and a new customer is born every couple of seconds. Poorer people, especially, are customers for government services and cannot afford to go elsewhere. |
| Government Controls Revenue | If more money is needed to provide a given service, government can and will raise taxes to pay for it. While the private sector has to persuade people to make purchases, government simply takes a percentage of citizens' income. |
| Government Expenditure Can Exceed Revenue | Governments, by law, must balance their budgets, but they avoid doing so by borrowing, deferring capital spending, and employing questionable book-keeping practices. |
| Government Delivers Essential Services | Whenever a reform-minded manager exerts pressure to reduce costs, status-quo managers can mount an effective defence by pointing to the essential nature of their task. |

Source: Researcher's Compilation²⁸

²⁸ See Sheshinski and Lopez-Calva (2000); Megginson and Netter (1998); Perlman and Zarenda (1997); Gentry and Fernandez (1997); and The Institute of Public-Private Partnerships (2000: www.ip3.org).

Table 2.2. reveals that, the macro-economic conditions of a privatising country shape its privatisation policies, often more so than the political environment. Erasing deficit by selling state assets is a typical strategy that has pragmatic appeal. Although privatisation may carry political risks, for cash-starved governments, it may be a lesser evil than cutting spending or raising taxes.

The link between privatisation and economic growth relates most directly to the micro-economic theories used to justify privatisation. At the heart of the debate are theoretical perspectives, which are drawn from property-rights theory and public choice theory (PCT)²⁹. Further to this, key theoretical elements underpinning the argument for a change in ownership from state to market, related firstly to the view that public ownership led to the pursuit of objectives that actually detracted from economic-welfare maximisation.³⁰

The case of incentive-efficiency also plays a role in the transition towards the private provision of former public goods. An apparent inability of the state to monitor its managers stems from a lack of discipline as there is no threat of take-over or bankruptcy. The political view concerns the temptation of political interference to distort manager objectives away from profit-maximisation and toward other motives such as employment-maximisation. Moreover, this interference can also result in the perception amongst state managers of a “pliable budget constraint” (Kornai 1986: 3-30) in which they expect subsidies or write-offs to cover enterprise losses due to production inefficiencies.

Ownership change, which is another way of privatising public good provision, could also improve economic performance by changing the mechanisms through which different institutional arrangements affect the incentives for managing enterprises. (Vickers and Yarrow 1991: 113)

According to Sheshinski and Lopez-Calva (1999: 12-14), publicly-owned enterprises also have the tendency to marginalise private enterprises in competitive access to credit

²⁹ Discussed further in Chapter 3.

³⁰ See Buchanan and Tullock (1962) and Niskanen (1971).

and use legislative barriers to preserve their monopoly status. It is argued that the net effect of a change in ownership from state to market would improve economic efficiency, and over time promote an increase in investment. Privatisation would reduce this crowding-out by the state, providing more credit to the market, and would increase opportunities for investment in newly-privatised enterprises by releasing them from the fiscal constraints previously faced under public ownership. A change in ownership would thus increase efficiency by introducing changes to incentivisation for employees³¹. (Lopez-Calva 1999: 12-14)

Although the trend towards more environmentally, socially sustainable and equitable business practices is growing, in reality it may be many years before best business practices reach globally significant proportions. This may be especially true in developing countries, where capital-intensive improvements may be less feasible than they are in more developed countries, where the incentives motivating society may be different. In this context, it is extremely important that developed countries share technology, known as technology co-operation and transfer. Schmedheiny (1992: 118-119) postulates that developing countries should be assisted by the developed nations in this initiative. (Shambaugh 1999: 12)

In their view on privatisation attempts in developing countries, Yergin and Stanislaw (1998) perceive economic sustainability as a crucial reason for seeking a stronger role for the private sector. The challenges posed by urban growth in the developing world are a vital consideration in the achievement of sustainability in such countries. This raises questions of opportunity-cost, and the effects of financial investments on sustainable development.

DeSimone and Popoff (1997) add that, for successful privatisation to occur, strong leadership in market investment decisions as well as adequate legislation is required. Some forms of strong legislation often create impediments by limiting the enabling environment for sustainable development through unrealistic policies. The state and communities have a significant role in the sustainable development process, the shift

³¹ The argument that the public sector crowds-out the private sector in terms of access to finance, is not evident in the South African situation, as the case studies in Chapters 8 and 9 will reveal.

towards sustainable development thus requires cooperation amongst the market, state, and other stakeholders. (Shambaugh 2000: 12)

The market's movement towards greater social and environmental responsibility has been due to a combination of state regulation, public pressures, and opportunities for increasing revenues and reducing costs. Parallel to this, the market is escalating into areas of society that were once considered the exclusive realm of the state, such as the provision of public goods. One of the methods illustrating this move is through partnerships of the state with the market, an increasingly accepted mechanism for the funding of basic infrastructure. In seeking to integrate the synergy between the market's objectives with those of the state, such partnerships represent a compromise between state monopoly and full divestiture. The market is an important source of technology and entrepreneurship to be sourced for sustainable development. However, in most parts of the developing world it will not be fully utilised unless a number of attitudinal changes occur from some quarters towards increasing private sector participation. It must be understood that the market cannot replace the state, but should rather complement it by working in those areas in which the state does not have the skills or technology to meet the needs of the public. (Faulkner 1997: 157-172; Gentry and Fernandez 1997; and Feigenbaum et al. 1999)

The objectives of the market will also change as private sector participation becomes increasingly involved in the area of public goods, such as communities' interests, environmental concerns, basic infrastructure provision, and social issues. As a result, a strong state presence in the form of regulatory and legislative compliance and assurance is needed. In effect, the recognition of the need for a strong state in developing countries, does not diminish the argument for a strong market role in sustainable development, but reinforces it. (Faulkner 1997: 157-172; Feigenbaum et al. 1999; Linden 1994; and Osborne and Gaebler 1992)

Complete privatisation, that is the state divestment of all rights to the infrastructure service system, receives the most negative publicity. The only pre-requisite to qualify as a *partnership*, is some degree of private sector participation in services that are from the public domain. Under this sweeping definition, private stakeholders may include local companies or TNC's, NGO's, and CBO's, or through subsidiaries. Such local

organisations play an important role in the local government context, due to their close proximity to community issues. (Gentry and Fernandez 1997; and Zahra 2000).

Even with a more comprehensive understanding of local government, forming private sector partnerships will still be complex. The financing of infrastructure for services is problematic at any level of government. Local governments come across obstacles that prevent them from securing loan finance. Businesses such as financial lending institutions exist primarily to make a profit, and local governments might pose as too large a risk. At this point, the private company can be sourced for finance that they have access to utilise. (Goetz 1993: 199-220; Bergström 1999; Klee 1999; and Humes 1991)

Shambaugh (1999: 9-10) supports Schmedheiny's (1992) argument that the private sector must develop an amicable balance between action and regulation compliance. With minimal action, this implies that a company may not be complying with regulation, but excessive regulation may however, result in higher costs thus reducing its business sustainability. For almost any company, sustainable development opportunities must provide financial and operational benefits.

Gomez-Echeverri (1997: 2) sees that strong foundations for private sector partnerships should be based on complementary goals and an enabling regulatory and political environment. Such partnerships can only work when the goals of the major stakeholders are complementary and the "legislative, administrative, political, and social environments" are in place to meet its objectives. The state usually has difficulty accepting the profit motive of private businesses, just as companies may be tempted to relinquish the more bureaucratic processes. Both sectors attempt to raise living standards; the state wants to alleviate poverty and the market can have more people that can afford their products so that sales increase. Both sectors want to provide efficient services; the state wants to keep costs low and increase service coverage and the market wants to increase profits. Social acceptance of the market is essential, as the public must see private sector participation as beneficial for the long-term sustainability of the partnership arrangement. Public support of private sector participation over the long-term will depend on the delivery of essential services with acceptable tariffs. Therefore, it is important that mechanisms be developed to ensure that the market is accountable to its customers in a private sector participation arrangement. (Gomez-Echeverri 1997:1-2)

2.5. Challenges to Private Sector Participation in the Provision of Public Goods

Private sector participation in former public goods provision faces a range of challenges. These include the restructuring of the affected organisation to be more conducive to private sector entry. Issues of regulation are critical to successful privatisation attempts. National sovereignty is also questioned as some developing nations limit the sale of state-owned enterprises to TNC's. This TNC could be due to the lack of local private funds and skill, which would need the foreign direct investment (FDI) to initiate the project, or foreign technology. Opposition to private sector participation is also evident in the sale of state assets from organised groups. In many countries where such partnerships have been formed, these groups are consistently opposed to any privatisation policy, including workers, trade unions, and public sector bureaucrats. In some cases, the process of privatisation has meant the transfer of government assets into the hands of those who are friends of the government, thus enriching themselves through rent-seeking means. Even with a well-constructed programme, privatisation can result in an unequal redistribution of wealth, power, and status within society. If people perceive privatisation as a mechanism to enrich a minority, there will be strong pressure to revise such reforms. Confidence in the fairness of the system depends upon the effectiveness of the legal environment and the accountability of the organisation through regulation. (Fishlow 1990: 61-74; Shambaugh 1999: 22; Gentry and Fernandez 1997; and Shep et al. 1995)

The fear of the historically negative effects of globalisation is a challenge that faces private sector participation strategies. Globalisation may promote economic growth and bring new technologies but it also challenges the sovereignty and pride of nation states. The universal market jeopardises established principles of organisations, which creates reminiscence for the established familiarity of the past. (Shambaugh 1999: 22-23; and Yergin and Stanislaw 1998)

The challenge of regulating competition is crucial for the improvement of efficiency in privatised enterprises. Unravelling the separate effects of policy changes and degrees of competition is difficult and explains the relative deficiency of empirical analysis in this area. The other major constraint to the development of empirical investigations is

related to the small time period that has elapsed since privatisation has emerged. (Vickers and Yarrow 1991: 116)

The correct choice of private sector participation project could also pose as a challenge. There is no shortage of potential projects for private sector participation, but the key to success is choosing the right project, which meets the criteria of being potentially sustainable. Local supporters to the project are needed, who can advise on local priorities, and develop a link to the state. Proponents of private sector participation are also tasked with the prospect of attracting investor confidence for small or medium-sized projects, which requires financially acceptable packaging. Larger projects have their own dynamic through economies-of-scale, whilst smaller projects have disproportionately higher transaction costs and political risks. (Faulkner 1997: 157-172; Gentry and Fernandez 1997; Zahra 2000; and Shep et al. 1995)

Organisational cultural differences exist, so there is difficulty in bringing the two sectors together, as the public sector is bureaucratic, and the private sector is profit-incentivised. Further issues such as delays or indecision by the state hinder private sector participation and delays projects. (Vickers and Yarrow 1991: 120)

2.6. Arguments Supporting the State Provision of Public Goods

New developments in the theory of industrial organisations promulgate that there is no theoretical reason that public sector utilities cannot provide services as efficiently as the private sector. It is not the ownership of the assets that is critical to service provision, but the nature of the competitive environment that is important. (Vickers and Yarrow, 1991:113)

The public seeks the state's benevolence as a refuge from the profit-driven demands of the market. The moral appeal of state intervention is clear; altruism and social development-maximisation, which the market does not offer directly. Its scruples are more subtle and indirect, in terms of what it makes possible, rather than what it does. Historically, the state took a more active role in less-developed countries (LDC's), in order to achieve rapid industrialisation and independence from their former colonialists,

both politically and economically. (Chang and Rowthorn 1995: 4-5; Yergin and Stanislaw 1998; and Shambaugh 1999: 23)

Market failure is seen as one of the biggest hazards of privatisation. If its benefits are regarded as exclusive rather than inclusive and it is seen to abuse its private power, it is likely there will be a public backlash and a demand for a return to greater state intervention, management, and control. (Shambaugh 1999: 23-24; and Yergin and Stanislaw 1998)

Considerable start-up transaction costs emerge in the transfer of service provision to the private sector. There are costs associated with research and development (R&D) endeavours, national government debate, the drawing up of legislation, restructuring of public sector utilities, transfer of employees and their benefits, and winning the support of the unions. The question remains as to whether the time, money, and effort that are channelled into facilitating this transition have an impact financially and socially. Some economists feel that there is sufficient empirical evidence to indicate that it would be cheaper to reform public sector enterprises rather than to enter into full-scale privatisation. (Chang and Rowthorn 1991)

Tariff concerns, including the use of subsidies and the political acceptance of higher prices, typically accompany any private sector participation. The market often inherits inappropriate tariff structures that gave the public the wrong impression. Empirical evidence reveals that unless clear tariff-adjustment policies are built into contracts, political factors will continue to affect tariff-setting. (Gomez-Echeverri 1997: 1-2)

It is also often argued that infrastructure development alone, cannot or should not follow market principles, either for political reasons or because the market is considered to be insufficiently contestable in a natural monopoly situation. (Sheshinski and Lopez-Calva 1999: 23)

Stigler (1991: 3-21) adds that from a regulatory point of view, justification could be provided against any form of private sector participation. The Averch-Johnson effect, also known as regulatory capture, whereby the private sector service provider and the regulatory agency participate in an ineffective regulatory relationship, instead of

independent monitoring, results in the regulator protecting the privatised concern from possible competitive forces. The issue of unemployment and labour bargaining rights is also high on the anti-privatisation agenda. Privatisation leads to retrenchments as managers are freed from political interference and are able to return to profit-maximisation as their primary objective.

Galal et al. (1994) propose that competition and natural monopoly phenomenon is one of the strongest cases for justification against the rule of the market. It is the level of competition, and not ownership, that best determines efficiency outcomes. Private owners have the right incentives to promote efficiency and in line with modern amendments to neoclassical theory, it is likely that the state will mismanage key issues to a greater extent than the market. If a market is monopolised, privatisation will not necessarily guarantee efficiency. An additional methodological criticism is that of “selection bias”. Improved performance in privatised firms does not necessarily mean that private owners are better. The improvements may rather indicate that it is the better state-owned companies or municipalities that are privatised³².

2.7. Concluding Remarks

Globally, privatisation as a solution to service delivery challenges has emerged out of two different historical backdrops. In the developed nations, it was ushered-in after a prolonged period of state-led development. Once an amicable level of infrastructure provision had been reached, the developed nations embarked on a neoliberal trajectory to exploit market efficiencies. In contrast, the developing nations are embarking on the neoliberal route, without having the level of infrastructure development that the developed nations had reached when changing its method of service delivery.

Whilst there seems to be many arguments supporting private sector participation in service provision, this avenue is not without controversy. The state and market are focused on different agendas, the former on a development prerogative, whilst the latter focuses on profit-maximisation. The key issue that emerges, is to whether the proposed benefits of superior technology and the work ethic that the market brings as compared to

³² This is an argument that sets-out the framework for the unique facilitative environments that envelop pilot projects that may not be possible in successive projects.

the state, generates enough fiscal savings to allow for a profit, *and* maximise on the welfare of the indigent people.

Emerging from this literature survey, there are three central issues that are key to the success or failure of any privatisation model at any level of government. The arguments supporting these issues are discussed in a greater detail in Chapter 3.

These issues relate to the three major constructs or segments that underpin the framework of this study, which are: -

- The Emergence of Privatisation;
- Privatisation Efficiencies and Ethics; and
- Globalisation Issues.

These segments are extracted and developed to serve as an introduction to the theoretical framework in Chapter 3.³³

A. The Emergence of Privatisation

The sub-issues emerging from the literature survey within this segment includes PCT. PCT is used as the theoretical framework within which privatisation is argued. In essence, it embellishes the issues of state failure in being able to provide public goods adequately to its citizens. Linked to this is, is the nature of public goods itself and its intrinsic qualities that make it a natural monopoly. It is through this commodification of public goods into private sector commodities that measurements of public welfare need to be determined. The role of the state in creating the ambient conditions for privatisation is also discussed.

³³ **NOTE:** Although there are issues of labour concerns and opposition characteristic ideologies, there is no *concise* equivalent theory within which to contextualise their opposition to privatisation. The theory of labour opposition to privatisation is largely based on the fear of unemployment, which, for the purposes of this study, are not necessary to evaluate from a *theoretical* perspective. This study evaluates the *actions* and *effects* of the opposition on privatisation. The labour issue is treated as a separate entity within the case studies, even though it is not given a specific theoretical framework.

B. Privatisation Efficiencies and Ethics

It is not only the risk of market failure that exists in the private sector, but also the ethics of providing an essential good for profit, which fuels the argument against privatisation. In order to measure the benefit to the public, a benefits-analysis must be conducted to assess the rent accruals to the various parties. This theory is used in quantum calculations in the case studies. Because of the nature of essential public goods, market failure is very likely, especially in developing nations where poverty is prevalent. Thus, included in this analysis, the issue of willingness-to-pay (WTP), counterbalanced by the individual's ability-to-pay (ATP) for an essential good, is discussed.

C. Globalisation Issues

Beyond the transition of a nation state towards the market provision of former public goods, one of the key arguments used by the anti-privatisation stalwarts, is the effect that globalisation has on the developing nation's economy in the long-term. The use of TNC's is often at the expense of local companies, and the short and long-term effects of any foreign direct investment (FDI) that such a company may bring, are questionable. With issues of localisation and anti-globalisation sentiment appearing high on the agenda of the anti-privatisation antagonists, and coupled with the endeavours of developing nations to achieve some levels of sovereignty, a case can be made against privatisation.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1. Introduction

For any private sector participation to occur effectively and seamlessly, it is imperative that the actual nature of the provided good is understood as well as the motives behind increased private sector participation. Similarly, prior to the privatisation attempt itself, there has to be an environment conducive to the transfer of the good from public to private hands. This environment is ideally initiated by the state, since the issues of legislation and regulation lies within the ambit of this sector. These issues are discussed in 3.2. under The Emergence of Privatisation. In the second stage of privatisation, that is, when the private sector participation strategy is already in operation, issues of accountability and ethics are juxtaposed against the issue of efficiency. During this period the operational aspects of the privatisation attempt and its implications for the pricing of goods and regulation thereof, can be analysed. These issues are discussed in 3.3. under Privatisation Efficiencies and Ethics. Finally, issues such as globalisation, foreign direct investment, and modern technologies, which pervade many privatisation endeavours, are discussed. This section is entitled 3.4. under Globalisation Issues.

3.2. The Emergence of Privatisation

For a public good to be seamlessly transferred from public to private hands, the very nature of public goods needs to be understood. Public goods are characterised by issues of public accountability and need, and generally fit into the ambit of essential goods rather than economic commodities. Entrenched within this public good delivery, there exist, issues of natural monopolies and a possibility of corruption without proper regulation and control. Thus, before a privatisation strategy is embarked upon by any organisation, the realm of possibilities that potentially exist for abuse has to be fully understood. To minimise corruption, the state needs to provide the conditions for a seamless transfer, that is, where there is no drastic effect on the public pockets and yet still facilitating the market incentive.

a) Public Choice Theory

According to Niskanen (1973: 615-653), Anthony Downs and James Buchanan developed the concept of Public Choice Theory (PCT), whereby they analysed the problem of non-market coordination. PCT is an approach to analysing public policy based on the acceptance of the motivation of self-interest and the understanding of politics as the exchange. The basic premise is that political bureaucrats involved in policy-making act with the same self-interest as private sector managers. If public servants do not act from selflessness and benevolence, privatisation may thus be a more logical path to pursue. Even if a single policy-maker wanted to act for the public's interest, PCT denies that this exists apart from multiple *individual* interests. PCT compartmentalises bureaucrats as being motivated by such factors as salary, public reputation and power, inefficient budget allocation amongst state organs, and marginal productivity. Thus, state officials are just as likely as private managers to maximise their status. Although it is the role of politicians to monitor state officials, they, in turn, are self-interested and often motivated by the objective of maintaining power. Pressure groups, in turn, lobby these politicians, who choose the state officials that subsequently run the organs of state. PCT is also about the different incentives and processes that operate when goods are sought through political means rather than through purely economic means. Its salient feature concerns the distribution of costs and benefits. The political distribution of goods seems comparatively more acceptable, because it concentrates its benefits and disperses costs. Many people can be taxed marginally through which a small number of people can be given large subsidies. This means that the majority hardly notice the wealth that they have lost, whilst the minority become active partisans of the resultant benefits. Politicians seem impervious to the majority and approachable to the minority, who also have some money to contribute to the politicians, which may actually be for the benefits that they receive. Thus, interest groups are created for each particular political benefit programme and it becomes nearly impossible to get rid of their vocalisation.³⁴

³⁴ [See Gunning (2002: www.fortunecity.com/meltingpot/barclay/212/votehtm/cont.htm); Buchanan et al. 1980: 97-112; and Buchanan 1990: 1-17].

Some of the activities that PCT covers, are: -

TABLE 3.1. ASPECTS OF PUBLIC CHOICE THEORY

| Parameter | Description |
|----------------------------------|--|
| Constitutional Government | An examination of the successes and failures of the system of government in which the people govern, and define their government by a constitutional charter. |
| Rent-Seeking | Refers to the act of obtaining special treatment by the government at the expense of the rest of the proletariat. |
| Political Manipulations | Is an examination of the ways politicians interact with each other, the voters, and their supporters to achieve their own goals. Vote-trading and wealth transfers are a few of the methods used to obtain selfish ends and only sometimes, meet the needs of the community. |
| Reality of Collectives | Examines the options involved with solving the many social dilemmas that emanates from living in communities. |
| Voting | Alternative voting methods are examined and evaluated where the simple approaches used have been shown to be defective, as they do not always achieve the desired results. |

Source: Gunning (2002); and Buchanan et al. (1980: 97-112)

b) Public Goods

One of the traditional arguments for the state provision of goods, concerns the nature of the goods provided. All goods provided by the private sector share one important feature, namely, that the provider of the good could charge those who wish to consume it and make a profit in the process. Not all goods, however, share this characteristic. There is a broad category of goods called public goods for which it is either impossible or undesirable to charge. The private sector traditionally avoids producing public goods.

States exist primarily for the purpose of providing goods that must be financed through revenue extractions because the market fails to provide these goods in desired quantities or quality levels. If the consumption of the good by one member does not reduce the supply available to other members, then that good is referred to as non-subtractable. If a good has physical properties such that it is not feasible to exclude one party from the good if other parties are benefiting from the good, then it is referred to as a non-excludable good. Public goods become non-rival when the marginal cost of

consumption is low. Thus, pure public goods are non-rival, non-subtractable and non-excludable in nature. (Gilles and Dimitrios 1994: 1-13)

Further to this, a merit good is used to describe a public good, which is deemed to be of high intrinsic worth and has to be provided regardless of whether people demand it. If it is desirable that individuals should consume more of the good in question, two policy alternatives are available. These are public subsidies and educational information intended to raise the individual appreciation of the benefits. (Perry et al. 1997: 5)

Conversely, private goods share one important characteristic, namely that the marginal cost of consumption is high. Although the private production of non-rival goods is possible, the market will produce sub-optimal quantities. Socially, optimal-pricing requires that the price of goods be equal to the marginal cost of consumption. If the price is set to equal marginal cost, private provision may then be unprofitable. Whenever the marginal cost of consumption is extremely low, it is undesirable to use the price system to ration the good, as efficiency requires that goods at least be provided at the marginal cost of providing them. The market, which would then charge more than the marginal cost of provision, would provide limited amounts of these goods. The argument for public involvement in the provision of non-rival public goods is strong, but the nature of the involvement need not be provision of the good, as ensuring the provision of funding may be optimal in many cases, regardless of its source. (Gilles and Dimitrios 1994: 1-13)

Thus, bank financing may be needed to finance the provision of public goods. As the banks' business migrates from financing the provision of private goods to financing the provision of public goods, the traditional tools of economic analysis need to be extended to evaluate the benefits of goods for which there are no ready markets. If the project produced a private good, the economic costs and benefits would be similar. What would differ would be the distribution of these benefits and costs among the various communal collectives. (Gilles and Dimitrios 1994: 1-13; and Mas-Colell 1980 625-641)

In terms of local public goods provision, influence costs arise because individuals in different jurisdictions consume different local public goods and expend resources to affect their provision and funding. The principle that the provision of public goods

should be located at the lowest level of government, encompassing the relevant benefits and costs, is the basic principle of fiscal decentralisation. Local public goods tend to be provided at a lower quantity when decisions are decentralised than when centralised. With an efficient social choice mechanism and facilitative policy instruments, a centralised government could improve upon the allocation achieved by local governments working independently. (Oates et al. 1999: 1120-1149)

Besley and Coate (1999) discuss the specific nature of local public goods, in that the disadvantage to centralisation is that central governments must provide local public goods uniformly and are unable to take into account the local variances in this blanket provision. Even if individuals had the same preferences for their local public good, their location in different jurisdictions results in diverse preferences over government action. The residents of any jurisdiction wish for their local public good level to be high, for their taxes to be low and the opposite to be true in other jurisdictions.

c) Natural Monopolies

The theory of natural monopolies provides one of the oldest justifications for the state provision of goods. In many markets, competition does not exist and in others, competition is inefficient. Some processes enjoy economies-of-scale where unit costs of provision fall as output rises. When economies-of-scale are present, large organisations produce goods less expensively than smaller organisations and thus tend to dominate the market. Eventually they may drive smaller organisations into bankruptcy and in extreme cases, they become monopolies. Industries in which the conditions of demand and supply are such that when production by a single organisation minimises costs, they are known as natural monopolies. Higher prices will result if more than one producer supplies the market. Furthermore, competition is said to cause consumer inconvenience because of the construction of duplicative infrastructure affecting the movement of people in public thoroughfares. (DiLorenzo 1996: 43-58)

The evidence concerning the relative efficiency of regulated privately-owned utilities compared to public utilities for the state provision of goods is mixed, though the weight of the evidence points to greater efficiency in regulated private enterprises, in comparison to the state enterprise. (Moore 1979: 33)

In many countries it is traditionally the state, which provided the good. The assumption is that the state maximises social rather than *individual* private welfare. However, to induce public enterprises to maximise social welfare is challenging, as social welfare is difficult to measure. Thus, managers of public enterprises do not necessarily maximise welfare, rather, they maximise political support. Tariffs can be set well below sustainable levels with voters paying lower prices for goods, which is very much in line with PCT. Evidence from developed countries supports this theory, and shows that public enterprises tend to charge lower tariffs than regulated private monopolies, practise less tariff discrimination, and adjust rates less frequently. (Peltzman 1971: 109-147)

In the case of a private regulated enterprise, regulation itself has benefits and costs. The benefits are a decrease in efficiency that would exist under public monopolies. The costs include the direct costs of regulatory agencies, higher provision costs because of changed incentives for regulated organisations, and the other unintended side-effects of regulation. (DiLorenzo 1996: 43-58)

d) Rent-Seeking

The term “rent-seeking” comes from the idea in PCT of monopoly rent. Monopoly rent is income earned by an individual able to charge a monopoly price. (Gunning 2002; and Buchanan et al. 1980: 97-112)

Rents are generally the easiest source of income. A rent is money paid for the use of a capital asset or whatever type of good someone might need, but does not own. Loaning money is a form of renting, where the asset may depreciate through inflation and there is considerable risk that the borrower may default. The element of risk introduces the element of profit, but a prudent lender will ensure that borrowers have the assets to guarantee any defaults, and the legal right to recover finance capital lent under such circumstances. Thus, rent-seeking is the expenditure of resources to bring about an uncompensated transfer of goods from another entity. Examples of rent-seeking behaviour would include the various ways by which groups lobby government for taxes, spending, and regulatory policies that provide financial benefits for them at the expense of the tax-payers. (Buchanan et al. 1980: 97-112)

Monopolisation can also emanate from rent-seeking, and the subsequent charging of a monopoly price has two effects. The first is a redistribution of wealth from some consumers to the monopolist. The second is an efficiency loss due to the transfer of resources from a higher-valued use to a lower-valued use. It is thus convenient to divide the consumers into two collectives. The first collective are consumers who decide to buy even though the monopoly price is high. This would result in a transfer of wealth from consumer to seller. The second collective is comprised of consumers, who decide not to buy, and as a result do not lose any money. (Gunning 2002; and Buchanan et al. 1980: 97-112)

The purest form of redistribution is a transfer of money from one collective to another. Besides money, redistributions may consist of the transfer of a right to use resources. When laws are passed that redistribute wealth from one group to another, there is no efficiency loss from rent-seeking. There are, however, investment costs involved, since the prospective gainers and the prospective losers have incentives to influence legislators. The costs of administering redistribution are associated with collecting the additional taxes needed to transfer the money or property, and the costs of distributing it to beneficiaries. In addition to this, one type of cost associated with redistribution is often overlooked; an eligibility cost. A law that causes a redistribution of wealth will also reveal the characteristics of individuals, who are eligible to receive the goods. It is imperative that it specifies eligibility requirements for recipients, as individuals can change their characteristics, which, in turn, changes their eligibility status. If an individual uses resources or sacrifices satisfaction that he otherwise could have had in order to achieve eligibility, his cost is also a loss due to rent-seeking. Such actions are very similar to those performed by rent-seekers. (Gunning 2002; Buchanan et al. 1980: 97-112; and Buchanan 1990: 97-112)

e) The Role of the State in Privatisation

From discussions on the new roles of local government at the 1992 Rio Summit on Sustainable Development, it was defined that “local governments are institutions that construct, operate and maintain economic, social and environmental infrastructure. It oversees planning processes, establishes local environmental policies and regulations and assists in implementing national and sub-national environmental policies. As the

level of government closest to the people, they play a vital role in educating, mobilising and responding to the public to promote sustainable development”. (Klee 1999: 1; and World Bank Website 2000: www.worldbank.org)

From a local government perspective, the decision to outsource services can be seen as the result of national government creating the environment for partnerships, and private companies indicating an interest in producing public goods. (Klee 1999: 14-15)

Private sector participation leads to a more equitable use of resources and is beneficial for all. Nationally-driven legislation endows the local government with the authority to bring-in the private sector. In unitary states, national government directly controls local government, whilst in provincial states, there is an additional level of bureaucracy weighing down upon the local government. The responsibilities of local government are indistinctly defined as those that are neither assigned to another higher tier of government (national or provincial), nor those functions that are specifically restricted by legislation. (Klee 1999: 1; and Humes 1991)

The following diagram is a schematic representation of local government interchanges with the population, national and provincial governments, and the directions that information, resources and influence flow around, or through local government: -

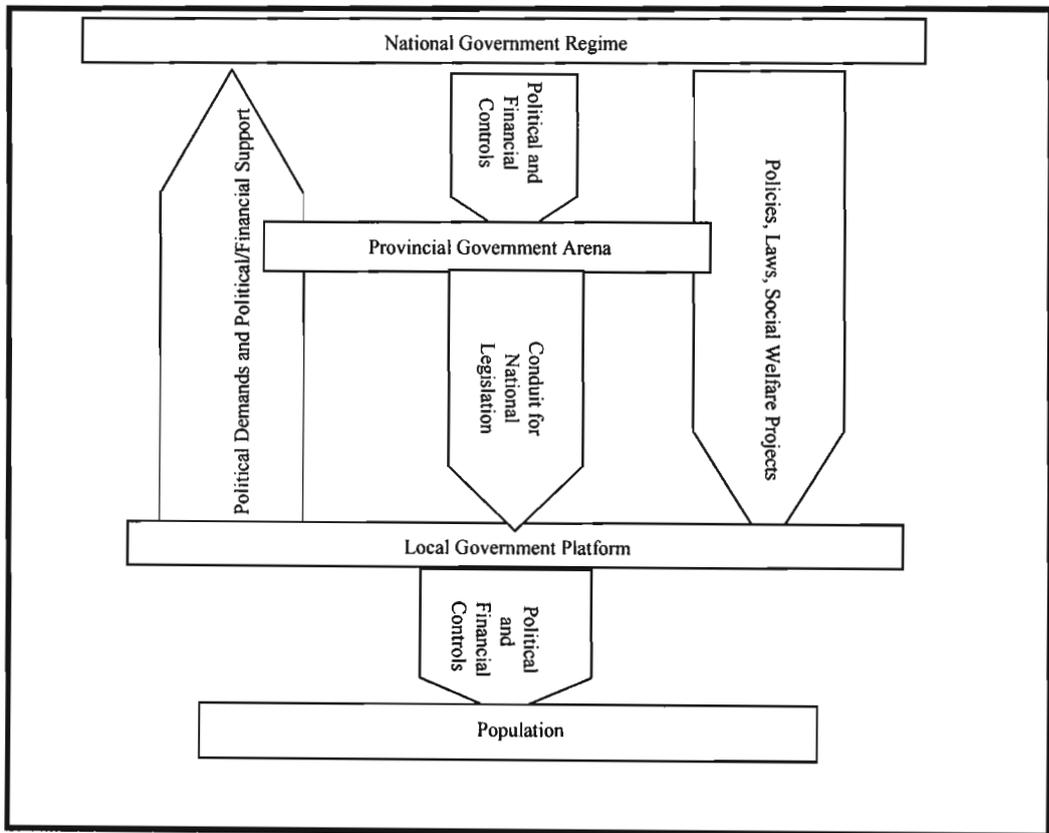


FIGURE 3.1. COMPLEX NETWORK OF INTERCHANGES

Source: Adapted from (Schultz 1979; and Klee 1999: 2) for the South African context, by the researcher.

In Figure 3.1., Schultz (1979) and Klee (1999), depict local government as the interface of the political, judicial, and financial flow systems that operate between governments and citizens. It acts as a two-way conduit, for political demands from the populace to reach national government, and for national and provincial policies to be administered to the nation.

According to Goetz (1993: 199-220), there are new challenges and responsibilities facing local government, which traditionally fell under the auspices of national government. There are four possible general roles of local government in the face of national decentralisation: -

TABLE 3.2. NEW ROLE OF THE STATE

| Parameter | Role |
|----------------------|---|
| Participatory | Local government actively participates with local private entities in business ownership, investment, and economic planning. This is a new role, where local government actively enters into private sector partnerships to stabilise the local economic situation. |
| Regulatory | Local government assumes responsibilities of taxation and regulation to monitor the private market. |
| Facilitative | Local government subsidises incentives to encourage local economic development. Local government seeks to empower and attract potential entrepreneurs, in order to stabilise the local economic situation. |
| Adjustive | Local government provides public goods that are uneven or lacking in newly-decentralised nations and thus serve as the safety-net in providing for social welfare. |

Source: Goetz (1993: 199-220); and Klee (1999: 16-17)

The “regulatory” and “adjustive” roles of local government fill the void left by the removal of the traditional functions of national government and the “facilitative” and “participatory” roles of local government have emerged as new methods to handle horizontal restructuring, after decentralisation. Private sector participation is one of the specific mechanisms used by local governments in adopting these new roles. (Goetz 1993: 199-220; and Klee 1999: 16-19)

An enabling regulatory, legal, and political environment is the crux of any sustainable private sector participation strategy. Mechanisms need to be put into place to minimise the likelihood of transgressions in any private sector participation process, enhancing accountability. Independent regulation is also required to implement acceptable and fair

tariffs. Due to the peculiarities and complexities of local governments, stakeholders face an accelerated learning process in trying to regulate any private sector participation programmes. (Klee 1999; Goetz 1997; Hemson 1997; and Humes 1991)

In addition, decentralisation commits municipalities³⁵ to a greater responsibility for the provision of public services. In situations where municipalities face fiscal constraints, national government may need to provide institutional support, with mechanisms such as enabling and capacity building bodies to improve the municipality's negotiating power in the private sector participation processes. The potential instability of developing countries, personal agendas of government officials (within the profile of public choice theory), and the special merit status of some public goods can create obstacles to facilitating private sector participation. Governments need to provide assurances to the market that political factors will not supercede the public's need of the good. In bringing in the private sector, municipalities must be cognisant of the benefits and pitfalls of private sector participation. They need to ensure that development-maximisation occurs, whilst the objectives of the other stakeholders are still addressed.

Such role changes often require capacity building, which may include the following³⁶: -

- Developing financial forecasting models for the contract;
- Regulation through the proactive monitoring of contract compliance;
- Restructuring budgets to adjust for new development priorities;
- Setting effective tariffs and service-levels as contractual agreements; and
- Meeting infrastructure investment and expansion needs.

Private sector involvement does not relieve the municipality of its responsibility to ensure adequate provision of the service. Given the nature of environmental services, it is inevitable that public regulation of the private involvement will be necessary. Developing such regulatory frameworks can be challenging. Governments must find the appropriate balance between making a private sector participation mechanism attractive to the market, whilst protecting the interests of its citizens. (Klee 1999; Goetz 1997; Hemson 1997; and Humes 1991)

³⁵ Meant in the same context as local government.

³⁶ See [Klee (1999); Goetz (1997); Hemson (1997); and Humes (1991)].

3.3. Private Sector Efficiencies and Ethics

For any privatisation to occur seamlessly, there are two sides of the stakeholders' expectation spectrum that must be met. On the one hand, there is the public, whose access to the good should not diminish in the transfer. At the other end of the spectrum, there is the private sector operator that must exist as a business, whose profit incentive must be fulfilled.

Effectively, these expectations appear to be two seemingly opposing expectations that need to be met, without necessarily prejudicing the other in the process. Emerging out of this "conundrum", is the issue of synergy, that is, the combined use of private sector technologies and work ethic, with the development motive and legislative power of the state.

Efficiency is sometimes achieved at the expense of the development motive, whether it is in the over-pricing of the goods in private hands or the downsizing of affected workers in the transfer. Thus, efficiency and ethics are also two opposing factors that need to be balanced in any privatisation attempt. One of the solutions to possible private sector corruption would be independent regulation. The people most at risk from corruption are the poverty-stricken. It is essential that their abilities-to-pay for goods be taken into consideration in any privatisation attempt.

For this transfer to be succinctly achieved, measures of the benefit of the change need to be evaluated. Other quantum measurements that need to be taken into account, are the actual cost of the change itself, known as the transaction costs. Whether these costs are adequately compensated by the change, that is, the cumulative savings, needs to be accurately predicted prior to the actual commissioning of the privatisation initiation.

a) Efficiency and Equity in Business: The Link to Ethics

Although efficiency and ethics are traditionally considered as trade-offs in public policy, they are interdependent and may work in the same direction towards overall improvement of well-being, given appropriate methods of policy-design and implementation.

“Economic efficiency” is one the most influential economic concepts in use today. However, the term is often misused and misunderstood when applied in practice. Also often poorly understood, are the strengths and limitations of using economic efficiency alone, as a guide to practical public policy-making and the relationship of economic efficiency to social justice. (Bai et al. 1997: 265-280)

According to Bai et al. (1997: 265-280), economists define and discuss “economic efficiency” in terms of either a change characterised by the fact that the gainers from it can fully compensate the losers and still be better-off themselves, or a state in which it is impossible to make someone better-off without making someone else worse-off.

Implicit in these definitions is the idea that economically-efficient changes can provide the opportunity to make someone better-off without making anyone else worse-off. An economically-efficient course of action might, amongst other trade-offs, necessitate making some people worse-off, even in the unlikely event that all those who gained from it were prepared to compensate those who lost from it. (Bai et al. 1997: 265-280)

According to McCallum (1997: 1), the following definition of “economic efficiency” is generally accepted by economists: “A change will produce an improvement in economic efficiency if the monetary gains of those who gain from it exceed the monetary losses of those who lose from it. The monetary gains of the gainers, in this context, are calculated on the basis of the maximum they would, given informed choice, be prepared to pay to secure their net gains. The monetary gains of the losers, in this context, are calculated on the basis of the minimum they would, given informed choice, be prepared to accept as full compensation for their net losses.”

Hence, for a course of action to be deemed economically efficient, it is not necessary for those who gain from the course of action to wish to fully compensate those who lose from it. Neither is it necessary that those who gain from the course of action, would be able to fully compensate those who lose from it, even if they wished to, due to barriers to the transfer of resources from one individual or group to another. (Bai et al. 1997: 265-280; and McCallum 1997: 2)

The term “efficiency” also refers to the relationship between the cumulative benefits of a situation and the cumulative costs of the situation. This popular concept of efficiency is more intuitive than the technical concept of efficiency known as Pareto-efficiency or Pareto-optimality³⁷. (Posner 1992: 13)

Thus, economically efficient courses of action may generate a surplus, but this surplus is redistributed with other costs coming into the equation. The way in which the idea of economic efficiency is usually expressed seems misleading because it over-emphasises the relative importance of economic efficiency over other social objectives. In particular, undertaking what would normally be regarded as an economically efficient course of action may result in making some people worse-off. (Bai et al. 1996: 265-280)

Another of the more common descriptions of allocative economic efficiency is contained within the Paretian framework of the Kaldor-Hicks test, which is normally used to refer to what constitutes an economically efficient change and the Pareto-efficient state. The Kaldor-Hicks test and the Pareto-efficient state is not mutually exclusive; implicit in their definitions are the idea that economically efficient changes can provide the impetus to make an entity better-off without making another worse-off. The Kaldor-Hicks tests indicate that it is not what constitutes an economically efficient state, but what constitutes an economically efficient change, that is of greater importance. (Polinsky 1989: 7)

According to Stiglitz (1988: 100), the test postulates: “State A is to be preferred to State B if those who gain from the move to State A can compensate those who lose and still be better-off. Compensation here is hypothetical and the Kaldor-Hicks criterion suggests that State A is preferable to State B even if compensation does not actually take place.”

When an economic framework of analysis focuses on which legislation is likely to enhance social welfare, that is, is Kaldor-Hicks efficient, then actual consent of the parties becomes minimal due to the overall welfare objective. Thus, welfare economics employs value-judgements about what good should be produced, through which means,

³⁷ “Pareto-optimal” refers to the ability of a solution being beneficial to one entity such, that it does not have any negative effects on any other entities or situations.

and the manner in which wealth should be distributed to collectives. However, individuals in a collective have a unique set of value judgements, which are dependent upon their attitudes, religion, philosophy, and politics. There is considerable difficulty in aggregating these value judgements in advising policy-makers about decisions, which affect the allocation of resources. (Trebilcock 1993: 19-20)

Hence, in practice, some mechanism has to be developed to measure the social costs and benefits of change. The social cost of a given output is defined as the monetary value, which is equivalent to the compensation to all stakeholders affected by the change. The social cost is the opportunity cost to society as a collective rather than just to one organisation or individual. (Stiglitz 1988: 100)

Economic efficiency is also defined as the outcome that would be produced by perfect competition. The circumstances under which perfect contracts are achieved, occur under the ideal conditions of trade within a model of perfect competition. The model of perfect contracts is an adaptation of the model of perfect competition, taking account of the central concerns of contract law. It is difficult to establish what would have happened in a truly free-market environment, as the world's states are under considerable regulation, and even an open market requires some regulation to enable it to work. (Cooter and Ulen 1988: 230)

b) Competition and Failures

According to Viscusi et al. (1996), for a market of perfect competition to exist, a number of conditions have to be satisfied. These include buyers and sellers engaging in voluntary exchanges with access to complete information. Governments, must provide for the enabling environment for contract compliance through regulation. The good must also be excludable and substitutable with a choice of alternative suppliers for the seller. There must also be open market-entry and exit conditions with a free flow and access of information about the goods. The market would fail then, under certain conditions. This occurs when a good is unique as in a natural monopoly situation where there are no alternatives. Market failure will also be imminent when buyers or sellers are compelled to enter into non-voluntary exchanges, or when there is a restriction on the exit and entry of goods into the market.

The condition of perfect information, equally shared amongst all consumers and producers, is a basic assumption of welfare economics. Another assumption is that complete markets exist with a market for every type of good and for every type of risk. Neither of these assumptions is ever fulfilled as information is always imperfect, and the market seldom provides all goods for which the cost of provision is less than what individuals are willing to pay. (Stiglitz 1988: 100)

Among the many theoretical constructs that have been developed for the analysis of public policy and social choice, the market-failure model has been particularly influential amongst policy-makers. The market failure model centres on questions of externalities, and the ability to set efficient prices for goods. (Becker 1974: 300-301)

These externalities occur when goods are non-rival. Market failure also occurs due to steep transaction costs, information deficits, monopolies, and other such competitive failures. It assumes that the private sector is the best problem-solver except in instances where market competition is flawed and prices are distorted. (Hulett and Davis 1977: 34-37)

A common type of market failure occurs when prices are not a true reflection of their actual worth, that is, when the prices of goods give false signals about their real value, thus diminishing the communication between consumers and producers. (Becker 1974: 300-301)

Market failures are related to an easily identifiable source and they can be corrected with well-defined state interventions. Incomplete markets are pervasive in the economy and difficult to correct, as nearly all markets are incomplete and information is always imperfect. Asymmetric information also works against producers. A lack of information induces banks not to lend to certain collectives or to lend at rates that cover costs *and* the risks that exist. As a result, banks lend at higher interest rates. If lenders had access to adequate information about the borrowers, it is often argued, lenders would be willing to lend at lower rates. In the case of adverse selection, it is human nature to seek protection when at risk and to be less careful when not at risk. In any given population, some people are at higher risk than others with respect to a certain good provision, especially public goods. (Stiglitz 1988: 101)

Arrow and Lind (1970: 364-378) postulate that the state can spread this risk over the population, and is therefore in a unique position as an investor. Thus, when states act as investors, they neither prefer nor avoid risk. States normally choose projects on the basis of their expected net present value. For the market, which is risk-averse, there is always a trade-off between risk and return. As investors cannot insure against commercial failure and normally avoid excessively risky projects due to the absence of any insurance against commercial failure, some projects are more attractive to the state than to the market.

Schmidt (1998: 569-579) assesses the theory from a financial perspective, viewing the cost of capital to the state as higher than the cost of capital to the market. Sometimes, however, the cost of capital to the market might be higher than the cost of capital to society. When the market contemplates a project, therefore, it may use a higher discount rate than the state and reject projects with a long-term cost-recovery duration. Thus, some projects that may be highly beneficial to society may not be attractive to the market. In these cases, state intervention, through subsidies, can improve welfare. The size and strategic nature of the project may be another justification for state provision. Schmidt sees the state, by its very nature, as commanding more resources than any single market entity, and is thus able to undertake large, strategic projects that require capital investments. Moreover, some large projects may be attractive to foreign investors, but many countries are reluctant to allow foreign ownership of strategic resources. State provision may be justified even if the project produces a private good, when the nature and size of the project are such that the market would not be able to undertake it.

c) Benefits Analysis

Cost Benefit Analysis (CBA) and Cost Effective Analysis (CEA), which is a particular aspect of CBA, are economic techniques that produce information intended to improve the quality of public policies. Here, quality refers to a measure of the social well-being that a policy conveys to society. Conceptually, CBA could be used to rank policies on the basis of their improvements or reductions towards societal benevolence. (Kopp et al. 1997: 1-2)

Social welfare is a benchmark that allows the comparison of conditions amongst various world states. Politicians and the general public routinely compare countries on the basis of their gross domestic product (GDP) per capita, and often evaluate economies on the basis of household disposable income and the distribution of that income. However, many of the fundamental aspects of well-being are left-out by such simplifications. (Kopp et al. 1997: 2-3)

CBA is meant to convey information to decision-makers, as to whether a policy could make society better-off than the status quo. The normative character of CBA is derived from the assumption that the satisfaction of individual preferences gives rise to individual well-being and that the *cumulative* social well-being is a function of individual well-being. (Sagoff 1993: 2-7)

CEA analysis then emerges as a study of two or more CBA policies to determine which policy leads to the least net detriment of social welfare (Kopp et al. 1997: 3). Individual measures of well-being are premised on a fundamental economic assumption that the satisfaction of individual preferences gives rise to individual well-being. Economists accept this assumption implicitly, as a logical premise that individuals know what choices are beneficial to them, and behave in a manner consistent with this objective to increase their well-being.

CBA is the accumulation of values of individual welfare to form a total communal welfare, which means that CBA measures all individuals anonymously. Thus, individual or collective welfare is not weighted more heavily in comparison to others. Hence, if a policy increases the welfare of the affluent and decreases the welfare of the indigent, but the affluents' gain exceeds the indigent's loss, the CBA anonymity analysis would still value this net change as a total improvement in social welfare. (Kopp et al. 1997: 8)

The answer to the problem of aggregating the elements of a list is to use a factored weighting index. An index would be inadequate if it contained only a subset of elements that were deemed important to a comfortable life. The question of practicality takes account of the fact that an index of well-being is something that will be used by individuals, including legislators in assessing institutional contributions to welfare. An index serves to aggregate elements of a list into a single value. In the simplest case,

aggregation as a measure of individual satisfaction is accomplished by weighting the elements and summing. These weights are derived from the economic values obtained from the observed choices of individuals, which economists attribute to underlying preferences. (Scanlon 1991: 1-9; and Kopp et al. 1997: 10)

According to Kopp et al. (1997: 7), the following parameters underpin CBA analysis: -

TABLE 3.3. COST BENEFIT ANALYSIS PARAMETERS

| Parameter | Result |
|-----------------------------|---|
| Comparability | CBA attempts to capture in a single index, all the features of a policy decision that affect the well-being of society. This approach permits the comparison of policies that affect different attributes of well-being differently, that is, it permits the decision-maker to compare dissimilar products on the basis of a single attribute, which is the index of social welfare that is common to both. |
| Ignorance Revelation | CBA requires information regarding the effects that a policy can have on social welfare and provides the analyst with a template for collecting and organising information. This knowledge provides the decision-maker with valuable insight into the level of ignorance regarding important attributes of the policy. |
| Transparency | The results of a well-executed CBA can be clearly linked to the assumptions, theory, methods, and procedures used in it. This transparency can add to the accountability of public decisions by indicating where the decisions are at variance with the analysis. |

Source: Kopp et al. (1997: 7)

d) The Role of Regulation in Privatisation

The tariff-setting approach of determining the private operator's rate-of-return utilises financial principles to value real assets under uncertainty. Generally, rates-of-return are subject to regulation. However, regulation does not account for the constraints that it imposes on the regulated organisation, limiting management's flexibility to react to societal needs, in effect, reducing the social-welfare value that regulation actually tries to increase. (Alleman 2000: 1-13)

Under the current practice in most countries, whenever a customer demands a good, the provider is obligated to provide the good, even if the customer is unprofitable. In the case of an essential good, a provider is bound to service the good's availability, regardless of a lack of profit, which subsequently requires a great degree of flexibility from the provider. (Pollit 2000: 1-35).

Regulation also impacts on capital investment for infrastructure provision, which is either through rate-of-return or incentive regulation. Rate-of-return regulation does not provide the incentive for the organisation to minimise costs or capital investments. (Alleman 2000: 1-13)

Tariff-caps are also used, where a revenue-limit is placed on the organisation, based on operating costs and the rate-of-return on the initial investment cost. The organisation is then allowed to change tariffs only by a general price index. (Copeland and Antikarov 2000; and Alleman 2000: 1-13)

Another distortion created by the regulatory system is the inability to abandon a service. This option is likely to become increasingly restrictive as the market enters the traditional arena of public good provision by the state. Without the flexibility to abandon a service the market is handicapped by its inability to be flexible. (Pollit 2000: 1-35)

Thus, in most cases, the economic regulator will only come into existence because of private sector participation, mainly through a concern for price regulation, service quality standards, and coverage targets. In essence, the regulator seeks to ensure that the service provider does not over-price or under-provide services. (Pollit 2000: 1-35)

One of the prevalent forms of this type of regulation is that it is applied to privatised public utilities to restrict the rate-of-return on capital investments. In order to achieve this, the private sector provider's profits are not allowed to exceed the regulated set profit ceilings. (Takayama 1969: 255-260)

e) Transaction Costs

“The Coase Theorem has had an encompassing influence on the way economists think about inefficiencies. It transcribes that provided the property rights are allocated, a fully-informed rational agent involved in an inefficient situation will ensure through negotiation that there are no unexploited gains from trade and hence an efficient outcome obtained.” (Anderlini and Felini 2001: 1)

According to Anderlini and Felini (2001:2), the bargaining and efficiency version of the Coase theorem can be expressed as follows: “When transaction costs are zero, then bargaining between the parties will produce an allocatively efficient solution.”

Coase’s work on externalities argues that, as long as rights are clearly established, externalities will not cause an inefficient allocation of resources. In many cases, unavoidably high costs would prevent the necessary transactions from taking place. The market finds ways to take account of externalities, that is, ways to internalise them. (Bailey 1995: 37-38)

Implicit in the Coase theorem, are a number of assumptions, one of which is the theory of zero transaction costs. This occurs when voluntary exchange is mutually beneficial and perfect knowledge, including knowledge of production, profit, or operational functions exists. (Anderlini and Felini 2001: 4)

The Coase theorem does not hold when there are difficulties in the negotiation process. With incomplete information, efficient agreements often cannot be reached and delays in bargaining may occur. It is thus clear that the Coase theorem explicitly assumes the absence of any transaction costs or other frictions in the bargaining process. Coase describes the theorem as a catalyst meant to show how unrealistic the world is without transaction costs. (Anderlini and Felini 2001: 4)

Ex-ante transaction costs also arise and are costs that both parties, at each level of negotiation, must pay to move on to the next level of the transaction. Problems created by ex-ante transaction costs are considered a major issue in contractual bargaining. Time is spent preparing for the negotiation, as a variety of tasks need to be carried out

by stakeholders before the actual negotiation can begin. In many cases, before a negotiation can start, stakeholders will need to collect and analyse background information, which facilitates their understanding of the opportunities to be exploited. (Bailey 1995: 37-38; and Anderlini and Felini 2001: 5)

f) Poverty, Inequality, and Willingness-To-Pay

Many economists and social theorists are questioning the policy of the increasing private sector participation in essential service delivery in developing countries. Economists such as Ha-Joon Chang (2002: Kicking Away the Ladder) and Bond (2001: Against Global Apartheid) feel that, with the West's control of the World Bank and the general push for post-Bretton Woods' policies to be prescribed as a prerequisite for funding, there have actually been minimal increases in service delivery, affordability, and accessibility for the poverty-stricken.

Many attempts to privatise in developing countries have been done so without adequate assessment of people's abilities to pay for essential services. The potential for market failure always exists in privatisation within developing countries because of the low abilities-to-pay of affected recipients. Issues of welfarism are juxtaposed against the profit-seeking drive of the private sector, creating an unstable framework for the sustainability of an operation.

Rivera (1996) poses the question as to what increased private sector participation has meant for the world's poor. In order to understand the implications for the poor, one has to define who these poor communities are and what the restrictions that surround them, are.

Wilson and Ramphela (1997: 75) define poverty as not knowing where your next meal is going to come from, and always wondering when the council is going to put your furniture out and always praying that your husband must not lose his job. This was quoted in the context of a poor individual that they interviewed.

According to the South African Participatory Poverty Assessment by May (2000: 5), there are various signs or indications of poverty: -

- Alienation from the community occurs where the poor are isolated from kinship and other communal institutions. Elderly without care and single, young mothers without any support, are generally viewed as poor.
- The inability to provide food for household members.
- Crowded homes with too many children (poor family planning).
- Poor access to basic forms of energy such as electricity, wood or coal.
- Unemployment or poorly paid jobs.
- Families, which are fragmented or incomplete, with absent male parents who have either left, or work in other areas.

In contrast, May (2000: 5-6) defines wealth as being characterised by adequate housing, access to energy, with access to household appliances.

Poverty does not mean a lack of awareness as social reality examples indicate that many individuals are more cooperative than is assumed. Many people vote, pay their taxes honestly, participate in unions and protest movements, and work hard, even when financial incentives may not exist. Even poor people have an inequity-aversion nature, which means that they resist inequitable outcomes, that is, they are willing to give up some material pay-off to facilitate more equitable outcomes for all. (Schmidt 1998: 569-579)

However, with poverty being a major challenge in developing countries, issues of willingness-to-pay (WTP) and ability-to-pay (ATP), become paramount in any privatisation attempts. The development of a theoretical framework on people's WTP is mainly based on empirical findings. Empirical findings have determined that an individual (X) would be more willing to pay for a good (Y), if his counterpart (X') had access to the same good (Y) without him having had it before. The corollary of this would also be true in that (X') would probably value the good (Y) less than (X), simply because he has had prior access. This concept is referred to as the endowment effect. (Bailey 1995: 262-285)

How, then, is WTP used? The issue of whether the desire to pay for benefits generated by a public good should be placed upon an individual or a household, has long been recognised as a practical problem. (Mitchell and Carson 1989: 2-7; and Quiggin 1997: 2)

The choice between individuals and households as units of analysis presents a problem in any study of consumer behaviour. Standard welfare and demand theory is based on individual preferences. The modern theoretical analysis of household behaviour is based on the rejection of the notion that households may be regarded as unitary decision-makers rather than as collectives. Practical considerations of data-collection normally encourage the use of households as the unit of analysis. (Becker 1974: 300-301)

Under appropriate conditions, provision of a public good will be Pareto-optimal only if the cost of provision of the good is less than household WTP. Hence, under the stated conditions, household WTP is the most appropriate measure for use in cost-benefit analysis. (Smith and von Haefen 1997: 1-2)

There are, however, some difficulties with the household WTP approach. Where households are made up of different individuals and there is limited capacity for redistribution, it cannot be guaranteed that the use of household WTP will lead to Pareto-optimal outcomes. In these circumstances, provision of a public good for which household WTP exceeds the cost of provision may make some members of the household worse-off. In this case, elicitation of individual WTP may provide relevant information that is lost when the household WTP approach is used. (Quiggin 1997: 2)

3.4. Globalisation Issues

The migration of developing countries towards neoliberal macro-economic policies has seen a shift in global borders. Transnational companies (TNC's) have identified niche markets in the field of technology and service provision in developing countries and opportunities to maximise their profits. With the expansion of operations, many global companies have brought in much-needed foreign direct investment (FDI). Such finance is assumed to give the required injection needed to kick-start developing nations' beleaguered economies. In the long-term however, such finance has arguably found to

be “a double-edged sword”. Many economists are of the view, that FDI actually depletes developing countries of wealth through the repatriation of profits back to the TNC’s parent country.

McMurtry (1998) sees the complexity of globalisation, its assumptions, goals, structures and processes, to be understood in relation to issues associated with human rights, labour conditions, environmental protection and national sovereignty. These are amongst the chief concerns raised in the debate on globalisation. Often globalisation is seen as either the inevitable next step in human progress, or the evil Capitalist system that threatens the future of coming generations.

a) Globalisation as an Analytical Concept

Understanding the term “globalisation” is paramount to interpreting global governance. Globalisation remains elusive from an analytical point of view, and is a phenomenon that is qualitatively distinct from that of the interdependence of states. The concept of a global public policy, open to private and public sectors, can be a legitimate query from an input and output perspective of corporate governance. (Evans 1997: 1-20)

Ansell and Weber (1999: 77-82) postulate that international state interdependence and globalisation are not mutually exclusive, as interdependent countries need to adjust their local economies in political alignment with their interdependence. To cope with increasing vulnerability, states have seen a need for the creation of international agencies that provide a regulatory framework to manage the relations amongst them.

According to Chesnais et al. (1999), this growth in international relations narrows the distances between states and necessitates closer macro-economic cooperation amongst public sector stakeholders. However, the principal drivers of globalisation are actually micro-economic factors. This arises as companies respond to the spiralling opportunities for competition emerging from the deregulation and liberalisation of transnational economic activities, giving new impetus to the strategic behaviour of individual companies.

This subsequently prompted the transnational movement of finance and technology, which provided the conduit required for companies to enhance their competitiveness, and create a transnational network through which greater wealth could be generated. Globalisation represented the emergence of a single, integrated global market arena that was driven by the objectives of TNC's cutting across multiple political divides. Due to this private sector independence, these TNC's are classified as being "stateless" institutions. (Evans 1997: 1-20)

It is also important to realise that the globalisation of micro-economic activity does not imply that macro-economic performance and management are marginalised. Interdependence and the need for closer macro-economic cooperation between states is an important precursor to globalisation, and remains a critical factor in ensuring the sustainability of global corporate relationships. In fact, with the liberalisation of macro-economic policies governing transnational economic activities, an environment was created that permitted and compelled companies to adopt global strategies to ensure survival. (Deblock and Brunelle 1998: 4-5)

b) The Entry of Transnational Corporations in Developing Countries

The activities of TNC's in the developing world have been the subject of much controversy. This is partly based on negative experiences in the late 1960's, with the inappropriate influence of political decisions, exploitative wages and poor socio-economic conditions for employees of TNC's. In fact, it is only in recent years that their impact on developing countries has been judged more amicably. Comparative surveys by international development agencies of social conditions, effects on employment, choice of technology, and skills-transfer by TNC's to local companies, try to ensure that a positive image of TNC's is now being portrayed. (Wilkins 1995: 95-133)

TNC's are supposed to make a positive contribution to the economic growth of developing countries through their investments, products and services. According to Kozul-Wright and Rowthorn (1998: 1-34), this is primarily achieved by: -

- Translating theoretical knowledge into practical results by the appropriate use of their products and services;
- Providing access to modern technological and management systems in areas such as research, development, marketing, and finance;
- Providing investment and employment; and
- Providing training in all areas and within all hierarchical levels.

The benefits for host countries from a TNC's presence vary according to its structure, product range, services, and sphere of activity. Suitable regulatory, legal and financial conditions are required to reinforce potentially positive effects, whilst their absence may have a detrimental effect. (Kozul-Wright and Rowthorn 1998: 1-34)

According to Hansen (1998), there are minimum requirements for good TNC business practices. There should be no fundamental difference between developed and developing countries in the quality of products and services, their safety, and information for its use. TNC's should set an example in their wage and social policies by applying the standards of local industries as observing the legal minimum is inappropriate for the social conditions in poor countries. The same objectives and principles must be uniformly adopted in the safety of production and environmental protection globally. TNC double standards in operational areas that affect the health of people is unacceptable and these companies need to take corrective action when problems occur in their areas, regardless of the existing local regulations that monitor their activities.

c) Conflicts of Interest

Lall (1993) sees a main area of concern as TNC's seek profit-optimisation and thus pursue their own corporate objectives such as achieving an acceptable rate-of-return on capital investments, gaining a greater market share, or ensuring its long-term

competitiveness; rather than supporting the host country's socio-economic development objectives.

According to Hansen (1994:14), the result is that TNC's and host country authorities have diverging opinions on very fundamental issues, some of which are: -

- A TNC's research policy and its strategic direction may not coincide with the developing country's needs.
- A TNC's location policy is not driven by a host country's need to become self-sufficient through the local production of specific goods.
- Patents, which safeguard the results of a company's research, may lead to conflicts, as developing countries prefer the lower-priced product generics.
- The repatriation of profits to the country of origin of the TNC, is in most cases essential in order to contribute to overhead costs incurred at global head-offices, as well as to corporate profits as repayment for financial risks. Host countries often consider this as a regrettable drain on limited foreign exchange.

In addition to the fact that society in many developing countries is still shaped by relatively under-developed state institutions and huge income disparities, corruption has especially deplorable effects. It leaves an indelible impression in the long-term and destroys all sense of integrity and trust. Any corrupt conduct by TNC's is a flagrant disregard of communal welfare. People most affected by this are the socially-powerless or indigent, who are arguably the ones who constantly receive smaller dividends in comparison to those who have the means and power to influence public agendas. This often means that normal services, to which all citizens are entitled by the law, are denied or greatly diminished when provided to persons from the lower socio-economic classes. Thus, the affluent receive greater dividends and are in a position to dispense favours to alleviate mistreatment. (Jenkins 1987: 23-35)

Lall's (1993) negative views on TNC activities is expounded in his theory that the affluent are able to extort patronage because of the money that they wield for favours from TNC employees, who might be so poorly paid that they are unable to maintain even a modest standard of living. They feel that they have no other recourse than to seek alternative sources to supplement their income. When their wage expectations are not

met, for many of them, loyalty to their employer diminishes and they begin searching for opportunities to improve their financial status. TNC's conduct the same rent-seeking activities with poorly-paid state workers in their host countries. For TNC's based in various parts of the world, this miscellaneous arrangement leaves them with varying degrees of freedom as an impetus for corruption.

Habitual corruption triggers a chain of reprehensible effects, which guide new state and TNC regimes, sometimes exposing the corrupt character of old regimes to "wrap themselves in a guise of legitimacy". It is precisely this collective facade that underpins the important fact that most people in developing countries reject corruption because they suffer the most under it. (Jenkins 1987: 23-35)

d) Foreign Direct Investment

Helleiner (1998: 1441-1480) has written extensively on foreign direct investment (FDI) and its effects. FDI refers to the capital that TNC's or foreign agencies bring into a host country in expanding its operations or markets, or to exploit local conditions. FDI has many implications for socio-economic development. The theory assumes that market forces ensure an efficient allocation of resources internationally so as to maximise development. The point of conjecture for arguing that FDI is development-enhancing, is that some countries are well-endowed with conditions that are conducive to certain types of FDI. Developing countries will attract capital in sectors where labour costs are low, or where natural resources are abundant, as these are the sectors where they enjoy comparative advantages. The international relocation of capital and productive resources should enhance global development and facilitate the process of adjustment in both the host and the source countries. The inflow of capital to developing nations makes investment capital available, and thus speeds up development and provides greatly-needed foreign exchange. Moreover, by providing a bundle of proven managerial skills and technology, FDI enables the host country to exploit its comparative advantages more efficiently. The most important impact on developing countries is that FDI is trade-enhancing, in that developing countries enhance production and export capacity.

Lall (1993) emphasises the *negative* impacts of FDI with the changing international division of labour, and argues that the growing presence of TNC's in the global economy has set developing countries on a road towards dependent capitalism. Hymer (1972: 113-140) sees FDI as a mechanism for the transmission of wealth, which is in line with Prebisch's "dependency school of thought", which sees these forces as destructive for developing countries rather than wealth-enhancing. The analysis generally views FDI negatively, and argues that the adverse effects of FDI for developing countries far exceeds the positive effects. The main focus of the "dependency school of thought" is on trade and political relationships, and applies to all industrial operations whether it is TNC or a local company, although TNC's are the main agents of such dependency. FDI is driven by numerous factors; declining profits in the developed nations; and the need to find outlets for surplus funds generated by Capitalism; the need for western capitalists to gain access to new markets. (Hansen 1998: 13-16)

e) The Micro-Economic Perspective

Why do TNC's invest in developing countries, that is, why do TNC's prefer to overcome the enormous obstacles associated with setting-up operations in foreign locations, instead of simply selling their products and services on the market? Macro-level theories do not reveal why TNC's successfully compete with locally-based companies in foreign locations, despite the greater obstacles that TNC's may seem to encounter there. (Hansen 1998: 24; Hymer 1972: 113-140; and Hymer 1993)

TNC's, compared to local companies, face certain additional costs in terms of their knowledge of the local market conditions. Under perfect market competition, local companies would have the same access to capital and information as TNC's and no FDI would occur. Therefore, TNC's must have certain additional advantages not possessed by local companies. The TNC possesses an array of such advantages, which are called "ownership-specific" advantages. These could be technological, organisational, economies-of-scale, managerial, entrepreneurial, and financial advantages. The micro-economic approach has evolved into two main perspectives, one of which has focused on the market-power view and on the ability of TNC's to restrict competition and engage in multifarious business activities across borders. This approach is called the

“global reach school”. The term “global reach” refers to the highly invasive worldwide presence of TNC’s and essentially focuses on the adverse effects of TNC’s on a host country’s economy. (Hansen 1998: 24; Hymer 1972: 113-140; and Hymer 1993)

A TNC’s ownership-specific advantages enable it to compete successfully in foreign locations. The “global reach school” believes that TNC’s are likely to be efficient and well-managed, thus improving welfare, but the market-power derived from their ownership-specific advantages, could also be transformed into political power. TNC’s would use this to generate market imperfections, remove competition, and eliminate opposition. The aggregate result is generally negative for the host country. (Jenkins 1987: 23-35)

Some of the more important effects expounded by the “global reach school” are: -

TABLE 3.4. GLOBAL REACH SCHOOL IDEOLOGIES

| Effect | Description |
|---|---|
| Inflow of Finance Capital | The apparent transfer of capital will often be compromised by the fact that TNC’s acquire loans in developing nations, thus diminishing local companies’ opportunities and access to finance and investment opportunities. TNC’s also, through the expatriation of profits, drain host countries of local capital. |
| Transfer of Technology | Technologies provided by TNC’s are too capital-intensive, with no local linkages created and are aimed at producing goods that meet the needs of the affluent. In cases where developing nations will need any advanced technologies possessed by from the TNC, such technologies might be over-priced. |
| Transnational Organisational Network | TNC’s import foreign management styles to local business methods, which undermines local management practices. Also, most employees in managerial positions in TNC’s will be foreigners. |
| Loss of National Self-Determination | There is a loss of sovereignty in developing nations, due to the inflow of foreign capital. TNC’s are stateless in comparison to local companies and thus difficult to control. As the TNC has only an allegiance towards its country of origin, it will, in many cases, choose profit over development objectives. |

Source: See Hansen (1998: 25-29); Hymer (1993), and Lall (1993); and Lall and Streeten (1977: 72)

f) Transnational Service Corporations

A special type of TNC is the Transnational Service Corporation (TSC). Their specific focal area is in the provision of services internationally. One of the main reasons behind the TSC expansion of operations globally, especially in developing countries, has been the deregulation and privatisation of large public service provision utility systems. These TSC's have undergone important organisational changes in the last thirty years which have resulted in a changed focus and unlimited frontiers around the globe. These TSC's generally are the largest TNC's that spread throughout the globe. (Petit 1998: 134-163)

The internationalisation process for TSC's can be judged to be a more complex transition than that of the other TNC's. The market provision of services is hindered by specific problems of trust, information flow, common knowledge, and the liabilities between buyers and sellers. There are asymmetries of information and externalities involved in these trades, which are dealt with by systems of regulation, customs, joint ventures, and shared knowledge, which are very regionally specific. This adds to the challenge of setting up operations abroad. Joint ventures where the TSC forms a partnership with a local subsidiary helps ease its entry into the foreign market and promotes their subsequent establishment. These types of arrangements also lead to take-overs, mergers and acquisitions. Due to the complexity of service provision, there is a resultant diffusion of the local patterns of service provision by the TSC. (Petit 1998: 134-163)

g) The Role of Subsidiary Companies in Transnational Corporations

Increasing evidence suggests that the entrepreneurial activities of subsidiaries play a key role in determining the success of TNC's. TNC's need to be innovative in order to sustain their market share and competitive advantages. They face considerable pressure in responding effectively to local market needs, while achieving global efficiency. This has led some TNC's to establish subsidiaries giving them greater autonomy to pursue their objectives. Subsidiaries differ in the scope of their operations, goals, strategies, and organisational cultures from their parent TNC's. These differences may exist so that a subsidiary can be innovative, able to take risks, and engage in entrepreneurial activities.

Such subsidiaries have also become more proactive in their operations by reaching the market with innovations ahead of their rivals. Restricted subsidiaries have been less able to engage in entrepreneurial activities, or have been constrained in their efforts by the parent TNC's controls. (Zahra 2000: 3)

Changing local conditions, which puts pressure on subsidiary managers to respond to opportunities that exist in the local environment is one of the challenges facing subsidiaries. These may include strategic knowledge of local markets and the unique political, legal, and socio-economic conditions that enable the smooth flow of business. (Zahra 2000: 5)

Interactions with customers can also improve the subsidiary's ability to identify innovative ideas. Innovations are often developed in response to requests and ideas from suppliers and customers. This can only occur at a local level. It can also help the subsidiary to refine its innovations and improve their ability to meet the existing demands of the market. (Zahra 2000: 7)

Thus, the role subsidiaries play in today's TNC's has undergone significant changes in recent years, from submissive compliance with global head-offices' directives, to developing and implementing strategic initiatives deemed important by local managers. Subsidiary managers are closer to their local markets and aware of its needs. The freedom to act independently has enabled subsidiary managers to pursue innovative activities that *they* see as important for the successful execution of the TNC's overall objective. (Zahra 2000: 9)

3.5. Concluding Remarks

According to public choice theorists, the reason behind the move towards privatisation is the apparent historical inability of state officials to provide an adequate level of public good provision. Although it does not imply total state failure, PCT is of the opinion that state bureaucracy and lethargy have resulted in the inefficiency of service provision.

However, due to the very nature of these goods generally being non-excludable, non-rival and non-subtractable, a situation of natural monopolisation emerges. It is at this

point that the principles of the market, which focus on competition and the deregulation of trade, seem to contradict the effects of the natural monopoly phenomenon.

As the private sector focuses its work ethic and targets towards that of optimum profits, which is only achieved by minimised costs or maximised revenue, the development ethic diminishes. Also, with a case of a sole provider due to the natural monopoly scenario and the lack of competition to keep tariffs down, the increasing commodification of the public good is probable.

However, private sector protagonists reveal that the synergy and hence the benefits that are derived from the work ethic of the market, facilitates the possibility of keeping stable prices on goods, whilst still being able to generate a profit. This is achieved by working on efficiency gains that the market is capable of achieving. The quantification of such a gain would be deemed to be economically efficient, if the compensation to the consumers of public goods is more than or equal to any losses that might emanate from the transition of public good to essential private sector commodity.

Thus, the debate that seems to be emerging is whether the market can be trusted to maintain the social ethic that is needed in the case of essential or merit goods, that is goods that are necessary for the continuation of basic human life itself.

The risk of market failure is always high with regards to such a transition. If the regulation is going to be strong, then there is a diminished capacity to earn a profit. The non-ambient environment within which the market has to perform could have disastrous effects on the poorer consumers who cannot afford to have a lengthy discontinuation of the public good rendition. With issues of ATP and WTP, particularly in developing countries, the market stands a significant chance of failure, unless the contract that binds the public good provision and the regulation that monitors it, is to the benefit of the market.

Benefits analysis is an essential tool used to calculate the supposed rent accruals to all stakeholders prior to the commissioning of any endeavour. Such analysis could support or reject a privatisation model arrangement, where the costs could be high to all stakeholders including the state, market, and ultimately the consumers.

What is also essential in such a case, is to assess the rent accruals in terms of benefits of a financial and socio-economic quanta, because there are ex-ante costs that exist in every transaction, which may be such, that in aggregation, it may even exceed the financial benefits and savings that are envisaged in the transition from public to private hands. These costs include lawyers' fees, feasibility studies, tendering and process management costs that may be measured in terms of fees and sundry expenses, or in terms of the time-utilisation of employees from the state and market sector that are involved in the transition.

What seems common to this privatisation process and seems to pervade developing countries' attempts to bring about some measure of success in public good provision, is the entry of the TNC's. These companies are virtually stateless and whilst they may sometimes bring with them much-needed FDI and perhaps technology, the long-term effects of their operations are controversial. This is especially apparent with regards to the immediate benefits that FDI may bring and the possible flight of money from the host country later on, after the operation has paid for the initial sunk costs of investment by the TNC. The methods and motives of TNC's are also questionable, and susceptible to constant scrutiny from critics of the increasingly globalised nature of such companies.

The most successful TNC's are those that tie themselves into the environments of the host countries' within which they operate through subsidiaries. This makes the enabling environments more facilitative and ensures that localisation brings about a greater understanding of expected obstacles. Thus, subsidiaries provide country managers with some degree of autonomy in making decisions that may not be the same as the parent TNC headquarters.

In conclusion, the nature of this transition is highly controversial, opposition is immense and as history has shown, it is not without valid reason. However, whether a formula can be found that somehow incorporates the private sector work ethic and the development motive of the state, is a scenario that is situation-specific.

CHAPTER 4: LINKING WATER SUPPLY AND SANITATION TO THE THEORETICAL FRAMEWORK

4.1. Introduction

Chapter 3 provided a framework, which defined the privatisation paradigm in a general theoretical context. As this study focuses primarily on water supply and sanitation (WSS), this chapter integrates the theoretical framework specifically into the WSS context. Because this is also primarily a study of the South African situation, references are also made to certain issues that contextualise South Africa. This chapter essentially unravels some of the pertinent issues that emerge in the privatisation of WSS and the factors that underpin this paradigm shift in communal service delivery. The structure from Chapter 3 is maintained in terms of its uniformity.

4.2. The Emergence of Privatisation

a) Public Choice Theory

When one applies the principles of public choice theory (PCT) to WSS, it is in within the tenets of rent-seeking, political manipulations, and voting that the most apparent applications can be found.

From the discussion in Chapter 2, PCT was developed on the assumption that the average politician or state official is motivated by self-interest and self-preservation. The postulate implies that the public good service rendition plays a secondary role to the private aspirations of the average state bureaucrat. There is empirical evidence that supports this theory. (See case studies on Buenos Aires in Chapter 5 and India in Chapter 6). However, this theory is also counteracted by succinct examples of public sector WSS delivery. (See Chapter 9 for a case study discussion on Umgeni Water.) PCT is very polemic in that many state-centric service delivery advocates dispute it.

WSS and its subsequent failure in some instances of state provision fit well within this ambit. In traditional municipal WSS service provision, certainly in that of developing countries, where the voice of the poverty-stricken is easily undermined, there has been

minimal focus on improving infrastructure operations and maintenance (O&M), water quality, environmental considerations, and general access of supply. Large-scale corruption due to power-wielding state bureaucrats has been noted from some of the empirical evidence. (See Chapter 5 for a discussion of the Indian experience that provides evidence of this profile for some of its public sector managers.)

It is at this juncture that the debate about which entity should be the provider of WSS services, the public or the private sector, emerges. When the private sector enters the arena, the public good status of WSS changes to become more of an economic commodity. Corruption and self-benediction occurs in both spheres, yet, the effects having different implications.

As the state works with public funds, it is almost spurious not to expect the exemplary use of such funds. In the private sector, it is public knowledge that profit is the main incentive in its service-provision endeavours. Also, corruption at a state level is harder to regulate, as it is the state itself, which has been the traditional “watchdog” or regulator for its citizenry. Corruption, then at a market level, although not condonable, is easier to monitor or regulate.

As the empirical evidence and case studies will reveal, WSS and its control and regulation is a source of great power and can be manipulated through the efforts of self-enriching, corrupt state bureaucrats. This is achieved through kickbacks from politicians in office, who, in turn, use the public sector WSS vehicles as leverage for power in politicking. This has been particularly evident in developing countries. (See the case study examination on the Indian subcontinent in Chapter 6.) False promises of infrastructure provision, marginal tariffs, and accessible services serve as bargaining chips to capture votes into political office.

b) Public Goods

In order to understand the nature of WSS as an essential life-giving and health-preserving good, as well as an economic commodity, one needs to define WSS’s status as a value-good.

WSS enhances public welfare (see discussion in Chapter 1), therefore, in essence, the following parameters can be used to define it: -

- There is no rivalry in the consumption of water, as one individual's consumption of it does not reduce another individual's capacity to have access to and enjoy its benefits, albeit in a potable form, free from pollutants and cases of extreme drought or extreme arid conditions, notwithstanding. It is thus non-subtractable, due to its natural abundance.
- It is, in the most, non-excludable, due to its life-sustaining necessity, one cannot exclude a member of the community from enjoying the good, *especially* if other members are already receiving the good. This is applicable especially in the South African context, where it is legislatively decreed that every household should at least have access to 6kl of free potable water per day.
- Water supply can also be categorised as non-rival due to its marginal cost of consumption being low. The cost of extending WSS services to additional users is generally minimal, but this depends on the type or service-level connection provided and as to whether the customer is willing to pay for the household connection.

To what extent is WSS a private or public good? Is it always non-excludable, non-rival and non-subtractable? Generally, it is a public good, but a public good in the sense that it retains the intrinsic qualities that were discussed above. But WSS can also be regarded as an economic commodity that retains some public good definitions of non-excludability, non-subtractability, and non-rivalness. WSS has both private and public good aspects, depending on its supply and distribution. The *degree* to which WSS is a public good, will justify what aspects and externalities predominate for determining appropriate tariffing policies.

Concomitantly, WSS could become significantly *less* public good in character, depending on the way it is packaged. With the widespread use of metering and increased awareness about water scarcity in many regions, WSS can *almost* become a rivalrous good. WSS industries can actually be restructured in order to introduce competition and hence incentives for high performance and the fair treatment of customers. The main thrust of such restructuring is towards the vertical unbundling and competitive tendering of isolated functions in the industry. These take the form of

management contracts where different aspects of the service, from water treatment and supply to infrastructure maintenance, can be outsourced to different companies that provide the most competitive and efficient tariffing and service, respectively.

In the past WSS was regarded as a pure public good, which prevented the private sector from entering the WSS field. Together with this, there now exists the issue of customer apathy where, in the absence of exclusion, customers have a selfish incentive to understate their need for WSS. They may be deliberately unwilling to carry the cost that corresponds to the marginal benefit that they derive from WSS provision, in the full knowledge that they cannot be excluded from the service. This problem arises in cases where the number of customers is large and the market mechanisms for valuation are not available. In practice, this problem means that there is little incentive for private markets to provide public goods, for which values and demand are difficult to define and costs are difficult to recover. It may then seem logical for the state to provide WSS.

WSS also fulfils the criteria for being considered a merit good, as access to clean water for personal hygiene has economic benefits as a lack of access to it, can reduce the capacity for work due to the contracting of diseases from unhygienic living conditions associated no access to adequate WSS. (See Chapter 1 for a discussion of these negative effects). Thus, there are also significant benefits associated with safe WSS provision. These benefits largely take the form of direct health and nutrition benefits, especially in relation to debilitating diseases. Although there is considerable controversy about the exact nature and extent of these interlinkages, there seems little doubt that they exist. WSS is thus a good, with intrinsic human worth and has to be provided regardless of whether or not people actually demand its provision.

c) Natural Monopolies

The natural monopoly phenomenon emanates from the distribution of water supply rather than from the intrinsic water properties itself. Since WSS is a tandem service provision, sanitation inadvertently becomes a natural monopoly as well.

The construction and maintenance of WSS distribution networks presents a difficult problem and a potential cause of market imperfection. Once a system of WSS

infrastructure is built, the owner of the system has a monopoly advantage in the market. If only one set of pipes exists in an area (as is usually the case), the owner of those pipes can exercise market power and charge a price for WSS provision in excess of its marginal cost. According to the World Bank, other means of obtaining water, such as water delivered by tanker-vendors, typically involve costs from ten to twenty times higher than buying water through a piping system, so competition is marginal. (World Bank Website 2000: www.worldbank.org)

To illustrate the natural monopoly phenomenon of WSS service provision, a case with two competing WSS service providers covering the same area, such as a municipal jurisdiction, is considered. With two service providers rendering the WSS service, there has to be two competing sets of infrastructure networks, treatment plants, etc., that will probably not be used at full capacity. The total infrastructure construction cost would be twice as much as for one infrastructure network cost, assuming that each and every customer had the right to choose his supplier.

Consequently, two networks have to be constructed to virtually every neighbourhood and every street. It is not possible to target the movement of a particular group of water molecules to a specific customer or the eradication of his particular sewer water to the treatments plants, so two companies cannot utilise one joint network on a partial basis for a particular time period. Due to the physical characteristic properties of a liquid, the water molecules from different companies cannot be differentiated, and neither is water transfer technologically-specific. Water supply from one company *cannot* be destined for a pre-determined customer.

Due to its nature, customers, both industrial and domestic, will require water to be supplied and sewer water to be eradicated on a continuous basis, throughout the day. Furthermore, two different service providers essentially splits the customer base. Depending on the type of split, it will then take a much longer time for the service provider to amortise the capital costs invested in the construction of the WSS infrastructure.

Added to this, the stability of market equilibrium is problematic when multiple, competing suppliers own networks with high fixed costs. Competition will then tend to

force WSS tariffs back down to marginal costs. At marginal costs, no service provider can break-even on costs expended, thus rendering it difficult to recover the fixed costs spent on constructing the piping system network. This effectively creates the natural monopoly nature of WSS and its traditional motivation for state provision.

Thus, WSS requires economies-of-scale to become a successful service provision, from both the social perspective, as well as the financial perspective. By virtue of one service provider producing and supplying larger quantities of water and treating larger quantities of wastewater and sanitation, the marginal cost of production or processing becomes systematically cheaper. The essence of WSS as a natural monopoly becomes evident in that, in the event of there being more than one service provider, the actual end-cost to the customer actually increases. Hence, for the typical residential user, a general situation exists where water can be obtained at lowest cost from a single dominant supplier within that geographic region.

Due to the natural monopoly status of WSS, the possibilities for corruption with regards to tariff-setting and profiteering are tremendous. In many WSS privatised concessions throughout the globe, profits of about 40 percent (Hall 1999), which is twice the international average for concessions, is common

d) Rent-Seeking

If WSS provision were privatised and not regulated, as a natural monopoly, prior to privatisation there may involve significant rent-seeking costs if different companies compete for the tenders. In traditional rent-seeking models, the resources expended on capturing a monopoly position are significant. A private monopoly company tenders for a bid with deliberately lower prospective service tariffs to win the tender. With such unscrupulous tendering, this implies that unregulated privatised WSS could cease to serve as a viable option. The transition to privatisation should thus be structured to keep rent-seeking costs to a minimum. Rent-seeking may take the form of a financial equity transfer rather than the consumption of real resources. In WSS privatisation, these rent-seeking costs are associated with what is called the concession, lease, or divestment fee, which is paid to the governing public authority.

Assuming that the state is restructuring its WSS assets to divest or lease to private companies, the winning company will tender an initial concession sum up to the expected profit, adjusted for the element of risk³⁸. Thus, companies will bid marginally lower than the expected profits to adjust for this risk. Rent-seeking then takes the form of a pure cash transfer and consumes no real resources. However, the transferred funds could also be used to meet distributional objectives, such as subsidies to indigent WSS customers, which then diminishes the negative views on rent-seeking.

A financial analysis of privatisation should consider the rent-seeking costs involved with various forms of state ownership and regulation. These costs may be quite high, considering the profits at stake. The imperfect ability of developing country governments to ensure strong regulation before awarding the tender, is a serious problem for the unregulated privatisation of WSS. WSS companies are then unrestricted in setting tariffs. The state should honour and enforce these contracts with credibility. Yet, in reality, empirical research has revealed that many developing countries often cannot enforce contract compliance. Many developing countries are often too incompetent to enforce contracts efficiently, or political pressure intervenes and the government deliberately nullifies or renegotiates certain contracts. (See case study on Buenos Aires in Chapter 5 and the Dolphin Coast case study in Chapter 8 for examples of these occurrences.)

Rent-seeking also occurs from the other side of the socio-economic spectrum. In cases where there is a redistribution of wealth through the cross-subsidisation of tariffs from rich to poor, according to Buchanan et al.'s theory (see Chapter 3, page 57-62), some customers can resort to questionable practices that resemble rent-seeking, in order to gain from this cross-subsidisation. An individual may falsify documents such as pay slips, number of family members, etc., to become eligible for such subsidies. In WSS, this may take the form of gaining entry into the free-service tariff block³⁹, or not paying for a connection charge. Because of the natural monopoly public good effects, he may not be excessively penalised for such actions, especially in cases where a state's focus is on equitable redistribution to the poor.

³⁸ See Dolphin Coast case study in Chapter 8 for a discussion on initial contract tender costs.

³⁹ A free service tariff block is a method of tariffing by some service providers as a way of subsidising the indigent, by providing a portion of water free, before escalating charges in successive blocks. An example of this system can be seen in the Dolphin Coast case study in Chapter 8.

The unscrupulous politician also plays a role in this case, as it is to his benefit to campaign for the marginalised in his community for the purposes of vote-gathering and access to greater political power. Not only does this affect the ability of a WSS state or market provider to be sustainable, it also promotes a culture of non-payment, which has especially devastating local economic effects in the medium or long-term.

e) The State in Creating the Environment for Privatisation

In many countries, WSS services were traditionally provided by a municipal entity in urban areas or by some state authority in rural areas. They either bought purified water from a regional bulk water supplier⁴⁰ or they abstracted and purified water themselves. They also managed the waste-water and sanitation eradication aspects, by operating the waste treatment plants and disposal of the waste.

In the last decade, for reasons of efficiency (see case study on England in Chapter 5), or because of a lack of finance (see case studies on Buenos Aires in Chapter 5 and the Dolphin Coast in Chapter 8), municipalities have decided to seek some form of private sector participation in their WSS services.

National governments participate from a legislative point of view, and also assist by setting up assistance vehicles for municipalities (See Chapters 7 and 8 on the South African experience), so that they can achieve a seamless transfer of the service provision from municipal to private hands.

The decision to privatise WSS is taken at a local or municipal level in South Africa. The local councillors and officials decide whether it has the capacity to facilitate the transfer and that the appropriate mechanisms are in place to ensure regulation of the private body. Thus, many municipalities have seen their roles change in terms of WSS service provision, from that of *provider* to that of *ensurer*. Municipalities could then focus on the issues of accountability and indigent assistance from a WSS point of view.

⁴⁰ A bulk water supplier generally abstracts water from rivers, lakes, and dams and purifies it into a potable form, before selling it in bulk quantities to water service providers. Bulk water suppliers, to facilitate economies-of-scale, generally have a number of water service providers within their jurisdiction.

The municipality should also ensure that in any private sector participation strategy, there is buy-in and a dissemination of information to its communities and union bodies, which affected workers may belong to.

In the South African situation, many banks do not lend municipalities finance to fund infrastructure. The following quotation from Cashden (2000: 8) reveals why South African municipalities are forced to look at private sector participation options: “Pressure to privatise is increased by the view that government is inefficient and unreliable. The South African Infrastructure Finance Corporation charges an interest premium to compensate its shareholders for the extra risk of municipal lending.” This issues is core to the reason that the privatisation of WSS has occurred in some municipalities in South Africa.

4.3. Privatisation Efficiencies and Ethics

a) Efficiency and Equity in Business: The Link to Ethics

One of the most important considerations in WSS provision is the physical access to services, or service coverage across different communities with different income levels. This aspect of equity in WSS service is especially important in the context of developing countries, where service coverage is typically low, ranging from 15 percent to 75 percent of the population. (World Bank Website 2000: www.worldbank.org)

This equity also encompasses the idea of quality, that is, access to reliable, safe drinking water. Also important, are issues of tariffing and affordability. Not all consumers are able to pay for services and will therefore require assistance.

One of the principal aims of privatisation programmes in the WSS sector has been the improvement of efficiency in the delivery of services, where efficiency is defined as a resource allocation that results in maximised net benefits from the use of the resource.

As a theoretical construct that is relatively quantifiable in practice, efficiency has thus been a useful criterion for the analysis of public services as well as business performance. Whether the increase in efficiency has actually occurred is of prime

importance in the privatisation situation. The beneficiary of the efficiency needs to be determined. The winning bidder in a privatisation tender, certainly in the long-run and provided his forecasts are correct, would benefit financially.

If more people receive access to cheaper or more reliable, quality WSS services, they might also benefit, as would those people who did not have the service before privatisation. Private sector finance may put less stress on state coffers but in the long-run, the state may lose out on much needed direct revenue or through the exit of local currency, if it is a foreign entity, which wins the tender.

There is a trade-off to consider in such a case. Do the immediate social benefits of privatisation, assuming that it is a scrupulous private sector service provider, vindicate the loss of state revenue in the long-term? Determining efficiency, with the Kaldor-Hicks system (see Chapter 3, page 69), may be difficult to measure, as it is a case of comparing two vastly different subjects over an extended period of time.

Some might argue that with the block-tariffing system of WSS, the rich begin to subsidise the poor, so the former become the losers. However, if looked at holistically, if the poor receive adequate basic infrastructure service such as WSS, there is less need steal water through vandalism (resulting in the destruction of piping networks through illegal connections for which paying customers have to subsidise). Vandalism of WSS piping networks results in high water losses, which are carried through to those who pay for WSS services. Thus, the monetary efficiency calculation of Kaldor-Hicks becomes difficult to quantify in WSS cases. Other benefits would be a decrease in diseases, proper nutrition, and other indirect spin-off benefits that emerge with access to adequate WSS.

Though representatives of labour oppose privatisation as inimical to the interests of workers, international and local experiences have shown that its effects on employment in developed economies have differed significantly to those in developing countries. In developed countries, complete service coverage, low population growth rates, and overstaffing in public enterprises led to sizable retrenchments during WSS privatisation, in the quest for increased productivity. On the contrary, significant workforce expansions are required in the process of addressing service and WSS infrastructure

backlogs that characterise developing countries. (See Dolphin Coast discussion in Chapter 8.)

Worker unions have continued to claim that they often find themselves in a less conducive environment after privatisation. Workers in the same public enterprise, who previously had the same employer, end up with different employers after privatisation. The result is that workers' solidarity and centralised bargaining rights might be affected. Trade unions have also expressed fears of bargaining with private sector employers whose main focus, they believe, is on cutting labour costs in order to make a profit, as opposed to supporting workers in a state-controlled enterprise, where issues of welfarism are more evident.

It is difficult to generalise about the impact of WSS private sector participation on jobs, partly because it has varied greatly and because distinguishing privatisation's impact from that of related structural adjustments is seldom possible. However, in many cases, employment protection guarantees won by unions have delayed retrenchments, so that figures for the years immediately following privatisation can be misleading. In others, restructuring ahead of privatisation, often in a corporatisation phase (see the literature survey in Chapter 2 for a description of the various service delivery options), has meant that retrenchments have *preceded* rather than followed privatisation. (Chapter 5 provides evidence of this occurrence, in the discussion of the English privatisation case.) Further to this is the fact that, in some cases, employment levels in specific privatised enterprises have not been affected at all or have been increased due to the WSS infrastructure backlogs.

b) Competition and Failures

Applying the theory from Chapter 3 to the empirical evidence, it can be seen that not all individuals resort to rent-seeking behaviour. In fact, as will be seen in the case studies later on, most customers are willing to pay a fair price for WSS. By fair however, it is meant that they are willing to pay some amount for WSS, which is tempered by issues that will affect what this amount is, such as what a neighbouring municipality might be paying for WSS. Due to the natural monopoly status of WSS, there exists no alternative

service providers within one jurisdictional area. Thus, this does not satisfy the criteria for a perfect market situation to prevail.

Defining perfect markets for WSS using Viscusi et al.'s theory (see Chapter 3, page 70), the following parameters are applied: -

- Not all WSS customers are engaged in the voluntary receipt and payment for WSS services. It is an essential commodity, which means that WSS payments are involuntary as it is a legitimate need and not a want or a desire.
- Due to its natural monopoly status, WSS does not allow the average customer to switch from one service provider to another. Even in the case of vendors, it is usually one vendor that services a particular area.
- WSS, as has been established, is generally not excludable.
- Due to its nature of controversy and the high regulation required in a privatised context, WSS has a restricted market-entry and exit system. Concessions generally run for thirty years and the service provider cannot opt out, notwithstanding commercial or other real failures.
- Information is generally accessible. However, due to the Greenfield⁴¹ area of the privatisation phenomenon, poor predictivity indicators and knowledge of the systems exist.
- Regulation does occur, as it is high on the list of any privatisation agenda. However, the chances of poor regulation and the regulatory capture having occurred quite frequently, as the empirical case studies will reveal. (See the Buenos Aires case study in Chapter 5 for an example of this phenomenon.)

The above application of the theory implies that the WSS service provision in private hands is very susceptible to market failure. In order to minimise such adverse conditions and the potential for failure, independent but enabling regulation is required with appropriate enabling legislation. A significant degree of state intervention will always be necessary to ensure that provision is not only economically efficient, but also socially equitable and environmentally sustainable.

⁴¹ Essentially a new area of focus, that is still in an explorative phase.

There is also the risk of market failure due to a lack of information. WSS companies also incorporate risk assessments in tenders that should ideally cover population growth parameters, demand levels, and other revenue-influential issues. However, it has also been known that many private sector bidders at the time of the bid, deliberately understate prospective tariffs, in order to win the contract. It is only when the contract has been well-grounded, that the state has to renege on its tight controls and regulations with regards to tariff-capping, and accept a tariff increase review, or risk the failure of the concession itself. This tariff review increases the tariffs so that the private sector can now generate a succinct profit in the long-term. The municipality, in turn, cannot risk a chance of admittance that there has been a failure of the concession and that other companies may have lost the tender, who may have tendered lower tariff-charges that may have been a more accurate reflection of the tariffs required for the concession to be a profitable venture in the initial bid. (See the Dolphin Coast case study in Chapter 8 for an example of this extraordinary review of tariffs.)

Applying Arrow and Lind's theory (see Chapter 3, page 72), most private sector bidders would avoid such projects, had there not been a mechanism for state intervention to ensure that the project is propped up as much as possible, and that an environment exists for the concession to continue. (See Chapter 8 on the Dolphin Coast case study for an example of such contractual safety-nets.)

The WSS private sector business does not have a risk insurance against commercial failure, it is thus counterbalanced by the states' almost altruistic attitude in ensuring that the concession does not fail. This altruistic attitude is also likely to conceal the failure of the privatisation attempt so that the unions and general opponents to private sector participation would not use this as a weapon against future privatisation projects.

Asymmetric information also has an effect on the financing institutions. In developing countries such as South Africa, banks are averse to lending monies for WSS capital projects since most municipalities lack creditworthiness. The risks are too high, due to the poor rates-of-return or poor user-pays principles amongst the poverty stricken. There is a fear that monies lent will not be recouped, certainly in the short-term. If national government legislates that banks must lend to municipalities, it is generally less than the social optimum and the finance does not cover the initial costs of capital infrastructure

projects. Hence the need for municipalities to turn to other sources of financing especially in the WSS field, to bridge the gap that exists between the indigent and affluent. However, banking institutions are more open to lending finance to transnational service companies (TSC's) who are less risky in terms of providing the collateral backup for WSS projects when compared to municipalities. This is one of the primary reasons given by municipalities in that they are forced to embark on the private sector option to ensure WSS provision. (See reference to Cashden's commentary, Chapter 4, page 99.)

c) Benefits Analysis

Adequate access to WSS facilities is a basic human need. This implies, amongst other things, that lower-income households will tend to spend a large proportion of their disposable income on WSS. Moreover, their expenditure on WSS will be proportionately much greater than that of richer households. This is not only a consequence of decreasing proportional consumption levels, but rather, an inequality in access to public facilities, as water is cheaper from a network than from a vendor.

User-charges from the WSS customers to finance operational expenditures involve several issues, which include: -

- The economic effect of WSS tariffs.
- The charges for existing and new-users in the case of network expansion.
- The affordability of tariffs by different users, that is, willingness-to-pay (WTP) and the ability-to-pay (ATP).
- Issues of cost-recovery.

In the financial cost benefit analysis (CBA), the unit of analysis is the individual project. A financial analysis of the entire WSS industry is referred to then, as the cost effective analysis (CEA). Therefore, a focus on the additional financial benefits and costs to the WSS utility, attributable to the project, is maintained. In contrast, the economic CBA evaluates the project from the viewpoint of the WSS utility by providing projected balance, income, sources, and the applications of funds.

The focus of the WSS operational CBA is on the financial benefits and costs of the project intervention. Hence, the company's WSS sales revenues are determined on a "with-project" and a "without-project" basis. In this way, the contribution of the project to the total revenue of the utility is estimated.

The project revenues are usually determined for different groups of users, such as households, state institutions, and commercial or industrial establishments. Each may have a different consumption pattern, may be charged a different tariff, and may respond differently to tariff increases.

Different methods can be used to provide estimates of operations and maintenance (O&M) costs. One approach is to estimate the O&M costs as a percentage of aggregate investment costs. Another approach might be to analyse the utility's past performance and to relate the total O&M cost to the volume of water distributed or treated. A third approach relates specific costs items to specific outputs and aggregate them. For example, costs of electricity and chemicals could be calculated on the basis of a specific requirement per volume of water distributed or treated and the labour requirements could be calculated on the basis of the number of employees per connection. The elements of O&M costs may include labour, electricity, chemicals, materials, overheads, bulk water charges, insurance, and other sundry charges. (The Dolphin Coast case study in Chapter 8 and calculations in Appendix 7 reveal how these expenses are used to finally calculate the predicted profit of the concessionaire.)

For WSS projects, the weighted average cost of capital is typically used as the benchmark to assess the financial viability of the project. A project may generate sufficient returns to allow for full recovery of all investment and O&M costs, while still yielding a small return-on-investment. This return may, however, not be a sufficient incentive for the owner to make the original investment or maintain it.

Foreign private investors will be looking for returns on equity that also includes, an allowance for risks, such as political and economic factors. Private domestic investors will also have alternative investments; financial assets or other productive activities such as water ownership rights. State investment, on the other hand, may be guided by

whether the funds are accessible, by the real cost of investment funds, and the economic benefits of the project.

Once the costs and benefits, including external effects, have been identified and quantified, they should be valued. Decisions by the producers and users of project output are based on financial prices.

In assessing WTP's and ATP's within a jurisdictional area of provision for WSS, it also is best to use a stratification method of analysis, where issues such as socio-economic status and ATP are taken into the calculations as a weighted factor. (The CBA and CEA analysis is illustrated in the Dolphin Coast case study analysis in Chapter 7 in the evaluation of surveys and financial projections to determine profits.)

d) The Role of Regulation in Privatisation

The WSS company may actually produce a greater quantity and quality of WSS outputs than under highly-regulated alternatives. In developing countries, the key challenge is to provide customers with at least minimal amounts of WSS and not to satisfy all optimality conditions, which may be difficult to achieve.

If a TSC owns or leases WSS assets and has sufficiently close relations with the host government, it may be given some latitude to charge the efficient tariff-discriminating natural monopoly outcome. In practice, however, governments frequently impose uniform tariff rules, or restrict tariff discrimination by regulating WSS companies.

The objective of regulation is to provide a mechanism to ensure that the private service providers do not abuse their WSS monopolies and that the public interest is protected. A strong regulatory system achieves these objectives by ensuring the maximum possible public access to information on all aspects of the services provided, including the operators, and conducts public hearings on issues such as tariff-levels and profiteering. The level and type of private sector participation in the provision of WSS services impacts on the regulatory structure needed.

Regulators have found it difficult to address the problem of the WSS monopoly without inducing other distortions. One approach grants private ownership but places a limit on tariffs. This, however, gives the private company an incentive to skimp on service and product quality. As with all tariff controls, the supplier will raise the real tariff to its desired level by lowering the quality of the product. Not only will quality decline in the short-term, but also long-term investments in system maintenance will be sub-optimal. This problem is particularly prevalent in developing economies.

Furthermore, rate-of-return regulation brings a new set of distortions in the form of higher costs. As rate-of-return regulation is practiced, WSS companies are guaranteed a minimum as well as a maximum rate-of-return. Without the minimum guarantee, WSS companies would not participate in the process, as too much profit will then be sacrificed or the risk is too big for them to take. WSS companies therefore use internal expense increases as a justification for their tariff increases.

Leasing and concession WSS agreements provide an attempt to overcome the basic problem with natural monopoly regulation. These institutional arrangements, however, do not avoid the fundamental problems associated with regulation. These agreements typically regulate WSS tariffs and rates-of-return to various degrees, either implicitly or explicitly. In this regard they involve the welfare losses associated with tariff and rate-of-return regulation. Leasing and concessions may provide for a more informal kind of regulation, given the ongoing relationships between the WSS company and the relevant government, but in the final analysis, either the service provider is free to adjust its tariffs or it is restricted. If tariffs can be set freely, there is a return to, effectively, an unregulated natural monopoly.

e) Transaction Costs

One of the main arguments that unions, workers, and anti-privatisation campaigners use against privatisation of the WSS sector, is the high transaction costs associated with the transition. In developing countries where the phenomenon is still relatively new, there are high costs associated with feasibility studies, lawyers' fees, consulting costs, administration costs, contract compliance, and sustainable regulatory expenses.

There is no perfect knowledge of the utility function due to the highly-localised specific parameters that change from country to country, and at a micro-level, from one regional jurisdiction to another. TSC's tender for a concession based on marginal or generalised knowledge of such schemes in neighbouring countries, or from empirical evidence. There is a transition period, where the TSC actually has to play a learning role to attain a full understanding of the markets. (The discussion in the Dolphin Coast case study in Chapter 8 investigates this occurrence.)

f) Poverty, Inequality, and Willingness-To-Pay

In principle, if individuals are charged according to the degree of benefit they derive from a WSS provision, so that the level of provision of WSS is equal to the desired level of consumption, then a socially-optimal level of WSS could be provided. However, it may be difficult to elicit this information from customers due to their suspicion of tariff increases. Given the difficulties of determining the appropriate level of tariff payments and of enforcing them, there is a strong case for state provision of WSS to be cross-financed through general taxation. If tariff payments are required to finance WSS provision, then the amount of WSS demanded would be less than what is in the social interest, because of difficulties in eliciting the full participation of all concerned in proportion to the private benefits realised.

According to the World Bank (2000: www.worldbank.org), privatisation assistance toolkits, the distinction between the WTP and ATP is central to the evaluation of tariff-setting in WSS. It is often assumed that if individuals are willing to pay for basic WSS service, they will arguably also be *able* to do so.

An individual or household may express their WTP for an essential service, despite the fact that doing so would require cutting-back on essential food intake. Sacrificing one need in order to fulfil another should be taken as an indication of a low ATP. The degree of duress faced by an individual or household in paying for a basic good or service is then a good indicator of the ATP.

Doing something freely requires the absence of necessity or duress. It is precisely this requirement that is violated when individuals state their WTP for a good or a service, despite their lack of ATP for it.

The WTP may be higher than the ATP if the need is sufficiently strong, even if this entails failing to adequately meet other needs. The expressed WTP for WSS services is observed to be high in developing countries, resulting from the urgency or need for WSS and the high direct and opportunity costs associated with the acquisition of WSS. However, this does not mean that the ATP for WSS is as high.

Although an individual or a household may express a WTP for a WSS service and may have enough income to do so, this may present an unacceptable strain when placed in the context of other equally pressing needs. WTP for WSS may be inferred from the actual high expenses of households on vended water, although this can in no way be seen as an indication of ATP, since high expenditure on vended water may be simply the consequence of a lack of other alternatives. (See Karachi case study in Chapter 7.)

4.4. Globalisation Issues

According to Vivendi (2000: www.vivendewater.com), globally, WSS is provided by public sector entities. This may change, but will not transfer the “lion’s share” of the industry from public to private hands. It will not happen in the foreseeable future due to the controversy that such transitions evoke from various anti-privatisation bodies.

The past decade has seen the growth of a new phenomenon, that is, the TSC utilities. With the increasing privatisation of WSS services, either through the outright acquisition of WSS-related infrastructure (referred to as divestment) or through concession contracts, several TSC’s have been engaged in aggressive growth programmes aimed at ensuring increased global market share and shareholder profits. Many do not welcome the phenomenon of the growth of the WSS TSC. There are strong and powerful opponents of private sector involvement in WSS, who regard the phenomenon with grave concerns, particularly around the issue of exploitation.

There are several reasons for the unprecedented growth of these TSC's. Firstly, the privatisation and deregulation of WSS services, which places these services in the hands of the market. In virtually all instances, the marketing strategies of the main international WSS TSC's explicitly target nations undergoing privatisation and the deregulation of their WSS sector. Secondly, the TSC's are attempting to meet investor demand for profits through acquisitions, since the provision of WSS services itself do not provide sufficient returns. The demand for WSS grows more slowly than the economy as a whole. So the TSC's have to look to acquisitions, as it may be the only way to achieve further growth, by finding related businesses to which the TSC can add value. In this way, energy provision and other utility services become absorbed into the TSC's areas of expertise. Finally, financing criteria from international funding agencies such as the World Bank favours multi-utility service providers for many development projects. (World Bank Website 2000: www.worldbank.org)

This requires TSC's either to broaden their scope or to develop partnerships with other TSC's. For this reason, smaller local WSS companies often find it difficult to compete with the larger WSS TSC's. This trend towards the domination of the industry by a few big companies shows no signs of abating. At present, approximately 5 percent of the world's population or 300 million people, receive WSS services from private companies. (Vivendi Website 2000: www.vivendewater.com)

TSC's are also reputed to bring-in foreign technologies through their subsidiaries in developing countries. (The Dolphin Coast case study in Chapter 8 contradicts this, but the Buenos Aires case study in Chapter 5 does support this to some extent.) Very few local companies are granted WSS provision contracts. This is especially evident in developing countries, where the top four global WSS TSC's provide almost all the WSS services. Local WSS companies find it difficult to achieve the economies-of-scale, which the TSC's can.

The following table reveals the major WSS TSC's and their area of operations: -

TABLE 4.1. WATER SUPPLY AND SANITATION TRANSNATIONAL SERVICE COMPANIES

| North America | Europe | Asia | Mid-East and North Africa | Latin America | Australia | Sub-Saharan Africa |
|----------------|--------------|--------------|---------------------------|----------------|-----------|--------------------|
| Vivendi | Thames Water | AWG | ONDEO | ONDEO | ONDEO | Thames Water |
| Azurix | ONDEO | ONDEO | Vivendi | American Water | Vivendi | Vivendi |
| United Water | Vivendi | Vivendi | SAUR | Vivendi | | ONDEO |
| ONDEO | AGBAR | Thames Water | | AGBAR | | SAUR |
| Aquarion | SAUR | | | SAUR | | |
| American Water | | | | AWG | | |

Source: World Bank Website (2000: www.worldbank.org)

The following table indicates the (1997-values) privatised percentage of the total WSS markets and their projected estimates for the year 2010: -

TABLE 4.2. PRIVATISED WORLD MARKETS

| Proportion of WSS Services Privatised ⁴² | | | |
|---|-------------------------------------|---------------------------------------|--|
| Region | Current Percentage Privatised: 1997 | Estimated Percentage Privatised: 2010 | Current Value of Privatised Market (\$US billions) |
| Western Europe | 20 | 35 | 10 |
| Central and East Europe | 4 | 20 | 4 |
| North America | 5 | 15 | 9 |
| Latin America | 4 | 60 | 9 |
| Africa | 3 | 33 | 3 |
| Asia | 1 | 20 | 10 |

Source: World Bank Website (2000: www.worldbank.org)

⁴² Exact predictive figures for the Australian region are unavailable, as the industry is still mainly in public sector hands with continuous debate on the entry of private players, although there are some existing private contracts.

It is believed that by 2010, 80 percent of WSS provision will still be in public sector hands in Asia, Eastern Europe, and the United States of America, whilst in Western Europe and Africa, 65 percent will be held by public sector entities. It is also predicted that only in Latin American countries will public sector ownership be below the 50 percent margin. (Vivendi Website 2000: www.vivendiwater.com)

The major WSS TSC's service the following number of people globally: -

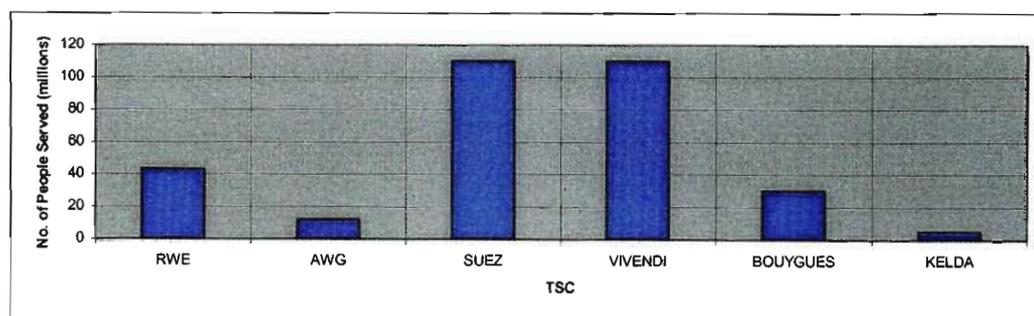


FIGURE 4.1. TRANSNATIONAL SERVICE COMPANIES' GLOBAL CUSTOMERS

Source: World Bank Website (2000: www.worldbank.org)

The following are the major WSS TSC's and their annual turnovers: -

TABLE 4.3. TRANSNATIONAL SERVICE COMPANY INCOMES

| Annual Income, Profit and Size of Major International WSS TSC's | | | | |
|---|--------------------------|-----------------------------|-------------------------------------|-------------------------|
| Parent Company | Principle WSS Subsidiary | Subsidiary Turnover (US\$m) | Subsidiary Operating Profit (US\$m) | Employees in Subsidiary |
| Vivendi | Water Division | 11 904 | N/A | 67 000 |
| SUEZ | ONDEO | 8 463 | 1 953 | 17 670 |
| RWE | Thames Water | 3 998 | 1 358 | 23 000 |
| Bouyges | SAUR | 2 231 | 108 | 23 000 |
| AWG | Anglian Water | 1 080 | 439 | 7 000 |
| Kelda | Yorkshire Water | 797 | 315 | 3 000 |

Source: World Bank Website (2000: www.worldbank.org)

The two largest water utility companies are French multinationals. Suez-Lyonnaise des Eaux and Vivendi, previously known as Generale des Eaux. Worldwide, it is the French multinationals that have garnered the largest share of the concessionary market, with Suez-Lyonnaise des Eaux and Vivendi leading the way in terms of market share globally. However, the African market is held captive by the smaller-focused SAUR, which seems to target the developing economies. (See Dolphin Coast case study in Chapter 8 for a discussion on SAUR.)

In England and Wales, by 1989, ten WSS utility companies were privatised under the Thatcher government. Prior to this, England and Wales had a number of smaller public WSS utility companies that were merged to form regional water service providers to achieve necessary economies of scale. This eased the transition towards privatisation by the Thatcherite government at the time. The difference between the English / Welsh transition and that of the French system was one of privatisation versus a public-private partnership (PPP) system. (See Chapter 2 for a discussion of these privatisation options.) The English / Welsh WSS utility companies were born out of the same public sector entities that existed prior to 1989, with profitability and service delivery now becoming a focus of the utility. (See English case study in Chapter 5 for a discussion on the development of the English WSS TSC's.)

In addition to the above, there are some WSS utility companies that are growing in America, Italy, and Germany. Most of these companies have other interests and are not necessarily focused on the WSS industry. There are various areas of conflict concerning TSC's managing WSS schemes globally. Chief amongst these would be the ultimate drain that these TSC's have on the host countries' wealth.

Already, many developing countries have suppressed the growth of their own local WSS companies as result of the proliferation of TSC's. TSC's are targeting them with access to finances for infrastructure provision that host countries and their municipalities do not have.

However, experience has also shown that certainly in the WSS sector where there may be an infrastructure backlog, the likelihood of an increase in local employment to construct, operate, and maintain capital projects, is high. If job losses do occur, they

would probably occur after the completion of capital infrastructure, and when the TSC begins assessing employee workload efficiencies to maximise on profits.

Many TSC's also form alliances or initiate joint ventures with local companies and form subsidiaries in order to ease them into the WSS market. Local companies will be more aware of local conditions than the TSC and with the promotion of legislation dealing with growth and skills-transfer to local companies; it is probably in the TSC's best interest to form joint venture subsidies.

Topography, the degree of aridity, knowledge of the local markets, and WTP environments, are all factors preventing TSC's from entering into the provision of WSS services with ease. In fact, most TSC's that do work without local assistance, generally end up outsourcing many activities and operations in order to fast-track their entry into the market. (See Dolphin Coast case study in Chapter 8.)

The application of the theory concerning globalisation and its effects with regards to the emergence of the TSC in WSS privatisation is revealed in greater detail in the empirical and investigative case study analyses.

4.5. Concluding Remarks

The controversy over WSS provision actually occurs when it changes from a public good to an economic commodity in private hands. It is important to note the fact that both these services are interlinked from an infrastructure, business, social, and health perspective. Whilst the theory may sometimes apply only to water supply or only to sanitation, their mutually associative relationship renders it acceptable that the theory applies to both services, due to their grouping as a single service provision.

There is arguably some measure of positive benefits from private sector efficiency for WSS. Empirical evidence indicates that, generally, though not always, when the private sector provides the service, their water losses are generally much lower than that of the state. Their tariff-recovery rate is also much higher, and with these savings and efficiencies, the customer benefits. However, indigent people face strict credit control policies in the privatisation process, which might marginalise them.

With the outright state ownership of WSS infrastructure assets control, the record of state provision has been varied. In developing countries, where state ownership and WSS service provision has been the norm, tariffs are routinely set well below cost-recovery levels in support of development maximisation. Thus, less than half of supplied water is actually paid for, and large segments of the population go without formal services because of the effects of poor cost-recovery. (World Bank Website 2000: www.worldbank.org)

Hence, for socio-political reasons, governments have little incentive to reduce costs. This also has an effect on the maintenance of WSS systems, the introduction of innovations. Countries around the world are thus moving away from state ownership and embracing various forms of private sector participation.

Low ATP's in developing countries leads to poor tariff-recovery for WSS provision. As a result, there may be little incentive for private markets to provide WSS services, as value and demand are difficult to define. It is then logical for the state to step-in and provide welfare goods such as WSS, especially when, as is the case of development infrastructure, they enhance productivity, health, and the economic well-being of the citizenry.

It is this primary factor that renders WSS services to be a social development service. Other related factors also explain why infrastructure services such as WSS have been traditionally supplied by the state. The presence of the economies-of-scale, network delivery systems, high sunk costs, and barriers to entry, compartmentalise infrastructure services such as WSS as natural monopolies.

The market power derived from monopoly conditions may lead to abusive tariff-setting practices if the monopoly operates on pure profit-making motives. Natural monopoly production characteristics, in the case of basic necessity goods such as WSS, have often led to state management and ownership, or private operations with strong regulatory constraints.

The value of basic services to society and the impact that the absence of such services might have on individual, household, and societal well-being, has traditionally led the

state to maintain control over WSS provision. This development role has minimised the under-provision of services to certain sectors of society, where cost-recovery may be low due to possible low ATP's or WTP's.

It is also in the government's interest to provide WSS free-of-charge for a certain portion or at reduced tariffs. WSS service provision has a crucial role to play in preventing environmental and social externalities, such as poor public health and reduced productivity, which ultimately negatively affects the economy, and burdens finances from national health budgets.

The fact that WSS is a merit good is explicit. Lack of access to WSS facilities has very disastrous micro and macro-economic effects for a country. The health-related problems associated with the preceding scenario are an alarming probability facing most developing countries.

The reality is that WSS can *only* be regarded as a natural monopoly. The risks associated with market failure are therefore high. As there is no self-regulation due to a lack of competition, as would be the case of a sole provider of WSS, the tariffs are largely unchallenged from a market point of view. It is only the possibility of strong regulation that can create the mechanisms of control to regulate this natural monopoly phenomenon, if utilisation of the synergies and the work ethic of the private sector WSS companies are exploited. However, even strong regulation cannot guarantee the *sustainability* of WSS provision.

Private sector providers are not without controversy, as there seems to be just a few global market players dominating the WSS privatisation market. The risk of fiscal drain in the long term, as well as foreign technologies that may be labour-minimising, may not be beneficial for developing countries. TSC's have developed a bad name, due to monopolisation of the market and poor operations in some areas. In some cases, large-scale profiteering has occurred, very early in the development of such projects. This historical poor corporate governance has resulted in large-scale and effective opposition from many institutions. Even if a private sector company is committed to a project and has the potential to make it work, it generally enters a privatisation project with a negative public image.

In many cases, privatisation projects have been unsuccessful because of poor benefits and financial analysis, or the deliberate under-valuing of proposed tariffs to win tenders. This can result in market failure if the state does not concede to demands for tariff renegotiation and chooses to over-regulate through tariff-capping rather than allowing higher tariffs for WSS. Either way, the poor customer is still the loser, with a lag in service delivery if remunicipalisation of the service occurs, or unaffordable services if the private sector provider is allowed to renegotiate the tariffs.

PART B: COMPARATIVE INTERNATIONAL EMPIRICAL AND CASE STUDIES

Part B is essentially a comparative global investigation of water supply and sanitation private sector participation cases.

Both chapters provide an empirical framework, which serves as a comparison to the South African context in Part C. The attempt here, is to assess the comparative manner in which a facilitative environment was achieved, the reasons behind, and characteristics of private sector participation in water supply and sanitation provision.

In Chapter 5, the case of English privatisation provides an example of a developed country and the different factors leading-up to this change in service provision. This is followed by a discussion of the Buenos Aires concession, one of the largest to occur globally, for which there has been both praise and criticism from different quarters. These two case studies are discussed from the available secondary literature.

Chapter 6 continues with a global privatisation comparison, and is part of an investigative study that the researcher undertook himself in India in mid-2000. India has experienced some small-scale privatisation, but the opportunity for market expansion is very large. Pakistan, with its attempts at a Karachi concession, on the other hand, went considerably further than India in its privatisation attempts. This was impeded and shelved however, due to vociferous opposition from the unions.

CHAPTER 5: COMPARATIVE INTERNATIONAL EMPIRICAL STUDIES

5.1. Introduction

The two international empirical studies discussed in this chapter are that of the English divestment case and the Buenos Aires concession. They are comparative in the sense that they provide a contrast or display commonalities to the South African context and its privatisation attempts. They also provide an understanding of the reasons that promulgated their privatisation process, and the effects of different enabling environments on its success.

Both the English and Buenos Aires cases differ in their methods of private sector intervention, and the external environments that facilitated each separate transition. The Buenos Aires case was eased-in over a much shorter timeframe in comparison to the English case, whose private sector entry spanned almost two decades.

Of greater importance is the different socio-economic classification of both countries. As the discussion will reveal, the reasons behind private sector participation in water supply and sanitation (WSS) provision differ between developing and developed nations. In addition, whereas the English case was essentially a national endeavour, in Buenos Aires, it was a localised one. This has several implications from the views of economies-of-scale that are generated, which will be discussed throughout the text.

5.2. Foreign Empirical Study Investigation: England

5.2.1. Aim of this Empirical Study

In comparison to other case study analyses, this study is investigated primarily to understand the reasons for private sector participation in WSS in a developed country. This study provides an insight into the mechanisms that were used to initiate this transformation. Essentially, this serves as a comparison of the process between developed and developing nations. The English / Welsh⁴³ case is also unique in that it has been one of the few cases of complete divestiture of the WSS system. It provides an insight into the benefits and negative impacts that emanate from this option.

5.2.2. The Reasons for Privatisation

The first companies to supply England with water were privately owned. WSS services in England and Wales were then taken-over by municipalities from the late nineteenth century, with some municipal authorities operating public limited companies (PLC's). These were providers who ensured provision through large, joint regional municipal providers to achieve the necessary economies-of-scale. There were also a few private water-supply companies scattered throughout the region. (Lobina 2001: 1)

The WSS industry was divested in the late 1980's by a Conservative Party-led government on a neoliberal campaign. The supporting motivation that was proffered by national government to support the privatisation agenda was a mounting capital investment bill required for infrastructure rehabilitation. The government wanted to fund this through finance-leveraging mechanisms, and sources other than itself. (Green 2001: 1)

However, this lack of funds for investment is not so readily accepted by researchers, who believe that the state had the power to decide how its fiscal funds were actually allocated. Essentially, the municipalities were not cash-strapped, so it was more of a paradigm shift in service delivery that was driven by *policy change*. Claims by the

⁴³ Although it is both England and Wales that have divested their water supply and sanitation system, for scriptural ease, it is referred to as the English divestment in the ensuing discussion.

government of the benefits of privatisation were not supplemented by any evidence from comparative studies or international reviews of the actual performance of public and private sector water companies. The regional WSS PLC's, were also purported to have failed to deliver in certain areas of their operations. The industry was completely divested to the private sector, a model that most WSS institutional specialists regard as being economically primitive in comparison to the partnership models currently available⁴⁴. (Lobina 2001:3; and Green 2001: 4)

5.2.3. The Transition Period into Privatisation

In 1973, national government instituted ten regional WSS authorities, which were known as PLC's, through consolidating the existing WSS providers. The new authorities were multi-purpose bodies, whose functions were water conservation and development, water supply, sewerage collection, treatment and disposal, prevention of pollution, and other environmental concerns. They supplied 75 percent of the water and 100 percent of sewerage services to domestic and commercial customers. Efficiency changes over a period of fifteen years, included the number of employees being reduced by thirty thousand people. (Green 2001: 4; and Lobina 2001: 4)

It was not until the 1980's that national government improved the management of these authorities by setting targets that were designed to encourage PLC's to reduce expenses and external borrowing, and to shift towards more demand-based management principles. The results were retrenchments, and the development of WSS sector-ring-fenced self-financing investment mechanisms, achieved by considerable increases in tariffs to customers, which was effectively achieved whilst the provision was still in public hands. (Green 2001: 5)

Despite this restructuring and move towards a "business-like" approach to service delivery, infrastructure was still deteriorating. This was essentially a corporatisation phase. (See Chapter 2 for discussion of this restructuring mechanism.) The industry was in need of massive capital investment and operations and maintenance (O&M) works. (Hall 2001: 2-4; and Green 2001:7)

⁴⁴ See Chapter 2 for a discussion on the various options.

5.2.4. Public Support for Privatisation

Excluding Scotland and Northern Ireland, notwithstanding polls indicating that three-quarters of voters disapproved of any privatisation of the WSS system, it went ahead. Later on, the drought of 1995 also diminished the private companies' ability to maintain a successful WSS service. Privatised companies had also chosen to under-invest in the services in order to maintain profit dividends. This aggravated the drought effects, and as a result, the companies still did not have the public's favour. This implied that the public was not co-operative with regards to water conservation efforts, especially in light of there being no sacrifice from companies *vis 'a vis* their profits. (Lobina 2001: 1)

Parker (2001: 1-2) provides the following conclusions from his national survey: -

- Most customers felt that the services they received were good, although some did feel that there not much value for money.
- Since divestment, WSS tariffs have increased by almost 40 percent, which is a much higher increase when compared to other privatised utilities.
- 46 percent of customers did not feel that there was any improvement in service privatisation.
- 70 percent of customers believed that shareholders have gained more than customers from privatisation.
- 66 percent of respondents thought that their water had always tasted good or had improved.

According to Parker (2000: 1-2), prior to the divestiture, customers received poor service, and the environment was suffering under management by PLC's. It is the strong regulatory system under privatisation that has ensured that customers have received a better service and a decrease in tariffs later on. Customer service and drinking water quality have also improved significantly. However, this does not imply that these benefits may not have been achievable under state delivery. The key delivery mechanism seems to be effective and independent regulation. The contribution that divestment has made ten years down the line is to have made the industry more

efficient, resulting in a reduction in tariffs. Whether the same could have been achieved through the public sector, is actually indeterminate. (Parker 2001: 1-2)

5.2.5. The Role of the State in Privatisation

When the government committed itself to this divestment, none of the various stakeholders were fully cognisant of the implications. In fact, when the idea was first suggested in parliament, it was initially ridiculed. After the eventual buy-in and acceptance by the majority-ruling government, it was hoped that the divestiture of utilities would spread ownership through the sale of shares (referred to as demutualisation), and reduce the fiscal stress placed on national treasury. National government saw WSS assets as having a financial value that could be unlocked through the divestment process. (Green 2001; and Hall 2001)

A large number of consultants were employed to help with the sale of the WSS PLC's. National government found it difficult initially to accurately estimate the amount of assistance that would be required and over what period of time. Therefore, some consulting contracts were placed on time-related fees rather than fixed fee costs, which meant that when issues proved to be more complicated and time-demanding, these ex-ante transaction costs increased dramatically. Due to the relative newness of the project, complications were a common occurrence. The cost of the consultants was about effectively about 2.5 percent of the sale, which translated to about £90 million. (Green 2001: 7)

5.2.6. The Opposition to Privatisation

In 1989, the WSS industry, valued at over £35 billion, was sold for £3.6 billion, that is, 10 percent of its value. This made the sale more lucrative to investors. However, national government had the power to terminate tenure after a certain period had elapsed. The privatised PLC's were given licences to operate for a maximum period of twenty-five years, when their tenure would then be reviewed (Green 2001: 7).

Complete divestment of the WSS monopoly was deemed as the most profitable option rather than a more competitive format of management contracts. Some economic

experts felt that the WSS industry could not be privatised as it stood at the time, as the service utility and regulatory roles were combined in one statutory body. However, the WSS industry opposed any disintegration of their various roles and campaigned for the wholesale solitary divestment of both aspects. (Green 2001: 6)

Heated discussions ensued about the private sector monopoly that would thus be created. Management concerns were eventually only placated by the fact that the demands of the market would give them the incentives they needed to secure greater efficiencies. There were many other issues vocalised by various stakeholders, as many felt that the chosen option gave the successful private sector bidder too much power and not enough accountability. These weaknesses in the impending sale impeded the whole process until some time later, when a more acceptable solution was found. (Green 2001: 5)

There were other criticisms of the manner in which the sale was conducted. The sale was complex and undertaken under extreme pressure from some quarters. In actual fact, a decade later, the national government official responsible for the divestment, stated that in hindsight, the customer was actually the ultimate loser when the PLC's were divested. Not only were publicly-owned assets divested at bargain values, but also in order to fund a large capital investment, taxpayers were charged increased WSS tariffs. There was also minimal public consultation about the privatisation or other possible alternatives. (Green 2001: 7-8)

Further criticisms levelled against the process include the fact that various options of private sector participation in the WSS industry were not investigated fully. The various partnership options available for private sector participation in the WSS industry were not credibly considered by national government in the privatisation process. The negative effects of divestment were such, that, despite initial large gains by investors, profitability dwindled as asset-ownership proved to be a drain rather than a boost to profits. In addition, national government wrote-off debts of £5.2 billion and gave tax allowances of £1 billion. Essentially, a £1.5 billion cash injection was the bonus for private buyers of the PLC's. (Green 2001: 8)

5.2.7. The Role of Regulation in Privatisation

It was originally national government's intention to sell the PLC's service utility and self-regulatory roles together. However, after much public lobbying and pressure, the National Rivers Authority (NRA) was established to independently regulate the environmental consequences of the WSS companies' activities. The appointment and functions of a Director-General of Water Services as a socio-economic regulator was also established. (Green 2001: 9-11; and Hall 2001)

The Director-General's duties were to ensure that: -

- The functions of a WSS company, as specified in the relevant legislation, were properly carried out.
- Companies were able to finance their functions, in particular by securing a reasonable rate-of-return on their capital.
- Customers' rights were protected and that there was no undue discrimination in the way companies set and recovered tariffs.

The tariff-regulator, the Office of Water Services (OFWAT), was also one of the three bodies intended to regulate the newly-privatised WSS industry. Tariff-setting was the most contentious area of OFWAT's regulatory role. The National Consumer Council (NCC) argued that customers had been paying unnecessarily high tariffs for some time. Price limits at OFWAT were set in 5-year control periods, thus restricting the average annual tariff change. (Hall 2001: 10; and Green 2001: 9-11)

5.2.8. Privatisation Efficiencies

By the end of 2000, more than a decade after divestment, national government conceded that the privatised concerns did not have significant incentives to promote efficiency, and there was little benefit from savings that were generated through the fixing of leaking pipe networks. In effect, without any strong methodology for efficiency-savings, market failure of the projects was high. What has now emerged, is a mixture of potential market failure arguably due to over-regulation and the high profit margins generated initially. It was expected that rates-of-return would not exceed 7 percent, but

at no point in time did the profits actually decrease below 10 percent. Initially, companies were reluctant to carry these savings through to the customer, which resulted in OFWAT's stronger regulatory stance. (Bakker 2002: 10)

According to Lobina (2000: 24-28), there have been a number of proposals from WSS companies to split and remutualise the assets of the system. These proposals involve two key elements; the physical infrastructure of the network itself is sold to a non-profit body, which would then finance capital investment through borrowing; and, that the operation of the system would be outsourced to another expert WSS company, with a long-term lease using a partnership concession model. (See Chapter 2, for a discussion on these private sector participation models.)

5.2.9. Financial Issues

The privatised WSS companies believe that they achieved a more economical capital investment programme than the state, due to the private sector work ethic and its resultant efficiency savings. One of the WSS companies maintains that, prior to privatisation, tariff accounts were rising at 4 percent above inflation, whereas post-divestment, these accounts only rose 2 percent above the inflation rate. As a result of the five-year tariff-cappings that were imposed post-privatisation by the regulatory bodies, customers waited a decade for efficiency savings to filter through. Meanwhile, shareholders had received an average of 24 percent annual rates-of-return from the divestment. Comparisons amongst WSS companies and other international companies' profit margins indicate that profit margins, in the UK are typically three, or even four times as great as the margins of companies in other parts of Europe. (Lobina 2001: 13-14)

According to the NCC, these high rates-of-return to WSS companies' shareholders was not acceptable as it was a low-risk monopoly industry. The NCC felt that the funding for capital expenditure should come from debt and equity-financing and not just from increased customer tariffs. The NCC viewed the share bonds as being of considerable value in serving as collateral for any financing mechanism in the long-term. (Lobina 2001: 13-14)

Correspondence related to a ministerial query that generated a discussion between the Director of Costs and Performance of one of the privatised companies and the Canadian Council for Public-Private Partnerships, revealed that the value of the efficiency-savings was split 70 percent in the customers' favour, which effectively meant that companies benefited from retained savings in the short-term, and customers benefited in the long-term. Since divestment, the companies have supposedly exceeded their expectations for both capital and operating expenditures. Customers have also benefited from savings made by companies whenever tariff-limits were reset, which has been twice since divestment. Effectively, these savings facilitated a 12 percent decrease in bills, with little increase expected for the next five years. It cumulatively took a decade for the effects of savings to actually reach the customers' pockets. (Emery 2001: 1-4)

However, some say that it is through the persistence of OFWAT's strong regulatory presence, that the tariff reduction has been achieved. The WSS companies maintain that it is the customer who will be worse-off as a result of the reductions, through decreased investments in the long-term. On the social welfare side, although the divestment tariffs increased significantly, whilst companies and their shareholders reaped considerable profits, many non-paying households were disconnected, a practice later banned by the new Labour Party government in 1997. (Bakker 2002: 10)

5.2.10. Transnational Companies and Foreign Technology

There have been no foreign concerns involved in the management of the privatised companies. The foreign link has come about from a shareholding perspective. Issues of foreign technology are not discussed here, as they do not form part of the scope of this empirical study.

The privatised WSS entities were as follows: -

- Anglian Water
- Dwr Cymru (Welsh Water)
- North West Water
- Northumbrian Water

- Severn Trent Water
- South West Water
- Southern Water
- Thames Water
- Wessex Water
- Yorkshire Water

According to Hall (2000), only some of the ten English WSS utilities (with subsequent name changes sometime after divestment) have become transnational service companies (TSC's). These are as follows: -

- Anglian Water, which has external interests in Chile.
- Biwater, which has interests mainly in developing countries and has been riddled with allegations of corruption and mismanagement.
- Hyder Water, which has interests in Bohemia.
- Thames Water has exclusive contracts mainly in Asia, namely Thailand, Malaysia and Jakarta, where it has tendered for the concession as a joint venture with the son-in-law of the dictator-ruler Suharto. There have been increasing calls by WSS workers in Jakarta to curb the growth of TSC's in the WSS utility sector.
- Severn-Trent Water has lost its international presence and is not planning any further international expansion at present. It was released from its contract in Trinidad due to mismanagement, and has sold its Mexico City operations to an American WSS utility company.
- United Utilities is currently only active internationally in Manila, where it has won half the contract. It is currently operating at a loss due to the regulator having capped the rates increases, and it has now asked for international arbitration on the matter.

The privatised WSS sector currently (2001) has an aggregate annual revenue turnover of £7 billion, a regulatory capital of £27 billion, and invests about £3 billion a year in capital projects and O&M endeavours. The industry had 22 million water customers and 21 million sewerage customers with private households constituting 90 percent of the industry's customers. (Green 2001: 3)

5.2.11. The Role of Foreign Direct Investment

Another contentious issue arising at the time of divestment was the sale of privatised PLC shares to foreign concerns. This meant that foreign direct investment (FDI) would come into the country. National government believed that this would add value to the pricing of shares, and would be a positive benefit to the taxpayer in terms of the proceeds of the sale. Locals however, were incensed. Of all the shares sold, 14.5 percent went abroad, mostly to Japan and Canada, despite enormous demand in the UK. (Green 2001: 8)

5.2.12. The Pilot Project as an Indicator of Success

The success of the project is related to the different phases staggered over twenty years, first through corporatisation and then through privatisation. Although essentially a full sale of the WSS systems, contract clauses also existed that allowed for a review of ownership after twenty-five years. It could also be surmised that the regulatory framework created contradictory paradigms for management, that is, balancing the need for steady returns and efficiency incentives, in contrast to the tariff-capping systems imposed by OFWAT. The failure to balance these contradictions, resulted in a significant re-regulation and restructuring of the industry. In this context, many of the private companies are now finding it difficult to generate the kind of returns that were achieved previously, and some are facing failure. Many have decided to diversify their interests into the energy field and the internationalisation of operations. Staggered nationalisation through municipalisation is once again being explored by national government to achieve greater control of these utilities. In this respect, any surplus revenue would be redirected back into the operations either through asset investments or O&M. (Bakker 2002: 2; and Lobina 2001: 6)

5.2.13. Concluding Remarks

The following sensitivity parameter table is developed by the researcher for analysis: -

TABLE 5.1. ENGLISH SENSITIVITY PARAMETER TABLE

| Domain | Area | Key Performance Indicators / Factors |
|--------------------------------|--|--|
| The Emergence of Privatisation | The Reasons for Privatisation | <ul style="list-style-type: none"> To utilise private sector funding for rehabilitation of the WSS infrastructure. To achieve synergies and efficiencies in service provision. |
| | The Transition Period into Privatisation | <ul style="list-style-type: none"> There was an ease into privatisation through staggered progression. This was achieved first through corporatisation and then through divestment over a twenty-year period. |
| | Public Support for Privatisation | <ul style="list-style-type: none"> Only had 25% support and public input taken into consideration only initially. Initially had very little buy-in from parliament as well. 46% of people felt that privatisation had not resulted in improvements in service delivery, although it was still good. |
| | The Role of the State in Privatisation | <ul style="list-style-type: none"> There was no prefeasibility conducted on alternative private sector participation options. Setting-up of focused state vehicles for privatisation regulation. Was efficient at ensuring adequate enabling legislation. Did not consult public amicably in the latter stages. |
| | The Opposition to Privatisation | <ul style="list-style-type: none"> Opposition was considerably weak. Corporatisation phase completed the retrenchment phase, so opposition was minimal from that perspective. Privatisation plans were initially shelved because of the structure of the privatising entities having the regulatory and operational function in one body. This does not have good implications for corporate governance issues. |
| | The Pilot Project as an Indicator of Success | <ul style="list-style-type: none"> As it was a national privatisation attempt, there were no successive projects. Arguably, the privatisation was successful, although it is disputed in some quarters.. |

| Domain | Area | Key Performance Indicators / Factors |
|---------------------------------------|--|--|
| Privatisation Efficiencies and Ethics | Financial Issues | <ul style="list-style-type: none"> Tariffs were increased prior to privatisation. In state hands, WSS tariffs increased at 4% above inflation and this decreased to 2% after privatisation. Ten years post-privatisation, the tariffs had increased by 40%, which is higher than in other countries. After ten years, tariffs were decreased by 12%. There was a greater degree of disconnections for non-payment of services in private hands than with the state. |
| | Privatisation Efficiencies | <ul style="list-style-type: none"> Water quality did not change after privatisation. It was generally regarded as being of good quality. There were improvements made to infrastructure. Invests approximately £3 billion annually for capital projects and O&M. |
| | The Role of Regulation in Privatisation | <ul style="list-style-type: none"> High degree of regulation and tariff-capping through three focused regulators. Economies-of-scale allowed a WSS industry-funding, large regulatory triad to exist. Regulation was independent and not surpassed by state decisions. |
| Globalisation Issues | Transnational Companies and Foreign Technology | <ul style="list-style-type: none"> Privatised companies are now multinational concerns with operations throughout the world. |
| | Foreign Direct Investment | <ul style="list-style-type: none"> About 15% of the companies are foreign-owned. |

Source: Researcher's Analysis

It is clear that the divestment was an immensely complex undertaking by national government and the privatisation was undertaken with insufficient public consultation or support in the later stages. In the haste to privatise, little attention was given to the optimal method of privatisation, although the effects of what the other options would have been, are not easily predictable. Many critics have voiced their disapproval of the divestment rather than a partnership concession, but there is no infallible method of predicting transactions costs that are inherent in the process.

The transition to privatisation in England occurred over a significant period. It was achieved primarily through a corporatisation phase, followed by the actual privatisation. Thus, opposition to retrenchment issues and other negative effects of some privatisation cases were *circumvented* whilst the WSS system was still in public hands. As a result, the opposition to retrenchment was diminished, as the *private sector* could not be criticised for trying to issue staff retrenchments.

The divestment was also successful due to the economies-of-scale set-up through regional state authority operators as WSS providers, and then the privatisation. The economies-of-scale facilitated a stronger, self-funded regulatory system. However, over-regulation has arguably also played a part in the demise of some privatised entities. As some of the privatised companies have to now reassess the situation and look at remunicipalisation, what could also be true is that over-regulation may have also led to this impasse.

The English privatisation, despite all its criticisms, was successful. There were some cases of possible remunicipalisation occurring, but some view this as a problem that was created through over-regulation. However, under private hands, expansion of the physical infrastructure occurred and the WSS systems were adequately managed. The ex-ante costs were high, but the project was a “Greenfield” one and to be expected for a project of this magnitude. National government had a responsibility to make sure that tax-payers received an adequate price for the sale of the WSS industry, which was not the case. However, it was the consultants and shareholders who received most of the financial benefits. National government was aware that it would be easier to divest the WSS industry cheaply, as its main motive was to relieve itself of the financial responsibilities of increased capital investment requirements.

5.3. Foreign Empirical Study Investigation: Buenos Aires

5.3.1. Aim of this Empirical Study

Buenos Aires is situated on the banks of the Rio de la Plata, a river supplying clean, raw water to the local populace. It supplies 92 percent of the system's water needs throughout the year. (World Bank Report 2001: 1).

The Buenos Aires concession is one of the largest WSS concessions in the world, servicing a population of about ten million people (World Bank Report: 2001: 1). It is operated by a consortium, with the French transnational service corporation (TSC), Suez-Lyonnaise des Eaux⁴⁵, being the largest partner. It is particularly important in the South African context, serving as an example for the larger concessions that are being considered in Durban and Cape Town. (Union opposition has delayed this to some extent.) There are similarities between the Argentinean and South African situations in terms of WSS, as both are developing nations with vast infrastructure backlogs and have citizens with low abilities-to-pay (ATP).

South African policy-makers did investigate this particular concession as a possible benchmark example for South African municipalities. Their findings (which were positive) have had implications for the South African privatisation campaign, providing the impetus for the Dolphin Coast and Nelspruit concessions. The French government financed this investigation, and it alludes towards some degree of rent-seeking activity, which have benefited the large French WSS TSC's in South Africa. (Loftus and McDonald 2000: 2)

At this point, it should be noted that the first WSS concession in South Africa was won by Siza Water Company. Its major shareholder is SAUR Services, a French company that is partly owned by the French government through an energy wing. Suez-Lyonnaise des Eaux is also the major shareholder in the outsourced WSS management contract for the city of Johannesburg in South Africa.

⁴⁵ Suez-Lyonnaise des Eaux is the major shareholder in the consortium. The concession operator (consortium) is called Aguas Argentinas and is sometimes referred to as the concessionaire in this section.

5.3.2. The Reasons for Privatisation

By 1989, Argentina was on the verge of national bankruptcy with a deteriorating economy and hyperinflation levels reaching 4000 percent. The newly-elected government introduced large-scale neoliberal economic measures, including the possible privatisation of inefficient municipal utilities such as the WSS industry. By 1992, a 30-year concession contract for WSS provision in the Buenos Aires metropolitan area was awarded to a private sector consortium. (World Bank Report 2001: 1)

Prior to 1992, WSS was provided by the state-owned utility, Obras Sanitarias de la Nacion (OSN), with poor quality of service and low levels of investment. OSN was also unable to expand connections to the rapidly-growing, poorer areas of the city. Revenues had shrunk, partly because of declining tariffs against inflation, and large-scale network deterioration ensued due to poor O&M and a lack of funds. At the time, only 70 percent of the populace were connected to the water system, and 58 percent were connected to the sewerage system under OSN's jurisdiction. The shortfalls were experienced mainly in the poorer areas, where people relied on water from wells. As a result, high rates of water-borne diseases were prevalent, due to the contamination of groundwater by untreated raw sewerage emanating from households not connected to the sewer system. (World Bank Report 2001: 1)

OSN did not invest enough capital to keep up with the pace of growth in some areas of the city, and the little capital that was invested, was not enough to maintain existing assets. Average annual investment by OSN from 1987 to 1991 was only US\$11 million, which did not even cover depreciation. Much of the WSS system was in need of desperate rehabilitation and / or replacement. Unaccounted-for-water⁴⁶ reached 45 percent before the concession, as compared to the average 15 percent in other countries. (Richard and Triche 1994: 1-22)

⁴⁶ This is also sometimes referred to as "lost water", which is the difference between the total water production *currency* value and the equivalent portion of water tariff amounts received from customers (that is, revenue received, calculated as a percentage of the value of water produced over a period).

OSN's low investment rates were mainly due to declining WSS tariffs. A marginal percentage of the WSS system's consumption was metered, and only 83 percent of billed accounts were actually received. Legislation also forbade the disconnection of services to households, who concomitantly reneged on the payment of tariff accounts. (Richard and Triche 1994: 1-22)

In addition to this, OSN was also overstaffed, with nearly 8000 employees. This represented an average of 8 employees per 1000 connections, compared with a global norm of 2-3 employees per 1000 connections. Top OSN management was also politically chosen and priorities were set according to non-commercial criteria, which aggravated the sustainability of the WSS operations. (Richard and Triche 1994: 1-22)

As a result, OSN's reported financial results produced mixed results throughout the period of its operational existence. Losses generally occurred and when there was a profit, this was solely due to financial misrepresentation measures. (Abdala et al. 1996: 45)

5.3.3. The Transition Period into Privatisation

With problems plaguing OSN, the government declared its intention towards neoliberal reform in the WSS sector. The World Bank funded a team of consultants to advise on the options available for Buenos Aires' WSS sector. It was also responsible for short-listing companies after the submission of bids. A privatisation committee was formed, which included national government employees, members of the existing Privatisation Board, OSN, and the main WSS sector unions. (Loftus and McDonald 2000: 9)

Preference was given to a concession format over a management or lease contract, as the government wanted the private investor to take financial responsibility for the massive investments needed to expand the system. Divestiture was not an option, as selling the assets could have posed legal problems, and the concession arrangement had the advantage of keeping the ownership of fixed assets in the public domain. (World Bank Report 2001: 3)

The number of potential bidders was limited by pre-qualification requirements, whereby the successful WSS concession operators had to have vast experience in operating large-scale systems. The bid was very competitive, with three consortia passing the technical pre-qualification stage. The 30-year concession was awarded to the consortium that offered the largest tariff reduction. The winner was the Aguas Argentinas consortium, which proposed a tariff reduction of 26.9 percent, with the nearest competitors offering a reduction of 26.1 percent and the third bidder, 10.1 percent. (World Bank Report 2001: 3)

5.3.4. The Role of the State in Privatisation

The Buenos Aires WSS system under OSN was deteriorating and in a state of virtual bankruptcy. Argentina was in a state of heavy recession and as a result, the privatisation of the Buenos Aires WSS system was very swiftly passed, with almost no or minimal supportive legislative frameworks for privatisation from the state. (Alcazar et al. 2001: 10)

The role of the state is discussed further, in the preceding and following sections.

5.3.5. The Opposition to Privatisation

There was no effective opposition to the concession from the unions or any other institutions. It was only in the early stages of the privatisation agenda, that the unions provided any form of opposition. In fact, according to the World Bank (2001: 3), close involvement of unions in the process also helped to win agreement, and the unions were also part of the original privatisation committee.

Loftus and McDonald (2000:17) see the involvement and support of the unions in the privatisation committee as capture of the autonomy of the unions, and a successful rent-seeking mechanism. Initially, labour had provided one of the key sources of opposition to privatisation in the 1980's, when strikes had been called in order to impede such reforms. This meant that union leaders had to be guaranteed a seat in the privatisation discussions, even if it meant offering employees a 10 percent share in the privatised

concern through an employee participation programme. (Loftus and McDonald 2000: 17)

To support their change in focus, representatives from the unions felt that their role shifted in the 1990's from being antagonistic towards privatisation, to fulfilling a more social position, in which they provided greater socio-economic benefits. With unemployment reaching 40 percent, the unions claimed that their traditionally socialist standpoint had to be transformed in order to serve the wider interests of the people, which would mitigate the fact that workers were retrenched due to the concession. (Loftus and McDonald 2000: 18)

Union leaders had veto rights in the privatisation process, but this power was never used. All decisions were made by consensus, including the loss of 3600 workers. The union leaders became part of a political elite, with the same vested interests as the politicians. One of the company directors, who now manages the concession, is a former union leader. Similarly, the head of the regulator overseeing the concession is a former director of OSN and is expected to monitor his erstwhile colleagues in this role. The distinction between these stakeholders is thus unclear, due to the close relationship that these stakeholders share. (Loftus and McDonald 2000: 17)

However, the issue of job losses is contrasted to the fact that, with all the capital infrastructure investments the project required, about 15000 jobs were created indirectly, through small, medium and micro enterprises (SMME's) and contract workers. Currently, Aguas Argentinas actually employs directly and indirectly, about 10 percent more people than OSN did. Additionally, over a three-year period, there have also been about 330000 man-hours of training, which is well in excess of anything OSN provided to its workers. (Biche 1998: 1-3)

5.3.6. The Role of Regulation in Privatisation

The regulator, Ente Tripartite de Obras de Servicios de Saneamiento (ETOSS) was created in 1993 to enforce the concessionaire's compliance with the terms of the concession contract. ETOSS was partly financed by a surcharge of 2.7 percent levied on consumers' bills. Mainly former employees of OSN, who were poorly qualified for the

responsibility of tariff-setting, and with no experience of regulating a commercial venture, were part of ETOSS. (World Bank Report 2001:3)

ETOSS's inexperience was to be expected, since it was created swiftly as part of the general rush to privatise. It was structured without a clear regulatory framework or established procedures. Prior to the concession, there had been no independent regulatory body for WSS, with OSN being predominantly self-regulated. (Alcazar et al. 2001: 23)

The board of ETOSS consisted of political appointees, and there were instances of politically-motivated decisions being foisted on the concessionaire. During the renegotiation of the contract, ETOSS was bypassed when the board became deadlocked and national government was forced to resolve issues, highlighting the regulatory failure of ETOSS. Decisions were frequently delayed by ETOSS, due to a lack of consensus amongst the board members. Restrictions placed by ETOSS on the activities of the concessionaire, were frequently over-ridden by national government. In fact, national government rewrote the concession contract in 1997, loosening many of the concessionaire's contractual commitments without any participation from ETOSS. (World Bank Report 2001: 4; and Loftus and McDonald 2000: 10)

ETOSS has been criticised from many different perspectives. Many feel that regulatory capture of ETOSS has occurred. Some personnel have even been bribed into overlooking aspects of the Aguas Argentinas' failure to meet contractual obligations. In contrast, employees from Aguas Argentinas felt that ETOSS had been unnecessarily critical and unwavering on their operations, viewed as more of an obstacle to service delivery than a crucial part of a WSS delivery system. ETOSS has proven to be a virtually powerless regulator. The state frequently bypassed the official hierarchical chain of command, effectively rendering the role of the independent regulator, meaningless. (World Bank Report 2001:3; and Loftus and McDonald 2000: 19)

5.3.7. Privatisation Efficiencies

The contract set a number of targets for Aguas Argentinas. Included were goals for service quality, water pressure, water quality and metering as well as capital

investments targeted at US\$4 billion spread over a fifteen-year period. Investment during the first five years alone was fixed at US\$240 million annually, compared to OSN's average annual investment of only US\$10 million during the entire preceding decade. (Alcazar et al. 2001: 24-25)

The following areas and their performance levels were provided at the start of the concession, that is, just prior to handover from OSN to Aguas Argentinas, for a total population of eight and half million people: -

TABLE 5.2. INITIAL INFRASTRUCTURE CAPACITIES

| Water System | | Sewerage System | |
|--|-------------|--|------------|
| Number of Connections | 1 170 000 | Number of Connections | 700 000 |
| Average Production (m ³ /month) | 108 950 000 | Served Population | 4 700 000 |
| Treatment Capacity (m ³ /day) | 3 640 000 | Volume Collected (m ³ /month) | 82 232 000 |
| Length of Water Pipe System (km) | 11 000 | Volume Treated (m ³ /month) | 3 413 000 |
| Served Population | 6 000 000 | | |

Source: Aguas Argentinas Website (2000: www.aguasargentinas.com.ar)

Since commissioning, Aguas Argentinas claims to have increased their WSS customer base by one and half million people. However, this figure includes the expansion of the concession's jurisdiction two years after the initiation of the contract, to a new area, which already had six hundred and fifty thousand existing users. They were already connected to another system of WSS networks, which were then absorbed by the concessionaire. By 1999, water coverage had reached 82 percent and sewerage coverage 61 percent, an increase in OSN's operations of 12 percent and 5 percent respectively. (Loftus and McDonald 2000: 11-12)

These are significant increases, the figures for water coverage meeting the performance targets of 81 percent for the first five-year period. Sewerage coverage, however, had not increased at the same rate and failed to reach the 64 percent contracted target. Furthermore, although the network of sewerage has expanded, very little of it is actually being treated, and is instead being dumped into the Rio del Plata. (Loftus and McDonald 2000: 11)

With regard to the actual size of the network, Aguas Argentinas has expanded water pipelines by 1700 km and the sewerage network by 300 km. Much of the old network has also been rehabilitated and cleaned. (Loftus and McDonald 2000: 12)

Workers have gained about \$US 40 million with shares from the participation programme. Those who remained employed under the private operation, increased their productivity and were compensated for this with average wage increases of 24 percent in 1993, and 14 percent in 1994. By 1998, there had been a cumulative 43 percent increase from OSN operations. In contrast, for those who were retrenched, severance payments were greater than normal packages. This averaged about US\$20000 per worker, but for some individuals, this compensation may not be enough to have mitigated their unemployment. (Abdala et al. 1996: 22)

In three years, production increased by 38 percent in terms of potable water. This has been possible without building new treatment plants, and rehabilitating older plants. Water connections also increased by 33 percent and sewerage by 17 percent.⁴⁷ (Biche 1998: 1-3)

The concession also had some benefits for customer welfare. The average annual investment of Aguas Argentinas in the first six years of the concession was more than twice that of OSN's in the *last decade* of its operation. The operating efficiency was also improved-upon and product and service quality were much higher than under OSN's operations. There were also important social and external benefits from the increase in coverage. (Alcazar et al. 2001: 53)

Lack of access to safe water is estimated to have caused nearly 40000 cases of diarrhoea in Buenos Aires before the privatisation. After the commissioning of the concession and with the introduction of safe sanitary infrastructure, diarrhoea morbidity has been reduced by 27 percent and diarrhoea mortality by 41 percent. Estimating the annual economic cost of morbidity and mortality for the population not covered by potable water and sewerage infrastructure in the city, indicates losses of over US\$35 million annually. While these figures are very rough estimates, they illustrate the magnitude of

⁴⁷ These figures contradict the coverage figures provided by Loftus and McDonald.

potential health benefits associated with investments to be carried out under the Buenos Aires concession, which was not achievable under OSN. (Biche 1998: 1-3)

5.3.8. Financial Issues

Agua Argentinas indicated initially in its tender proposal that tariffs would be reduced by 27 percent if they won the tender bid. However, *prior* to the privatisation, since early 1991, there was a cumulative 25 percent tariff increase, till just before the privatisation in 1993. These increases under OSN's hands, occurred "supposedly" in order to compensate for inflation, as was the 29 percent increase two months later. A year later, a goods and services tax, which constituted an 18 percent increase, was then added to WSS tariffs. Thereafter, just before handover, a further 8 percent increase was instituted. The effect of these increases was to seemingly allow the successful private sector company to offer what seemed to the public to be a 27 percent decrease in costs once it took over the WSS operations. The reality was that it was a *manufactured* reduction, prepared by the state. This is a common strategy for curbing opposition to the private sector participation process. However, it should be seen in context, as consumer inflation was higher in the two years prior to privatisation, 84 percent in 1991, and 18 percent in 1992. This would imply that tariffs increases were still below inflation. (Loftus and McDonald 2000; and Abdala et al. 1996: 15)

Since the concession's commissioning in 1993, several major tariff changes have been implemented, and some of the terms of the concession have been renegotiated. The first revision occurred in 1994, when the concessionaire was granted a 13 percent tariff increase. This translates to about half the original reduction on which the contract was awarded when the consortium tendered its proposed initial tariffs. It had become clear that the infrastructure was in worse shape than originally estimated. To improve water quality, investment plans had to be speeded up, and the resulting cost increase triggered a contract clause allowing for a tariff adjustment. (World Bank Report 2001:4)

Under Argentinean law, consumers must connect to a water or sewer network, when it extends to within a certain distance of their premises. This means that the concessionaire can, in principle, install networks without consumers' consent, and without a need to determine their willingness-to-pay (WTP) for the service. Under the

terms of the original contract, expansion of the secondary network in Buenos Aires was to be financed through an infrastructure charge on new consumers. This charge affected mainly low-income households living in the poor suburban areas and, as a result, was a source of resentment. Monthly repayments of up to US\$48 represented about 20 percent of the family income of the poorest households. Despite low interest loans extending over a two-year period by the concessionaire, these charges were beyond the ATP's of the poor, and an increasing number of people refused to pay. By the end of 1996, arrears had reached \$US 30 million, forcing the concessionaire to suspend service expansion to poor areas, which led to the renegotiation of the contract. (Loftus and McDonald 2000: 13; and World Bank Report 2001: 4)

The renegotiation, agreed in August 1997, introduced new changes, replacing the infrastructure charge for new users with a bi-monthly fee payable by *all* customers, as a cross-subsidisation mechanism. This charge was set to replace the revenue loss of the concessionaire, and to fund environmental improvements not included in the original contract. It reduced the once-off connection charges to US\$120 for WSS, repayable over five-years in interest-free instalments, averaging US\$4 per month. Aguas Argentinas' contractual obligations were reduced by cutting expansion targets for the first five-year plan by 15 percent for water and 13 percent for sewerage, and by postponing the completion of the first phase of the concession expansion. (World Bank Report 2001:4)

As a result of these changes, the average bimonthly bill for existing customers increased by 19 percent from US\$37 to US\$45. For new customers, the majority of whom were living in the poorer areas, average bills decreased by 74 percent from US\$61 to US\$16. By 1998, the concessionaire requested a further 11.7 percent tariff increase, which brought about major public opposition and finally a figure of 4.6 percent was reached. (World Bank Report 2001: 4)

Renegotiation of the contract indicated decisively that the government was not prepared to censure the company for its failure to meet targets. Moreover, it showed a lack of compliance on the part of government towards the original contract. The 1998 increase was accepted without any input from the regulator, who was actually bypassed in the negotiations. (Loftus and McDonald 2000: 10-11)

These price increases set a spurious precedent, as they implied that the contract was negotiable and that Aguas Argentinas could push for tariff increases whenever it wished to, particularly if they could show that new demands were extra-contractual and had to be paid for by the customer. As a result, the tariff increase also had the effect of shifting the cost of expansion from the private sector to the customers. Profits from 1997 averaged about 25 percent on revenue takings, which compared favourably to the average profit rates in England, which averaged about 9.3 percent⁴⁸. (Loftus and McDonald 2000: 14)

5.3.9. The Pilot Project as an Indicator of Success

The concessionaire, needed to prove its ability to successfully manage this pilot project to ensure successful tendering for other large projects. The state was interested in ensuring its success, considering the sweeping step taken towards privatisation. A failure of the concession would have been an indictment on the state's partisan stance in promoting the privatisation project, to the point of bypassing the regulator. The World Bank and their team of consultants provided considerable assistance, giving the institutional support where required. Whether this assistance is foreseeable in other privatisation concessions in Argentina, is not really known, but such considerable external support would be unlikely in successive projects.

Considering the various improvements and extensions to infrastructure that were made, and notwithstanding the poor regulation by ETOSS, benefits for communal welfare did increase. For other poorly-performing municipal operators in Argentina, this project would probably serve as a precedent for future projects. However, other factors, such as customer profiles and variations in municipal capacities, would need to be taken into consideration, in predicting the success of future projects.

⁴⁸ These figures, quoted by Loftus and McDonald, contradict reports on the English experience, which actually indicate figures of 24 percent earnings to shareholders in the English case. (See case study on England.) However, in mitigation, 25 percent profiteering, especially so early in the concession is spurious, especially considering the low ATP's and vast infrastructure improvements required in the area of operations. Generally, such concessions are designed at least for a 10-year break-even period, before any profit should be generated.

5.3.10. Transnational Companies and Foreign Technology

According to Biche (1998: 1-3), Aguas Argentinas decreased expenditure and increased revenues by implementing an expense control system designed to closely monitor and control procurement and cash flow. Savings were achieved through: -

- A 10 percent reduction in energy costs through the replacement of equipment.
- A more efficient inventory control procedure, which increased turnover and reduced working capital requirements.
- A decrease in clandestine connections, where nearly 100000 illegal connections were identified.
- Increased billing based on meters from thirty one thousand customers in 1993 to over 150000 in 1995 and increased billing collection rates from 83 percent in 1993 to 96 percent in 1995.
- The introduction of a centrally-controlled procurement system that lowered costs by increasing competition amongst suppliers.
- Water quality also increased. Under OSN, there were some problems with turbidity and excess chlorine. Water quality now stays within the 90-100 percent quality rate in compliance with the contract under Aguas Argentinas.
- The renegotiation of contracts for the purchase of chemicals used in water treatment resulted in savings of US\$13 million annually.
- Updating its customer database regularly, thereby improving the basis for calculating tariffs.

5.3.11. The Role of Foreign Direct Investment

The majority of investments in connections were funded by the concessionaire's regular expansion programme. The balance was funded through the tax credit agreement and innovative institutional arrangements, mixing public and private funds.⁴⁹ (World Bank Report 2001)

⁴⁹ This contradicts Loftus and McDonald, who state that funding for new infrastructure was mainly through tariffs.

However, most of the new investments by Aguas Argentinas came through loans from international financing agencies and new infrastructure charges to customers, which seems to mitigate the positive aspects of “supposed” innovations in funding that are gained through privatisation. Despite the impressive gains in the extension of WSS infrastructure, the majority of the concession’s negative impacts have been most deeply felt in the poorest sections of Buenos Aires. Although capital investment has increased since privatisation, this was financed through higher tariffs to customers. (Loftus and McDonald 2000:18)

To counteract negative perceptions of post-concession capital investment, WSS companies cannot deliver improvements to all its customers at once. This means that some customers may only receive phased benefits towards the end of the thirty-year concession. In fact the indigent who form 15 percent of Aguas Argentinas’ customers, require 25 percent of investments but generate only 1.5 percent of income. (World Bank Report 2001: 4)

This is the challenge facing Aguas Argentinas as it seeks an equitable approach to meeting the needs of all its customers. In addition, Aguas Argentinas operates like a conventional customer-oriented WSS company, but it is not yet achieving the level of profitability, it believes necessary to finance such a high level of investment. (World Bank Report 2001:4)

However, three annual dividends have been delivered to the shareholders. This seems questionable considering that the concession had not really matured enough to deliver equity dividends. (Loftus and McDonald 2000:18)

The following table indicates the level of WSS capital and maintenance works investment that occurred after the Aguas Argentinas takeover: -

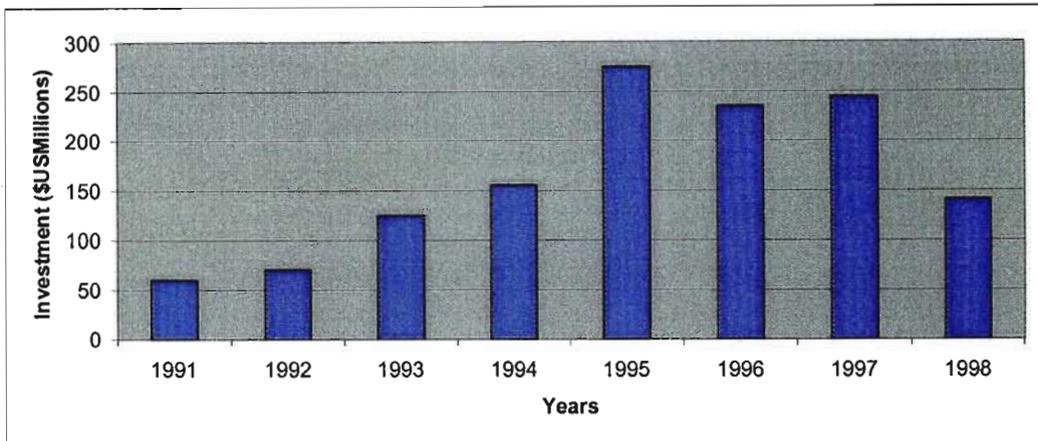


FIGURE 5.1. INVESTMENT BY AGUAS ARGENTINAS

Source: Aguas Argentinas Website (2000: www.aguasargentinas.com.ar)

In terms of profiteering, the concessionaire emerges as the triumphant stakeholder. The net gain is distributed between foreign groups, who gain US\$212 million and domestic companies, who are better-off by US\$147 million. (Abdala et al. 1996: 21)

The state experienced mixed results as a consequence of privatisation. From a tax perspective, the state received more revenue due to greater rates recovery. As a shareholder in the concession, it receives quasi-rents from the operation. However, the state also incurred consulting fees as ex-ante costs during the transaction negotiations, as well as during the commissioning itself. The cost of regulation is borne, however, by the surcharge on customers. The state absorbed existing OSN debts, which meant interest payments and amortisation costs were written-off. In total, the state lost about US\$155 million. (Abdala et al. 1996: 21)

5.3.12. Public Support for Privatisation

Although there were many benefits to the poor in terms of accessibility to infrastructure and services (due to tariff increases), support for the project diminished considerably. Even if tariffs were needed to counteract the effects of inflation, and decades of

undercharging, the poverty-stricken would only view this as a considerable drain on the meagre finances. Although not necessarily spearheaded by the concessionaire, there was eventual acquiescence that many of the poor could not afford the infrastructure investment portion of the tariffs. A blanket system was devised, which resulted in a considerable decrease of tariffs for the poor and also created a system of cross-subsidisation from rich to poor.

5.3.13. Concluding Remarks

The following sensitivity parameter table has been developed for analysis: -

TABLE 5.3. BUENOS AIRES SENSITIVITY PARAMETER TABLE

| Domain | Area | Key Performance Indicators / Factors |
|--------------------------------|--|---|
| The Emergence of Privatisation | The Reasons for Privatisation | <ul style="list-style-type: none"> • Lack of state funds for capital infrastructure investment. • To counteract the effects of poor cultures of payment. • State was experiencing hyperinflation. • Unaccounted water reached as high as 45%. |
| | The Transition Period into Privatisation | <ul style="list-style-type: none"> • Less than five years. • Earlier attempts were thwarted in the 1980's. |
| | Public Support for Privatisation | <ul style="list-style-type: none"> • There was very little apparent public opinion gauged on the proposed project. • State eventually issued a decree for the concession to go ahead. |
| | The Role of the State in Privatisation | <ul style="list-style-type: none"> • No amicable consultative and enabling legislation. • State was prescriptive in attempting to privatise. • State bypassed autonomy of the regulator and diminished the regulator's capacity. |
| | The Opposition to Privatisation | <ul style="list-style-type: none"> • Opposition was very fragmented. • Union chiefs were bought-off through positions of office. |
| | The Pilot Project as an Indicator of Success | <ul style="list-style-type: none"> • There has been a certain degree of success. This indicates that a project of similar magnitude (needed for economies-of-scale) could succeed. |

| Domain | Area | Key Performance Indicators / Factors |
|---------------------------------------|--|--|
| Privatisation Efficiencies and Ethics | Financial Issues | <ul style="list-style-type: none"> Tariffs were increased prior to privatisation followed by a manufactured reduction after handover. Initial tariffs represented 20% of monthly household income of the poor. Tariff increases were high, although still lower than inflation. The new consumers had a low ATP, so tariffs were restructured to accommodate their ATP's. This resulted in a 74% decrease in tariffs for new indigent users. |
| | Privatisation Efficiencies | <ul style="list-style-type: none"> Increase in the number of connections for water by about 800000 people after about eight years, which is a 33% increase and an increase in the number of sanitation access systems by about 17% according to Biche. Contrast to Loftus and McDonald's figures of an increase in coverage area by 12% for water and 5% for sanitation. Increase in the length of water network infrastructure by 1700 km and sewerage by 300 km. Number of employees has increased by 10%, with about 43% increase after 5 years of commissioning. There was also an increase in the training and development of employees. Billing collection rate increased to 96% from 83% under OSN. |
| | The Role of Regulation in Privatisation | <ul style="list-style-type: none"> The regulator was extremely weak as the state and the concessionaire bypassed its authority. |
| Globalisation Issues | Transnational Companies and Foreign Technology | <ul style="list-style-type: none"> Major shareholder was a French TSC. There have been benefits in terms of improved management systems. The foreign technology has not been new technology, but a tightening on procedures and controls. |
| | Foreign Direct Investment | <ul style="list-style-type: none"> New infrastructure was financed mainly from tariffs. Initial funding for financing was mainly through international development banks. There have extremely high profits of about 24% per annum. |

Source: Researcher's Analysis

This privatisation went ahead because of the fiscal crisis that underpinned ailing Argentina's economy. This crisis filtered through to Buenos Aires services, resulting in

inefficient WSS operations under municipal hands. With immense infrastructure challenges, the assistance of the private sector appeared to be the only option to consider. Due to the endemic proportions of the crisis, privatisation was relatively swift.

In creating an amicable environment for privatisation to occur, the state was deceptive with regards to the initial escalation of tariffs to create a viable tariff reduction option for the prospective private sector operator. Tariffs were dramatically increased before the initiation of the concession, and lowered after the handover. This was a strategy that was employed to facilitate the easy acceptance of the privatisation by the public, and send signals that the private sector operator was welfare-focused to some extent.

Very little of the FDI needed for the initial capital expansion works, actually came from the concessionaire. Most of the foreign finance came through loans and the concessionaire standing as guarantor. Thereafter, infrastructure expansion was financed by infrastructure charges to the consumer. However, even though this was not *directly* financed by the concessionaire, there has been considerable infrastructure expansion, which was not adequate under state hands.

Capital expansion of WSS infrastructure was desperately needed in Buenos Aires, and there seemed to be no source of funding other than through some form of FDI, whether from the concessionaire, or some other foreign institution. Regardless of the motives of the concessionaire, it did bring in urgently-required capital, at a time when Argentina was in the midst of an economic crisis.

Whilst the operational efficiencies certainly indicate innovation and practicable business practice, it would also seem that the ATP's of the indigent have been arguably marginalised. The concessionaire may have achieved blanket savings for all customers, but this also meant incorporating those users that genuinely lacked real finances, or who had to sacrifice other important needs to receive any form of WSS.

Although the conduct of the concessionaire may have been less than exemplary, especially with regards to profiteering and tariffing, the fact is, that without privatisation, the situation could arguably have been much worse. The concessionaire was not held accountable however, for some questionable financial deals. In addition,

an unethical relationship existed between government and the concessionaire that completely bypassed the regulator.

It must be reiterated that such projects are likely to suffer market failure without some degree of state intervention. In fact, the likelihood of market failure will be continuously imminent, if there is no rates-paying base with sufficient ATP's to maintain a sustainable WSS service. It does not seem probable that a private sector operator can manage a WSS system in a third world country without some degree of state intervention.

As this has been an empirical study, all the information discussed here has been gleaned from various sources. There have been glaring contradictions with regards to efficiency gains and their quanta. Whilst Loftus and McDonald (2000) have portrayed the concession in a very negative light, there are others such as the World Bank (2001), Alcazar (2001), Abdala et al. (1996), Richard and Triche (1994), and Biche (1998), who seem to give a differing account of the concession. These contradictions are referred to in the earlier discussion. This is of serious concern, as many future projects are authorised on the views of such investigators. Whilst a balanced account gleaned from different quarters is welcomed, it is expected that details of quanta and efficiencies are factual, and *should* not contradict each other.

CHAPTER 6: COMPARATIVE INTERNATIONAL CASE STUDIES

6.1. Foreign Case Study Investigation: India

6.1.1. Aim of this Case Study

This case study analysis of India is of importance to the South African context due to certain characteristics that both countries share. India is far vaster in terms of population, density, size and differences in regional topographical and meteorological characteristics do exist. There are similarities, however, in socio-economic and institutional capacities for development, with significant infrastructure challenges in water supply and sanitation (WSS).

India has not advanced as far as South Africa in terms of achieving any outright private sector participation in WSS from a *financial-equity* perspective. Recently, though, a small-scale venture was initiated. There are also fragmented cases of private sector participation intervention in WSS, through outsourcing or small-scale community-led endeavours.

An analysis of the Indian subcontinent's institutional capacities to facilitate private sector participation in WSS, its ability to garner support for the shift in service delivery, from state to market and the general opposition to such endeavours, can help South Africa to better understand and reflect on its own challenges.

This case study analysis is a macrocosmic view of private sector participation in WSS in India. It is not in-depth or lengthy study, but a surface analysis. The case study reveals the characteristics restricting the development of private sector participation in India.

As the case study will reveal, opposition to the process actually comes from the state operational authorities, rather than the unions as in the South African case. It provides a basis to compare whether South Africa's strong union opposition to privatisation is unique or a universal union approach, as sweeping and unyielding union opposition may

be to the detriment of communities in dire need of WSS services, which cannot be sourced through public funds.

Compared to the South African situation, the Indian subcontinent's public sector WSS service provision is more fraught with prolific rent-seeking endeavours. It illustrates that the public sector is as open to corruption as the private sector. Generally, the opponents of private sector participation have argued that private companies generally pursue a profit motive and relinquish the development needs, whilst the state's objective would be more altruistic towards development. This case study provides evidence that contradicts this latter perception in some quarters.

There is also much to be learned from the communities' own involvement in WSS provision. Many communities in India have taken the initiative to form partnerships and alliances to achieve the economies-of-scale that would facilitate a more successful WSS service provision. South Africa does not have the same communal entrepreneurship that India has displayed.

6.1.2. Research Methodology

The generic framework for the research methodology is set-out in Chapter 1. Here, only data-gathering research that is specific to this case study, is discussed.

Various articles and publications cited on private sector intervention and WSS on the Asian subcontinent were sourced. These include publications and papers drafted by the World Bank, United Nations Development Programme (UNDP), and the International Monetary Fund (IMF). Interviews and discussions were held in New Delhi, India in July 2000, with people from the World Bank, UNDP and other institutions involved in privatisation endeavours and WSS in India.

People interviewed included: -

- Barbara Evans: Civil Engineer – Regional Urban WSS Specialist and World Bank Global Urban Thematic Co-ordinator.

- Mary Helen Zerah: WSS Specialist, on secondment to the World Bank from Suez-Lyonnaise des Eaux a transnational WSS company.
- Pushpa Pathak: Urban Planner – UNDP.
- Mike Webster: Civil Engineer – World Bank.

As this was not a study of actual singular partnerships in progress or their operations, there were no site visits to assess actual benefits and negative effects.

6.1.3. The Reasons for Privatisation

Many regions in India face challenges in the management of WSS provision. This situation has developed gradually from independence in 1948, where the national per-capita fresh water availability was 5000 million cubic metres per year. This has declined to 2000 million cubic metres currently, and measures to combat any further decrease are vitally-needed to ensure *future* supplies of water. Although some regions in the country are arid, cumulatively, India is generally still sufficient in terms of water resource availability. It is in many of India's arid regions, however, that water resources have an almost completely exhausted. Growing urbanisation and industrialisation have also resulted in increasing resultant conflicts over WSS tariffs. (World Bank Report 2000:1)

Millions of poor people living in rural areas and urban fringes in slums are the most affected by this crisis. It is additionally estimated that nearly 44 million people are affected by water quality problems as a result of pollution. Adequate quantities of water are also a problem for many, particularly during the summer months where women have to walk long distances to fetch water. (World Bank Report 2000:1)

Pathak describes India as having a long history of creative innovations in water management, with the community playing a central role in the management of WSS provision. Many WSS structures were built and maintained by the community for multiple uses. There was also a strong religious dimension that pervaded these communities in the management of WSS. Local authorities took WSS provision initiatives, mobilised the people, and assisted in WSS management. The central state authority extended a helping hand when required, although it remained largely peripheral. This communal tradition of managing WSS declined swiftly due to large-

scale state intervention during the colonial era of the British Raj, and after independence. With the challenges that face India, the state has proven inadequate in effectively managing WSS provision. (Pathak, Interview: 18.07.2000)

Pathak is more optimistic about the management of the WSS crisis that is generated, more from the efforts made by individuals, non-governmental organisations (NGO's), and social movements, rather than from any organised endeavours of national government. Efforts have been made to create new institutional mechanisms and value systems to try and conserve and manage water effectively, and to mitigate the sanitation crisis. These new innovations include efforts to create stakeholders at grassroots level for integrated WSS management and provision. (Pathak, Interview: 18.07.2000)

6.1.4. The Transition Period into Privatisation

Barbara Evans, who is stationed in India for a significant period of time with the World Bank, provided a background to the limited entry of the private sector into the WSS domain. She felt that with the increased trend in liberalisation of the Indian economy, there has been a greater realisation and policy acceptance of the potential role of the private sector in WSS. In the early 1990's, there have been several attempts to introduce public-private partnership (PPP) arrangements at ground level also, although the objectives of these measures have varied considerably across the states and regions. (Evans, Interview: 17.07.2000)

Whilst the list of PPP attempts is long, there have been some successes, some failures, and others have been delayed indefinitely. Not much information has been documented about the successes and failures on the Indian subcontinent. There is also no incentive structure to corporatise current WSS boards, and then bring in the private sector. A sense of lethargy seems to prevail in the WSS boards, with bureaucratic processes deliberately propped up by high-ranking officials who are happy to live with the current status quo due to the power that it provides. (Evans, Interview: 17.07.2000)

6.1.5. Public Support for Privatisation

According to Evans, there has been minimal private sector involvement in WSS from a financial equity perspective, as tariffs are fixed due to legislation and there is no latitude for profit to be maximised. There also has been no vociferous public condemnation of the private sector. Union opposition to some projects has occurred, but on a small-scale. (Evans, Interview: 17.07.2000)

However, the post-research period (beyond 2001), has revealed that an alliance against private sector participation by civil society has been developed, with an increasing global awareness of the corruptive behaviour of some WSS transnational service corporations (TSC's). The recent (2002) World Summit on Sustainable Development in South Africa has also saw formidable opposition by Indian NGO's and protestors, who have gathered anti-privatisation support in some regions in India. (Roy 2001)

6.1.6. The Role of the State in Privatisation

According to Evans, policy-makers are not working swiftly to fast-track policy formation in order to promote the entry of the private sector into the domain of WSS. From the view of the poverty-stricken, she sees many policy obstacles to the process. For example, one of the major constraints is that municipalities are only obliged to provide slums that are "notified". This means that municipalities do not have to provide WSS services to these communities until a period of tenure is completed. This sometimes takes up to ten years before they can gain official recognition by the municipality. By this time, the conditions are so bad that vast capital injections are needed to provide services. Against a backdrop of much-needed WSS capital infrastructure for the poor, with low abilities-to-pay (ATP's), the private sector is reluctant to get involved. The situation is allowed to burgeon to the point where it becomes a vicious cycle. Evans provides an example, where even though there has been national government acceptance, in principle, of concession contracts through its National Water Committee, which has endorsed WSS private sector participation in infrastructure financing equity-risk, there has yet to be any such large-scale projects. (However, a private WSS company has tendered a proposal for a concession contract in Andhra Pradesh.) (Evans, Interview: 17.07.2000)

According to Evans (Interview: 17.07.2000), some of the government objectives to promote private sector participation options in WSS provision, are as follows: -

- To facilitate technical and managerial expertise and harness new technology into the sector.
- To improve capital markets to welcome commercial financial sources.
- To improve economic efficiency in the use of capital investments and service operations.
- To inject large-scale investment capital into the sector or gain access to private finance capital markets.
- To insulate the WSS sector from short-term political intervention in utility operations.
- To introduce customer-orientation and good customer responsiveness practices.
- To introduce the possibility of a direct link between tariffs and service quality, which will help remove general public subsidies or redirect them to the poor.

Evans indicated that the limited Indian privatisation experiences have not matched the above objectives. Despite the large number of initiatives, there is a lack of clarity on the underlying objectives. For most private sector participation endeavours, the main incentive is to attract private capital especially for institutional capacity enhancement, and limit additional state employment by introducing contracting for the delivery of WSS services. Even for service contracts, which is expected to reduce costs, the source of cost-reduction is not clear, as most contracts leave little latitude for the contractor to innovate. Thus, there is less emphasis on the private sector's ability to bring about innovation in operational efficiency. (Evans, Interview: 17.07.2000)

Evans speaks disparagingly about the lack of understanding amongst state agencies regarding the objectives of different private partners entering into these arrangements. The private sector is distinguished in terms of their component abilities and capacities, such as construction contractors, small contractors for specific tasks, rather than larger operators interested in managing the entire WSS system. (Evans, Interview: 17.07.2000)

Evans particularly emphasises the need to ensure that facilitative public sector WSS organisations should be commercially-orientated within a larger social mandate. Compared to the extent of efforts in project development and outsourcing, institutional restructuring efforts, including new private sector participation arrangements, have been fewer. At a policy level, there is an increasing recognition of its importance. (Evans, Interview: 17.07.2000)

Pathak highlights the important differences between large metropolitan cities and medium-sized towns. In the larger centres, either a special metropolitan authority or a strong municipal corporation provides WSS services. Such an authority has a greater possibility of operational independence, though tariffs are still governed by direct political considerations and decrees. (Pathak, Interview: 18.07.2000)

Where WSS services are provided federally, Pathak indicates that the emerging decentralisation of WSS services is a result of a national government decree to make services more localised. However, many local municipalities are not keen to take over WSS services due to perceived problems, lack of knowledge of such systems, and poor internal capacity. (Pathak, Interview: 18.07.2000)

Pathak's criticisms also include the fact that, at a larger macro-political level, there seems to be a lack of consensus on the needs and usefulness of private sector participation, as well as a lack of clarity and cohesiveness on their objectives. She also sees a lack of consultation with stakeholders on appropriate institutional arrangements as a major constraint to the process. No *localised* forums or platforms exist through which discussions can actually take place, despite the fact that the urban planning process requires public input by law. (Pathak, Interview: 18.07.2000)

According to Evans, the inability of several WSS private sector participation infrastructure projects and institutional restructuring efforts to take-off, also highlights the lack of project champions to guide the process. It is quite common for government to transfer the person spearheading the project in the middle of commissioning, either stopping the project or impeding its progress. (Evans, Interview: 17.07.2000)

6.1.7. The Opposition to Privatisation

Evans comes out very strongly against state bureaucrats, who have powerful vested interests in WSS, and rent-seeking industrial lobbies, which influence state macro-strategies for service delivery. The result is that private sector participation in WSS provision, is developing very slowly. (Evans, Interview: 17.07.2000)

Evans (Interview: 17.07.2000) provides the following diagrammatic representation of the generic case of WSS provision in the metropolitan structures in cities in India: -

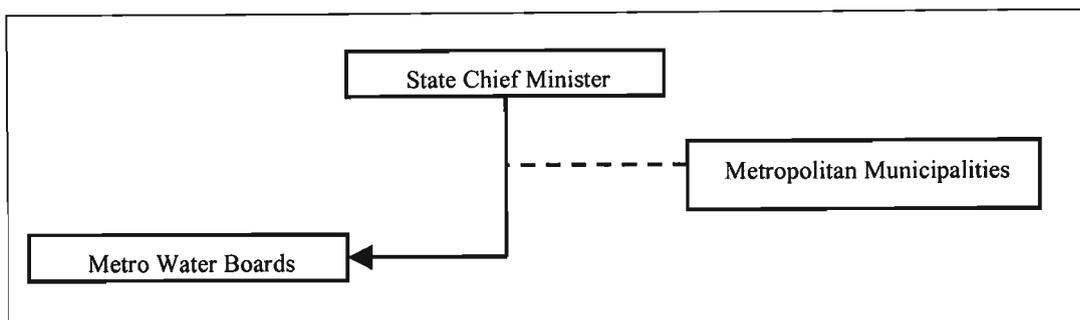


FIGURE 6.1. METRO WATER BOARDS IN INDIA

Source: Evans (2000)

Evans explains that the above diagrammatic representation indicates the control and power WSS provision actually has in India. The Metro Water Boards have to report directly to the Chief Minister of each state, instead of the municipalities. Rent-seeking by the private sector industrialists occurs. These industrialists promote politicians into power by financing their political campaigns. These politicians, in turn, soften their approaches to issues such as individual tariffs and environmental pollution. For example, a Chief Minister has considerable power within his jurisdiction. Along with this power, and the fact that Metro Water Boards report directly to the state rather than at a local level, comes the right to grant industries access to water. Water needs and the pollution of water resources are the requirements and outcomes of heavy industry. Rent-seeking industrialists financially support public choice theory (PCT)-profile political candidates for the position of high office through funds for politicking and electioneering. From a financial perspective, the industrialist is virtually guaranteed some sort of latitude with regards to payments for the vast quantities of water that his

industry may utilise, and the state may deliberately ignore environmental and ecological concerns that emerge through the environmental pollution from these industries. (Evans, Interview: 17.07.2000)

Evans (Interview: 17.07.2000) sums up the slow progress that the state has made in promoting private sector initiatives in WSS in India: -

- The situation, although bad, has not reached *absolutely endemic* proportions, which is needed to trigger large-scale action at a political and operational level in India.
- WSS boards are very strong, politically-speaking, almost taking on what Evans terms: “Mafiosi-type proportions”. These boards are fraught with corruption and are not self-funding. Many politicians are engaged only in “visible” processes, in order to appease any questions that arise regarding their management, and this results in a whitewashing of the real issues.
- There is very little emphasis from the state on the operations and maintenance (O&M) of existing infrastructure and their rehabilitation. Attention seems to be focused on capital-works development. Thus, whilst new systems may be springing up, old systems are declining rapidly. This does not facilitate the entry of the private sector, as it creates significant infrastructure challenges that are hard to operate and maintain sustainably.

According to Webster, a South African expatriate seconded to India by the World Bank, there is union resistance, albeit not as strong as in South Africa. In Bangalore, a litigation suit was brought against the proposed private sector endeavours in WSS. Subsequently, Hyderabad experienced union opposition, scuttling its private sector participation process, as a backlash occurred against the high bid prices that emerged from the tender, amidst talk of possible retrenchments. The Hyderabad Metro Water Board decided to remain a public utility vehicle, with a vast loan request being made to the World Bank to meet its infrastructure backlog. (Webster, Interview: 19.07.2000)

6.1.8. Privatisation Efficiencies

Due to the relative new entry of the private sector in WSS provision in India, at the time of this research, few examples of private sector efficiency existed. As this case study

serves primarily as an investigation into the hindrances and opposition to private sector entry, this has not been limiting to the research. However, as the following discussion will illustrate, there have been some indications of success.

Evans indicates that, despite the number of small-scale initiatives in private sector participation in WSS, these have been limited in scope and confined to a few regions in the country. Most initiatives are concentrated in the South Indian states, and the North Indian neighbouring states of Gujarat and Maharashtra. Evans reiterates the lack of private sector financing in service delivery with almost all projects being service-type contracts. This effectively means that there has not been any equity-debt sharing from the private sector, and that the public sector still carries the financial risk and responsibility. There is only one management contract for a water treatment plant in Chennai, and there are some other management contracts on the verge of commissioning, but these still do not have private sector finance equity. (Evans, Interview: 17.07.2000)

Evans explains the one-dimensional role of these service contracts. WSS services are unbundled into a number of different component sub-services, including contracts for the O&M of facilities such as sewerage pumping stations, sewerage treatment plants, billing and collection of water tariffs, and the O&M of special equipment such as water meters or sewerage-cleaning machines. In some of these contracts, local authorities have gradually evolved a detailed performance monitoring system, which is also used to impose penalties for performance shortfalls. The performance measures include both input and output parameters. Community participation in such monitoring systems were attempted and proved successful. (Evans, Interview: 17.07.2000)

Webster speaks of the success achieved in Ahmedabad, where a PPP arrangement developed between the municipality, a local NGO, community-based organisations (CBO's) and a local banking institution as the financier. The project focused on the development of slum areas by providing capital works infrastructure. (Webster, Interview: 19.07.2000)

Evans makes reference to nearly 30 projects, which were earmarked as Build, Operate, Own and Transfer (BOOT) type contracts. (See Chapter 2 for a discussion on these

various private sector participation options.) Evans' criticisms are levelled at the fact that these WSS projects are complex and have taken considerable time to develop. This is related to inappropriate risk management and poor project development processes. Pre-feasibility studies are also generally inadequate, prior to the bidding process. Transparency and fair selection (which is required for accountability) also seem to be major issues that are found to be absent in such contracts. Variations in the initial selection and conceptualisation of private sector participation projects also affect project development adversely. In the WSS sector, there is a continuous lack of emphasis on distribution and improvements in operational systems, with an undue emphasis on new source development and system expansion. It reflects the lack of commercial orientation in the management of services at an institutional level, as well as the lack of mutual understanding between public agencies and private sector players. (Evans, Interview: 17.07.2000)

Pathak refers to the success that can be achieved through applying economies-of-scale, in this case, by grouping neighbouring towns into a single service delivery arrangement, with some degree of private sector participation. This has been successfully explored in Karnataka, a state in southern India. A memorandum of understanding has been signed between the state and a joint consortium company as a three-year management contract. It effectively uses the existing resources of the public agencies to manage the WSS systems in three neighbouring towns. Thereafter, these may be transformed into longer-term lease contracts. Pathak refers to a Tamil Nadu city having a special PPP vehicle set-up to drive the implementation and operation of new WSS systems. This developed into a full concession contract, which works as a Build, Operate, and Transfer (BOT) project that was *still* financed by the government. It is effectively the first such concession in India. The winning contractor consists of an international consortium. (Pathak, Interview: 18.07.2000)

Evans also discussed the initiatives by WSS companies to propose longer-term concession contracts for WSS services in Andhra Pradesh state. At the time of the research, the initial proposal was awaiting approval by the state authorities. In the state of Maharashtra, India's powerhouse, and home to the sprawling metropolis of Mumbai, possibilities of private sector participation for overall service delivery exists, and are being discussed in several sub-municipal structures. In many cases, the local councils

believe that such endeavours are essential, although they seem to lack knowledge of the mechanisms and processes involved. (Evans, Interview: 17.07.2000)

6.1.9. Financial Issues

According to Zerah, with the relatively new introduction of private sector participation and the fact that there is no private sector financial equity (there are mainly service and management contracts), tariff-collection rates have had minimal impact on the sustainability of the private sector provider. A predetermined fee for the project is paid by the state to the private operator, based on WSS delivery over a set period of time. However, there are implications for future privatisation success, if one considers the current culture of low payment for WSS services. Zerah illustrates the private sector concern about its entry into the Indian WSS industry, despite its tremendous profit potential (she is seconded from the French WSS utility, Suez-Lyonnaise des Eaux). Currently, at a local level, inappropriate tariff review structures exist, as a result of limited commercial knowledge on the part of public utility companies. (Zerah, Interview: 19.07.2000)

Thus, when a private sector operator enters the fray, it may have to increase tariffs. Not only would this fuel communal opposition, but would also serve as a warning to other towns contemplating private sector initiatives. Zerah also refers to the culture-of-entitlement, whereby people expect their WSS services for free, especially after colonial rule, which ended more than over fifty years ago. This is similar to the current South African situation, post-apartheid. (Zerah, Interview: 19.07.2000)

6.1.10. Transnational Companies and Foreign Technology

According to Zerah, some TSC's have already had discussions with various metropolitan municipalities in India about possible private sector participation options. She is disparaging about the lack of international development funding, which increases the development risks at every stage of the projects. High population numbers and low ATP's for tariffs, also increase the risk for the private sector, *despite* the significant *potential* for profits. There are many international WSS companies that have earmarked India potentially as a source of great revenue capacity. Besides the French and English

companies, even a corporatised public sector South African organisation, Umgeni Water⁵⁰, has met with high-powered delegates to market their services. (Zerah, Interview: 19.07.2000)

6.1.11. Foreign Direct Investment

As there has not been any considerable private sector equity-sharing projects, there has, at the time of the research (mid-2000), not been any foreign investment in the WSS sector. However, some of the larger WSS TSC's have conducted at-risk feasibility studies as marketing strategies to the municipalities. These feasibility studies would have required some funding, although this would be minimal compared to the initial foreign capital that can be expected from large-scale private sector participation projects. (Evans, Interview: 17.07.2000)

6.1.12. The Role of Regulation in Privatisation

As India does not have large enough projects to create an institutionally independent regulatory body, WSS private sector participation is monitored by municipalities. Evans indicates, however, that there is some degree of investigative control from the World Bank and the UNDP. The fact that India has not developed any formal legislation to regulate the WSS industry from a private sector perspective or to formally legislate the development of partnerships itself, also pre-empts any regulatory structures being instituted. There does exist a National Water Committee and national government has indicated support for private sector intervention, but no bill has been passed to provide a formal framework for legislative compliance.

6.1.13. The Pilot Project as an Indicator of Success

The projects that have been initiated in India have mostly been implemented simultaneously, and operate on small service or management contracts. These have been successful with regards to achieving synergies with private sector management and through community mobilisation.

⁵⁰ See Chapter 9 for a discussion on Umgeni Water.

6.1.14. Concluding Remarks

The following sensitivity analysis has been determined by the researcher: -

TABLE 6.1. INDIAN SENSITIVITY PARAMETER TABLE

| Domain | Area | Key Performance Indicators / Factors |
|---------------------------------------|--|--|
| The Emergence of Privatisation | The Reasons for Privatisation | <ul style="list-style-type: none"> • Lack of state funds for capital infrastructure investment. • To counteract the effects of poor cultures-of-payment. • Poorly-managed state WSS utilities. • Increase accountability, as large-scale corruption exists in state hands. |
| | The Transition Period into Privatisation | <ul style="list-style-type: none"> • Progress has been slow as there is considerable opposition to private sector entry. World Bank personnel have been stationed in India investigating private sector participation options. |
| | Public Support for Privatisation | <ul style="list-style-type: none"> • Initially apathetic but now a considerable increase in civil sector opposition. |
| | The Role of the State in Privatisation | <ul style="list-style-type: none"> • Has set up a national privatisation driving vehicle. • Legislation is inadequate. • Due to federal nature of India's states, national decrees lose momentum at a regional level. |
| | The Opposition to Privatisation | <ul style="list-style-type: none"> • Considerable opposition by some state bureaucrats. • Union opposition, although it does exist, is minimal. • Some civil sector opposition with increasing global awareness campaigns. |
| | The Pilot Project as an Indicator of Success | <ul style="list-style-type: none"> • Projects have been small-scale management and service contracts, implemented simultaneously. There has not been any equity-sharing by the private sector in projects, so no concise pilot projects exist. |

| Domain | Area | Key Performance Indicators / Factors |
|---------------------------------------|--|--|
| Privatisation Efficiencies and Ethics | Financial Issues | <ul style="list-style-type: none"> A culture-of-entitlement does exist, so willingness-to-pay (WTP) is low. This does have concern for private sector equity-sharing, as the financial risks for returns on investments are higher. |
| | Privatisation Efficiencies | <ul style="list-style-type: none"> There has been success in community partnerships with certain municipalities. Small, Medium and Micro Enterprises (SMME's) has been set-up to manage certain aspects of service provision. Economies-of-scale has also proven to be a success factor in the grouping of municipalities to provide services. |
| | The Role of Regulation in Privatisation | <ul style="list-style-type: none"> As the private sector is not involved in a financial-equity capacity, regulatory bodies have not been set-up. The World Bank and UNDP does investigate issues of accountability for some projects. |
| Globalisation Issues | Transnational Companies and Foreign Technology | <ul style="list-style-type: none"> Some TSC's have conducted at-risk feasibility studies. |
| | Foreign Direct Investment | <ul style="list-style-type: none"> As there is no financial-equity in these small-scale projects from the private sector, there has been no FDI. |

Source: Researcher's Analysis

India is potentially one of the largest global markets for TSC's to target for their WSS operations reach, as the high population base can possibly provide larger profits. There is considerable lobbying by TSC's to the Indian chapter of the World Bank and in municipalities for a rapid transition to a more market-focused WSS service delivery. There is very little state funds that are available to finance the significant infrastructure requirements throughout the country in WSS. The low WTP's are also an inhibitive factor to ensuring WSS sustainability.

The ease into privatisation of WSS has been slow, as there is considerable opposition from public sector bureaucrats (who have their self-benedictive agendas) against privatisation. There is a national privatisation committee that exists, which has not made great in-roads into promoting privatisation. In essence, privatisation is still in its "fledgling" status in India.

In India, opposition to private sector participation emanates not from the unions and the general public, but rather from rent-seeking industrialists who have much to gain from corrupt, bureaucratic state employees, who choose to keep WSS boards in state hands. Generally, public opinion is that the state focuses on development, whilst the market pursues a profit-incentive. The Indian case study reveals that, in the case of the former perception, the opposite is true at a federal level. Corruption by state bureaucrats is rife, and their monopolistic hold on WSS utilities serves as a great source of power in politicking. The Indian unions seem weak and fragmented, and not as strong as their South African counterparts. There have been small pockets of successful union opposition, mainly aimed at possible retrenchments. (However, the likelihood of retrenchment is low, considering the high infrastructure needs of India, and developing countries in general.)

India has shown that, with adequate community participation, it is possible to achieve success. Communities in India have decided to take charge of their WSS needs in terms of *ensuring* its provision. Some municipalities have merged in terms of providing WSS, to achieve economies-of-scale. This could be a successful public sector option delivery as an alternative to private sector participation, to utilise in other developing nations. A significant level of state bureaucracy exists preventing the swift implementation of any privatisation measure, especially in the metropolitan areas. Through a piecemeal process, success is being achieved in certain areas such as Ajmer and Madras. India is effectively a decade behind South Africa in the privatisation field at the current rate of progress.

Emanating out of the Indian case study, the greatest contrast to the South African situation is encapsulated by the opposition against private sector entry that is created by the state bureaucrats. The opposition provided by a fragmented union at a national level, also provides a glimpse of the differences that exists between India and South Africa in terms of differences in the scale of union opposition. It also indicates that union opposition, of the scale experienced in South Africa, does not globally pervade all developing countries.

6.2. Foreign Case Study Investigation: Karachi

6.2.1. Aim of this Case Study

Karachi's⁵¹ proposed WSS concession did not materialise due to extreme resistance by many stakeholders, particularly the unions, who took the government to court to halt the privatisation bid and subsequently won the case. As South Africa also has a very strong union presence and is a developing country facing an urban WSS infrastructure provision crisis, the parallels that can be seen between the two countries are beneficial in understanding the local and global resistance towards private sector participation in WSS.

The enabling environment for successful private sector participation is very important. However, like any commercial venture, the risk of failure does exist. In the case of the natural monopoly situation that WSS presents, there is little or no competition from other service providers. The potential for high profits in WSS provision is thus, extremely high. This is counterbalanced by the fact that there is also a commercial risk failure, if the tariff-collection rate does not meet certain absolute minimum values, or if the private entity is over-regulated.

The Karachi case illustrates the excessive case of providing an enabling environment for private sector entry. The commercial entity would have had very little initial financial-equity to invest in the system, and the creation of counter-measures by the government, cushioned the prospective private sector winner from market failure.

Both of the above scenarios serve as a learning curve for South Africa, if a metropolitan area is considered for private sector participation with financial equity-sharing in WSS provision.

⁵¹ This study is a combination of empirical and case study investigations.

6.2.2. Research Methodology

The generic framework for the research methodology is set-out in Chapter 1. Here, only data-gathering research that is specific to this case study, is discussed.

This research was conducted through interviews with various people who worked on the Karachi private sector participation strategy. Some were interviewed in India, as they were involved from a World Bank perspective, and others were interviewed via e-mail correspondence.

Amongst those interviewed were: -

- Barbara Evans: World Bank.
- Mohammed Sohail: Loughborough University (through correspondence).

Various sources of empirical literature cited in the bibliography were also studied for experiences of other stakeholders.

6.2.3. The Reasons for Privatisation

Before the establishment of the Karachi municipality in the mid-1850's, water was obtained from wells located throughout the city. Karachi differed from other cities in the area, as its water abstraction came from rivers outside of the city. It was only by the mid-1880's that English engineers set up a network of piping infrastructure to distribute water, including wells that were sunk in the city. (Ahmed and Sohail 2000: 11)

Karachi's population increased from 45000 on the eve of partition of the Indian subcontinent in 1947, to more than 13 million people in 2000. Over the years, plans were prepared to improve the city's infrastructure, but these were not fully implemented for a variety of political, technical, and institutional reasons. As a result, much of Karachi's social infrastructure needs could not be met. (Ahmed and Sohail 2000: 11-12) From 1951, the Government of Sindh (GoS) implemented infrastructure development and operational activities under various institutional arrangements, but for a variety of

reasons, many of these arrangement could not fully address the rapidly-escalating needs of the city. (Hasan 2001: 25-31)

In 1983, the GoS created the KWSB in response to this burgeoning crisis. The GoS made notable efforts with the support of international lending agencies, to improve the technical and commercial position of KWSB. Despite this, WSS services remained very limited in their operational and capital expansion capacities. (Hasan 2001: 25-31)

With a rapidly increasing population, these WSS arrangements began to fall short of community expectations. Capital infrastructure improvements and new works could not keep pace with rapid population growth. The poor infrastructure development and maintenance was due to a number of factors, including low tariff-levels, poor rates recovery, political interference, obsolete technologies, and overstaffing crises. (Ahmed and Sohail 2000:11)

The city also faced an acute water supply shortage and poor service-levels with regards to sanitation. The KWSB had barely the capacity to meet the needs of half of Karachi's population. Other water-users took their water supply from private vendors who charged exorbitant prices for poor quality water through broken mains, wells, hydrants, and tankers. (Ahmed and Sohail 2000: 12)

According to Sayeed et al. (1997: 2), revenue collection by KWSB was very low. Only 23 percent of the 700000 billed customers paid their accounts in 1996/97. Further to this, approximately 100000 customers were connected but not billed. Tariff-levels were low by international standards, even in comparison with other cities in Pakistan.

6.2.4. The Transition Period into Privatisation

Since the 1980's, the Government of Pakistan has gradually adopted the policy of liberalisation and started implementing the policy of denationalisation, deregulation, and decentralisation. Initially, the populace of the country was not too concerned about these policies, accepting them under the assumption that increased private sector participation would create more job opportunities and result in increased income levels across-the-board. (Ahmed and Sohail 2000)

Privatisation developed in Pakistan throughout the early 1990's. The Pakistan national government founded the Privatisation Commission, whose objective was to set-up the institutional capacities to privatise the main state commercial units and industries. The country's external debt was nearly US\$10 billion, so it was envisaged that privatisation would unlock some of the wealth held in these state industries. (Hasan 2001: 25-31)

6.2.5. The Role of the State in Privatisation

By 1994, a World Bank mission focusing on WSS issues held discussions with the GoS to offer institutional and possible financial support for private sector participation in its WSS infrastructure construction and service provision in urban areas. The GoS wanted the privatisation initiative to go ahead, based on the proviso that the World Bank would be involved in the tender adjudication process. The GoS also wanted the process to be totally transparent. (Evans, Interview: 17.07.2000)

Evans adds that the World Bank offered the names of eight multinational WSS utility companies for consideration. Officials from the GoS also attended seminars on partnerships with private and public sector entities in Paris, to gain a better understanding of the synergies involved. (Evans, Interview: 17.07.2000)

Evans (Interview: 17.07.2000) stated that the terms of reference for the World Bank were as follows: -

- To assist in the bidding process and the tender adjudication.
- To assist in the preparation of request-for-proposals (RFP's) and pre-qualification documents.
- To assist in developing a private sector participation strategy and a preferred approach that would best suit the city of Karachi and its people.
- To conduct a detailed feasibility study of options and provide all scenario impacts and costs involved.

As part of its propaganda campaign to gain the support for this new privatisation paradigm, an intensive media campaign was developed, which included various forums involving many stakeholders. (Evans, Interview: 17.07.2000)

6.2.6. Foreign Direct Investment

The GoS guaranteed the private sector participation in a commercial venture, with absolutely no risk for the winning private sector utility company in the event of failure, a circumstance not generally found in the market. In fact, the winning bidder would only need to provide an equity of \$US 50 million, whilst the GoS and the Pakistan national government would provide a risk-equity of US\$250 million collectively. (Hasan 2001: 25-31)

Despite the prospective private sector monopoly with the imminent privatisation, private equity-finance would only bring-in less than 10 percent of the funds needed for rehabilitation and expansion of the network. The bulk of investments would be financed by additional international agency loans and rapidly increased revenues, through tariff increases and a doubling of the collection-rate. Notwithstanding network expansions, this would increase revenue by well over 600 percent. Furthermore, GoS guaranteed all future international debt, and there would be no penalties for poor performance by the privatised entity. The private sector participation strategy also recommended that the provincial and national governments continue to service nearly US\$300 million of debts for past and concurrent schemes. In essence, the financial accountability aspect that privatisation is meant to bring, had virtually disappeared. (Hasan 2001: 25-31)

Labour costs were also considered to be a prime factor in the fiscal crisis, and that the private sector participation strategy proposed a reduction in staff by 1500 members prior to privatisation, and by another four thousand after privatisation. This resulted in large-scale opposition from the unions. (Hasan 2001: 25-31)

Evans also reveals that there were no firm guarantees for improved services, or a clear legal guarantee of minimum quality standards on the part of the operator, despite the GoS's financial guarantees. Very little emphasis was placed on the improvement of the sewerage system because it did not yield substantial profits. The lack of attention towards the fate of the slums and the unrealistic price hike was a strong factor in the blockading of the privatisation as well. The GoS had indicated that it would not charge any concession fee to the private sector operator, in order to increase the marketability of the project. This was found to be unreasonable by the committee as the KWSB had a

high degree of debt that needed financing. With Pakistan's declining creditworthiness internationally, it was likely that this debt situation would not realign itself. There was also the problem of the KWSB debt-servicing, in view of the proposed five-year "no concession fee" status granted to the operator. The privatisation committee also reported that, owing to the change of mood in Karachi, that is, the rising opposition against the projected denationalisation of KWSB, the World Bank itself did not consider private sector participation as a viable option any longer. (Evans, Interview: 17.07.2000)

About 60 percent of Karachi's residents live in informal slums, without any formal WSS provision. It was found that the private sector participation strategy did not provide any substantial framework to address this area of operations, or how to eradicate the lack of badly-needed WSS infrastructure. (Sohail, Correspondence: 17.08.2000)

6.2.7. Public Support for Privatisation

Sohail indicates that later on, the response from the public and other stakeholders, including the media, was initially negative towards the privatisation campaign of Karachi's WSS. As a result, the GoS formed a committee to assess the viability of any private sector participation in Karachi's WSS. (Sohail, Correspondence: 17.08.2000)

The staff of KWSB felt that people would not benefit from the privatisation, as no mention was made of the extension of service-coverage to the poor, and there was no public consultation. The staff also felt that their abilities were not fully utilised, as they had diminished powers of authority. The water traders (small-scale private vendors) were obviously against privatisation as it would have marginalised them out the business. Builders and developers were positive about privatisation based on issues of efficiency, which included the timeous payment of accounts. The developers felt that the administrative, technical and managerial performance of the KWSB would improve after privatisation. Local politicians felt that most people were against privatisation as it would cause unemployment, whilst national politicians and high-ranking officials were more positive about privatisation, based on KWSB's financial malpractice. There were mixed reactions from civil society groups. The more affluent saw privatisation is a good idea, especially from those who paid their WSS bills. The poor had a more negative

view. They felt that it was difficult to believe that a foreign company would invest in the extension of services when their own government did not want to invest in it. (Ahmed and Sohail 2000: 27-36)

6.2.8. The Opposition to Privatisation

Trade unions from KWSB and citizen groups challenged the privatisation in court. In 1999, the Sindh High Court issued orders to temporarily freeze the whole process. (Evans, Interview: 17.07.2000)

In view of the mounting opposition, supported by an increasingly coherent argument against privatisation, the GoS decided to form an independent committee to look into the social, financial, and administrative aspects of the project. Its findings underlined the shortcomings of the project. (Evans, Interview: 17.07.2000)

6.2.9. The Role of Regulation

Regulatory aspects of the project did not become a contentious issue. However, there was an understanding between the GoS and the World Bank that the latter would set-up the institutional support required to ensure the success of a pilot project. (Evans, Interview: 17.07.2000)

6.2.10. Financial Issues

The willingness-to-pay (WTP) of consumers was judged to be high, based on rates paid for private tanker delivery. Similarly, the current tariffs were well within the generally accepted affordability threshold of 4 percent of household income. (Ahmed and Sohail 2000: 12)

6.2.11. Transnational Corporations and Foreign Technology

As this project was impeded, there is no evidence to test for the foreign technology component. It was envisaged that the prospective bidder would most likely have been one of the larger WSS TSC's. (Evans, Interview: 17.07.2000)

6.2.12. Privatisation Efficiencies

The expected gains from privatisation were primarily aimed at increasing service coverage and rehabilitating the current network system. With water being sourced from outside of the city, it was envisaged by the GoS that the successful prospective private sector bidder, would investigate an innovative method of increasing the haulage of water into the city. (Evans, Interview: 17.07.2000)

6.2.13. The Pilot Project as an Indicator of Success

Like all pilot projects, Karachi was the most suitable place to begin any privatisation endeavour. It was essentially Pakistan's financial powerhouse. Karachi gained considerable attention from the World Bank during this period, not necessarily a service that could be provided in the long-term to other projects of this nature. National and provincial governments were also providing financial guarantees that would not be feasible in successive projects.

6.2.14. Concluding Remarks

As privatisation did not proceed, a sensitivity parameter table has not been developed for analysis.

Karachi's WSS system was ailing because it was quite old and in need of rehabilitation. In addition, because water was abstracted from a considerable distance, the costs were greater. In light of the low tariff collection for WSS under public sector operations, the challenge for WSS provision was significant.

The significant flaw in Karachi's case manifests itself in the minimal commercial risk that was attached to the proposal to be borne by the successful private sector service provider. The prospective private sector would be protected from commercial failure, a scenario that does not exist in private sector markets.

As is becoming evident, it would seem that pilot projects receive the most amount of attention in terms of funding (both internal and external) and seem to have the greatest

institutional support structures in place in comparison to successive projects. Thus, whereas a pilot project's success does not imply that other future projects will be successful, the opposite holds true in the case of failure. Pilot project failure indicates with a fair degree of certainty that successive projects in other cities or towns would fail.

In the Pakistan case, the period of transition was too rapid. Whilst initially it had public support, this rapidly dwindled. Privatisation in developing countries has developed this symptomatic approach to swift privatisation, which tends to have minimal acceptance from the general public.

In terms of the ex-ante costs that went into the feasibility study stages, the costs to Pakistan were high. The fact that it was stopped just before commissioning indicates the measure of opposition to the whole privatisation process in Pakistan, especially as it was the unions that took the case to court and won. In this case, if the role of the unions is universally expected to protect the rights of the employee, then considering the impending retrenchment, the unions were within their jurisdiction with regards to opposing the privatisation attempt. However, due to extensive coverage requirements that needed to be met in the long-term, the eventual employment creation could have increased.

PART C: THE SOUTH AFRICAN EXPERIENCE

Part C begins with Chapter 7, which discusses the development of South African macro-economic strategies from 1910 to the current period (2003). It traces the trajectory from a strong state-led development focus that focused mainly on providing comprehensive basic services for White communities, to the eventual neoliberal framework embraced by national government today. Chapter 7 also provides a review of the current legislative frameworks and government guidelines that enable the privatisation environment in South Africa. This is followed by a review of the current wave of criticism levelled at privatisation attempts in South Africa, which is especially pertinent since the opposition coalition has successfully halted or postponed the privatisation process in water supply and sanitation. Chapter 7 essentially provides a macro framework to understanding the microcosm that the *individual* South African case studies represent and work within.

Chapter 8 follows with a critical examination of the Dolphin Coast case study, which serves as the crux of this thesis. It is the first public-private partnership concession in South Africa, and heralds the *official* introduction of the “privatisation brigade” in water supply and sanitation.

Chapter 9 follows with smaller case study investigations in the Stanger, Estcourt, and Newcastle municipalities of the KwaZulu-Natal province of South Africa. It further investigates the parastatal operational utility, Umgeni Water, which is a government-instituted organisation that is tasked with bulk water provision and addressing the primary water supply and sanitation needs of certain rural communities in KwaZulu-Natal. Umgeni Water is investigated as an institution instead of a geographical area (such as in the case of the municipalities investigated), because of its successful delivery achievements as a public sector vehicle.

CHAPTER 7: THE EMERGENCE OF PRIVATISATION

7.1. Background and Introduction

In the developed nations, the move toward privatisation emanated mainly out of an *existing* free-market economy with more comprehensive municipal services infrastructure in comparison to the developing nations. The developed nations' expectation of the outcome of privatisation was arguably an increase in the efficiency of service delivery. In essence, privatisation was an exploration of the synergies that could be achieved by integrating the public and private sectors towards delivering more efficient basic services. In South Africa, although service delivery efficiencies should be paramount to any privatisation attempt considered, the driving forces behind private sector participation are somewhat more reactive in comparison to the developed nations. In water supply and sanitation (WSS) provision, the privatisation option has emerged because of a *lack* of government funding for the financing of vast WSS capital infrastructure backlogs.

There are mainly two distinct types of privatisations in South Africa. One of these is evident in the restructuring of state-owned utility companies such as Telkom, Transnet, and Eskom, which monopolise the communications, logistics, and electricity generation industries. This has occurred partially through the process of demutualisation and the sales of shares in these companies. The other type of privatisation occurs in the provision of former public goods, such as WSS, which occurs mainly at the tier of local government (municipalities). It is at this level of governance that national government assistance is required in providing basic municipal infrastructure through grants, legislative, and institutional assistance, as most non-metropolitan municipalities⁵² have limited funds for development and poor credit ratings to borrow finance from the financial institutions. It was estimated in 1994 by the Department of Constitutional Development that South Africa needed R170 billion for infrastructure development, to meet basic service-levels (Municipal Infrastructure Investment Framework 1995).

⁵² In South Africa, as discussed earlier, metropolitan municipalities have a dynamic that is very different to their non-metropolitan counterparts. This difference is based mainly on the parameters of the economies-of-scale and significant affluent population base, which is a factor that arguably, favours the metropolitan municipalities in terms of achieving sustainable service delivery. See discussion in Chapter 1.

Creditworthy private sector utilities thus become the *default* service providers, who have sufficient initial capital, or access to capital, for the financing of infrastructure development projects.

Effectively, the difference in the driving forces between private sector participation in the developed and developing countries for service delivery are illustrated with the former seeking operational efficiencies and the latter urgently requiring capital to finance development infrastructure. Cognisance has to be taken that whereas in the developed nations, privatisation of WSS was essentially a matter of choice, in South Africa it was introduced as a case of necessity. (This argument is extracted further in the South African case studies in Chapters 8 and 9.)

The following discussion provides a framework to understand the changes in macro-economic policies that has led to the current neoliberal paradigm that underpins South Africa's economic policies. The focus of the discussion is centred on the implications that changes in these economic policies have meant for municipal service delivery and the entry of privatisation paradigms. It is important to understand that the African National Congress (ANC) campaigned on a nationalisation agenda prior to, and just after its unbanning in 1990. The change to a neoliberal policy, which was anchored in 1996 with national government's Growth, Employment and Redistribution (GEAR) macro-economic policy, is arguably underscored by the *perceived* influence of the World Bank and other Bretton Woods organisations, in some quarters. (See Padayachee, in Michie and Padayachee 1997)

Many socio-economic researchers such as Patrick Bond and David McDonald⁵³ view South Africa's attempts at privatisation as being underpinned by the neoliberal influence of the World Bank. Bond's views are exemplified by the following excerpts from his research: "The Knowledge [World] Bank strengthened the neoliberal cause within the ANC..." (Bond 2000: 191); and "The Bank maintains a broadly dominant

⁵³ Patrick Bond is based at the University of Witwatersrand in South Africa, and David McDonald is based at the University of Queens in Canada. Bond and McDonald have written extensively on socio-economic issues in South Africa, particularly against the privatisation of basic municipal services. Bond and McDonald are also key researchers on the University of Queens project, which focuses on the effects of municipal privatization, and poor service delivery, on the indigent in South Africa.

role in proffering advice—and sometimes orders—in the SADC⁵⁴ water sector.” (Bond et al. 2001: 2). Bond (2000: 3) further reveals his negative perceptions towards the Bretton Woods organisations when he states: “...the *pernicious*⁵⁵ influence of World Bank and International Monetary Fund advisory missions...”

The views of anti-privatisation researchers such as Bond and McDonald are opposed by empirical studies conducted by employees of pro-privatisation *public* agencies in South Africa, and some consultancy services. According to Jackson (2000: 1), a project manager stationed at the Municipal Infrastructure Investment Unit (MIIU)⁵⁶, the international experience of privatisation has generally been positive, and where problems were identified, these could be avoided in future privatisation projects. Jackson’s views are that in the general case of WSS privatisation, consumers cumulatively benefit. Jackson is not anti-public provision (2000: 2), as he acknowledges that there are global examples of successful publicly-run WSS services. However, Jackson (2000: 2) sees South Africa’s challenges and shift towards privatisation being embedded in the lack of state funding to finance infrastructure development. Jackson’s (2000: 7) views are that corruption potentially exists in both the public and private sectors, so it is actually a strong *regulatory* system that is needed to prevent the occurrences of corruption. Jackson uses parameters such as increases in infrastructure development and other measurable benefits under privatisation to support his views, which are echoed by some national government officials and consultancy services.

Concomitantly, differing, and sometimes, contradictory views, are proffered by researchers, who focus mainly on issues that legitimise their general anti-privatisation views on privatisation. At this stage, the privatisation of municipal WSS services has been staggered or significantly impeded by a strong, co-ordinated coalition of worker trade unions, anti-privatisation researcher’s, and labour organisations.

In introducing the macro context for privatisation in South Africa, there are three prominent issues that require further discussion. Section 7.2. traces the trajectory of

⁵⁴ Researcher’s note: SADC is an acronym for Southern African Development Community.

⁵⁵ Researcher’s emphasis.

⁵⁶ National government instituted the MIIU under the auspices of the national Department of Local Government and Housing to drive municipal privatisation and facilitate the gap in the municipalities’ knowledge of privatisation mechanisms.

South Africa as it underwent various changes to its economic policies with their resultant implications for service delivery in the 1990's. Emanating from the neoliberal GEAR policy that shapes South Africa's economy currently, is the legislative framework and guidelines that have been swiftly developed to govern and facilitate the privatisation paradigm (Section 7.3.) Also emerging from this introductory discussion is the strong cohesiveness and institutional capacities of the anti-privatisation coalition that has staggered municipal privatisation. Section 7.4. investigates some of the arguments that underpin this opposition. Essentially, the anti-privatisation coalition does not view privatisation as providing the degree of development-orientation that they feel that South Africa needs to ensure the provision of affordable services to the indigent.

The shift in government policy towards a neoliberal 'user pays' system, coupled with rising unemployment and high inflation, has meant that the ability-to-pay (ATP) for basic services such as WSS has become more difficult.

The combination of a lack of social bulk services infrastructure and a low ATP for services has created a formidable task for the succeeding democratically-elected ANC government. (Lipton and Simkins 1993: 5-6; and Terreblanche 2002: 371-415)

7.2. The Transition Period into Privatisation

The following discussion details the various economic models that were suggested as solutions to South Africa's economic challenges in the 1990's, by various economic bodies that represented different quarters. Of the four models that are discussed, only two were actually implemented as policies of national government, as the discussion will reveal.

i) The Normative Economic Model

In 1993, just prior to its exit, the National Party released an economic approach called the Normative Economic Model (NEM) (Carter et al. 2002: 3; and Central Economic Advisory Services 1993). The NEM focused on a lean state with a strong focus on privatisation. The NEM approach was rejected by the ANC because of NEM's neoliberal nature. Therefore, this rejection of the NEM approach by the ANC is ironical

that the NEM shares considerable common ground with the ANC's current GEAR policy, *vis 'a vis*, the deregulation of the market and the entry of privatisation (Carter et al. 2002: 5).

In trying to procure support for the NEM policy, the National Party government explained that its preference for changes to the prevailing economic policies was built-upon the goals of maximising the growth of the economy. Structural changes were to come from the expected flexibility to be achieved by sustained and higher growth rates, which would encourage significant inflows of private foreign investment. Specific targets in the NEM policy included raising the gross investment-to-GDP⁵⁷ ratio, thereby reducing the budget deficit and the tax revenue-to-GDP ratio. These targets were to be achieved by maintaining a competitive exchange rate and keeping a tight grip on inflation. The NEM approach advocated an economic framework that focused on supply side reforms. It further advocated the paradigms of a free-market economy and private ownership, which were seen as substantive factors in developing the South African economy. This NEM approach advocated policy changes to facilitate the entry of privatisation mechanisms, which would supposedly provide benefits that, according to NEM, suggested would eventually filter through to the poorer communities. (Habib and Padayachee 2000: 245-263; and Michie and Padayachee 2001: 185)

The NEM model effectively proposed the continuity of the fragmented and duplicative administration departments (Central Economic Advisory Services 1993) that were introduced under apartheid. This lack of synergy in using duplicative departments with similar foci would have continued to be a considerable drain on state funds. (MERG Report 1993: 4)

ii) The Macro-Economic Research Group Model

Almost in tandem with the release of the NEM from the National Party, the ANC released a macro-economic strategy under the auspices of the Macro-Economic Research Group (MERG) called Making Democracy Work. MERG was linked to the Industrial Strategy Project (ISP), which focused on issues of productivity growth and

⁵⁷ Gross Domestic Product.

the opening-up of the South African economy. Both proposals attempted to provide a balance of the “old style ANC thinking and the dominant neoliberal ideas of the Washington Consensus (Carter et al. 2002: 3). The MERG approach was never institutionalised and was not adopted by the ANC government, with minimal support from the business sector and mainstream economists (Marais 2002: 137).

The MERG option favoured post-Keynesian paradigms (Carter et al. 2002: 4) of an interventionist state, with a two-phase plan of a strong state-led growth phase followed by a phase that would promote an increasing private sector presence. The MERG strategy, although not instituted, did however, have certain elements carried through to the adopted RDP policy in 1994. (MERG Report 1993: 10-11; and Michie and Padayachee 2001: 186)

The MERG approach aimed to target the poor directly and focus on providing them with the means, in terms of socio-economic infrastructure, to participate in the country’s economy. It placed significant emphasis on infrastructure development, financed by public-led investment and on easing supply bottlenecks in the economy. (Fine 2002: 5; and Habib and Padayachee 2000: 245-263)

It was essentially a demand-led and internal infrastructural development strategy, which was less immediately concerned with reducing the budget deficit and inflation (African Communist 2003: 8). Fine (2002: 5) saw MERG as attempting to provide an alternative to neoliberal policies and frameworks, particularly in the context of the provision of socio-economic infrastructure. MERG saw a significant constraint in terms of institutional capacities of vehicles to deliver basic amenities, which would include WSS and other bulk infrastructure. These constraints could be particularly embedded in issues of service-levels and the conditions of finance.

MERG attempted to provide a macro and micro-economic strategy for the financing of basic infrastructure. The key to MERG was not just the financing sources and mechanisms to leverage, but the question of *how* to deliver basic social infrastructure. MERG also encouraged the continued ownership of state utility companies. (MERG Report 1993: 13; and Habib and Padayachee 2000: 245-263)

iii) The Reconstruction and Development Programme: 1994

The RDP was the product of a lengthy grassroots and community struggle. It represented, in some ways, the continuation of the Freedom Charter of 1955 (Fine 2002: 2), a struggle-document, which outlined the ANC's agenda through its period in exile, although there were points of conjecture that did exist between the RDP and the Freedom Charter.

The RDP envisaged the development of a strong, democratic state that would redistribute wealth and provide basic goods and services as justifiable entitlements to the people of South Africa. Once the technical details had largely been established and fiscal constraints understood, mass popular support for the RDP was mobilised through state-led information campaigns. In actual fact, a separate ministry was instituted to manage basic infrastructure delivery via the RDP. (Researcher's Experience 1994-1996: Appendix 8)

In essence, the RDP was conceptualised as an integrated socio-economic policy framework, which had buy-in from both business and political spheres. The RDP's ideology was in fact, argued by the ANC to be in line with MERG, the point of departure being some degree of greater liberalisation in terms of trade growth and tariff relaxation under the RDP. (Habib and Padayachee 2000: 245-263)

The RDP proposed development through reconstruction and redistribution and provided an enabling role for government in guiding the economy. The disadvantaged majority supported the RDP as it promised to release the economic potential of the country, providing jobs, the equitable distribution of income, and the provision of basic services. The RDP was developed with the specific aim of addressing the infrastructure and service delivery backlogs. Designed with the assistance of academia, government officials, non-governmental organisations (NGO's), community-based organisations (CBO's), development consultants, parastatals, quasi-government structures, and corporates; it was essentially a guideline document that provided the benchmark measurements for access to basic services. (Adelzadeh 1996: 66-95)

For example, access to a potable water supply was a basic public good, which had to be made available to all citizens in South Africa. A minimum of 25 litres of affordable, potable water, at least through a standpipe, was to be made accessible to all citizens within a radius of 200m. Similarly, sewerage services in the form of pit latrines as a minimum, was to be provided. (RDP Policy Document 1994: 28-31)

The following is a list of some RDP infrastructure goals in 1994: -

TABLE 7.1. RECONSTRUCTION AND DEVELOPMENT PROGRAMME GOALS

| RDP Goals | |
|---|--|
| Housing: Provide well-located and affordable shelter for all by the year 2003. Build one million houses in five years. | Electricity: Supply 2.5 million more households and all schools and clinics with electricity by the year 2000. |
| Water: Supply 20 to 30 litres of clean water each day to every person in two years and 50 to 60 litres per day within five years from a point no more than 200 meters from their dwelling. | Health Care: Give free medical care to children under 6 years and to homeless children; improve maternity care for women and organise programmes to prevent and treat major diseases. |

Source: Researcher's Compilation (RDP Policy Document 1994)

The document also emphasised the cross-subsidisation of tariffs from rich to poor and from urban to rural. However, the RDP failed to provide any strategic framework on how to actualise this service delivery through any normative means. It is, in essence, not really an implementational "how-to" strategy, as more of a "what-there-should-be" document. Whilst the RDP document outlined the measurements for service delivery, it was vague in the details of how to achieve this. It did provide a platform for bringing in a greater number of stakeholders, including the private sector, not so much in a financial equity role, but more in an advisory or management contract role, such as in the construction of infrastructure. (Researcher's Experience 1996-1999: Appendix 8)

Bond (2000: 89-121) sees the RDP policy as having elements of the neoliberal paradigm especially regarding its strict limitations on state expenditure. Bond highlights the initial support from the left-wing South African Communist Party (SACP) and the Congress of South African Trade Unions (COSATU) for the RDP, because these organisations interpreted it to facilitate some degree of decommodification of essential

goods. Bond (2000: 93) states: “Before the ink was dry on the RDP, leading activists of the of the SACP began defending the document as consistent with the longer-term socialist project....There were mutual supportive means within the RDP to ‘decommodify’ (remove from the market) and ‘destratify’ (make universal) basic needs goods, in addition to other radical reforms.”

In providing the basic impetus for private sector participation, the RDP also failed to stress focal attention to the regulation of stakeholders, and provided many private sector consortiums in WSS provision, considerable latitude to be unaccountable. In KwaZulu-Natal (KZN), this was evident in the Build, Operate, Train, and Transfer (BOTT) public-private partnership (PPP) contract, initially developed under the rubric of the RDP for the Department of Water Affairs and Forestry (DWAF). A consortium of private sector construction, social development, and operations and maintenance (O&M) companies won the lucrative R100 million per annum contract to manage the construction, implementation, commissioning, O&M, and training needs for the second round of the RDP WSS programme in KZN. This would have been followed by the subsequent handover of these WSS projects to regional councils in KZN. This contract was regarded in many quarters as a huge failure, due to a poor understanding of the process of ushering-in private sector participation and a lack of strong regulation. The construction company was liquidated due to insolvency, the actual physical structures erected were of poor quality, and there was no initial competent regulator to monitor the consortium at a provincial level. In essence, the DWAF had failed in providing the monitoring compliance that was evidently needed in such a project. It was only later that an employer’s representative (sourced from the private sector) was hired to serve as a monitoring watchdog on behalf of the DWAF. (Researcher’s Experience 1996-1999: Appendix 8)

Thus, whilst the RDP document provided the targets, it failed to provide the means and ability for the sustainability of these projects. The focus was on the government subsidisation of projects. (Researcher’s Experience 1996-1999: Appendix 8)

The RDP recognised the funding gap and specified the need for tariff-restructuring and cross-subsidies with respect to WSS. Moreover, according to the RDP, in the case of water, the national recommended tariffing structure included a lifeline supply to ensure

that all South Africans had access to it that was sufficient for health and hygiene requirements. (Researcher's Experience 1996-1999: Appendix 8)

Whilst the government may have provided vital infrastructure services to three million households (Government Media Announcements 1999), a large number of these schemes are not sustainably operational. In many instances, the actual infrastructure has been vandalised and repairs have been minimal. In other cases, households have lost access to WSS because of non-payment for services provided. (Researcher's Experience 1996-1999: Appendix 8)

iv) The Growth, Employment and Redistribution Strategy: 1996

By 1996, national government had recognised that the RDP had not generated sufficient resources to expand social service delivery, and had made insufficient progress towards an equitable distribution of wealth (Bond 2002; 113-118). National government needed to implement a set of policies, which would deal with the macro-economic problems plaguing the country. As a result, national government developed the neoliberal GEAR policy. GEAR recognised that accelerated job creation was essential to achieving a sustained reduction in inequality, and that substantial progress in job creation would require structural transformation to achieve higher and more labour-intensive growth within the economy. According to national government, the GEAR strategy would not depart from the earlier RDP strategy, but accelerate aspects of the existing policy framework (Bond 2000: 113-115). However, whilst the RDP still focused on a strong state interventionist role, the GEAR strategy was much more neoliberally-focused.

GEAR (1996) revealed the new neoliberal policy adopted by national government in outlining the other possible roles of government, from being that of service provider to one of regulator, where the government did not necessarily need to provide the service, but would ensure that the service was provided.

GEAR (1996) outlined national government's renewed attention towards harnessing private sector initiative, skills and capital. This capitalisation could be gained through unlocking the significant amounts of wealth sealed within national state utilities, by sales of the utility or through piecemeal privatisation.

There was no guarantee that the implementation of that GEAR would lead to the desired macro-economic outcomes, however. The whole process rather depended on the ability of GEAR to generate confidence amongst domestic and foreign private investors. Effectively, private capital was recognised as the main vehicle through which services such as WSS delivery would take place. In actual fact, according to Marais (2001: 172), private sector investment had actually dropped from 6.1 percent in 1996 to -0.7 percent in 1998 under GEAR.

Much criticism has been levelled against GEAR, including from the research fraternity, trade unions, political parties, NGO's and some parts of civil society. COSATU, a key ally of the ANC during the struggle years and post the first democratic elections, feels that GEAR has failed to deliver promised economic and job growth, or significant redistribution of income and socio-economic opportunities in favour of the poor. GEAR, with its focus on stringent monetary and fiscal targets, is in conflict with the goals of the RDP, of growth based on job creation, meeting people' needs, and a more equitable distribution of wealth. (Bond 2000)

The GEAR policy firmly announced national government's commitment to a market-centric economy that had been brewing in ANC ideologies for some period of time, post the first election in 1994. In fact, upon Mandela's historic release from prison, he had spoken of the ANC's intent to nationalise the mines, banks, and other industries as a mechanism of redistributing wealth to the people. Four years later, in 1994, Mandela declared that there was not a single reference to Marxist ideologies (including nationalisation) in any of the ANC's economic policies (Marais 2001: 122-132). Ironically, in the same year, the RDP document specifically states that nationalisation is an option that would be considered, which contradicts Mandela's statements (RDP Document 1994: 80). In fact, as early as 1992, the ANC had begun revealing its eventual change in economic policy, when it began promoting the need for property rights and privatisation mechanisms. Although the general ANC "rhetoric" in 1992 still focused on a "strong developmental state", support for this approach was diminishing amongst the leadership (Bond 2000: 90).

Social and physical service delivery has been slow when compared to the original aims of the RDP and GEAR. Adequate financial and institutional mechanisms have been the exacerbating factor in diminishing service delivery to the poor. Added to this, has been “a culture of non-payment for services” (Michie and Padayachee 1998: 623-635) and in many cases, an inability to pay for services.

Habib and Padayachee (2000: 255) also state that the entry of any successive privatisation projects has been slow, even under GEAR. Marais (2002: 173) sees the privatisation of national state utility companies as having been beneficial to transnational companies (TNC’s) rather than to the South African economy, although foreign direct investment (FDI) did increase in South Africa through this.

According to Bond (1999), the increasing commodification of WSS under GEAR has meant that the WSS policy paradigm has moved from socio-economic rights to consumer rights. It has moved from an inalienable right to WSS services to a position whereby citizenry receive services according to their ATP. This commodification of WSS has been accompanied by the increased involvement of the market in WSS service delivery. As a result, WSS as a sector has become ring-fenced, which means that its budget is closed to cross-subsidies from other sectors.

According to Bond (1998: 36-76): “Since its inception in 1996, the GEAR strategy has been promoted as a market approach to economic policy through increased fiscal discipline, a leaner state, deregulation and privatisation. For public sector advocates, the GEAR strategy’s focus on reducing budget deficits as opposed to guaranteeing service delivery has led to an 85 percent real reduction in the inter-governmental grant from national to other spheres of government.”

7.3. The Role of the State in Privatisation

Emanating from national government's transition into neoliberal policies espoused by its adoption of GEAR in 1996 (see Section 7.2.), policy frameworks were designed to assist in facilitating a seamless privatisation transition for service delivery.

The following policy documents⁵⁸ are linked to infrastructure service delivery, and include frameworks that guide the WSS privatisation process: -

- The Constitution of South Africa (1996).
- The Water Services Act - Department of Water Affairs and Forestry (1997).
- Integrated Development Planning for Local Authorities: A User Friendly Guide - Department of Provincial Affairs and Constitutional Development (1997).
- A Strategic Framework for Delivering Public Services through Public-Private Partnerships - Department of Finance / National Treasury (2000).
- The Consolidated Municipal Infrastructure Programme Handbook - Department of Provincial and Local Government (2000).
- Guidelines for Public-Private Partnerships - Department of Finance / National Treasury (2000).
- Guidelines for Private Sector Participation in Municipal Service Delivery - Department of Provincial Affairs and Constitutional Development (1997).
- Policy Framework for Municipal Service Partnerships - Department of Provincial and Local Government (2000).
- Municipal Structures Bill - Department of Provincial and Local Government (2000).
- Framework for the Restructuring of Municipal Service Provision - South African Local Government Association (SALGA) and COSATU (1998).
- Public-Private Partnerships: A Manual for South Africa's National and Provincial Government Departments - Department of Finance / National Treasury (2001).

⁵⁸ These policy documents represent the accumulation of ideas emanating out of special national government task teams and "think-tanks". Concomitantly, they have no specific author.

The above list of policies and documents indicate that there are a plethora of guidelines and frameworks governing private sector participation strategies in urban WSS services in South Africa. What follows, is a brief discussion on these policies and documents, and their implications for WSS service delivery and privatisation.

i) The Constitution of South Africa (1996)

The Constitution of South Africa is inherently a charter outlining the fundamental human rights and dignities of any citizen of the country. Reference is made to the right of all individuals to have access to all basic services that are needed in order to sustain life and dignity. This includes the rights of access to services and goods that are situated within the ambit of social welfare. This charter is essentially the governing document that provides the framework for all other state policy documents.

ii) The Water Services Act 1997

The initial Water Services Act of 1997 made only a marginal reference to the possibility of private sector involvement in WSS provision. The following extract from the Act, reveals this reference: -

| Contracts and joint ventures with water services providers | |
|--|--|
| 19. (1) A water services authority- | |
| (a) may perform the functions of a water services provider itself; and | |
| (b) may- | |
| (i) enter into a written contract with a water services provider; or | |
| (ii) form a joint venture with another water services institution, to provide water services. | |
| (2) A water services authority may only enter into a contract with a private sector water services provider after it has considered all known public sector water services providers which are willing and able to perform the relevant functions. | |
| (3) Before entering into or renewing- | |
| (a) a contract with a water services provider; or | |
| (b) a joint venture with another water services institution other than a public sector water services institution which will provide services within the joint venture at cost and without profit, the water services authority must publicly disclose its intention to do so. | |
| (4) Any water services provider entering into a contract or joint venture with a water services authority must, before entering into such a contract or joint venture, disclose and provide information on- | |
| (a) any other interests it may have, which are ancillary to or associated with the relevant water services authority; and | |
| (b) any rate of return on investment it will or may gain by entering into such a contract or joint venture. | |
| (5) The Minister may, after consultation with the Minister for Provincial Affairs and Constitutional Development, prescribe- | |
| (a) matters which must be regulated by a contract between a water services provider and a water services authority; | |
| (b) compulsory provisions to be included in such a contract; and | |
| (c) requirements for a joint venture between a water services authority and a water services institution, to ensure- | |
| (i) that water services are provided on an efficient, equitable, cost-effective and sustainable basis; | |
| (ii) that the terms of the contract are fair and equitable to the water services authority, the water services provider and the consumer; and | |
| (iii) compliance with this Act. | |
| (6) As soon as such a contract or joint venture agreement has been concluded, the water services authority must supply a copy thereof to the relevant Province and to the Minister. | |
| (7) The Minister may provide model contracts to be used as a guide for contracts between water services authorities and water services providers. | |

FIGURE 7.1. WATER SERVICES ACT CLAUSE

Source: Water Services Act (1997)

As is evident, the Water Services Act allows for the provision of privatisation contracts, with ancillary clauses, prescribing the manner in which the private sector is to be involved. Private sector involvement is very clearly indicated as a *last* resort, and the government should make every attempt to provide the service through a public sector organisation, *before* considering the private sector as a possible partner. The Act also indicates that any private sector undertakings must be undertaken overtly. However, the Act neglects to ensure that consultation with relevant stakeholders, such as unions and CBO's, occur, as their buy-in to privatisation is important to the success of the project.

The issue of workers who are affected by the privatisation and their bargaining rights are also not addressed.

The government only hints at possible private sector contracts in WSS. It seems that the government's view on private sector participation in WSS was not the focus of this Act. It was only after the onset of discussions about a possible concession in Nelspruit and the Dolphin Coast, and amidst much opposition from the unions, that national government actually took a much clearer stance on this issue and clearly revealed its privatisation plans. An "Introductory Policy Note Regarding Regulation of Water Service Providers" was then released as an addendum to the Water Services Act.

This document starts with the declaration: "The government welcomes the participation of the private sector, in addressing the challenges we face to provide water services for our people" (1997:1). In essence, it provided the impetus for an influx of transnational service corporations (TSC's) that began at-risk feasibility studies for municipalities, in order to gain initial leverage, prior to actual tender requests. This particular document is much more detailed in outlining issues of regulation, worker rights, stakeholder participation, scope of works, duration of contracts, terms of reference of contracts, financial issues, and minimum standards of service, and this document reiterates national government's stance towards redressing the infrastructure backlog of the past.

It effectively, retracts its initial emphasis on the public sector as the first mode of delivery. National government took a consultative role in preparing this document and requested further comments. Reneging its initial stance, however, has resulted in large-scale opposition from the unions.

iii) Integrated Development Planning for Local Authorities

This document is essentially a guide for municipalities in designing their individual framework plans for service provision in an integrated manner. This essentially implies that duplicative processes, such as feasibility studies and surveys for different public services, can be instituted with greater success, if utilised coherently.

It provides the municipality with a holistic framework within which to address infrastructure and developmental needs at a local level. The references to private sector participation are initially subtle, being embedded in discursive terms such as participatory stakeholders, and issues of accountability.

It becomes more overt with its reference to privatisation, where it says that municipalities need to become familiar with the GEAR strategy in the following areas: -

- Initiatives to enhance private sector involvement in development through investment.
- Broader investments in infrastructure.
- More effective local spending and reprioritisation of budgets.
- Rationalisation of municipality personnel.

The final point clearly indicates the government's intent to restructure the bloated personnel bureaucracy of the public sector, where the state has traditionally been seen as an employer, and not a service provider or regulator. The document later also refers to examples of sound municipal practice that can be achieved by forming partnerships between all stakeholders, including businesses and other stakeholders, although no *specific* reference is made to possible private sector participation.

iv) A Strategic Framework for Delivering Public Services through Public-Private Partnerships

This document has been released by the National Treasury, and serves as an aid in the negotiation and instituting PPP's. It details the benefits of PPP's and refers to the benefits of PPP's without actual substantiation, other than that the private sector is able to harness greater skills and success in its operations as compared to the public sector.

The document is fairly open-ended in revealing the national government's foray into a hitherto unknown area. The document's approach is cautious and suggestive on a government departmental basis, with references to the more cautious stance taken by certain national government departments, including the DWAF.

The document also alludes to the fact that current legislation is insufficient with regard to minimum contractual provisions, and that the legal capacities and jurisdiction of different spheres of government have yet to be clearly demarcated. National government adopts an open approach with this document and clearly reveals its intent to bridge the gap between actual practical and theoretical knowledge. It has therefore set-up a dedicated commission to investigate issues of partnerships and its practicalities in a South African context.

v) Guidelines for Public-Private Partnerships

Released by National Treasury in April 2000 as a concise guide to how PPP's are to be implemented, these guidelines indicate the various mechanisms and approaches that can be adopted, and the different options available in integrating a private sector participation strategy development objectives.

The document provides a checklist of information and a detailed guide to the PPP implementation process, from conception through to commissioning of the project and on issues of regulation. The document also provides references to the various Acts that govern the PPP implementation process and the subsequent aim of each legislative clause. Included in this "how-to" guide is a user-friendly, process-driven strategy that provides strategies and frameworks, within which a request-for-proposals (RFP) can be drawn-up and tenders assessed and awarded for PPP's. Where this document fails, is on the issues of a strong union presence and strategies on procuring their buy-in, foreign companies and their implications, and what *negative* effects can emanate from private sector entry.

vi) Guidelines for Private Sector Participation in Municipal Service Delivery

This document, released by the Department of Constitutional Development, serves as a precursor to the more detailed document (see vi.) written under the newly-named Department of Provincial and Local Government. It is essentially an attempt by national government to integrate current knowledge on PPP's at the municipal level. It outlines the benefits of PPP's, the risks associated arising and the opportunity-costs that are arguably imminent if such remedial and innovative steps such as PPP-formation are not taken.

vii) Policy Framework for Municipal Service Partnerships

Released by the Department of Provincial and Local Government, this document is a framework dedicated to issues relating to partnerships with the private sector in the provision of municipal services. It outlines areas of responsibility, the transition of municipalities from service providers to service regulators, and how this function affects the authority of the municipalities. In actual fact, municipal powers are reinforced in their new roles as regulators, and being able to hold another entity liable for contract compliance. The document clearly defines the augmented roles and responsibilities of the municipality and the need for participative stakeholder action. The document also highlights issues of monopolisation and competition, which show the progression that this document has made from its predecessor (see vi.). The limits of authority and jurisdiction of the various entities are also clearly defined, and the appropriate legalisation and linkages governing the process, is provided. An emphasis on the planning process is a major focus of this document, and attests to the fact that planning and feasibility studies, incorporating all relevant stakeholders, are critical to the PPP-formation process. Issues of economies-of-scale are highlighted, and reiterate the importance of the regional integration of services between neighbouring municipalities, to achieve synergies in economies-of-scale.

viii) Municipal Structures Bill

The following is an extract from the Bill: -

| |
|--|
| <p><u>General</u></p> <p>83. (1) A municipality has the functions and powers assigned to it in terms of sections 156 and 229 of the Constitution.</p> <p>(2) The functions and powers referred to in subsection (1) must be divided in the case of a district municipality and the local municipalities within the area of the district municipality, as set out in this Chapter.</p> <p>(3) A district municipality must seek to achieve the integrated, sustainable and equitable social and economic development of its area as a whole by—</p> <ul style="list-style-type: none">(a) ensuring integrated development planning for the district as a whole;(b) promoting bulk infrastructure development and services for the district as a whole;(c) building the capacity of local municipalities in its area to perform their functions and exercise their powers where such capacity is lacking; and(d) promoting the equitable distribution of resources between the local municipalities in its area to ensure appropriate levels of municipal services within the area. <p><u>Division of functions and powers between district and local municipalities</u></p> <p>84. (1) A district municipality has the following functions and powers:</p> <ul style="list-style-type: none">(a) Integrated development planning for the district municipality as a whole including a framework for integrated development plans for the local municipalities within the area of the district municipality taking into account the integrated development plans of those local municipalities.(b) Bulk supply of water that affects a significant proportion of municipalities in the district. |
|--|

FIGURE 7.2. EXTRACT FROM MUNICIPAL STRUCTURES BILL

Source: Municipal Structures Bill (2000)

The Bill serves to outline the demarcation of priority services and the responsibilities of the municipality and the district municipality that it is within. The Bill also clearly reveals the fact that *ensuring* the provision of WSS is seen as a responsibility of the district municipality. There is no apparent reference to private sector participation.

ix) Framework for the Restructuring of Municipal Service Provision

This document is an agreement signed by COSATU and SALGA. The Agreement was initially regarded by many as a milestone achievement, in the sense that it indicates the unions' acquiescence towards neoliberal reform at a municipal level, and possibly paves the way for less resistance, although possibly more scrutiny. The Agreement proposes that, in promoting any private sector participation, the principles of life-line tariffs for the poor, universal access to basic services at affordable tariffs, principles of cross-subsidisation, and respect for the environment, are paramount. The issues of accountability, consultation, with relevant stakeholders and transparency are noted as critical to any private sector participation strategy.

However, the Agreement proceeds to further to reveal that, prior to any private sector participation undertaking, two other modes of delivery must be attempted. These include the possible restructuring of the public sector service provider towards a more effective use of resources, and more equitable, disciplined and prudent public policy management. Failing this, the municipality can only *then* investigate the possibilities of forming what is termed a *public-public* partnership, where the municipality should try and form partnerships with neighbouring municipalities to achieve economies-of-scale or partnerships with NGO's, parastatals, and CBO's, that is, other public sector organisations.

It is only if this avenue is not possible, that private sector participation negotiations can be given any credence. In signing this Agreement, COSATU emphasises the development-needs of the poor that need to be met, as COSATU fears that the private sector will not necessarily focus on such issues. COSATU believes that profiteering before development-maximisation will lead to malpractice, exploitation, and marginalisation of the indigent. COSATU also expresses concerns about jobs losses, and the effect that privatisation will have on the plight of workers. It would also seem that SALGA signed this Agreement more out of exasperation to fast-track the process, than as a result of any pre-planned strategy. The Agreement does arguably provide some acceptance by COSATU of private sector participation in the arena of public goods. However, the route prescribed by COSATU, and agreed to by SALGA, seems tedious and long-winded due to the emphasis placed on the other two delivery options being utilised, before private sector participation can be considered. Ironically, with this Agreement has now delayed the entry of new private sector endeavours, due to the lengthy process that needs to be followed.

x) Public-Private Partnerships: A Manual for South Africa's National and Provincial Governments

This is a policy guideline released by National Treasury for the privatisation of non-municipal public sector organisations, such as national utilities. It is unrelated to the guidelines providing the framework for private sector participation within the municipal environment, although elements of this document act as a guide to understanding the mindset behind private sector participation in a South African context.

7.4. The Opposition to Privatisation

Section 7.2. traced the trajectory of South African macro-economic policies from the early 1990's. With GEAR, legislative frameworks and guidelines were developed to ease-in the privatisation of state utilities and essential municipal services. These frameworks were discussed in Section 7.3. Concurrent with, and post the design of these legislation frameworks, there has been significant opposition to the privatisation advocacy of GEAR by a coalition of researchers and worker trade unions. Their cohesiveness and strength has arguably staggered further privatisation attempts of municipal WSS. Therefore, an investigation of the views of this opposition facilitates a comprehensive understanding of the macro context that underpins the microcosmic opposition cases in the South African case studies in Chapters 8 and 9.

Despite the commitment of national government to leveraging private sector finance and knowledge ensconced by its adoption of GEAR and the development of legislative frameworks, privatisation attempts has been considerably impeded in the WSS arena. This impediment is underscored by a strong coalition opposition to privatisation, which includes some unions, labour groups and researchers, effectively forming an anti-privatisation coalition.

In South Africa, the support for increasing private sector participation in WSS delivery is procured from local chapters of global Bretton Woods development institutions such as the World Bank, and local development, and national and other tiers of government. There is moderate support at a municipal level for increasing private sector participation, which is mainly from senior municipal officials⁵⁹. These entities essentially form the pro-privatisation advocates in South Africa.

In the South African context, not many *academic* papers promoting private sector participation in municipal services have been written. Most of the available literature supporting privatisation in the South African context is essentially reports drawn-up by consultants who have worked on privatisation projects, and some papers written by staff from the local development banks, such as the DBSA. Organisations such as the DBSA

⁵⁹ See the results of the questionnaire survey in the Stanger case study in Chapter 9.

and the MIU are entrusted as vehicles by national government to promote increasing private sector participation in municipal service delivery. (Researcher's Experience 1996 – 2002: Appendix 8)

The anti-privatisation coalition specifically includes the South African Municipal Workers' Union (SAMWU); socio-economic researchers, including Patrick Bond (University of Witwatersrand), and David McDonald (University of Queens); and labour-based organisations, for example, the International Labour Resource and Information Group (ILRIG), which is based at the University of Cape Town.

Whilst some of their anti-privatisation viewpoints are valid, it needs to be determined whether the *extensive* development-state system that some of these privatisation opponents envisage or imply, is actually feasible in South Africa. This thesis suggests that ultimately, the evidence does reveal that the privatisation of the South African WSS industry is *not* sustainable. Therefore, at a superficial level, it may seem ironical that what follows is critique of researchers that also highlight the negative effects that privatisation may bring, which is in alignment with the outcome of this study. However, the *reasons* underpinning the outcome of this thesis and that of the anti-privatisation views of the other researchers that are critiqued, differ to some extent. Added to this, many of these researchers have been steadfast in their views that any form of privatisation attempts should be thwarted. Considering the current lack of sources of finance other than the private sector for vast infrastructure backlogs⁶⁰, regulated privatisation until a more amicable solution is reached, as against *no* development at all, may be the lesser of two evils. The former case, at the very least, does bring-in some degree of development infrastructure required by the indigent, who face health-risks with no access to services such as WSS.

The question that emerges, is whether the non-negotiable stance taken against privatisation economic policies in many quarters of the anti-privatisation coalition is detrimental. The anti-privatisation coalition's ultimate aim is to ensure the delivery of adequate, sustainable, and affordable services to the poor. With a lack of other sources of finance, privatisation provides the only *immediately* realisable financing mechanism

⁶⁰ See Dolphin Coast case study in Chapter 8.

to ensure some degree of service delivery until a more sustainable solution is developed. Thus, with researchers, ILRIG, and SAMWU joining forces to form a coalition, the opposition to privatisation has become formidable, and it is noteworthy to investigate whether this coalition has not, in fact, impeded the only *immediately* realisable (albeit unsustainable) solution to the challenge. The coalition has been so strong, that if it has not thwarted private sector participation endeavours in WSS, they have certainly delayed them. Socio-economic costs could be attributed to this total impediment to privatisation, as the result is that no new capital infrastructure developments can occur, which implies disadvantaged people may have to continue with their current inadequate or no access to basic services such as WSS. The lack of access to WSS then results in the serious health-related issues that are discussed in Chapter 1.

If national and local governments indicate that there is no state finance to fund capital expansion works for WSS infrastructure to the previously disadvantaged, and the only source of funding at present, is the private sector WSS companies, then any opposition to this readily available, albeit unsustainable solution in the long-term, continues to keep the previously disadvantaged in a *continuously* disadvantaged state. Privatisation may not be the answer in the long-term as this thesis will seek to suggest, but until a more viable and sustainable solution is found, then the immediate needs of adequate WSS in poverty-stricken areas should be met swiftly. The debate surrounding the private sector delivery mechanism could occur in tandem with it, without necessarily stopping it. Notwithstanding, privatisation may offer the indigent some glimmer of hope in terms of WSS provision in the short-term.

a) A Review of the Criticism against Privatisation

Some of the opposition work reviewed here, includes works by Patrick Bond, David McDonald, John Pape, Greg Ruiters, Harry Zarenda, ILRIG, David Letsie, and Laila Smith. Much of their work highlights the plight of the poor, especially with regards to access to basic amenities, and contains strong and coherent evidence of the lack of sustainability that privatisation paradigms hold for developing nations⁶¹. However, considering their effectiveness in restricting further private sector entry in WSS through

⁶¹ Patrick Bond's work is referenced extensively in this study.

an anti-privatisation coalition, what follows is a critique of some of their research. The critique also highlights the difference in perceptions that might be gleaned from an *operational* as against a *research* involvement in privatisation. The critique is not comprehensive as it serves as an ancillary investigation to the greater research questions of this study. The critique provides an *insight* into the efficacy of some points that are argued against privatisation. (See Appendix 8 for a discussion on the researcher's experience in WSS delivery.)

Many researchers have used the experience of privatisation in developed nations to predict the expected outcomes of privatisation in developing nations such as South Africa. This trend is echoed by Zarenda (2001) in his work on PPP's. This thesis suggests that using the developed nations' privatisation experiences to predict the success of a privatisation attempt in the developing countries is not accurate predictive methodology. The major thrust of Zarenda's paper focuses on the experience of PPP's and their effects on corporate governance issues and effective service delivery from a Eurocentric or first world perspective. Although the paper does make reference to some examples of PPP's in South Africa, the focus is on the findings of the Commission of Public and Private Partnerships set-up in the United Kingdom. The likelihood that the experiences of the developed nations could be translated into the South African context as a predictive tool to gauge the success of privatisation is minimal⁶².

In their paper: "Debating Supply and Demand Characteristics of Bulk Infrastructure: Lesotho-Johannesburg Water Transfer", Letsie and Bond (1998) adopt a hardline attitude against the Lesotho Highlands Scheme⁶³. The backdrop of the report is provided by the residents of the poor Black township of Alexandra in Johannesburg, who outlined their grievances against the Scheme (1998: 3-22). Concerns are raised about the effects that the Katse Dam has had on the people within its vicinity in Lesotho (1998: 4). About 2000 people (300 households) were moved. Whilst the forced removal of these people is regrettable, the basic expectation in any large-scale infrastructure construction would result in some degree of community relocation. This has also occurred with road and housing developments. The relocation of people is a consequence of infrastructure

⁶² See English case in Chapter 5.

⁶³ The Lesotho Highlands Scheme (also referred to as the Scheme) is a vast joint undertaking between the South African and Lesotho governments to augment the water supply to the Gauteng basin in South Africa.

development, and in this case, they were compensated by the relocation. The affected people were given adequate financial compensation for the relocation and many were provided with jobs on the Scheme⁶⁴. The cumulative effect of this project is essentially an economically-efficient action⁶⁵. In fact, besides the job opportunities for its people and access to WSS infrastructure, Lesotho, being a poor developing nation, stands to gain US\$40 million per annum for the next fifty years from the Scheme. (World Bank Website 2003: www.worldbank.org)

The Lesotho Highlands Project was almost completely financed by South Africa, with an initial 5 percent of total cost loan (US\$110m) from the World Bank, for which South Africa stood as guarantor. South Africa, particularly Gauteng, which is the economic powerhouse of South Africa, stands to gain from the Scheme. Essentially, the problems that Lesotho may have experienced from the Scheme's construction and operation were placated with reasonable compensation. Moreover, industrial growth in Gauteng would be dependent on water from this Scheme. Besides the immediate economic spin-offs of the Scheme, Gauteng's industrial growth would also have a filtration effect to Lesotho. (World Bank Report: The Economics of Phase 1B: 1998.)

The Lesotho Scheme was built as a safeguard against the effects of a potentially lethal El Nino drought. In addition, South Africa is an arid country and the Lesotho Scheme mitigates the effects of droughts that will crop-up periodically in South Africa. Letsie and Bond (1998: 60), ask that, considering the high possibilities of drought in South Africa especially in the Gauteng region, "should further industrial, commercial and residential growth, requiring large increases in water supply in the absence of more demand-side management, be encouraged, or indeed be allowed?"

Letsie and Bond (1998), in posing such a question, imply that the Gauteng industrial expansion should now be stemmed. The effects of such industrial retardation, if instituted, would have significant negative effects for the growth of the South African economy and for Lesotho, which is economically dependant on South Africa. Letsie and Bond suggest that, instead of focusing on increasing supply (such as the Lesotho Highlands Scheme has done), the state should rather focus on controlling demand.

⁶⁴ See World Bank Report: The Economics of Phase 1B: 1998.

⁶⁵ See Bai et al.'s work, discussed in the theoretical framework in Chapter 3.

Simultaneously, Letsie and Bond (1998) propose that a cross-subsidisation scheme of tariffing be instituted. This is contradictory in that, if water restrictions were imposed on industry in Gauteng through the control of demand as Letsie and Bond *suggest*, less water would be used by industry and the affluent. Effectively, there would be less revenue to augment this cross-subsidisation that they suggest.

The World Bank shows that supply augmentation makes more economic sense than the management of demand restrictions, which Letsie and Bond advocate. Letsie and Bond further promote their views on demand-based management, when they suggest the management of water losses through rehabilitation of the current network in the townships of Gauteng, which is approximately 24 percent. They propose that this would prevent the need for having the Lesotho Scheme, or at the very least, to discourage the move to Phase 1B of the project. However, the fixing of faulty and leaking pipes, although very much needed, does not mitigate the envisaged growth and resultant water demand that Gauteng would need in the near future. (World Bank Report: The Economics of Phase 1B: 1998.)

Letsie and Bond (1998) focus on the social effects of the Scheme, for example, the relocation of communities. Letsie and Bond (1998) further comment on the large size of the dam itself the negative socio-economic effects that such dams bring. However, shallow dams lose water at a much more rapid rate than deeper dams, which is an important consideration in an arid country like South Africa, with its scarcity of fresh water availability. The focus of researchers *solely* on the socio-economic effects emanating from the development of large-scale infrastructure highlights the gap that exists in providing comprehensive investigations that incorporate all aspects of development, which includes technical issues.

Letsie and Bond (1998: 10) summarily reveal their negative stance towards the World Bank, when they make the following sweeping statement *vis 'a vis* the Scheme: “Bank staff appear to move money for the sake of moving money.”

Patrick Bond's views on the subject of WSS pervade in many of his papers, which are listed in the bibliography. In his paper: “Basic Infrastructure for Socio-Economic Development, Environmental Protection and Geographical Desegregation: South

Africa's Unmet Challenge" (1998: 43-59), Bond is very critical of the Municipal Infrastructure Investment Framework's recommendation that all South Africans should have access to 25-30 litres per day. He believes that as a result of health-related diseases, this should rather be increased to 60 litres per person per day. The fact that this target is not feasible in the short-term seems to be circumvented by Bond. His stance seems to be against the present government, yet the problems arising are mainly historical and due to the legacy of the previous apartheid government. If some sections of society do receive the 60 litres that he envisages as a lifeline supply, than this would be at the expense of other disadvantaged members of society, who also have no access. The only way that the government is going to overcome these obstacles is through a piecemeal manner, given adequate time and resources.

David McDonald has written numerous papers on South Africa's development challenges and the effects that privatisation has brought-about, especially in the WSS arena. McDonald and Bond have worked extensively together on the Municipal Services Project, under the joint auspices of Queens University in Canada and the University of Witwatersrand along with Greg Ruiters and John Pape. The Municipal Services Project has very strong linkages with SAMWU, ILRIG, and a Canadian public sector employees union. McDonald and Pape have recently edited a collection of papers entitled: "Cost Recovery and the Crisis of Service Delivery in South Africa".

In one of McDonald's papers in the book (2002: 27), he discusses the historical unfairness of the apartheid system. He states: "Perhaps the single most compelling argument against full cost recovery in South Africa is the fact that it was not practised under apartheid. As noted earlier, White South Africans and industry benefited enormously in social and economic terms from heavily subsidised municipal services. Now that apartheid has finally ended, Black South Africans are expected to pay their own way, with scarcely a mention of the fact that this has not always been state practice. The historical nature of policy development and the hard-hitting tone of the Masakhane Campaign⁶⁶ reek of hypocrisy in this respect, with the biggest beneficiaries of the formerly subsidised system – White ratepayers and industry – being the most vociferous advocates of a user-pays system." (McDonald 2002: 27)

⁶⁶ The Masakhane Campaign refers to a campaign by the government to describe the co-operative assistance that it aims to use to assist people in South Africa.

If White ratepayers are indeed *now* the most vociferous proponents of a user-pays system, it would be difficult for Black South Africans to accept this hypocrisy, considering the previous privileges through subsidies received by Whites under the apartheid government. But does McDonald's statement that the fact that White South Africans were subsidised before, make this a *reasonable* argument to decommodify water? Whilst the apartheid system was no doubt unjust, the obvious reality is that, in terms of population numbers, Blacks exceed the White population nearly seven-fold. Thus, whilst not lessening the harshness of the apartheid system, it was *financially possible* for the apartheid government to historically subsidise the White segment of the population *because* of their smaller population base, *even* though it was unjust. With the legacy that apartheid has left in terms of a lack of infrastructure, McDonald's expectations of the same degree of subsidisation for Black people from the current government is not feasible financially, considering the much larger Black population. McDonald's views that this is the "single most compelling argument", it is essentially an improbable one to bring to justify the decommodification of water. McDonald (2002: 29), sees this as the only way that South Africa is going to provide a sustainable WSS service. Both McDonald and Bond were advocates of the free-service tariff block in the past. Now that this system has been implemented, it is still considered to be insufficient. McDonald's view that water should be decommodified is unrealisable. Considering that the South African government cannot finance its huge WSS infrastructure backlog, the system has to be sustainable. McDonald's view is that private sector participation is non-negotiable. His view is that such money can be generated from surplus funds from the government to finance WSS infrastructure backlogs, although he provides no evidence of the actual existence of these surplus funds.

John Pape (2002: 183-193) has written a paper on alternatives to cost recovery. These include the restructuring of the national state budget, policies on alternative methods of funding, progressive block tariffing, and the use of prepaid technology for bulk users. These alternatives lack clear action mechanisms, and seem to mask the fact that there is no readily-available sweeping alternative. To propose that government budgets need to be restructured with a larger allocation for WSS does not solve the issue. If the government does have such funds available yet refuses to use it, and considering the drastic need for WSS, then this would imply that national government is withholding vitally-needed funds. The likely circumstances from a case study perspective, *in light of*

there being no alternative conclusive evidence, is that there *is* no comprehensive funding for capital investment infrastructure from national government, and the only source of funds that *seem* viable, is from the private sector. Water boards such as Rand Water and Umgeni Water also could provide some sources of funding, but even these sources may not necessarily cover the full backlog in the short-term.

These anomalies between pure social research as against integrating it with actual technical knowledge, highlights the gaps that research studies using expertise from only one of these sectors, may have. It also highlights the need to bring together all sectors of society with differing areas of experience and expertise to research privatisation attempts in a more comprehensive approach, rather than in isolation.

b) A Review of the Unions' Responses to Privatisation⁶⁷

SAMWU is the largest public sector union in South Africa. SAMWU is an extremely powerful and vociferous organisation. It is affiliated to the powerful COSATU governing body, an entity that, along with the ANC and the Communist Party, formed the powerful tripartite alliance during the run-up to South Africa's first democratic elections in 1994.

SAMWU has strongly opposes against national government's commitment to inject desperately-needed capital, management, and technical expertise into municipal services delivery, through financing and management from the private sector. SAMWU's view is that the shift in service delivery from state to market would result in increased tariffs to the poor and worker retrenchments⁶⁸. It has argued that the private sector emphasises the ideals of efficiency, which masks cost-minimisation and profit-maximisation endeavours. As a result, SAMWU feels that a private sector provider is unlikely to focus on the universal provision of services, especially the truly-indigent who genuinely cannot pay, nor can the private sector contribute towards the building of the institutional

⁶⁷ Data for this section is sourced from the researcher's extensive experience with public sector unions and various media coverages (Researcher's Experience 1996-2001: Appendix 8). Extensive data was also sourced from the SAMWU Website (2000: www.samwu.org.za).

⁶⁸ The South African case studies provide evidence that there is an increase in tariffs during privatisation, although these increases may occur due to reasons of sustainability of the commercial operation, or in profit maximisation. The evidence indicates that the possibility of retrenchments in the South African cases is unlikely.

capacity of local authorities to take responsibility for service-delivery at the end of the contract period, that is, in the remunicipalisation of the service.

SAMWU has actively led anti-privatisation campaigns throughout South Africa. SAMWU believes that global poverty is a direct result of capitalism and that privatisation is a poor option chosen by the government, which will exacerbate rather than redress this problem. SAMWU believes that one of GEAR's privatisation advocacies is the promotion of Black empowerment elitism, which in turn, is actually a front for TNC's who would extend their operations into South Africa to increase their profits through revenue from their local subsidiaries. The unions see such TNC's as having the actual corporate power and receiving the major portion of profits.

According to SAMWU, it was the previous apartheid government's policy to uplift poor White communities through nationalisation initiatives and the siphoning of revenue from state-owned industries into infrastructure development for these communities. Ostensibly, SAMWU believes that it is reform and the restructuring of the public sector that will lead South Africa towards more effective service-delivery, and not the private sector participation influx that "supposedly" brings in much-needed private capital markets and "efficiencies".

Accordingly, an agreement between the local governments and the unions was reached via a document signed by COSATU and the SALGA, governing the entry of private sector participation and the process for their increasing role in municipal service provision.

The process deemed to be acceptable by COSATU is three-pronged, the first being that there should be an internal restructuring of the public sector entity to try and manage WSS service delivery more effectively. It is only if this endeavour fails that the municipality should then utilise another public sector entity as a partner in effective municipal service delivery. Private sector participation is the last option to be considered, and would only be given credence if the municipality can prove that the other two options were attempted. SAMWU is not without victory in this regard, as the case of Tygerberg municipality's privatisation attempt reveals, where SAMWU referred

the matter to the Commission for Conciliation, Mediation and Arbitration (CCMA), and the CCMA ruled in SAMWU's favour, as the agreed process was not followed.

It is noteworthy however, that SAMWU has failed to distinguish between PPP's and full-scale privatisation. Many SAMWU members are under the mistaken notion that PPP's mean the transfer of assets (to the ownership) of the private sector entity, which in the case of the current WSS concessions in South Africa, is not the case, as there has been a transfer of financial risk and not physical assets.

SAMWU has rallied the media for support, and makes use of the traditional freedom-press syndicates, allies from the apartheid-era to gain publicity and provide information to its members. It is through the media that almost any challenge to the private sector is highlighted, and every failure by a private sector concessionaire is seen as a victory by SAMWU in its anti-privatisation campaign.

According to a privatisation survey done for SAMWU, led by ILRIG, in May 2000 and in conjunction with researchers from the Municipal Services Project led by the University of the Witwatersrand, there has been some vindication on their collective stance against private sector participation in former public sector services. The survey was undertaken amongst workers and citizens within the Cape Metropolitan Area.

Some of the results of this survey include: -

- Diminishing worker numbers, which has had a direct effect on service delivery and quality.
- Workers were not fully utilised to complete tasks, with private sector contractors being brought in to complete tasks.
- Poor utilisation of capital resources, where municipal expensive equipment is left idle.

According to ILRIG (2000), it also emerged that municipal workers had to do a "mop-up" job after private sector contractors had performed poorly. Many workers felt that there was little attention given to the training of workers, and communication mechanisms between management and workers were insufficient.

SAMWU is of the opinion that municipalities need to reform their internal management policies in order to bring about successful local governance. Areas of focus that have been proposed in a strategic framework plan, include training, information management, effective communication between all stakeholders, effective utilisation of worker experiences in service delivery, proper management systems and extensive community participation in the provision of services.

SAMWU's stance is not only taken against private sector providers and attempts by municipalities to bring the private sector into the market, but is also directed against national government itself, in developing the legislation to enable such private sector participation to occur.

Using the WSS sector as an example, according to SAMWU, the Water Services Act, a policy document released by the DWAF, gives no direct preference for private sector providers, although the Water Services Act does not in any way preclude private sector participation. It is open-ended with regards to the nature and goals of WSS service providers. A further area of contention for SAMWU is the fact that although national government went through a process of consultation in the drawing-up of the initial draft version of the Water Services Act and the finalised version of the paper, the Act was amended to clarify the meanings of "WSS service provider" to include the private sector, without any further consultation with the unions. The initial document, SAMWU believes, gave a general indication that the public sector is the preferred mode of service delivery. SAMWU also refers to the Constitution, which seems, in their opinion, to contradict the Water Services Act. The Constitution directly states that a municipal entity cannot divest of its obligations towards the community, which is tariff-collecting, tariff-regulation, and service provision. However, SAMWU seems keen to link those parts of the Constitution that suit the legitimisation of its own agenda.

The underlying question that seems to emerge at this point, is whether SAMWU now opposes private sector participation on practical or ideological grounds. Little or no reference is made to the concept of private sector participation as a partnership model, a grey area that SAMWU is keen to exploit. In opposition to any private sector participation, SAMWU has been keen to highlight the failures of private sector delivery in former public sector service arenas. It completely circumvents the concept of

performance contracts, independent monitoring, and regulation through strict measures of independent control. Where there is reference to mechanisms of risk-control, SAMWU seems to be completely inflexible.

People's unalienable rights to basic human needs such as WSS is the SAMWU's fundamental premise and they question the morality of such intrinsic basic needs to become areas to leverage profits. Beneficial to SAMWU's agenda, there has been little mention of the successes of such concessions globally, and the media tends to focus on the failures of the private sector service provider.

To justify SAMWU's argument, many of the TNC's that dominate the South African market, have been guilty of corruption, using bribery to win favour in concessions. Not only has money changed hands unethically, but also the promise of high-ranking jobs for tender adjudicators within the private sector has occurred (Hall 1999). However, such corruption cannot be applied sweepingly to the companies' entire sphere of operations.

7.5. Concluding Remarks

What has become apparent, is that South Africa requires a strong development-orientated government, if the delivery of basic services such as WSS to its formerly and currently disadvantaged, is to be ensured. This development-orientation however, is tempered by issues of sustainability, which hinges on adequate sources of funding to develop, operate, and maintain service infrastructure. For any solution that is developed, it has to combine the issues of sustainability of the services and funding, to ensure successful service delivery in South Africa. Whilst a more comprehensive, sustainable, and robust solution is sought, privatisation inadvertently becomes the default solution, underpinned by a lack of other sources of finance for this backlog. This study essentially suggests that the privatisation of non-metropolitan municipal WSS services is unsustainable in South Africa. However, in view of there not being any other realisable sources of finance in the short-term to diminish vast WSS infrastructure backlogs, it may be the "lesser of two evils", that is, it is a more amicable solution than to not having any access to WSS services.

This state development-orientation paradigm was outlined in the MERG strategy of 1993, which served as a basis for the RDP. However, implementation of the RDP was plagued by mismanagement in the WSS sector.

In opting for any form of private sector participation options, South Africa has resorted to a WSS privatisation solution, until a more suitable and sustainable strategy can be implemented. Currently, the South African government does not have the money to finance capital works, or any operations and maintenance works programme. Backlogs in WSS alone, run into billions of Rands.

Whilst the MERG strategy seemed sustainable in the long-term, and most suited to South Africa's challenges, the imbalances of apartheid needs to be *immediately* redressed, in order to offset the debilitating effects that occur from a lack of adequate WSS. Besides the obvious health and socio-economic effects, vast amounts of time are spent finding sources of water for usage.

Most of the municipalities in South Africa are cash-strapped and have low levels of creditworthiness, making it difficult to gain bank finance or self-fund capital works programmes for WSS provision. Through a lack of public sector finance or access to it, South Africa municipalities may be forced to seek private sector assistance. Considering the immediate urgency of the situation, unless other sources of funding become immediately available, the default situation appears to lean towards the private sector. However, in the long-term, this sort of urgent default reaction has been unsustainable in developing countries globally. (See case studies.) MERG is a sustainable strategy that can be phased-in, but would not meet the *immediate* WSS financing backlogs.

South Africa's legislative environment for private sector participation in WSS is advanced by global standards. However, the ANC government seems to have followed two diametric policies, initially, a nationalisation agenda and now a neoliberal one. This has resulted in some degree of confusion and allegations of betrayals by other members of the tripartite alliance. Dialogue towards finding amicable solutions to infrastructure challenges has been negatively affected by this change in policy.

In terms of consultation national government has been approachable to other viewpoints from across the spectrum. Whether such views were seriously considered, is questionable. The influence of the World Bank is difficult to determine in terms of the privatisation of WSS in South Africa, as although there has been ample evidence of the World Bank's neoliberal influence in other countries.

The signing of the Agreement between SALGA and COSATU heralded the slackening of any private sector participation endeavours in South Africa in the short-term. This may not have been the best route to follow, as it effectively superceded any enabling legislation governing the implementation of municipal privatisation in South Africa.

Finally, whilst opposition to government is a necessary requirement of any democracy, the stance taken by some opponents to private sector participation has perhaps become too rigid. The lack of technical and operational knowledge, or omission of such issues in academic papers by some researchers leaves research gaps that need to be bridged. This type of opposition may not be in the best interests of the South African indigent. This anti-privatisation coalition in South Africa has been very effective in terms of impeding the private sector participation process, but the benefits of this opposition are yet to be seen. Unions have arguably gone beyond their jurisdictional mandate and worker obligations in opposing privatisation, as the case study of Dolphin Coast in Chapter 8 will reveal, as in this situation, workers were not adversely affected by private sector entry. The private sector may be the only *immediately* available source of finance to diminish WSS infrastructure backlogs and hasten service delivery to the indigent. Rather than alleviating poverty and inequitable access to basic services in the short-term, the anti-privatisation coalition may have inadvertently restricted the development objectives that they actually seek to implement, even if these objectives were only *marginally* achieved with privatisation.

CHAPTER 8: MAJOR CASE STUDY INVESTIGATION: DOLPHIN COAST

8.1. Introduction

The Dolphin Coast Transitional Local Council (TLC)⁶⁹ is a municipal entity created under South Africa's municipal restructuring process. (See Chapter 1 for an explanation of the process.) Faced with large-scale urban migration from outlying areas and water supply and sanitation (WSS) infrastructure requirements, the municipality decided that urgent action needed to be taken in order to cater for the basic infrastructure needs of the increased population. It also sought to release the financial strain placed upon it as a result of increasing capital investment infrastructure requirements and operations and maintenance (O&M) costs. It was under these circumstances that the municipality finally entered into a 30-year public-private partnership (PPP) concession with a WSS transnational service corporation (TSC).

The Dolphin Coast is characterised by strong, cohesive leadership, which creates a conducive environment for private sector participation strategies. The fact that it had already begun outsourcing other municipal services over the last decade, meant that it was more prepared for large-scale private sector participation municipal intervention in comparison to other municipalities in KwaZulu-Natal (KZN).

8.2. Aim of this Case Study

The aims of this particular case study are as follows: -

- To determine the suitability of a pilot project to predict success in other municipalities. Being the first such PPP concession in South Africa, it is probable that the pilot project if successful, would serve as a fore-runner to other private sector participation concessions in WSS.
- To study the reasons provided by the unions opposed to the project.

⁶⁹ The use of the term "Transitional Local Council" is a synonym for "municipality", "council", "local government" or "borough" in this study.

- To analyse the views of the WSS customer subsequent to the commissioning of the PPP concession. These views are important in gauging the benefits of this type of innovation to the public.
- To investigate the technology, training, technical expertise, and foreign direct investment (FDI) that emanates from a TSC managing local WSS services.

8.3. Research Methodology

The generic framework for the research methodology is discussed in Chapter 1 of this study. Here, this section discusses the actual process of data-gathering that was used for the Dolphin Coast case study.

In a case study such as the one of Dolphin Coast, it is essential that as much local knowledge is gleaned as possible. Statistical data on demographics and cultural biases could affect any surveys conducted within the area. In forming conclusions and conducting statistical analysis from such surveys, it is important that cognisance be taken of such respondent bias. In essence, structures and norms do not appear in a vacuum, but generally develop gradually in reaction to internal and external pressures. (Babbie and Moulton 2001: 491-495)

For the Dolphin Coast case study, it was essential that buy-in of all stakeholders to the process was sought, as they would serve as primary sources of information for the study. These included the local government councillors and their officials; the concessionaire⁷⁰, being Siza Water Company (SWC), the local populace, the unions, the regulatory body, the local newsdesk, other researchers conducting similar investigations, and the transferred workers affected by the private sector entry.

Once the support of local government officials and councillors had been obtained for this research, the receptivity and support of other stakeholders increased. As a pioneer of the concession concept in South Africa, the Dolphin Coast has been subject to considerable academic and practical research investigating the concession and its effects

⁷⁰ The term “concessionaire” is sometimes used for Siza Water Company (SWC) in this case study.

on WSS provision⁷¹. As a result, respondents experienced consultation-fatigue. This is exemplified than by the exasperated tone of the marketing manager for the concessionaire, when he was first informed by the researcher of his intent to use the Dolphin Coast WSS concession as a backdrop to his primary case study analysis. His initial reaction to the researcher telephonically was: “*Not another one!*”, obviously in reference to the cumulative queries of other researchers’ endeavours.

Research for this study was facilitated by the fact that the researcher had been a participant of the regulatory body project-managing the concession, and had knowledge of the local environment as a former resident. Amicable relationships were also built-up by the researcher’s long-standing association with some of the local inhabitants.

Senior municipal officials and councillors have been very cautious with regards to providing information for the research, as this concession was essentially a pilot project for them. Its failure would have been an indictment on their public support as both senior officials and councillors in the community. This concession was thus, also of considerable public value and is seemingly subjected to close scrutiny, if not by the public and national government, certainly by the unions who are keen to highlight any privatisation failures.

A discussion on the three data-gathering techniques that were used, follows: -

i) Literature Research

Although the Dolphin Coast WSS concession is still fairly new in its commissioning (it was commissioned in April 1999), it has been a subject of extensive media scrutiny. However, investigations on the welfare effects of the privatisation to the local populace, local entrepreneurship, profitability of the venture, regulatory control measures, and possible corruption, are still quite minimal.

There were various sources of pertinent literature, including council meeting minutes, newspaper articles, concessionaire publications, concessionaire feasibility studies,

⁷¹ See Hemson and Batidzirai (2001) for a full reference list of research conducted on the Dolphin Coast concession.

contract documents, pre-feasibility studies on the viability of the concession, regulatory body comments, union anti-privatisation literature specifically aimed at this concession, and water committee meeting minutes.

There were many newspaper articles that emerged during the concession's time of commissioning. Being touted by the media as the "R1 billion Concession", there was a considerable media frenzy about the concession, which was the first in South Africa. In addition, large-scale antagonism had broken-out between the unions and the local municipality, which set the pace for a media blitz on the issues that surrounded the concession.⁷²

Subsequently, once the concession was fully commissioned, the media reported on issues such as customer grievances, including complaints about the low welfare concerns of the concessionaire, the "supposed" large-scale disconnections that occurred without warning, or any adherence to a "fair" credit-control policy by the concessionaire to ease financial impositions on the poorer customer.

The researcher had collated a library of information in his previous role in project-managing the regulatory aspects of the concession, which included the contract and regulatory framework plan. The contract is pivotal to understanding the concession, as it is compliance to the dicta of this contract that provided the background benchmark information, against which the successes and failures of the concessionaire could be quantitatively measured.

A recent study by two local academics, Hemson and Batidzirai (2001), as part of an international research project by the University of Loughborough on the welfare effects of PPP's in WSS on the poor, complements the researcher's work. Reference to their research is made in the rubric of this case study.

⁷² See bibliography for a list of articles.

ii) Interviews

Interviewing was one of the primary sources of direct data-gathering. It was used as an alternative to questionnaires and forum discussions. Interviews took the form of either direct, that is, face-to-face interviews, or indirectly through telephonic interviews. Generally the telephonic interviews were a follow-up to direct interviews, in order to gain clarity on earlier data that had been analysed. Telephonic interviews also sufficed in cases where the interviewee was not available for direct interviews due to time constraints, and when the interviews had to follow a particular chronological order. For example, it would be more appropriate to interview the chief executive officer (CEO) prior to the Mayor, as the former can give a holistic backdrop to the concession, and the latter provides the political perspective.

As is generally the case in case study analyses, most interviews require more than one source or respondent. These included the following interviewees in the case of the Dolphin Coast WSS concession: -

- The Town Clerk / CEO, Andrew Ferguson.
- The Town Secretary, Tokkie H.M. Saayman.
- The Mayor, Bonnie Maraj.
- The local trade union representative / shop steward, Kenny Naidoo.
- Affected workers in the transfer from the council to the concessionaire.
- The Managing Director of the concessionaire, Thierry Chatry.
- Dr. David Hemson: Research social scientist, Human Sciences Research Council.
- A Mr. X, who provided valuable data on the concession. (For reasons of sensitivity regarding important information provided by this respondent, and his close proximity to the concession, at this person's behest, his name has been withheld.)
- A Mr. Y, an employee of Siza Water Company, who confirmed actual investment figures in the project by his company.
- Random and deliberate customers who were interviewed.

iii) Questionnaire Survey Analysis

One of the techniques used to gather data by the researcher for this case study was the use of questionnaires. Two particular questionnaire types were drawn. The first was required for the concessionaire's completion. (See Appendix 3 for a copy of the questionnaire.) It was considerably lengthy, as it required the bridging of gaps in data initially gleaned by the researcher. Care was taken to ensure that the questionnaire did not require completion by the use of sentences, but parametric blocks were provided in the questionnaire, so that the concessionaire could select the most appropriate block answer to each question. Suffice to say, after eight months the concessionaire had not completed the questionnaire and the researcher arranged a special interview, during which he administered the completion of the questionnaire.

The second questionnaire was designed as part of a customer survey in the area, assessing their attitudes towards the concessionaire and the current service that they received. It was highly unlikely that customer respondents would fill in the socially-appropriate answer, other than the truth *as they saw it*, as WSS provision is a basic need, required by all members of the community. WSS is a contentious issue, especially when seen in tandem with privatisation and with the considerable media hype surrounding it. The probability of getting "blasé" answers thus seemed unlikely. In cases such as these, where a respondent completes a questionnaire for the sake of completion, they may inadvertently contradict themselves through some other question in the questionnaire. This case scenario was not really apparent in the researcher's analysis and cross-examination reference checks that were designed into the questionnaire.

The competency of the respondents to answer the questions was of vital importance to the research. One of the problems in designing the questionnaire was to investigate the possibility of providing a questionnaire in the Zulu language (the dominant local African language in KZN), as the researcher wanted a statistically representative sample of the population to be used in his analysis. As many respondents could not speak English, completion of the questionnaires would have been problematic. In addition, the African communities in the Dolphin Coast are generally the most indigent, and therefore most affected by the policies of a private concessionaire in WSS, so their input was crucial.

Problems also arose in providing a lexical equivalent for some of the language used in the questionnaire. As privatisation is a relatively new phenomenon, it has yet to be incorporated into the Zulu language.

In order to counteract this, a number of counter-measures were used to gain a representative sample of the population. The Dolphin Coast concession area is an amalgam of a number of communities, and although there are no legislatively-demarcated racial residential areas anymore post-apartheid, most of the residential areas are still very race-segmented, as the effects of apartheid would take a considerable time to dissipate. Questionnaires distributed to the various areas would no doubt have a racial / economic relationship, and a trend could probably be extrapolated. As national government has embarked on a neoliberal campaign to provide swifter, more affordable and accessible basic services to the poor, such a welfare analysis would no doubt prove as some sort of indicator to either vindicate or mitigate such a process.

In the survey questionnaires distributed to the Dolphin Coast population, it was assumed that a responses should at least simulate the racial and socio-economic breakdown of its constituent communities. From a non-probability point of view, the sub-technique required was to use purposive or judgemental sampling. This required the choosing of the sample for analysis, based on the knowledge of the population being studied. This was especially important if empirical relationships were to be established, linking race and socio-economic status to the willingness to support privatisation. Linked to this purposive-sampling technique is the quota-sampling technique. Quota-sampling essentially begins with a matrix describing the relevant characteristics of the target population. Once such a matrix has been established and the various characteristics of each cell is linked, the researcher sets about harnessing the views of each population group that ties in with a particular cell.

It is in the distribution of the questionnaires that the probability sampling technique was actually used. The non-probability sampling technique was used to choose a sub-area that would be indicative of a particular subset of socio-economic characteristics relevant to this study. For example, if one wanted to study the responses of the poor inland communities of Dolphin Coast and compare these responses to their more affluent

coastal counterparts, then the areas and number of questionnaires distributed should be in proportion to the population numbers of these communities.

In stratified sampling, (a modification of the random and systematic sampling techniques), simple random and systematic sampling ensures that a degree of representation is achieved and permits an error estimate in the sample. The larger the sample, the smaller the error that emerges due to sampling bias. Similarly, a homogenous population produces a sample that is likely to have a smaller sample error than a heterogeneous population. The probability is such that homogenous samples would generate equivalent data, whilst the data from heterogeneous populations would provide data that is probably more varied. Stratified sampling takes into account this inherent heterogeneous mixture of characteristics that may be prevalent in the research sample, and tries to align and minimise this sampling error. The ultimate aim of stratification is to organise the sample into homogenous subsets, so that the subsets can be exclusively studied and then integrated to procure a more accurate representation of the population.

In choosing to distribute the questionnaires, then, a host of questions emerged: -

- What percentage of the population could truly be a statistical representative of the population within the concessionaire's jurisdiction? What would be the units of analysis to base the statistical data on?
- Would population numbers that match this minimum critical mass sample be adequate, or does the racial and economic background demographics of the participants play a role major in the analysis? In essence, what critical mass of people and what composition of this critical mass could be termed as a reasonable representation to base any quantitative sociological analysis on, and to surmise any conclusions?
- Would the language of the questionnaire, if only in English, be within the ambit of the average citizen across all areas within the municipality? If not, what measures could be taken to counteract the limitations of this limitation?
- How could the questionnaires be distributed to respondents in all areas and ensure adequate returns, to form a statistically viable conclusion?

The distribution of questionnaires was effected through a number of mechanisms. There are two relatively large post offices in Dolphin Coast. One is in Ballito, which serves the mainly affluent residents that stay on the eastern seaboard. The other is in Shakaskraal, serving the communities of a lower socio-economic status who reside in that area. By using these two centres for distribution, stratification sampling was used, based on race and socio-economic status. With the distribution of these questionnaires to post office boxes, the systematic random sampling technique was used, where every fifth box had a questionnaire inserted into it.

However, not all WSS customers have a post box. Some customers receive their mail at residential addresses. Many residents pay for WSS services at two service kiosks, one of which is in Shakaskraal and the other in Ballito. Customers entering the kiosks, were offered the questionnaire for completion. They could either try to complete the questionnaire at the kiosk, or bring the completed questionnaire when they returned to pay their next WSS tariff. In order to minimise response bias and respondent apathy, it was requested that respondents complete the questionnaire whilst waiting in queues for paying tariffs etc. (The questionnaire probably took about a minute to complete.)

The kiosk operator at the Shakaskraal kiosk was fluent in Zulu, and assisted many Zulu-speaking customers in completing the questionnaires. However, as the concessionaire operated the kiosks, care had to be taken to ensure that there was no coercion by the kiosk operator to form a deliberately favourable bias towards the concessionaire. These particular questionnaires were analysed for evidence of coercion, but no signs of it was evident, as there were many negative views that were proffered on the concessionaire. Cross-checking the response types from the Shakaskraal post office to the Shakaskraal kiosk facilitated this analysis. The post office returns were generally either posted or faxed, whilst the kiosks questionnaires were returned to the kiosk for collection. Each questionnaire was also numbered into subsets in order to distinguish its distribution centre.

However, some members of the population do not pay for WSS services. In order to ensure that such people were included in the population survey, questionnaires were also left for distribution at the municipal offices, where citizens paid for municipal land rates and services.

Concomitantly, not all people pay their rates or are part of any rate-paying registry. Most of these people would probably come from the poorer, western areas of Dolphin Coast. Questionnaires were left under doors and distributed in residential post boxes and “spaza shops”, that is, township stores.

The researcher’s contact details were also available on the questionnaires in the event of there being any queries that needed clarification.

In order to facilitate ease of collation and to minimise costs to the population survey sample, questionnaires could be posted, faxed, or returned to the municipal offices and kiosks.

In order to determine empirical relationships or conclude any theoretical inferences from questionnaire survey analyses, the response rate is very important as discussed in Chapter 1. Issues concerning response rates are discussed later in this chapter in the analysis of the questionnaires.

8.4. The Reasons for Privatisation

A brief history of the Dolphin Coast is provided to place the concession into context: -

i) The Dolphin Coast Prior to 1994

The Dolphin Coast area, pre-1994, consisted of a sprinkling of communities that were managed by separate municipalities within closely-bounded areas. It was created in February 1995, out of a collection of eleven towns and settlements spread over an area of approximately 160 km², with a population of about twenty-eight thousand people. (Maraj, Interview: 19.09.2001)

The area was typical of most settlements that populate the coastal belt of KZN. On the extreme east coast, there exists an elite, wealthy White populace with first world service standards, all living within a ring-fenced “Utopian” community. They are bounded on the east by the Indian Ocean and on the west by the national motor highway called the N2. (Maraj, Interview: 19.09.2001)

During the apartheid era, to the east of the N2, vast tracts of arable land and sugar cane plantations served as buffers between the White and Black communities. Within these plantations, were scatterings of unplanned Black settlements of Indian, Coloured, and African communities. The members of these latter communities generally served as workers on White-owned sugar-cane plantations, as tradesmen, domestic or industrial workers, or professionals within their own communities. The affluent eastern and poor western areas were referred to as “littoral and shadow zones”, respectively. In this context, it refers to the richer, affluent areas with access to first-class amenities (littoral zone), and this compares to the poorer communities that had less access to basic services and played a secondary role with regards to receiving attention from municipal authorities (shadow zone). (Hemson and Batidzirai 2001: 5)

Stretching from Port Edward on the South Coast of KwaZulu-Natal (KZN) to Pongola in the North, this “littoral and shadow zone” is depicted by the following areas: -

TABLE 8.1. SHADOW AND LITTORAL ZONES ALONG KWAZULU-NATAL'S COAST

| Littoral | Shadow |
|-----------------------|---------------------------|
| Port Edward / Margate | Rural African settlements |
| Port Shepstone | Rural African settlements |
| Scottburgh | Umzinto |
| Umkomaas | Craigieburn |
| Amanzimtoti | Isipingo |
| Umhlanga | Phoenix |
| Umhloti | Tongaat |
| Ballito | Shakaskraal |
| Blythedale | Stanger |

Source: Researcher’s Analysis

The “shadow and littoral” zone effect depicted in Table 8.1. currently continues up the North Coast of KZN, with other examples.

With the focus on providing a sustainable service delivery mechanism to meet certain minimum acceptable standards, national government initiated the first amalgamation in

1994. (See Chapter 1 for a discussion on the amalgamation.) The new municipality was home to a number of industries, the most notable of which were the sugar, tourism, and small to medium manufacturing industries. (Maraj, Interview: 19.09.2001)

These industries were sources of jobs to local African people, as well as migrant African people from homelands established under the apartheid regime. With the confluence of labour forces, there emerged a need for dwellings. Informal settlements sprang-up in the “shadow areas”. Other job seekers arrived including friends, families, and fellow homeland dwellers, to secure employment in a geographical area that was not infrastructurally-equipped to support them. (Maraj, Interview: 19.09.2001)

Informal settlements literally sprang-up overnight, without any proper infrastructure services such as WSS, roads, transport, or health services. It is with this scenario in mind, that the Dolphin Coast TLC was formed in 1994, in order to promote infrastructure development via economies-of-scale and more equitable development policies. (Saayman, Interview: 21.05.2001)

From a WSS perspective, initially services were provided by the old Joint Services Boards (JSB's). When this system of service provision was disbanded in the early 1990's, the parastatal utility company, Umgeni Water, became the WSS service provider. Effectively, Umgeni Water was now the bulk water supplier as well as the local WSS service provider. The comparisons in tariff charges between Umgeni Water and the concessionaire are discussed later in the analysis. (Saayman, Interview: 21.05.2001)

ii) The Dolphin Coast from 1994 to 2000

After the first amalgamation, the Dolphin Coast municipality arguably became the flagship non-metropolitan municipality in South Africa. The Dolphin Coast developed its name as “the leading non-metropolitan municipality” in South Africa in terms of infrastructure development, due to the astute guidance of its leadership. If this study is to make any recommendations towards policy based on the Dolphin Coast experience, an understanding needs to be fostered of the charismatic leadership that existed in the Dolphin Coast. Whether Dolphin Coast's strategies could serve as a role model for other

municipalities, is underscored by strong leadership rather than sound local government economic policies. The municipality had an astute leadership under the guise of three notable leaders. (Researcher's Experience 1996-2000: Appendix 8)

Councillor Bonnie H. Maraj was the Mayor of Dolphin Coast when the concession was initiated and commissioned (April 1999). An African National Congress (ANC) councillor, under his leadership, he campaigned for shadow areas to receive acceptable standards of service, and to alleviate the plight of the shack dwellers that populated these areas. (Researcher's Experience 1996-2000: Appendix 8)

The Chief Executive Officer (CEO), Andrew Ferguson, was a man of considerable experience, in terms of local government management, and was the previous chairman of the KwaZulu-Natal Local Government Organisation (KWANALOGA), a provincial subsidiary of the South African Local Government Association (SALGA). (Researcher's Experience 1996-2000: Appendix 8)

Whilst these two men were the political and management leaders respectively, it was through the drive of the Town Secretary, Tokkie H.M. Saayman, who ensured that development occurred. Regarded as the local "Mr. Do-It" man, Saayman was capable of fast-tracking essential services delivery through housing and bulk infrastructure development, and was an expert at procuring national government funding for pilot projects. The Dolphin Coast WSS concession was one of these pilot projects. Mr. Saayman's administrative methods can be regarded as unorthodox, even bordering on the "maverick", but he was generally given such latitudes because of his ability to get the job done. (Researcher's Experience 1996-2000: Appendix 8)

Delivery was effective and swift especially in housing development in the area. The financing of these projects was such that national government provided subsidies for housing, although monies could only be released at a certain stage of construction. This time lag prompted the municipality to bridge-finance the funding for housing, to be reimbursed by the provincial housing board. Due to the swiftness and scale of delivery by the municipality and the time lag of subsidy reimbursement, by 1998/9, the Dolphin Coast municipality experiencing severe cash-flow problems. Furthermore, due to the municipality's effective service delivery, greater numbers of migrant labour and home-

seekers were attracted to the area. In essence, a vicious cycle had developed, in terms of the great infrastructure demand and its depleting effects on the municipality's coffers. (Saayman, Interview: 21.05.2001)

Reasons for the concession were cited by Ferguson (Interview: 22.05.2001), Saayman (Interview: 21.05.2001), and Maraj (Interview: 19.09.2001), i.e., the CEO, Town Secretary, and Mayor, respectively. This included that the Dolphin Coast municipality took over only a relatively small number of staff members, responsible for operations and maintenance after the restructuring in 1995. No technical or management staff were transferred to the municipality, so municipality did not have the experience to provide a comprehensive WSS service. The bulk infrastructure in the geographically-fragmented formal towns was in abject condition and service provision was generally inadequate. Pipelines were laid in the 1950's and were in drastic need of rehabilitation, overhaul, or replacement. The local banks also refused to finance infrastructure improvement projects. Along with this, were the informal settlement areas, where 50 percent of the population had virtually no services at all, and capital project investments were desperately required. By 1997, the municipality's population had grown to over forty thousand people, which implied that in just two years, the need for essential services in the area had nearly doubled. Population growth estimates commissioned by the municipality had indicated that the area's population would reach two hundred and fifty thousand people by the year 2020. Over the same period, estimates indicated that an investment of approximately R200 million at 1997-values is required for the upgrading of WSS services in the area.

According to the Saayman (Interview: 21.05.2001), given these challenges, the municipality felt an extremely urgent need to begin an expansion of affordable services to people living in the deprived informal settlements. Simultaneously, the municipality had to begin upgrading the poorly-maintained infrastructure in the formal towns.

Saayman (Interview: 21.05.2001) felt that the municipality was not in a position to provide the required capital investment required for the infrastructure expansion, especially in view of the municipality's budgetary constraints and diminishing funding from national government. As with many South African municipalities, the Dolphin Coast municipality could not directly access private capital because of what the banks

consider to be the large size of the municipality's borrowing needs and its low levels of credit-worthiness, relative to private corporate borrowers. In essence, the commercial banks viewed the municipality as too large a risk factor to stand as a guarantor for any large-scale loans.

8.5. The Transition Period into Privatisation

The Port Natal Ebodwe Joint Services Board provided WSS services for the towns in this area until March 1996, when the Board was abolished as part of a restructuring process. The Dolphin Coast municipality was forced to take over service-provision and was confronted with a variety of formidable service-delivery challenges. WSS was subsequently contracted to the bulk water supplier, Umgeni Water. (Saayman, Interview: 21.05.2001)

According to the request-for-proposals (RFP) for the WSS concession tender, the majority of the Dolphin Coast areas were in dire need of development, and it was in light of this challenge that the local authorities viewed the private sector as a possible partner in inter-sectoral infrastructure service provision.

The municipality also felt that a possible PPP concession would have other spin-offs such as job creation, community and local economic development, and also possible small, medium and micro enterprise (SMME) promotion via the development of smaller sub-contractors. The municipality had also outsourced many of its smaller services in the last decade to the private sector, so the enabling environment was more conducive to private sector participation in service delivery, as compared to other municipalities. (Saayman, Interview: 21.05.2001)

8.6. The Role of the State in Privatisation

The role of the state at a national level is discussed in Chapter 7. This section specifically discusses the role played by the municipality in providing the environment for privatisation to occur, and other issues that were pertinent to achieving successful private sector participation at a local level.

The municipal council was, by South African standards, one that worked cohesively. According to the Maraj (Interview: 19.09.2001), although debates reverberated through the council chambers, councillors were fully aware of national government's focus on equitable development and access to services for all citizens. The new policies were accepted as an inevitable change. Rather than working against these policies, the municipality worked towards sustaining effective development in traditionally under-serviced areas.

National government viewed the concession as a pilot project for other municipalities in South Africa. Accordingly, the municipality had the full co-operation of national government through its Growth, Employment and Redistribution (GEAR)⁷³ strategy. National support came from the Department of Water Affairs and Forestry (DWAF), Department of Constitutional Development and also the National Treasury through its private sector partnering programme. The municipality was fully committed to awarding the concession to the most viable entity, based on the proviso that the prospective winning concessionaire would be able to provide a cost-effective, efficient, and comprehensive WSS service to its residents. (Maraj, Interview: 19.09.2001)

From the discussions with Ferguson (Interview: 22.05.2001), it was learnt that by December 1996 the senior officials and councillors of the Dolphin Coast municipality deemed it necessary to bring-in external parties to assist and manage the WSS service, as well as to extend and maintain the existing infrastructure. However, this was not a decision taken solely by the municipality, as the Dolphin Coast used external consultants from the national government PPP promotion vehicle, the Municipal Infrastructure Investment Unit (MIIU), and the Development Bank of South Africa (DBSA) to conduct a feasibility study to ascertain the options available to the municipality.

After this decision was taken, a public announcement was made via the media, of the municipality's intention to enter into a municipal services partnership (MSP). The DBSA continued to serve as consultant in an advisory capacity to the municipality, and the MIIU continued to offer support both technically and financially. The media

⁷³ See Chapter 7.

announcement also called for expressions of interest from possible service providers, to which fifteen organisations responded. (Ferguson, Interview: 22.05.2001)

The Mayor ensured that, as part of the acclimatisation process, the Dolphin Coast senior municipal officials and councillors underwent training on the structuring of MSP's and PPP's. This was achieved through workshops and seminars. An organised tour of six cities in the United States of America was also undertaken in order to provide the officials with a practical perspective of existing MSP's internationally. (Maraj, Interview: 19.09.2001)

The Dolphin Coast municipality designed the RFP in February 1997, with extensive assistance from the DBSA. The RFP outlined the coverage areas of the service, the people that required service delivery and the terms of reference of the service provider. These included the construction, expansion, O&M, and financing of the WSS system within the jurisdiction of the municipality. The RFP also provided the prospective bidder with a list of current, government-funded projects and population growth predictive values that were presumed from a demographic and infrastructure perspective, and extensive detail about the current WSS infrastructure, including their areas of supply. (Ferguson, Interview: 22.05.2001)

The prospective bidder was also supplied with information on the current WSS demands and tariffs that were set by the council. The council outlined explicit criteria with regards to the transfer of workers, a key area of concern, which the unions had used in their opposition to the concession. (Ferguson, Interview: 22.05.2001)

The RFP outlined the criteria for evaluation, and also provided the prospective bidders with background information into what was required to draft company proposals. At the time of its issue, four entities had already been short-listed, all of which had a foreign concern as joint partners to a South African company or organisation. These included the three major French WSS utility companies and a water utility from England. (See Chapter 4 for a discussion on these utilities.)

The Umgeni Water-related bid was initially disallowed, due to it being the bulk water supplier, but after a re-evaluation, it was generally accepted that the tendering firm (an

autonomous subsidiary of Umgeni Water) was a separate entity from the actual bulk water supplier. (See case study on Umgeni Water in Chapter 9 for a discussion on the Umgeni perspective as to why they lost the bid.) All four tendering consortia had provided tariffs in the same ballpark. Finally, according to Ferguson (Interview: 22.05.2001), it was the technical standards of SAUR's proposal that won the bid, and the fact that it had a local Black empowerment⁷⁴ partner.⁷⁵ The tender was awarded on a points basis for various categories of appropriateness, including technical standards, proposed tariff costs, initial investments and social requirements, amongst other criteria.

The value estimated in terms of investments from various funding sources, including the DBSA and the MIU, was approximately R2.4 million. These ex-ante transaction costs are regarded as conservative by the unions and other opponents to the concession, as they felt that the actual costs (including financially quantifying the time spent by various stakeholders) were much greater. (Ferguson, Interview: 22.05.2001; and Naidoo, Interview: 21.05.2001)

8.7. Transnational Companies and Foreign Technology

The Dolphin Coast WSS concession is managed by a company called Siza Water Company (SWC), which is also referred to as the concessionaire.

⁷⁴ In the South African context, an empowerment firm is made up of previously disadvantaged individuals from the apartheid era (could consist of Africans, Indians, or Coloured individuals, and / or women and disabled individuals.) Essentially, such individuals are expected to be empowered by developing their skills that will be enhanced by access to new ventures. This also results in some degree of wealth redistribution.

⁷⁵ Whilst this is the official reason proffered by the tender adjudication committee for Siza Water Company winning the tender, some other views on the subject are put forward in the case study on Umgeni Water in Chapter 9.

It is an amalgam of five companies, consisting of the following entities: -

TABLE 8.2. SIZA WATER COMPANY SHAREHOLDING STRUCTURE

| Company Name | Shareholding Percentage | Remarks |
|------------------------------------|-------------------------|-----------------------|
| SAUR Services Ltd. | 58 | French TSC |
| Metropolitan Life Limited | 23 | Local insurance giant |
| Investment Progress Group Holdings | 5 | Empowerment group |
| NANO Investments (Pty) Ltd. | 5 | Empowerment group |
| WDB Investment Holdings (Pty) Ltd. | 5 | Empowerment group |

Source: Concession Contract

The major shareholder is the TSC, SAUR Services Ltd., which is a French utility company, and part of the Bouyges Group. The Bouyges Group has a 77 percent shareholding in SAUR, which, in turn, is also partly owned by Electricite de France, the French state-owned electricity company. Bouyges was founded in 1952 by Francis Bouyges as a construction company, and has undergone steady expansion to become one of the largest construction companies in Europe. At present, over 50 percent of Bouyges' income is foreign-earned. The envisaged growth sector is in construction work outside of France itself. (Hall 1999: 182-200)

SAUR was founded in 1933 as a public services company focusing on the provision of services to the public sector. It is still relatively small compared to the two larger WSS utility companies, Suez-Lyonnaise des Eaux, and Vivendi⁷⁶. The SAUR subsidiary was acquired in 1984 by the Bouyges Group. SAUR's sphere of operations is far-reaching with interests in energy, WSS, waste management, and telecommunications. SAUR has many partners in joint ventures, one of which includes the now-defunct and "credibility-lacking" Houston-based Enron utility company. (Hall 1999: 182-200; Researcher's Experience 2002-2003: Appendix 8)

The major portion of SAUR's income is generated by WSS business, with other aspects only accounting for about one-sixth of total sales turnover. Its majority sales are still in

⁷⁶ See Chapter 4 for a discussion on these TSC's.

France, accounting for 63 percent of total turnover. Africa generates about 19 percent of the total sales income for SAUR. Of all the utility services, WSS is regarded as probably the most lucrative due to its essential nature, natural monopoly status, and high customer demand. (Hall 1999: 182-200)

In Africa, SAUR is particularly active in Senegal, Guinea, the Central African Republic, and the Ivory Coast. SAUR has WSS and waste management services in most major cities in these countries. SAUR is also involved in some energy-generation work. Much of SAUR's business is generated outside of France and centred in Africa. Suez Lyonnaise des Eaux and Vivendi, in turn, have relatively small presences in Africa. (Hall 1999: 182-200)

SAUR has had successes, but is not without controversy. One of its oldest concessions is a WSS concession venture in the Spanish town of Valencia, which has a population of about 750000 people. It had acquired a company that had been running the WSS concession in Valencia since 1904, with a 99-year concession, under the auspices of a subsidiary called AVSA. (Hall 1999: 182-200)

According to the Hall's profile of SAUR (1999: 182-200), allegations against SAUR include *inter alia*, the following, concerning the AVSA concession: -

- SAUR had tried to goad the council into extending the contract for another 50 years without any competitive tender.
- SAUR made assertions that it now owns the WSS system, and not the council of Valencia.
- After 100 years of private control, SAUR has still fought any attempts at competition for the market.
- SAUR attempted to stymie the transfer of AVSA to Spanish stakeholders.

Similar allegations of questionable tender process ethics were made against SAUR's operations. Due to the problems experienced with a municipal contract held by SAUR in Poland, no other private sector initiative was taken in Poland. Further to this, Bouyges now has impending rent-seeking charges of corruption through the bribery of officials, who were critical to the appointment of construction firms in the Lesotho

Highlands Project. (Hall 1999: 182-200; and SAMWU Website www.samwu.org.za: 2001)

There have been other blots on the SAUR name, if not directly, then under its holding company, Bouyges. These include the fact that the Chairman of Bouyges was arrested on corruption charges, and Bouyges' questionable membership of cartels, which monopolised the utilities business in France. (Hall 1999: 182-200; and SAMWU Website www.samwu.org.za: 2001)

The fundamental difference between the goals of public sector delivery and private sector delivery seems to emerge under these allegations. SAUR, being a private sector entity, ideally seeks a profit on its invested capital and an increase in its market share. This is in contrast to the development goals of the state, which endeavours to uplift and ensure the long-term socio-economic health of its citizens. Without the scrutiny of intense regulation, the profit-driven incentive of any TSC like SAUR would arguably be a contrast to the ideologies of a development-orientated state, which South Africa still needs to be at present to uplift its poor.

At this point, it may be prudent to ask, what benefits SAUR brings that a local utility company cannot. This is one of the key elements of investigation that underpins the hypothesis of this study.

For SAUR, under the auspices of SWC, being the successful bidder, various reasons provided by the Dolphin Coast municipal leadership, that is, Ferguson (Interview: 22.05.2001), Saayman (Interview: 21.05.2001) and Maraj (Interview: 19.09.2001), include the following: -

- SAUR would bring in considerable foreign investment capital into the country.
- SAUR is a specialist in the WSS field who could see to technical issues such as maximising on delivery, the curbing of water losses, and the improvisation of existing systems.
- SAUR is large enough to have the economies-of-scale to incorporate infrastructure development in less-condensed areas at the lower end of the socio-economic spectrum.

- SAUR has powerful in-house software that could be used as an effective management information systems tool for as many as one hundred thousand customers.
- SAUR has a local empowerment company in its consortium bid, the critical factor that allowed it to eclipse the Umgeni Water bid. (See Chapter 9 for the Umgeni perspective as to why they lost the bid.)
- SAUR has a social upliftment clause in its bid for the communities.

It is best to discuss these factors in a piecemeal manner in order to assess the true impact of their supposed strengths.

The concession is headed by a French National by the name of Thierry Chatry, an environmental engineer, whose knowledge of WSS concessions was developed in north western Africa on the Ivory Coast. Chatry has been with SAUR for twelve years and has a total of seventeen years experience in partnerships and WSS. Chatry's contract of employment at the Dolphin Coast concession lasts approximately five years from time of inception, until his tenure ends in 2004. (Chatry Interview: 19.09.2001)

Chatry (Interview: 19.09.2001) has his own views on the South African legislation that regulates private sector participation in the provision of former public utility services. Although his stance is not negative, he believes that taking a consultative approach to everyday operations and obtaining the viewpoints of every stakeholder, impedes SWC's service delivery capacity. Chatry feels that the concession should be allowed to do what it does best, that is, to provide the most effective WSS possible. Chatry does concede however, that regulation is very important to the customer's benefit, and can play an intermediary role in times of dispute. Chatry was unaware of the specific content of the legislation that regulates these concessions, the most important being the Municipal Structures Bill and the Water Services Act. (See Chapter 7 for a discussion on these legislative documents.) This lack of knowledge on relevant legislation sends warning signals, as these Acts are laws promulgated by parliament to add accountability to the whole process of privatisation. (Chatry, Interview: 19.09.2001)

Chatry (Interview: 19.09.2001), as Managing Director of SWC, believes that SWC under the auspices of SAUR, brings the following benefits to WSS provision: -

- SAUR has vast knowledge of WSS provision in developing countries and especially in Africa.
- SAUR has “tried-and-tested” software that is first-class.
- There is a transfer of knowledge from foreign to local companies.
- SAUR does not just run concessions for towns and cities, and in some regions, an *entire country's* WSS system.

8.8. Foreign Direct Investment

Any country, in order to strengthen itself in the global market, should ideally have a net export product. One of the ways to facilitate this is to bring-in foreign capital and technology to develop the economy. The WSS market is not an *export* product. The end-customers are local, and whilst initially there might be net capital influx into the country for capital infrastructure construction, after a certain period, capital would then exit the host country.

Developing countries, including South Africa, are new markets for TSC's such as SAUR. South Africa embarking on a neoliberal strategy, has effectively created a market for TSC's such as SAUR. With a prospective market of over 800 municipalities in South Africa to facilitate its growth, the potential for profiteering is great.

The quantum of capital brought in directly from foreign shores, especially for this project also needs to be determined. The concessionaire will need to make the following payments, or has made already once-off payments.

These payments include the following: -

TABLE 8.3. LIST OF SIZA WATER COMPANY FEES

| Description | Frequency | Value |
|--------------------------------------|-----------|------------------|
| Contract Implementation Fee | Once-off | R 200 000 |
| Lease Fee (1999 value) | Annual | R 3 814 412 |
| Concession Fee | Annual | R 554 850 |
| Youth and Community Development Fund | Annual | R 75 000 |
| Social Fund | Annual | Board Discretion |

Source: The Concession Contract

In addition, the combined share capital and share premium account of the concessionaire was to be at least R 7 160 000 at the handover date. According to Chatry (Interview: 19.09.2001), the total start-up cost was thus, R7.2 million for SAUR. They believed that they had served the empowerment perspective by providing the equity-capital for the empowerment portion of the SWC. Of the start-up costs, about 70 percent was foreign capital, either from their own finances or international banks. This would seem to indicate that the *actual* FDI envisaged for this 30-year concession from SAUR would be in the region of about R5 million. When one considers these figures against the R1 billion revenue that this contract is meant to generate over thirty years, the inequity becomes apparent.

Chatry (Interview: 19.09.2001) was explicit in stating that there was no capital financing from local development banks or financing institutions. However, as alluded to earlier, there was an initial financing for the feasibility studies of about R2.4 million.

According to the contract, it was initially envisaged that the Lease Fee paid by SWC to the council for use of the existing WSS infrastructure assets, would be staggered as follows, although this has now changed due to some dramatic failures in the data presuppositions made by both the municipality and the concessionaire: -

TABLE 8.4. INITIAL LIST OF LEASE PAYMENTS BY SIZA WATER COMPANY

| Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|------------|------------|------------|---------------|------------|
| R3 814 412 | R3 668 331 | R3 583 001 | R3 380 682 | R3 237 058 |
| Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
| R4 168 068 | R2 901 701 | R2 707 166 | R2 546 472 | R2 166 059 |
| Year 11 | Year 12 | Year 13 | Year 14 | Year 15 |
| R2 046 800 | R1 910 523 | R1 787 691 | R1 670 213 | R1 552 964 |
| Year 16 | Year 17 | Year 18 | Year 19 to 30 | |
| R1 433 389 | R1 235 692 | R 100 | R 100 | |

Source: The Concession Contract

In addition to the above, strict conditions have been put in place in the event that the concessionaire does not perform to certain standards as stipulated in the contract. Chief amongst these is the Performance Guarantee Bond (payout value of R5 million) taken with a reputable banking institution in favour of the municipality, for the first five years. Thereafter, the Performance Guarantee Bond would be a percentage of the annual sales turnover of the concessionaire, staggered at 5-year intervals.

In addition to the above, SWC is obliged to provide a maintenance bond to facilitate the protection of assets that will be transferred back to the municipality at the end of the concession, if there is no extension of the contact. The concessionaire is also obliged to pay for the insurance of any fixed and operating assets, including workers' compensation and any other compensation required by law in the operating of such an industry. These would include a public liability insurance with a minimum limit of R10 million. Other insurances required, include professional indemnity, employer's liability cover, material all-risks damage, and business interruption insurance, in the event of the business coming to a halt due to unforeseen circumstances. SWC is also responsible for other payments as well. These include capital infrastructure payments as well as finance for O&M costs. Financial calculations are conducted to ascertain the element of profit that SWC would generate within the first five-year period. A five-year period is chosen to allow the adjustive effects of population growth estimates and capital infrastructure expansion alignment. In effect, this means that, with a significant growth in population,

a capital infrastructure investment programme would need to be developed. This would only occur after the population growth.

Expected Five-Year Profit Calculations⁷⁷

To determine the expected profit that SWC could make in the first five years of commissioning, an in-depth financial analysis was conducted, using the available data. The income and expense statements are calculated on a “worst-case” basis to determine the *absolute minimum* profit that the concession could generate. Data sources for calculations include Siza Water’s Five Year Plan Investment Report (March 2000), the concession contract, the RFP for the concession, as well as other relevant documents provided by the Council, SWC, and interview sources.

There are three main sources of revenue. These are water supply, sewerage and connection costs. Other service areas, such as technical call-outs and sundry services are not included in these calculations. The aim of these calculations is to determine the actual *minimum* profit incentive for the concessionaire. In the assumptions made, the revenue is minimised and expenses are maximised, as this would indicate the minimum possible profit for the concessionaire. It is important to understand that these calculations are based on the population growth estimates provided at the beginning of the concession, and provides the minimum profit that SWC would make, based on the envisaged population growth being attained or exceeded.

⁷⁷ See CBA analysis in Chapters 3 and 4.

a) Revenue Calculations

i) Water Revenue

During 2000, there were 4500 customer households. Annual consumption was 2142000 k l . There was a basic connection charge of R24.60 per household. The rates for water supply are as follows: -

TABLE 8.5. SIZA WATER COMPANY TARIFFS

| Consumption | Tariff |
|-------------|--------|
| 0-10 k l | R0.00 |
| 11-35 k l | R2.74 |
| > 35 k l | R3.60 |

Source: Siza Water Company Five-Year Plan

In order to calculate the number of households that fit into each category, 1996 data from the RFP is used to approximate a trend demand curve⁷⁸ (See Table 8.6. and Figure 8.1.) for future consumption patterns: -

TABLE 8.6. 1996 CONSUMPTION PATTERNS

| Town | Number of Connections | Average Monthly Consumption (k l) |
|-----------------|-----------------------|--------------------------------------|
| Ballito | 1 264 | 53 589 |
| Zimbali | 0 | 0 |
| Salt Rock | 595 | 13 722 |
| Chaka's Rock | 353 | 13 962 |
| Sheffield Beach | 193 | 5 136 |
| Tinley Manor | 315 | 3 397 |
| Shakaskraal | 558 | 14 318 |
| Nkobongo | 7 | 100 |
| Umdlali | 70 | 4 291 |
| Shakashead | 1 | 10 |
| Etete | 67 | 3 916 |

Source: Siza Water Five Year Plan

⁷⁸ A demand curve is developed from historical data on water usage to forecast the expected trend for future water demand in the same periods in following years.

Using Table 8.6., the following demand table is developed by the researcher: -

TABLE 8.7. GROUPING OF TARIFFS AND COMMUNITIES

| Block Tariffs | Town | Number of Connections | Individual Percentage of Town Households of Total Number of Households (%) | Average Area Monthly Consumption (kl) | Average Monthly Consumption per Household (kl) |
|---------------------|-----------------|-----------------------|--|---------------------------------------|--|
| Group 1 | Zimbali | 0 | 0 | 0 | 0 |
| | Shakashead | 1 | 0 | 10 | 10 |
| | Subtotal | 1 | 0 | 10 | 10 |
| Group 2 | Tinley Manor | 315 | 9 | 3 397 | 11 |
| | Nkobongo | 7 | 0 | 100 | 14 |
| | Salt Rock | 595 | 17 | 13 722 | 23 |
| | Shakaskraal | 558 | 16 | 14 318 | 26 |
| | Sheffield Beach | 193 | 6 | 5 136 | 27 |
| | Subtotal | 1 668 | 49 | 36 673 | 22 |
| Group 3 | Chaka's Rock | 353 | 10 | 13 962 | 40 |
| | Ballito | 1 264 | 37 | 53 589 | 42 |
| | Etete | 67 | 2 | 3 916 | 58 |
| | Umhlali | 70 | 2 | 4 291 | 61 |
| | Subtotal | 1 754 | 51 | 75 758 | 43 |
| Final Totals | 3 423 | 100 | 112 441 | 33 | |

Source: Researcher's Calculations⁷⁹

⁷⁹ As the research may indicate anomalies with poorer areas such as Etete and Umhlali, having incongruously high household water usage, this is because the concessionaire operates communal standpipes in the area for households that actually do not have a household connection. This means that the water consumption in *these* areas, are not a true reflection of the *actual* household consumption, as most of this water is diverted to the standpipes. However, this blanket method of calculation is within acceptable limits if a *consumption demand trend* per area is being determined. Such data aligns itself with the increase of household connections of customers, which is currently in operation. These figures do not affect the global consumption of water in the area. (See Cost Benefit Analysis discussion in Chapters 3 and 4.) As these calculations are essentially focused on determining the worst-case scenario for profiteering by SWC, these two intermittent anomalies do not actually affect the *cumulative* profit calculations. Etete and Umhlali essentially constitute an aggregate 4 percent of total household number, and 7 percent of total water demand in the concession area. This is aligned later in the calculations on Page 245.

A demand curve or table, in this context, is a trend pattern of consumption of water by a collective and is used in the forecasting and financial modelling. Table 8.5. indicates three groups, Group 1 is those households that only use water in the first tariff block, that is, less than 10k/ a month; Group 2 pays for water in both tariff blocks, that is, less than 10k/ a month as well as that portion of water usage that exceeds 10k/ a month but is less than 35k/ a month; and Group 3 are those households that utilise water in the first two tariff blocks as well as utilising a portion of water that exceeds 35k/ a month in the third tariff block. In the event of a lack of payment by recipients, their water supply is slackened in terms of water pressure to a basic trickle feed.

The above data is also used to extrapolate the following demand curve and individual household consumptions: -

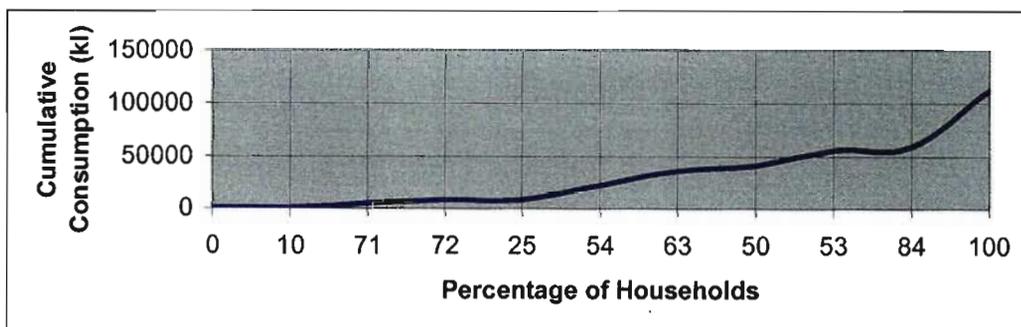


FIGURE 8.1. CALCULATED DEMAND CURVE

Source: Researcher's Calculations

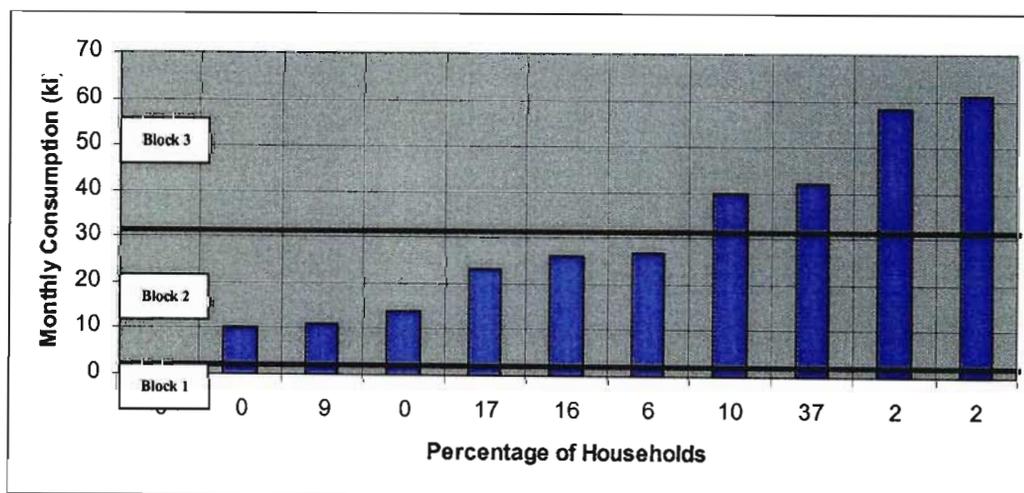


FIGURE 8.2. CALCULATED TARIFF BLOCK CONSUMPTION

Source: Researcher's Calculations

From Table 8.7. and Figures 8.2 and 8.3., the following consumption demand is calculated per tariff block: -

TABLE 8.8. CALCULATED TARIFF DEMAND DETERMINATION

| Monthly Block Tariffs | Actual Monthly Litres Used in Each Block Tariff |
|-----------------------|---|
| 0-10kl | Group 1' + Group 2' + Group 3' = $(10 \times 1) + (10 \times 1668) + (10 \times 1754) = 34\ 230\ k/l$ |
| 10-35kl | Group 2'' + Group 3'' = $[(22-10) \times 1668] + [(35-10) \times 1754] = 46\ 326\ k/l$ |
| >35kl | Group 3''' = $112441 - (34230 + 46326) = 31\ 885\ k/l$ |

Source: Researcher's Calculations

In Table 8.8. , Groups (1', 2', 3') refer to that portion of water in the first block tariff used by the three groups. Similarly Groups (2'', 3'') is for the second block tariff and Group (3''') is for the third block tariff.

As water supply sales are being calculated on an annual basis, the following table is calculated by the researcher: -

TABLE 8.9. CALCULATED FINAL WATER REVENUES

| Tariff Block | Tariff Rate | Average Monthly Consumption | Yearly Consumption | Consumption Block Ratio | Total Revenue (1997) |
|----------------------|----------------|-----------------------------|--------------------|-------------------------|--|
| Basic Charge | R24.60 a house | | | | $3423 \times 24.60 \times 12 = R\ 1\ 010\ 470$ |
| 0-10kl | R 0.00/k/l | 34 230 k/l | 410 760 k/l | 14 | R 0 |
| 10-35kl | R 2.74/k/l | 45 326 k/l | 543 912 k/l | 18 | R 1 490 318 |
| >35kl | R 3.60/k/l | 31 885 k/l | 382 620 k/l | 13 | R 1 377 432 |
| Final Water Revenues | | | 1 337 292 k/l | | R 3 878 220 |

Source: Researcher's Calculations

The consumption block ratio from Table 8.9. is approximately 14:18:13. This ratio is applied to future growth levels. An inflation rate of 8 percent is assumed as against the 10 percent indicated in the RFP, as the worst-case scenario is developed for SWC from a profit perspective.

From the RFP, there is also an expected increase of 3327 upmarket housing units and about 6000 township units. Using the housing growth levels from the SWC Company Five-Year Plan, an assumption is made that 665 upmarket houses will be constructed and occupied per year, and 1200 new township dwellings are occupied per year.

There is a further industrial and leisure hotel growth predicted over the next five years, although actual construction has not met the anticipated forecast, so this demand is negated. As SWC predicts that most dwellings would have a high service-level by the fifth year of the concession, this would imply that most dwellings would also increase their water demand.

However, the growth rate of upmarket dwellings is approximately half that of the township dwellings, thus the assumption is made that the ratio of tariff block usage remains constant when viewed cumulatively with the increase in houses. From the RFP, the population growth rates for the Dolphin Coast area are approximately 7.5 percent. The assumption is made that water demand would also increase at this rate annually.

A correction factor to the water demand is also calculated to account for the disparity between Umgeni Water's figures and that of the RFP document, which does not take into account the higher consumption rate for December and January, which is the tourist season.

A factor of 36 percent is applied to account for the tourist season to tie in the RFP data with Umgeni Water's data for 1996 and the data from Siza Water's Five Year Plan for the year 2000. The population growth rate of 7.5 percent is also applied and is assumed to share a linear relationship with water demand.

Finally, using the preceding calculations, the following five-year table for water supply sales was determined by the researcher: -

TABLE 8.10. CALCULATED WATER SUPPLY FIVE-YEAR TABLE

| Year | 2000 | 2001 | 2002 | 2003 | 2004 | 5 Year Totals |
|--------------------------------|---|-----------|-----------|-----------|------------|---------------|
| No. of Houses | 4 500 | 6 365 | 8 230 | 10 095 | 11 960 | |
| Corrected Water Demand (k) | 1 800 000 | 1 935 000 | 2 080 125 | 2 236 134 | 2 403 844 | 10 455 103 k |
| Demand Block Ratio | 14:18:13 | 14:18:13 | 14:18:13 | 14:18:13 | 14:18:13 | |
| Connection Cost per House (R) | 295 | 319 | 344 | 372 | 402 | |
| Selling Price: Block 1 (R/k) | 0 | 0 | 0 | 0 | 0 | |
| Selling Price: Block 2 (R/k) | 2.74 | 2.96 | 3.2 | 3.45 | 3.73 | |
| Selling Price: Block 3 (R/k) | 3.6 | 3.89 | 4.2 | 4.53 | 4.9 | |
| Demand Block Ratio Percentages | Block 1 = 30 percent, Block 2 =40 percent, and Block 3 = 30 percent of total demand | | | | | |
| Consumption: Block 1 (k) | 540 000 | 580 500 | 624 038 | 670 840 | 721 153 | |
| Consumption: Block 2 (k) | 720 000 | 774 000 | 832 050 | 894 454 | 961 538 | |
| Consumption: Block 3 (k) | 540 000 | 580 500 | 624 038 | 670 840 | 721 153 | |
| Total Connection Cost (R) | 1 327 500 | 2 029 264 | 2 833 764 | 3 753 997 | 4 803 331 | |
| Total: Block 1 (R) | 0 | 0 | 0 | 0 | 0 | |
| Total: Block 2 (R) | 1 972 800 | 2 291 040 | 2 662 560 | 3 085 865 | 3 586 536 | |
| Total: Block 3 (R) | 1 944 000 | 2 258 145 | 2 620 958 | 3 038 907 | 3 533 651 | |
| Yearly Totals (R) | 5 244 300 | 6 578 449 | 8 117 282 | 9 878 769 | 11 923 519 | R 41 742 318 |

Source: Researcher's Calculations

ii) Sewerage

The sewerage tariffs are charged at an apportionment of the total potable water used. An inflation rate for charges is set at 8 percent. The sewerage revenue is calculated as follows, using the data from water revenue calculations: -

TABLE 8.11. CALCULATED FIVE-YEAR SEWERAGE REVENUE

| Year | 2000 | 2001 | 2002 | 2003 | 2004 | 5-Year Totals |
|------------------------------|-----------|-----------|-----------|------------|------------|---------------|
| Number of Households | 4 500 | 6 365 | 8 230 | 10 095 | 11 960 | |
| Basic Charge (R) | 432 | 467 | 504 | 544 | 588 | |
| Total Basic Charges | 1 944 000 | 2 969 654 | 4 146 972 | 5 493 654 | 7 029 266 | |
| Water Demand (k) | 1 800 000 | 1 935 000 | 2 080 125 | 2 236 134 | 2 403 844 | 10 455 103 k |
| Volumetric Charge Unit (R/l) | 1.84 | 1.99 | 2.15 | 2.32 | 2.5 | |
| Total Volumetric Charges (R) | 3 312 000 | 3 845 232 | 4 464 314 | 5 183 069 | 6 017 543 | |
| Total Sewerage Revenue (R) | 5 256 000 | 6 814 886 | 8 611 286 | 10 676 723 | 13 046 809 | R 44 405 705 |

Source: Researcher's Calculations

iii) Start-up Connection and Reconnection Charges

According to the contract, in 1999, there would be a start-up water connection cost for new houses, which was, on average, R1200 per connection. In terms of sewerage, all new houses would require start-up connection fees, averaging R800 per house depending on effluent pipe size. By 1999, there were approximately 4500 houses and every year 1865 houses would be built. An inflation rate of 8 percent for connection fees is estimated. There are also about 100 water reconnections a year, assumed constant. A customer is charged R38 for the notice and R131 for the actual reconnection.

Thus, the following fee schedule revenues are estimated for five years: -

$$\begin{aligned} \text{Total Connection Fees (2000:2004)} &= \text{New Water Connections} + \text{All Sewerage} \\ &\text{Connections} + \text{Reconnections Revenue} = \{ \sum_{i=0:4} [1865 \times 800 \times (1+0.08)^i] \} + \\ &\{ \sum_{i=0:4} [1865 \times 800 \times (1+0.08)^i] + 4500 \times 800 \} + \{ \sum_{i=0:4} [100 \times (38+131) \times (1+0.08)^i] \} = \\ &\text{R } 21\,205\,083. \end{aligned}$$

The resulting data is graphically represented with the following trend patterns: -

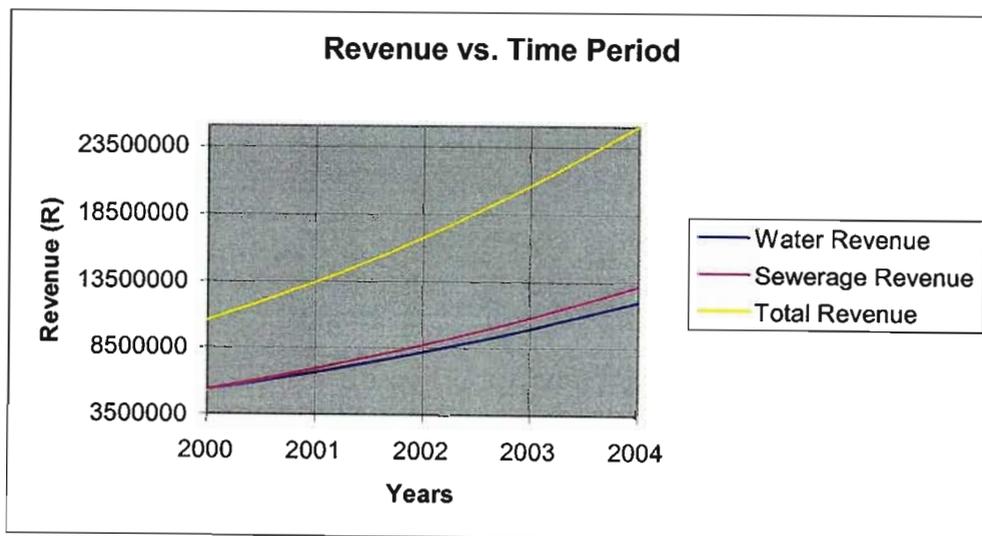


FIGURE 8.2. REVENUE TRENDS
 Source: Researcher's Calculations

Figure 8.2. provides a graphical representation of the relationship between water and sanitation revenue as a proportion of total sales. The indication is that the revenue generated from both water and sanitation would be equal in quantum.

b) Expense Calculations

For the initial five-year period, from Jan 2000 to Dec 2004, the following costs are allocated: -

- a) Bulk Water Costs.
- b) Contract Implementation Fee.
- c) Average Lease Fee.
- d) Concession Fee.
- e) Youth and Community Development Fund.
- f) Social Fund.
- g) Maintenance and Capital Infrastructure Investment.⁸⁰
- h) General New Office Capital Expenses: Land, Buildings and Vehicles.
- i) Rent.
- j) Office Operating Expenses and Sundries (Including Marketing).
- k) Wages and Salaries.
- l) Training.
- m) Insurances, Bonds and Guarantees.
- n) Sewerage Treatment and Disposal Costs.

(See Appendix 7 for calculations of the above expenses.)

⁸⁰ Although SWC indicates a projected infrastructure investment of R25 million in the first 5 years from various sources (R21 million from internal sources), there is no available document on the actual investment from SWC at the time of completion of this study. According to internal source at SWC, Mr. Y (Interview: 10.11.2003), close onto the end of the fifth year of the concession, there was about R10 million worth of investment, which is less than half the prediction from the Five Year Report.

c) Predicted Five-Year Financial Statement (2000-2004)

Using the financial analysis from the revenue and expense calculations, the following predictive five-year financial statement is drawn-up incorporating the first five years from 2000-2004: -

TABLE 8.12. FIVE-YEAR FINANCIAL STATEMENT

| Income (2000-2004) | | Expenses (2000-2004) | |
|----------------------|----------------------|---------------------------|---------------------|
| Description | Value (R) | Description | Value (R) |
| Water Revenue | 41 742 318 | Bulk Water | 22 196 807 |
| Sewerage Revenue | 44 405 705 | Contract Implementation | 200 000 |
| Connection Revenue | 21 205 083 | Average Lease | 17 683 484 |
| | | Concession Fee | 3 226 631 |
| | | Development Fund | 439 995 |
| | | Social Fund | 58 666 |
| | | Infrastructure Investment | 21 423 653 |
| | | General Capital Expenses | 1 000 000 |
| | | Rents | 140 798 |
| | | Office Operating Expenses | 861 480 |
| | | Wages and Salaries | 11 721 469 |
| | | Training | 466 200 |
| | | Insurances | 1 500 000 |
| | | Sewerage Treatment | 2 091 021 |
| Revenue Total | R 107 353 106 | Expense Total | R 83 010 204 |

From the above financial statement (Table 8.12.), it is evident that SWC would make a *minimum* profit of about R24 million over five years, which translates to about 29 percent profit on cost-of-sales (investment and operational expenses) annually. To account for the anomaly created by the Etete / Umhlali aspects⁸¹, as these two areas use 7 percent of total water consumption, a 93 percent profit-diminishing factor is *further* applied to the above profit. This would, in a worst-case scenario, bring the profit on investment down to 27 percent. Additionally, there would be no continuous lease fees after a certain period and no successive contract implementation fees. The expected total revenue for the concession over the thirty-year life-cycle was estimated at

⁸¹ See footnote on Page 238.

R1 billion⁸² in the initial feasibility studies. As SAUR, the TSC, has a 58 percent stake in SWC, over this period, there would be a net exit of $(0.58 \times 0.27 \times R1 \text{ billion}) = R 156$ million. However, by applying the above analysis, the calculations in Appendix 7 reveal that the actual total sales return on the profit, using only inflation as a parameter (8 percent), indicates that a total revenue of about R2.2 billion is more likely to be the minimum total revenue. These calculations found in Section 2 of Appendix 7, also assume that there would be continuous capital investment by the concessionaire over the thirty-year cycle. This degree of capital investment is unlikely however, as capital investments generally decrease over the project lifecycle. Added to this, is that the lease payments also decrease considerably after the eighteenth year of the concession. For the purposes of this *revenue-minimising* calculations, these parameters are assumed to be constant however. An upper minimum tolerance profit of R344 million could then be repatriated to SAUR's parent country. Effectively, had the initial population growth been correct, the transfer of such quanta of capital would have been viewed as an acceptable practice by all tiers of government that were involved in the process.

Evaluating the above predictive profit, reference is made to a comment by Ian Coates, a Councillor at Dolphin Coast⁸³: "In the contract, there is a cap on the amount of profit to be made (10-15 percent). If they (SWC) have a huge profit, we would say, hey, we want a tariff review. It means either you are not spending money on the development side of the issue and therefore retain too much money, or you are charging us too much, or the tariff formula went wrong somewhere. At the 5-year review meetings there is an opportunity for both sides to present their cases."

Thus, having used all the predictive parameters and information provided to and given by the concessionaire, it is evident that the upper capping of 15 percent would have been eclipsed.

Subsequent to the financial data used in these calculations, in early 2001, SWC stated that the envisaged population growth had not occurred at the Dolphin Coast. This resulted in a situation that SWC stated, would not facilitate *any* cumulative profit during

⁸² These were the expected cumulative revenues that were expected over the thirty-year project cycle, as predicted by the municipality.

⁸³ See Hemson and Batidzirai (2001) in their study on the effects of the concession on the poor.

the *entire* duration of the 30-year concession. The municipality intervened and allowed major tariff increase changes, a decrease in the lease fee paid by SWC, and a decrease in the free water consumption block. In essence, the municipality prevented a market failure of the project from occurring. However, the case of improbable profit has not been verified, as the discussion on the regulators' role will reveal later in this chapter.

8.9. The Opposition to Privatisation

Chapter 7 provides a detailed discussion on the opposition to privatisation in South Africa at a macro level. This section discusses issues of opposition specifically related to the Dolphin Coast case.

In an interview with the fire chief of the Dolphin Coast, Kenny Naidoo (Interview: 21.05.2001), who is also the local municipal shop steward representative for the South African Municipal Workers' Union (SAMWU), he sees the Dolphin Coast WSS concession as a social and financial failure. The consensus amongst the lower-level municipal workers, it appears, is that Dolphin Coast was used as a "guinea-pig" by national government. On being probed as to the use of the term "guinea-pig" compared to a more appropriate term such as "pilot-project", the suggestion was treated with contempt. According to the shop steward, employees of the municipality, especially the lower-level employees, view the private sector intervention in a very negative light.

Naidoo (Interview: 21.05.2001) goes on to say that the following negative effects are already being felt just two years after the commissioning of the concession: -

- As this is a pilot project, there are no benchmark criteria to evaluate the contract agreement pertaining to the concession.
- There has been poor contract compliance by SWC.
- There is still a triad of three external companies serving as the regulatory team, which was supposed to have only been a temporary measure, and to have been conducted internally through the municipality.
- The disconnection procedures employed when a customer cannot pay his account, are too harsh, with reports of attorneys' letters being sent on errant payments without prior warning from the concessionaire.

- SWC has been guilty of sending incorrect bill amounts to customers, some being quite exorbitant.
- There is no apparent difference in the WSS system before and after the handover from the municipality to the concessionaire. The water quality has not changed and the service delivery is still the same.
- Where SWC has trained staff on technical and management areas, the municipality could have managed this within its own sphere.
- Employment equity does not seem to be an issue with SWC because it is essentially a foreign-owned company, who does not see the need to adhere to local legislation. The top management is still White, and after two years, there is only one middle-level manager who is Black, who manages the operations aspect of the business. This only came into place after heavy lobbying by SAMWU⁸⁴.
- Tariffs have increased considerably after handover.
- Two skilled workers left the SWC's employ, as soon as they were transferred to it.

From the perspective of the municipality, according to the RFP document that was issued, there was buy-in from SAMWU at a meeting held in January 1997. At this meeting, the conceptualisation of the PPP concession system was suggested by the municipality to SAMWU.

According to Naidoo (Interview: 21.05.2001), discussions ensued, with the unions acquiescing initially and making the following demands and provisos pertaining to the transfer: -

- All staff were to be given the choice of transfer to the successful private sector bidder with the same or better salaries, allowances and benefits. The municipality would provide a written offer detailing their transfers to all affected employees. Also, if certain staff members chose not to transfer to the private sector operator, the municipality would continue to keep these staff members within their employ. Further to this, a guarantee had to be given by the concessionaire that there would be no retrenchments of affected staff after handover, as a result of the transfer of the operations.

⁸⁴ By 2003, there has been an improvement in terms of meeting employment equity targets for senior positions at SWC.

- Conditions of service were discussed and agreed with the unions, municipality, affected workers, and the private sector party, prior to handover of the operations.
- All transferred staff members were to be provided with training and development in line with the employment equity laws of the country.
- The successful bidder had to be on a sound financial footing.

According to Saayman (Interview: 21.05.2001), SAMWU was initially supportive of the project initiative and accepted the pitfalls of municipal delivery. It was only later that the unions seemed to renege on this strategy, possibly due to pressure from higher-up in the national union hierarchy. Saayman feels that the staff who have been transferred are actually very happy with the concessionaire, and now refuse to retain SAMWU as their union representative.

However, contrastingly, a perusal of the study by Hemson and Batidzirai (2001: 28-33) on the concession reveals, that transferred workers are not satisfied and feel that the only area where there has been any apparent improvements, is that of training.

Ferguson (Interview: 22.05.2001) also stated that when SAMWU began to oppose the PPP, they were given a chance to provide an alternative option. SAMWU's options, however, did not seem feasible, proposing a restructuring of WSS service delivery within the municipal hands, an option that did provide a solution to the immediate lack of finance problem.

8.10. The Role of Regulation in Privatisation

There is no structured regulatory body monitoring the concession as a unified body, unlike that of Buenos Aires. This is to be expected, as due to sheer differences in the size of population served, there may not be a need to have full-time body monitoring a concession of this size. Also, a small-scale PPP such as the Dolphin Coast case, does not provide the economies-of-scale to facilitate the financing of comprehensive regulation.

The monitoring is conducted by three separate companies focusing on different aspects of the concession. These "piecemeal regulators" were not appointed through any tender

process. This is within the ambit of municipal law, as the fees generated from the monitoring process cannot exceed about R500000 per annum as at 1999, which is small enough not to require any formal tender adjudication process. The annual concession fee paid by SWC is used to fund this regulatory mechanism.

In 1999, the municipality's aim was to appoint the triad of companies on a one-year basis, which would have given the municipality sufficient time in which to appoint its own internal monitoring body. This would not only monitor the WSS concession, but other outsourced services as well. This has not yet materialised. One of the aims of this transfer of regulation from external to internal was to develop the skills of municipal workers to be able to manage regulation internally.

This is evident in the following statement made by a councillor about the financial regulator, Deloitte and Touche⁸⁵: "Deloitte were doing our internal audits. If we had to tender, it will have taken two years. We decided to use them because they knew exactly what we were doing. Both the Borough of Dolphin Coast and Deloitte did not have any idea about costs involved. Internally, the Borough has refuse removal, verge cleaning and beach cleaning etc. that were outsourced. The question was why do monitoring only on the WSS contract, let's do it to all services that are outsourced. This will empower us and motivate staff to work permanently on this. The water component is a major one, but not the only one."

There are three aspects to the monitoring; the legal, technical, and financial aspects governing regulation of the project. The legal firm, Shepstone and Wylie; technical firm, Bosch and Associates, and the auditing firm, Deloitte and Touche, provide these regulatory services, respectively. Deloitte and Touche also project manages the regulation by ensuring the collation and distribution of information.

In essence, a regulator exists to ensure that the most efficient and cost-minimal quality service is provided to the customer with no negative effects on the municipality and the concessionaire. If one were to ask whether the regulation met certain basic standards of checkpoint contract compliance, the answer would be in the affirmative. The

⁸⁵ See Hemson and Batidzirai (2001: 13).

expectation of the regulator, in this case, is to play that of a reactive rather than a proactive role. If that is the municipality's request, then there is no doubt that the regulator is restricted from exceeding general contract compliance monitoring.

However, a regulator's role should facilitate an efficient service and a beneficial situation for all stakeholders, especially the end customer from a pricing and quality perspective and for the provider from a commercial viability perspective. In a developing country, and with WSS being a public good, there should be some focus towards welfare and development.

To label the regulator as a success or failure would thus be too presumptive. Yet, in essence, the concession *has* failed. The municipality allegedly provided an over-estimation of the population growth-levels in the RFP, although this was duly-known to be an *estimate* only. The concessionaire used these figures in their calculations, and tendered tariffs based on these expectations. Three years down the line, the concessionaire requested an extraordinary review of tariffs, using a clause in the contract. Growth-levels have been less than expected, and there seemed no chance of profitability throughout the 30-year lifetime of the concession with tariffs escalating at the initial pace.

The renegotiation of the contract was essentially between the municipality and concessionaire, with the regulator playing a more perfunctory role in the process.

The expectation of a municipality embarking of privatisation would be that a professionally world-renowned WSS utility should have enough experience to factor in such gross estimates in their tariff tenders. Yet SAUR did not do so, as one of the main criteria in selecting the successful bidder is that the low tariffs win the bid.

Arguably, with Umgeni Water supplying the bulk water, Umgeni Water would have probably been able to provide lower tariffs than SWC, by exploiting the synergies that can be gained by being the bulk water supplier and WSS service provider simultaneously.

The regulator should have been able to factor in such events by conducting trial checks and balances. This reveals the difference between a reactive regulator, as to a proactive one. Whether the regulators have actually done an analysis on the revenue estimates of the concessionaire, or verified the new financial predictions of the concessionaire, is questionable. This is not intended to insinuate that the concessionaire may be involved in corruption with regards to camouflaging revenues received, but rather questions the role of the regulator in fulfilling its obligation towards counter-checking calculations against their own predictive analysis. It also highlights the regulators' lack of experience in the WSS privatisation arena.

Many of the regulatory issues covered in the regulators' report on contract compliance, are one-dimensional in nature. It consists primarily of "checks-and-balances" to ensure that certain contracts are signed, and contract minimal percentages are complied with, for example, affirmative action employment equity criteria are in synch with the requirements of the contract. These are really tasks that do not require in-depth auditing knowledge, and are an indication of the degree of focus on financial issues. This does not mean that such "checks and balances" are not important. It is, however, a criticism of the *degree* of involvement of the regulators in monitoring. The regulators cannot be blamed for this occurrence as the fees charged are restrictive, and do not permit excessive monitoring of the contract. The fees cannot be increased, as the contract itself is too small to facilitate an increase in fees. The only criticisms by the regulator against the concessionaire seemed to come from the technical monitoring team, although these were not large-scale problems.

One of the aspects requiring closer scrutiny is the subsequent signing of a sub-contract between the regulator and the concessionaire. This is essentially a secrecy clause that restricts the regulator from revealing any transgressions by the concessionaire to any outside entity other than the Dolphin Coast municipal authorities. In order to procure copies of the regulators' report, the researcher followed a considerably bureaucratic procedure before these reports could be made available. The emphasis of the secrecy clause was embedded in the restriction of technology rights that may be stolen if these documents become public. However, the question arises as to extent of the technological nature of these reports, as there was no evidence of any advanced or innovative knowledge. The implications are, that the concessionaire did not want the

general public to be aware of its transgressions, as it would impede their future expansion targets in other municipalities.

This secrecy clause seems to contradict the position that a regulator should take. Although by concessioning the WSS service provision to a private sector entity, it effectively changes the status of WSS from a public good to that of private sector commodity, this does not change the *need* for WSS. As an essential part of human survival, WSS provision has to be monitored, and with public access to pertinent information. If the regulator exists to serve the public interest, it is imperative that the public be aware of any transgressions by the concession. The accountability of privatisation, as emphasised in the literature survey in Chapter 2, is of extreme importance to maintaining ethically-acceptable corporate governance, post the commissioning of the concession.

8.11. Public Support for Privatisation

Prior to the concession becoming an official agenda, the municipal councillors held full-scale discussions with their ward communities. The first part of the publicity process occurred via media advertisements, which were also covered in local newspapers, so that all affected communities would have knowledge of the municipality's intention to bring-in the private sector. In January 1997, a workshop was held between various parties, including councillors, officials, media, the DBSA, community members and organisations, and commercial concerns. Other benefits that would lead to local economic development in the area were also discussed.

In conjunction with this, the lower socio-economic areas of Etete, Shakashead and Nkobongo were also earmarked for discussions. According to the RFP, the following issues were raised: -

- The communities were in favour of private sector involvement based on the proviso that it would bring about an improvement in WSS services and standards.
- Tariffs were indicated to be within the affordability of even the poorest communities. The community expressed a willingness-to-pay (WTP) for services subject to the quality and standards of the service being at acceptable levels.

- The community requested a range of service standards to choose from in keeping with their financial constraints, which was agreed upon by the municipality.
- The community also felt that the municipality must not relinquish its role totally in the provision of WSS services, especially with regards to the regulation and monitoring of quality standards and tariff-setting.

The empowerment of local contractors was also discussed with possibilities of local SMME development, especially of previously disadvantaged communities, being addressed. Local communities were to be given preference with regards to employment opportunities emerging during the expansion phase of the concession programme.

Public Survey

As discussed earlier, questionnaires were distributed to gauge public opinion on the concession. On the reverse side of the questionnaire, respondents could proffer further opinions on the concession. Although not all the respondents provided further feedback of their personal opinions, there were many who were willing to complete the questionnaires. Most respondents complained about the lack of knowledge prior to the concession's implementation. Respondents felt that there was no public consultation and felt marginalised by councillors and local ward representatives. Respondents from many communities felt that, even though they may not have the ability to make a significant impact on municipal governance decisions, they would at least like to have a say in the process. This contradicts the fact that there were community consultations on the concession through feedback from workshops, and notices of intent to garner private sector involvement through the local newspapers. There can be no conclusions drawn on whether initial public apathy about the process changed once the concession had been implemented, or whether there was a genuine lack of communication by the municipal authorities.

Many of the respondents have made comparisons with Umgeni Water's services. Not all residents in the area receive their water from SWC. Some residents in the area still receive their water from the bulk water supplier, which is Umgeni Water. Many respondents feel that Umgeni Water is cheaper and provides a better service-level. Complaints include SWC's "supposed" poor billing systems, where people who have

been disconnected, are still sent monthly bills. This places SWC's assertions that it has a superior customer billing and tracking software system under question. There have also been complaints concerning SWC's lack of regard for people's ability-to-pay (ATP). SWC has probably taken the view that all customers can pay for their usage and that the ATP is superseded by issues of the communities' willingness-to-pay (WTP).

The following is an analysis of the questionnaires that were distributed to the public, using the research methodology set-out earlier in Chapter 1: -

a) Current Statistical Data on Household Connections

The questionnaire is found in Appendix 1.

Total number of households at time of questionnaire distribution: -

TABLE 8.13. HOUSEHOLD CONNECTIONS

| Area | No. of Properties | Household Connections ⁸⁶ |
|-----------------|-------------------|-------------------------------------|
| Zimbali | 0 | 0 |
| Shakashead | 1 | 0 |
| Tinley Manor | 315 | 128 |
| Nkobongo | 7 | 0 |
| Salt Rock | 595 | 468 |
| Shakaskraal | 558 | 486 |
| Sheffield Beach | 193 | 193 |
| Chaka's Rock | 353 | 332 |
| Ballito | 1264 | 1195 |
| Etete | 67 | 246 |
| Umhlali | 70 | 105 |
| Totals | 3423 | 3153 |

Source: Siza Water Five-Year Plan

⁸⁶ Etete and Umhlali indicate anomalies in the figures provided by the Report as the number of metered properties exceed the number of properties in the area. However, this is explained by the fact that such properties may be flats that require meters per household.

The success rate of the survey was determined as follows: -

- Of the above households, at the time of questionnaire distribution, 3153 properties had household connections.
- Total number of questionnaires distributed = 500.
- Sampling interval = population size / sample size = $3153/500 = 6.3$
- Sampling ratio = sample size / population size = $500/3153 = 15.9$ percent of total number of households.
- Total number of returned questionnaires = 324.
- Success rate = $324/500 = 65$ percent success rate.

As the sample needed to be as representative as possible, properties without household WSS connections⁸⁷ also needed to respond. Using the stratified proportioning system, the following table is developed by the researcher from the completed questionnaires: -

TABLE 8.14. HOUSEHOLDS AND AREA DESCRIPTIONS

| Area | No. of Properties | Household Connections | Predominant Racial Breakdown |
|-----------------|-------------------|-----------------------|------------------------------|
| Zimbali | 0 | 0 | White |
| Shakashead | 1 | 0 | Indian/African |
| Tinley Manor | 315 | 128 | Indian |
| Nkobongo | 7 | 0 | African |
| Salt Rock | 595 | 468 | White |
| Shakaskraal | 558 | 486 | Indian |
| Sheffield Beach | 193 | 193 | Indian |
| Chaka's Rock | 353 | 332 | White / Indian |
| Ballito | 1264 | 1195 | White |
| Etete | 67 | 246 | African |
| Umhlali | 70 | 105 | African |
| Totals | | 3153 | |

Source: Researcher's Analysis

⁸⁷ Such customers have access to communal standpipes and pit latrines.

b) Weighting Allocation

As this was essentially a multi-variate analysis, probability theory would indicate that there would be three over-riding factors to consider in apportioning weights to the feedback. (See research methodology used on this case study and Scanlon's theory on stratification in Chapter 3.) The three over-riding parameters used in this analysis were race, service-levels, and community subset populations. The number of questionnaires returned indicates that the former White and Indian areas had the highest actual return-rate. These areas still have racial majorities, and to prevent bias as a result of high-level customers dominating the responses, a weighting system was used as described in the research methodology. The weight factor used in the area incorporates service-level, race, area distortions and representation, and income. From earlier analysis, approximately half of all households in the concession area have household connections, that is, a level-four service. Thus, in the weighting, the split of questionnaires includes this cross-section.

The following table indicates the determination of the area weight factor: -

TABLE 8.15. AREA WEIGHT FACTOR DETERMINATION

| Area | Actual Returned | Return Split (RS) (%) | Actual No. of Households | Household Split (HS) (%) | Area Weight Factor =RS/HS |
|-----------------|-----------------|-----------------------|--------------------------|--------------------------|---------------------------|
| Zimbali | 5 | 1.56 | 0 | 0.00 | 0.00 |
| Shakashead | 23 | 7.03 | 0 | 0.00 | 0.00 |
| Tinley Manor | 20 | 6.25 | 128 | 4.06 | 1.54 |
| Nkobongo | 10 | 3.13 | 0 | 0.00 | 0.00 |
| Salt Rock | 41 | 12.50 | 468 | 14.84 | 0.84 |
| Shakaskraal | 71 | 21.88 | 486 | 15.41 | 1.42 |
| Sheffield Beach | 13 | 3.91 | 193 | 6.12 | 0.64 |
| Chaka's Rock | 15 | 4.69 | 332 | 10.53 | 0.45 |
| Ballito | 84 | 25.78 | 1195 | 37.90 | 0.68 |
| Etete | 20 | 6.25 | 246 | 7.80 | 0.80 |
| Umhlali | 23 | 7.03 | 105 | 3.33 | 2.11 |
| TOTALS | 324 | | 3153 | | |

Source: Researcher's Calculations

c) Analysis of Questionnaires

The data received from the questionnaires was coded to ease the computational analysis. Initially the Microsoft Excel spreadsheet programme’s “pivot table” and “filter” functions were used in the analysis and this was verified with the assistance of the social statistical software package “SPSS 8.0.” Where data was incomplete, extrapolations on trends per area and per parameter were surmised. The computational analysis eased the assessments required for each variable. For example, if one wanted to know (1) how many White people, (2) above a certain income, (3) live in Ballito, this would require a triple-variable analysis. Each questionnaire had twenty-six questions with their own choice of answers ranging from a minimum of two choices (simple yes/no choices) to a maximum of thirteen for questions that related to the number of household members. (See Appendix 1, for a copy of the questionnaire.)

i) Racial Makeup

The following graphs indicate the actual race demographics of the survey: -

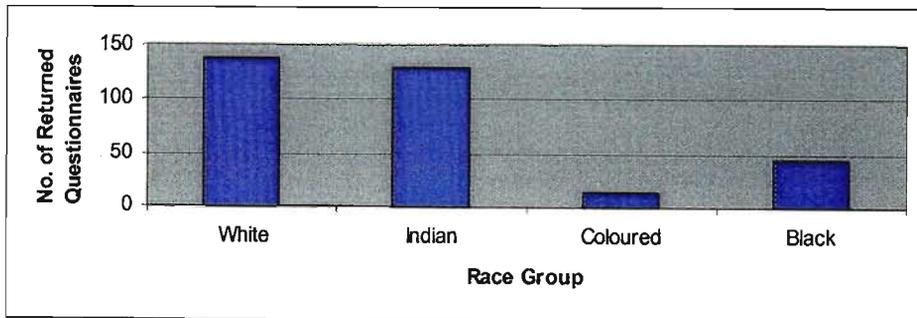


FIGURE 8.3. RACE GROUPING

Source: Researcher’s Calculations

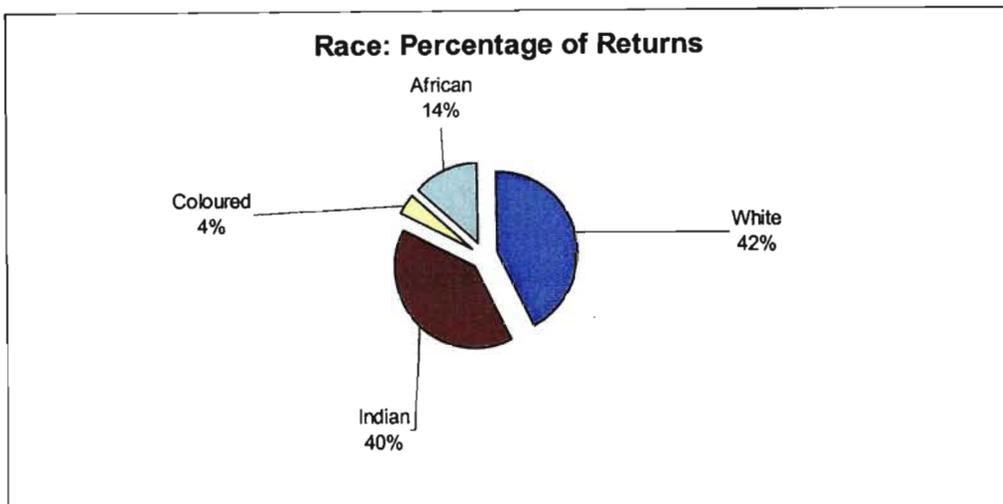


FIGURE 8.4. RACE QUESTIONNAIRE RETURNS RATIO

Source: Researcher's Calculations

ii) Household Members

The following table calculated by the researcher, indicates the number of actual household members per area: -

TABLE 8.16. AVERAGE HOUSEHOLD NUMBER

| Area | Actual Average No. of People per Household | Area Weight Factor | Proportionate Weighted Fraction |
|---|--|--------------------|---|
| Zimbali | 3.0 | 0.00 | (Area Weight Factor x Average Number of People per Household) |
| Shakashead | 5.9 | 0.00 | |
| Tinley Manor | 5.8 | 1.54 | |
| Nkobongo | 7.0 | 0.00 | |
| Salt Rock | 3.2 | 0.84 | |
| Shakaskraal | 5.5 | 1.42 | |
| Sheffield Beach | 3.0 | 0.64 | |
| Chaka's Rock | 3.5 | 0.45 | |
| Ballito | 3.3 | 0.68 | |
| Etete | 7.2 | 0.80 | |
| Umdlali | 3.5 | 2.11 | |
| Average Household Number for Dolphin Coast | | | |

Source: Researcher's Analysis

According to Table 8.16., the average household in Dolphin Coast has about 4.52 household members. The tariff calculated for the use of the free water block amounts to 10kl free water, as per year-2000 municipal recommendations (which has now changed to 6kl, after the extraordinary tariff increase) per month per household. This 10kl free-water block is greater than the national stipulated minimum of 6kl free per month, which translates to about 25l per person per day for an 8-member household. As the highest average number of householders is in Etete, using the 10kl free block tariff, this adds up to about 46.2l per person per day, which is nearly double the national RDP average minimum.

iii) Intrinsic Value of WSS

In order to determine a proportionate value to this good, one has to ascertain the cost of the good to the income of the families in the different areas. The graph in Figure 8.5. that follows Table 8.17. indicates the relationship shared between increasing poverty and increasing number of household members: -

TABLE 8.17. PROPORTION OF MONTHLY BILL TO MONTHLY INCOME

| Area | Predominant Race Group | Average Net Monthly Household Income (R) | Average Number of Household Members | Number of Households | Populations | Average Monthly PCI per Area (R) | Average Monthly WSS Bill (R) | Percentage of Bill Against Monthly Household Income (%) |
|--|------------------------|--|-------------------------------------|----------------------|-------------|----------------------------------|------------------------------|---|
| Nkobongo | African | 750 | 7.0 | 0 | 7700 | 107 | 129 | 17 |
| Etete | African | 1100 | 7.2 | 246 | 9360 | 153 | 177 | 16 |
| Shakashead | Indian / African | 1300 | 5.9 | 0 | 2360 | 220 | 154 | 12 |
| Umdlali | Indian | 2500 | 3.5 | 105 | 700 | 714 | 273 | 11 |
| Tinley Manor | Indian | 4300 | 5.8 | 128 | 2320 | 741 | 267 | 6 |
| Sheffield Beach | Indian | 4500 | 3.0 | 193 | 600 | 1500 | 269 | 6 |
| Shakaskraal | Indian / African | 5000 | 5.5 | 486 | 7700 | 909 | 275 | 6 |
| Chaka's Rock | White / Indian | 7500 | 3.5 | 332 | 1400 | 2143 | 246 | 3 |
| Salt Rock | White | 13000 | 3.2 | 468 | 2240 | 4063 | 289 | 2 |
| Ballito | White | 13000 | 3.3 | 1195 | 6270 | 3939 | 347 | 3 |
| Zimball | White | 30000 | 3.0 | 0 | 600 | 10000 | 365 | 1 |
| Totals and Averages (using area weight factor) | | 7753 | 4.50 | | 41250 | 1979 | 317 | 4 |

Source: Researcher's Calculations

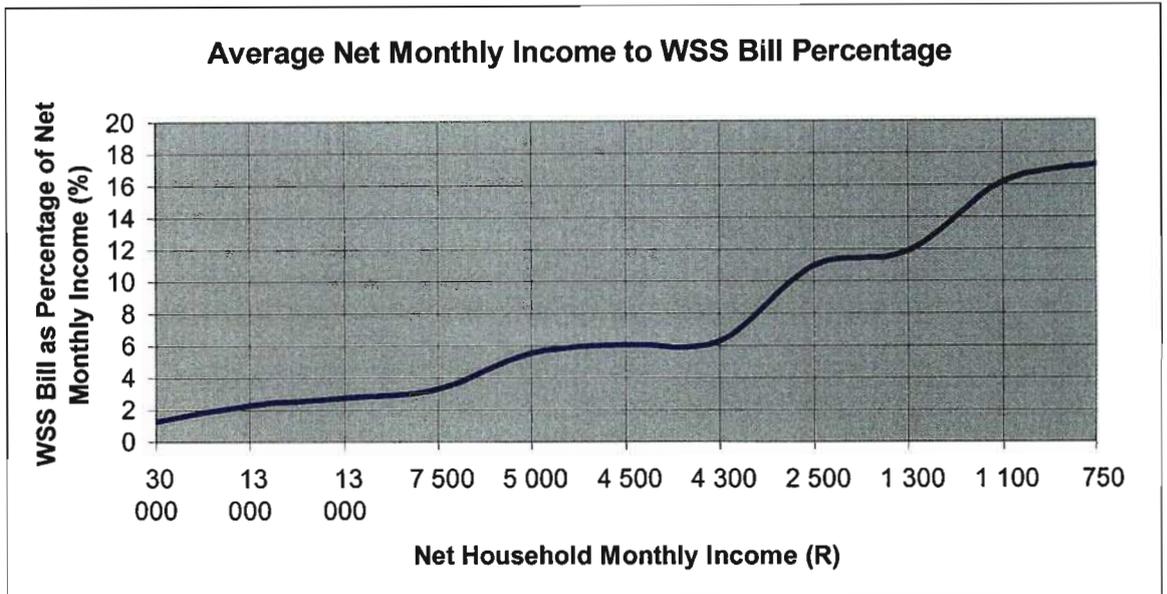


FIGURE 8.5. AVERAGE NET MONTHLY INCOME TO WSS BILL PERCENTAGE

Source: Researcher's Calculations

The following graphs indicate the relationship between monthly WSS bills and increasing poverty: -

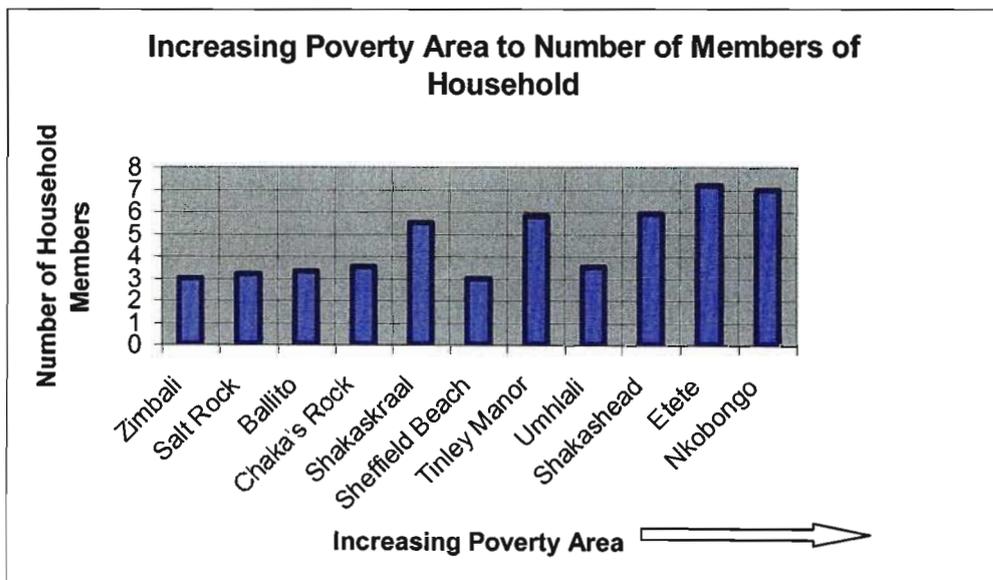


FIGURE 8.5. INCREASING POVERTY AREA

Source: Researcher's Calculations

The graph in Figure 8.5. indicates that there is a general tendency for household members to increase in number as the areas become more poverty-stricken. This is an important issue, as the concessionaire supplies the first six kilolitres of water free to every household. By using the dwelling as the parameter for the free water supply block, instead of the number of individuals that constitute the household, the poorer customers, clearly come off worse.

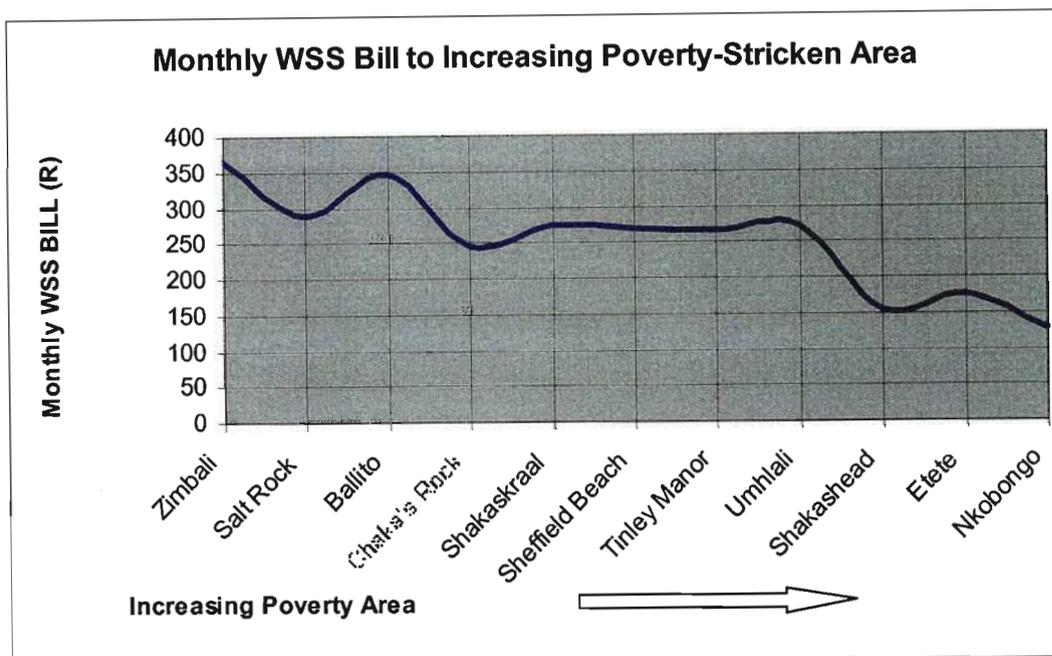


FIGURE 8.6. MONTHLY WSS BILL TO POVERTY-STRICKEN AREA

Source: Researcher's Calculations

Table 8.17. and Figures 8.5. and 8.6. reveal that with increasing poverty, there is a decrease in monetary values of the accounts paid towards WSS provision. Effectively, this means that the poorer the area, the less water that is consumed. Considering that poorer areas have a higher household number, it can be assumed that poverty-stricken people are thus using very much less per capita water than their more affluent counterparts. Using Zimbali and Nkobongo as examples, this effectively means that for the average seven member households of Nkobongo, in comparison to the three member households of Zimbali, the monthly per capita use of water in financial terms is R120 per capita for Zimbali as compared to the R40 per capita use in Nkobongo. However, what is also obvious is that there is a general empirical relationship between the number

of members in a household and their state of poverty. Also, with decreasing poverty, the reflection of the WSS bill as a percentage of their net monthly income actually increases. That is, WSS has a higher “cost-value” to poorer people due to the higher proportion of its consumptive monetary value, as compared to household income. In fact, to a poor person in Nkobongo, the *relative value* of WSS is almost worth seventeen times as much as to a person staying in Zimballi.

iv) Fairness of Tariffs

When asked about the fairness of the current tariffs, the people of Dolphin Coast gave the following views: -

TABLE 8.18. COMPARISON OF TARIFFS

| Area | Fairness of Tariffs (%) | | Comparison of Tariffs to Neighbouring Municipalities (%) | | | Who Would Have Provided a Cheaper Tariff? (%) | |
|--|-------------------------|----------------------|--|--|--------------------------------------|---|-----|
| | Tariffs Are Fair | Tariffs Are Not Fair | Neighbouring Municipality is Cheaper | Don't Know if Neighbouring Municipality is Cheaper | Tariffs are Cheaper in Dolphin Coast | Council | SWC |
| Zimballi | 40 | 60 | 80 | 20 | 0 | 20 | 80 |
| Salt Rock | 31 | 69 | 98 | 2 | 0 | 37 | 63 |
| Ballito | 33 | 67 | 97 | 3 | 0 | 57 | 43 |
| Chaka's Rock | 37 | 63 | 96 | 4 | 0 | 55 | 45 |
| Shakaskraal | 44 | 56 | 98 | 2 | 0 | 73 | 27 |
| Sheffield Beach | 46 | 54 | 91 | 9 | 0 | 72 | 28 |
| Tinley Manor | 50 | 50 | 95 | 5 | 0 | 65 | 35 |
| Umdlali | 59 | 41 | 94 | 6 | 0 | 54 | 46 |
| Shakashead | 78 | 22 | 99 | 1 | 0 | 44 | 56 |
| Etete | 90 | 10 | 95 | 5 | 0 | 75 | 25 |
| Nkobongo | 100 | 0 | 90 | 10 | 0 | 70 | 30 |
| Totals and Averages (using area weight factor) | 51 | 49 | 95 | 5 | 0 | 56 | 44 |

Source: Researcher's Calculations

Table 8.18. is summarised in the trend analysis below in Figure 8.9. The following graph indicates the views of the different respondents on the fairness of tariffs: -

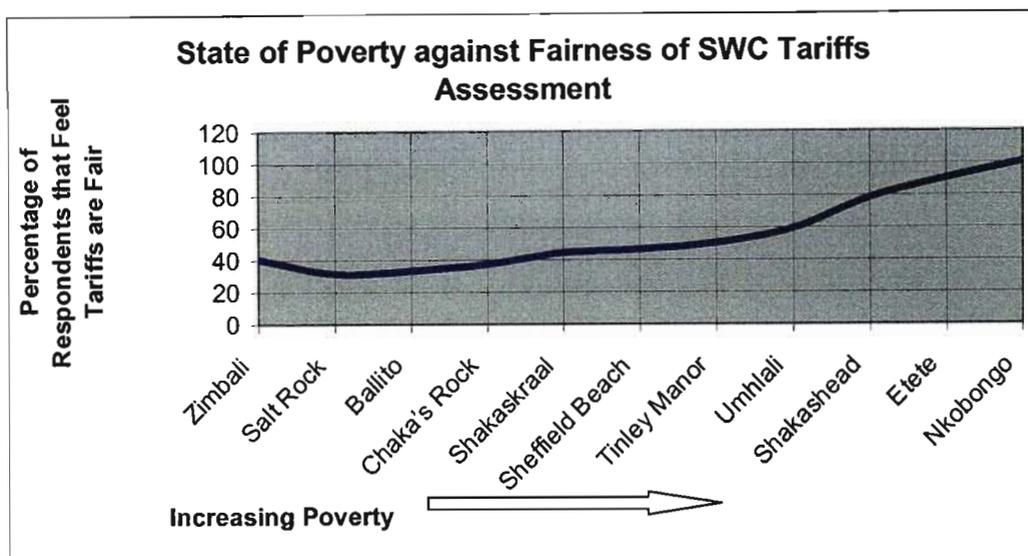


FIGURE 8.7. STATE OF POVERTY AGAINST FAIRNESS OF TARIFFS ASSESSMENT

Source: Researcher's Analysis

Figure 8.7.'s trend arguably indicates an anomaly in the *expected* pattern. It would seem that poor people hold the view that WSS tariffs are fairer than to their wealthier counterparts. This could be explained by the fact that there is a certain degree of cross-subsidisation of rates due to the block tariff system and free water service for the first 10kl, which indigent people generally do not exceed in terms of consumption per household. Also, due to their low ATP's, some indigent people that were respondents may not actually be paying for WSS services, and manage to sustain their needs of the trickle-feed that the concessionaire has to provide, even if the customer does not pay for WSS. This trickle-feed of water supply is basically a mechanically-slackened rate of water flow to those customers that have a household connection, and do not pay their WSS accounts.⁸⁸

In fact, many respondents from more affluent areas complained about the high sewerage tariffs paid in proportion to the amount of water consumed. For example, many affluent

⁸⁸ These statements by the concessionaire are opposed by Naidoo (Interview: 21.05.2001), who states that in most cases, people are simply disconnected because the debts continue to mount.

residents have pools on their properties that require large amounts of water supply, but they do not necessarily create sewer water for treatment and eradication. (Sewer is charged proportionately as a per volumetric water consumption.)

This indicates that the welfare effects of private sector WSS are not as negative as presupposed by the unions and opposition to private sector intervention. Overall, about 50 percent of the population feel that the SWC tariffs are currently fair. However, the questionnaire was distributed prior to the extraordinary review and subsequent tariff increase actually being implemented in 2002. Thus, customers' perceived satisfaction has to be viewed in the context of this earlier period.

However, viewed in conjunction with the tariffs paid by neighbouring municipalities, (although this is later disproven in the research in this chapter), most respondents still felt that residents from neighbouring municipalities have access to cheaper WSS services. (See case study investigation on the Stanger municipality in Chapter 9.) As most WSS is provided by the public sector in neighbouring municipalities, this would indicate an implied support for public sector service provision. On being asked whether the SWC or the council would have provided a cheaper level of service, there was 56 percent support for the council. This would indicate that there is only a small margin of apparent contradictions in respondents' views.

v) Technical Details

With the exception of those respondents that receive their water supply through community standpipes, most of the respondents agreed that the quality of water supply was good. In the case of community standpipes, there are problems with water quality, although whether it is within acceptable levels, was not assessed. What is commonly accepted practice is that standpipes would provide a certain degree of "hard water", that is water with a high mineral content.

With regards to the concessionaire's ability to respond to technical infrastructure faults, most respondents agree that the concessionaire is fairly adept at ensuring swift technical maintenance, generally less than ten hours. The frequency of any breakdowns is also fairly low. Most respondents did indicate that there was a low occurrence of technical

problems, and those that did cite technical problems occurring, put this as a once-a-year occurrence. In all likelihood, this is probably not a localised household problem, but a regional problem that everyone undergoes simultaneously.

Although most of the more affluent respondents were disgruntled with the tariffs set by the concessionaire, they were still happy with the service-level. However as poverty increased, there was a bias towards the municipality providing a better service-level than the concessionaire does. There could be a number of reasons for this belief, including the fact that most customers have a typical “consumer-memory” profile, in that they cannot remember beyond their last customer account, which in this case would be from the concessionaire. The other reason could be that the concessionaire has developed a negative image with many poorer customers due to the concessionaire’s high levels of disconnections. According to Hemson and Batidzirai (2001: 45), this could reach levels as high as 50 percent for household connections in these less-affluent areas, although the concessionaire disputes this figure. The concessionaire, as is expected, would probably take a harder stance than the municipality would, on the non-payment of accounts, as its primary motive would be profit-generation.

vi) Extension of Services

There was no apparent trend that could be ascertained from the analysis of data provided by the respondents on this particular issue. (This would require a presupposition on the part of the respondent as to whether the municipality could have been able to extend WSS services to the under-developed areas.) Whilst the more affluent had a negative attitude towards the municipality’s ability to extend services, the assumption made by these respondents, is that the municipality did not have access to funds for an extension of services. Although the affluent group arguably represents the more educated members of the community in comparison to their poorer counterparts, the affluent would probably have little knowledge of other funding and finance sourcing mechanisms for WSS provision, as it is not common knowledge.

From the RFP that was issued, it is apparent that the municipality did actually provide a large amount of capital for infrastructure works, although the finance may not have necessarily have been sourced internally. Overall, on having a choice as to who should

provide WSS services from an array of choices arranging from local municipalities, metro-municipalities, parastatals, NGOs, regional councils, and the private sector; there was a high degree of support for public sector WSS provision.

vii) Profiteering

The majority of respondents indicated that they would accept a profit-motive in the provision of WSS, as long as the service-levels and tariffs-levels were acceptable to them. This would imply that as long as the basic needs of the customer were met at affordable prices, they would not be opposed to the concessionaire making a profit.

viii) Specific Comments from Respondents

Many respondents provided further views on the reverse side of the questionnaire as well as through telephonic correspondence. Some of these comments included the following views: -

- “In the beginning, council could have probably provided lower tariffs, but they certainly could not have sustained this momentum.” – White male, affluent area.
- “Profiteering is a very good practice as it ensures a high level-of-service.” – White male, affluent area.
- “What bugs the community at large is the sewerage volume charge, it is daylight robbery.” – White male, affluent area.
- “At the moment, Siza is definitely making a big profit as the staff are driving company vehicles.” – Indian male, affluent area.
- “The sanitation systems were already in place before Siza took over. There should not be much cost in developing new systems, as the cost of connection is covered by the customer and Siza only needs to maintain the system.” – Indian male, affluent area.
- “The tariffs should be lowered, as this would encourage poorer people to cover their accounts and this would bring in more money into the system, rather than through cross-subsidisation.” – Indian male, affluent area.

- “We were promised lower tariffs for water and sewer when Siza took over! What happened?” – Indian male, middle-income area.
- “When the services were taken over by Siza, in a short space of time, tariffs were doubled.” – Indian male, middle-income area.
- “The water account increases every month. Because of poor services, I would like my tariffs to be much lower.” – Indian male, middle-income area.
- “The basic connection charge is too high! Therefore, customers saving on water usage, do not benefit, due to these charges. Like in other areas, it is the middle-income group that carries the burden.” – Indian male, middle-income area.
- “Siza is a profit-making company, who put their shareholders first. Therefore, Siza should change their name to Biza⁸⁹. We are filling the coffers of the shareholders pockets with their huge profits and interests. Basic services such as electricity and water should not be put into the hands of the private companies who’s main aim is to make a profit.” – Indian male, low-income area.
- “I have a disability grant. I do have a sewerage system toilet. I do not have a shower. I use water only for drinking and bathing. Charges should be considered for poverty-stricken people. Late payment penalties should also be done away with for poor people. R47 is too high for late payment by a disabled person. They should consider having a stock grant calendar.” – Indian male, low-income area.
- “I live on my husband’s disability grant, R570 a month. There is no sewerage, no storm water pipes. None of these services are rendered, except for the water which I use.” – Indian female, low-economic area.

The above commentary from the public raises some degree of concern about the concession. Firstly, it could provide a strong *civil* opposition platform with the unions against private sector intervention, and secondly it emphasises the failure of the concessionaire to meet development needs. It is also noteworthy that with the existence of the free water tariff block, which is essentially designed to augment the finances of the poor, the majority of such people actually do not benefit from this scheme, as they access water from standpipes using prepaid electronic cards, which do not cater for the stipulated free water provision. Researcher’s Experience 1999-2000: Appendix 8)

⁸⁹ This is a pun on the word Siza, which means “help” in the Zulu language, whilst “Biza” means “call”.

8.12. Financial Issues

a) Tariffs and Infrastructure Investment

The basic WSS tariff progression for the “littoral zone” (east side)⁹⁰, are as follows: -

TABLE 8.19. TARIFF CHARGES PRIOR TO CHANGE IN FREE WATER MINIMUM

| Charge | State Provision 1998 | SWC post-Feb 1999 | SWC 99/00 | SWC 00/01 |
|------------------------------------|----------------------|-------------------|--------------|--------------|
| Monthly Sewer Basic Connection Fee | R 0.00 | R 36.00 | R 45.00 | R 87.00 |
| Level 4 Domestic Charge | R54.00 a month | R 1.65 / k/l | R 1.65 / k/l | R 1.84 / k/l |
| Monthly Water Basic Connection Fee | R 0.00 | R 20.00 | R 20.00 | R 24.60 |
| Water Supply (0-10k/l) | R 2.11 / k/l | R 0.00 / k/l | R 0.00 / k/l | R 0.00 / k/l |
| Water Supply (10-35k/l) | R 2.51 / k/l | R 2.23 / k/l | R 2.45 / k/l | R 2.74 / k/l |
| Water Supply (>35k/l) | R 2.61 / k/l | R 2.92 / k/l | R 3.15 / k/l | R 3.60 / k/l |

Source: Siza Water Company

TABLE 8.20. TARIFF CHARGES AFTER CHANGE TO FREE WATER MINIMUM

| Charge | SWC Current (2002) |
|------------------------------------|--------------------|
| Monthly Sewer Basic Connection Fee | R74.10 |
| Level 4 Domestic Charge | R2.28 / k/l |
| Monthly Water Basic Connection Fee | R 32.82 |
| Water Supply (0-6 k/l) | R 0.00 / k/l |
| Water Supply (7-30 k/l) | R 3.46 / k/l |
| Water Supply (>30 k/l) | R 4.45 / k/l |

Source: Siza Water Company

Tables 8.19. and 8.20 indicate the monthly charges for the average east side⁹¹ customer with level-four⁹² services for WSS. Due to the failure of the concessionaire to predict a relatively accurate population growth, tariffs have been increased substantially from 2001 to 2002. Other reasons cited by the concessionaire for this increase, include the fact that Umgeni Water, the bulk water supplier, had increased its charges by 22

⁹⁰ Different zones pay different tariffs.

⁹¹ Affluent zone, between the eastern seaboard and the N2.

⁹² This would indicate a household connection for water supply and water-borne sewerage.

percent. There was a subsequent amendment to the free water usage, decreasing from ten to six kilolitres per month per household.

In order to compare 1997 charges to 2002 charges, the researcher calculated the increment for an average east side customer using approximately 40 kl of water: -

TABLE 8.21. COMPARISON OF TARIFFS INTERNALLY

| Charge (R) | Umgeni Water | Council Adjusted | SWC | | |
|------------------------------------|-----------------|---------------------|---------------|---------------|---------------|
| | 1998 | 1999 | 2000 | 2001 | 2002 |
| Monthly Sewer Basic Connection Fee | 54.00 | 36.00 | 45.00 | 87.00 | 74.10 |
| Domestic Charge | 0.00 | 66.00 | 66.00 | 73.60 | 91.20 |
| Monthly Water Basic Connection Fee | 0.00 | 20.00 | 20.00 | 24.60 | 32.82 |
| Water Supply (Band 1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Water Supply (Band 2) | 52.75 | 55.75 | 61.25 | 68.50 | 83.04 |
| Water Supply (Band 3) | 13.05 | 14.60 | 15.75 | 18.00 | 44.50 |
| Totals | 119.80 | 192.35 | 208.00 | 271.70 | 325.66 |
| Percentage Increase | | 61 | 8 | 30 | 20 |

Source: Researcher's Calculations

The above tariff increases in Table 8.21. indicate that there has been no inflation-linked increase of tariffs, except in 1999. There have been high escalations in the tariff schedules. In addition, a basic connection charge has been introduced, debunking the concept of "free water". A new tariff deal was structured as SWC failed to pay its annual lease bill to the municipality at the end of 2001. According to an article that appeared in the Business Day, 13 June 2001, Jim Leigland, project manager at the MIU commented that SWC would revert to a sound financial footing, once the restructuring had been conducted.

The municipality essentially bailed the concessionaire out of commercial failure, which is a common practice that seems to pervade privatisation attempts in developing countries. Effectively, such action protects the private sector provider against any commercial risk. If this pilot project was allowed to fail, it would have had negative

implications for the continuity of the private sector participation process in other municipalities.

From an investment point of view, the major portion of new investments seems to have come from customer tariffs, loans from lending agencies and developers, rather than through equity-debt financing from the concessionaire itself. The actual infrastructure development has been minimal, although this was initially envisaged at being at least R21 million from SWC. To date, this has not occurred. Furthermore, many of the investments and new structures were financed prior to handover, from national government infrastructure grants. According to SWC (2003), the actual investment has been about R10 million for the first four-and-half years of the concession.

b) Welfare Aspects

Although the concept of “free water” has been largely accepted as a norm for the municipality, one has to question the introduction of a connection charge is a way of financing the ‘free water’ that is supplied. In fact, the connection charge actually *supercedes* the commercial value of the “free water”.

According to Hemson and Batidzirai (2001: 47-49), there have been complaints about water quality and service-levels. SWC’s “ruthless” attitude towards the collection of tariff accounts and the subsequent imposition of fines for reconnection makes economic sense, but avoids the critical issue of welfare and the poor. For many people, as this study has indicated, it is not just a question of WTP, but the ATP that over-rides the “culture-of-entitlement” image, which many poverty-stricken communities are saddled with.

The analysis of the questionnaires found in the section on public support for privatisation, provides a detailed discussion on issues of willingness and abilities-to-pay, and the issue of poverty.

8.13. Privatisation Efficiencies

a) Employment, Training and Development

In terms of the provisions made for employees affected by the transfer, the contract is fairly comprehensive and favours employees extensively in many aspects. Credit should be duly given to the municipality in ensuring that all employees were not prejudiced in the negotiation process. The municipality went further than the stipulations of the Labour Relations Act (LRA) in ensuring that the transition process for employees would be a seamless one. The question might arise as to whether these conditions were negotiated because of considerable pressure from SAMWU. However, regardless of the motive or the intent of the municipality, the end-result has been that the experience of employees throughout the transition process was very fair and certainly exceeding legislative requirements. (Researcher's Experience 1999-2000: Appendix 8)

One of the contract conditions is that employees are provided with an employee-shareholder scheme, which is equal to 4 percent of the total equity of the company or its share capital, which means that they have a share in the company dividends. (Researcher's Experience 1999-2000: Appendix 8)

All affected employees were also given adequate notice of the impending possibility of a new employer. Negotiations with SAWMU were extensive and SAMWU was purported to have been involved in the process from the very beginning. (Researcher's Experience 1999-2000: Appendix 8)

In their interviews with workers, Hemson and Batidzirai (2001: 28-33) claimed that workers' emotions were mixed with regards to the transfer. Many claimed that there was no knowledge of the transfer until very close to the handover of operations. It is highly unlikely that there would be no information dissemination to employees with regards to the intent of the municipality to bring in a private partner to manage its WSS service. In all fairness, the municipality did advertise this intent in local newspapers, and there was extensive consultation with SAMWU. SAWMU represented the rights of affected workers at that time. In actual fact, it was the duty of SAMWU to play a more active role in the dissemination of information and the preparation of the workers for the

transfer. There would also, in all probability have been a filtering of information from the higher-level employees through to their subordinates. To indicate their intent to investigate possible partnering in the supply of services, the municipality even held mass meetings with communities and workers. (Researcher's Experience 1999-2000: Appendix 8)

From interviews with the local union shop steward, Kenny Naidoo (Interview: 21.05.2001), it is clear that workers were initially not happy with their transfer to a private sector entity. In fact, many workers felt that they were forced to take this option, simply because there was no other choice in the matter. However, the question arises as to whether worker fears were legitimate or engendered through years of anti-privatisation union influence. Fears of job losses, pay cuts, and reductions in benefits, were high on the workers' agenda of issues, although all these fears were placated during the transfer. Many workers still feel aggrieved at the lack of employee benefits, which they would have had under the municipality. The municipal housing subsidy that is provided to employees after a certain period of tenure with the municipality, is an example of this. The concessionaire does not provide a subsidy for housing, although the concessionaire was willing to provide guarantorship for employees who were considering buying houses. However, the *cumulative* financial implications have accrued to the workers' benefit after the transfer. (Naidoo Interview: 21.05.2001; and (Researcher's Experience 1999-2000: Appendix 8)

The contract has been very explicit in ensuring that all employees have at least the same pay, insurances and benefits with the concessionaire or even better conditions. The contract also specifies that no employee's contract of employment is to be terminated based on the operational requirements of the concessionaire. It does, however, leave opportunities for retrenchment to occur from "non-operational" requirements. There have been no forced retrenchments to date. (Researcher's Experience 1999-2000: Appendix 8)

In addition, the municipality ensured all employees that they would have the same collective bargaining rights as they had prior to the transfer, with a chance to join the union of their choice. They were also given a chance to remain with SAMWU, although SAMWU's legitimacy as a union body in the private sector would be hazy, as it is a

public sector union. The contract also stipulates that the concessionaire would undertake to adhere to basic employee rights governed by the LRA of 1966 and the Basic Conditions of Employment Act 75 of 1997. The Occupation Health and Safety Act 85 of 1993, and the Compensation for Occupation Injuries and Diseases Act 130 of 1993, also applied. In addition, the municipality also endeavoured to ensure that the concessionaire strictly complied with the Employment Equity Act 55 of 1998, although SAMWU shop stewards insisted that they had to lobby for changes in this regard. (Researcher's Experience 1999-2000: Appendix 8)

The contract also stipulates that training, development and evaluation of the affected employees to be provided for, by the concessionaire. The council makes a stipulation that this training and development should be no less than 3 percent of the total salary and wage bill of the company. (Researcher's Experience 1999-2000: Appendix 8)

Many workers seem to be happy with the training received. Even SAMWU concedes that training and development has been well attended to by the concessionaire. However, it would seem that some workers are still disgruntled about *unnecessary* training being provided, as they are not fully utilised. The aim of the concessionaire is for multi-skilled workers to be developed who can be effectively utilised in the event of, either a lack of staff in an emergency situation, or during a peak holiday season when there is a rapid influx of visitors to the area. However, workers complain that, with the training, should come opportunities for promotion. Whilst the employees' ambitions and concerns might be legitimate, comparisons must be made with training and development that workers received prior to the transfer, whilst in the municipality's employ. Workers' training was minimal and career advancement was in all probability, equally stifled. The workers could be unjustified in their expectations, as too many managers in any organisation is not feasible. Training and development makes also employees much more marketable. (Researcher's Experience 1999-2000: Appendix 8)

In understanding the conditions of the transferred workers, comparisons must be made to their "before-and-after handover" situation to obtain a more holistic view of whether there has been any advancement or demise in terms of the conditions of employment of the workers. Many workers have become computer literate, and understand the basics of

how to operate the company's in-house software packages. (Researcher's Experience 1999-2000: Appendix 8)

Although workers had the option of remaining with SAMWU, most have joined another private sector union that is also affiliated to COSATU, in deference to SAMWU. Workers stated that they were still upset with the inability of SAMWU to stop the advent of the concession, even if some of the workers may actually be happier in the concessionaire's employ.

Workers complain that they work harder, but the working conditions are not *harsh*. Breakdowns have decreased and call-out repairs are much faster than under previous municipal management, so it is evident that a work ethic is promoted at the concessionaire, which may not have been prevalent within the municipal employ due to the job security that the public sector provides. In fact, the strongest criticisms from workers are allegations of being over-worked, but not excessively. However, investigations revealed that the concessionaire was well within the appropriate legislative parameters governing worker hours and related pay during overtime situations. (Researcher's Experience 1999-2000: Appendix 8)

The municipality was extremely sensitive to any feelings of the affected workers. They even went so far as to guarantee employment to affected workers in the event of the contract collapsing, or any other event that may result in job losses for the workers.

SWC has increased its number of employees to twice that of the number of employees employed by the municipality, prior to the concession. However, it must also be reiterated that the municipality only provided an operations and maintenance sewerage treatment facility prior to the concession. Umgeni Water supplied water to the area prior to the concession. Thus, in order to incorporate the two functions into one integrated service provision, SWC had to hire more employees. How this measures up to the total of the municipal-affected employees and Umgeni Water employees that worked on the water supply provision in the area, is actually indeterminate, due to the number of variables and synergies of Umgeni Water using employees across different areas. (Researcher's Experience 1999-2000: Appendix 8)

b) Suitability of the Concessionaire to the Local Environment

Mr. X, a professional person introduced earlier on in the research methodology, has provided an ample description of his views on the concession. As outlined before, this person is not just a general member of the public and has been well connected with the project from inception. Due to the closeness of this person in proximity to the concession, anonymity is maintained. (Mr. X, Interview: 21.11.2001)

Mr. X reveals that SWC outsources much of its operational work to South African contractors and in many cases, serves as the intermediary in the management of contractors. Whilst one may argue that this could promote skills-transfer from the concessionaire, facilitating local business empowerment and development, Mr. X feels that this is a cover-up for *SWC's* lack of knowledge of the local environment. The Dolphin Coast concession is part of the major shareholder's (SAUR) strategy to procure larger and more lucrative contracts, and thus serves as a valuable learning curve for the concessionaire. (Mr. X, Interview: 21.11.2001)

Mr. X also feels that the contract was badly written, with concessionaire penalty clauses being tempered with provisos that actually cushion the concessionaire from penalties. The extraordinary review of 2001 is an example of this. The penalty clauses seem to have been inserted for the sake of posterity and to procure buy-in from the opposition. (Mr. X, Interview: 21.11.2001)

c) The Contract Binding the Concession

It is important to note that although the contract does stipulate guidelines, restrictions, and functionalities, within which the concessionaire performs its duties, cognisance has to be taken of the fact that this contract leaves room for negotiation. In essence, the contract is conditionally binding, but may be renegotiated, subject to certain provisos, as will be discussed later.

According to the preamble of the contract, the municipality emphasises its commitment to service delivery, and stresses that these services should be efficient, reliable, and affordable to the indigent. Although the municipality views the development of the

concession as being an “integral” part of the Reconstruction and Development Plan (RDP), in actual fact, the concession is more in line with the national government’s GEAR strategy, which focuses attention on private sector capital utilisation and financial risk-transfer to the private sector. (See Chapter 7 for a discussion on the various macro-economic strategies initiated by the South African government.)

The preamble of the contract also alludes to the guideline document from national government, this being the Framework for the Restructuring of Municipal Services, a framework agreement between SALGA and COSATU. (See Chapter 7 for a discussion on their views.)

The CEO, Ferguson, stated that the municipality had embarked on the WSS private sector participation drive, before the Agreement came into place. This contradicts the preamble of the contract, which makes specific mention of the fact that the Agreement was followed as part of its strategy. (Ferguson Interview: 22.05.2001)

The contract itself is a fairly lengthy document with what many parties may feel as being too detailed. However, cognisance must be taken of the fact that this was the first contract of its type in South Africa, and consideration of every possible scenario had to be provided for.

Besides the municipality and the private sector partner being key stakeholders, the municipality sought assistance from other entities as well. These include inter alia, the Department of Constitutional Development and Provincial Affairs, the DBSA, who assisted with the pre-feasibility studies and served in an advisory capacity and the MIIU, which had been set up by national government to provide capacity enhancement to projects of this nature. The DBSA was a key figure in drawing-up the RFP document and was strategically involved in the evaluation of bids, the drawing up of the contract, and the negotiation process thereafter.

Just prior to the handover of the concession, certain conditions or provisos were put in place that needed to be fulfilled by both parties in order to initiate the concession. These were effectively termed the “suspensive conditions” of the contract.

These suspensive conditions included the following: -

- The concessionaire had to submit two documents termed the Memorandum and the Articles of Association of the concessionaire.
- The provision of the Technical and Operating Assistance Agreement.
- The delivery of the Performance Guarantee from the concessionaire.
- The necessary insurance policies.
- A contract implementation fee to be paid to the council of R200000.
- The signing of an unconditional bulk water agreement.
- The passing of an Employees' Shareholder Scheme, which would constitute at least 4 percent of the total equity of the company.
- The passing by the council of the necessary bye-laws that would be required for the contract compliance.

In one of the clauses of the contract, reference is made to the proposed WSS services area that would be covered by the concessionaire. It is within a sub-clause that mention is made of the concessionaire's duty to include any new areas that are incorporated into the municipal area as part of service delivery. This is provided that the municipality gives the concessionaire due notice of the incorporation of any new areas. It is this particular clause that could be loosely termed as being ironic, in that the subsequent demarcation (see Chapter 1), has seen the merger of Dolphin Coast municipality with KwaDukuza⁹³ municipality to form a regional municipal governing body. This has resulted in the advent of two different service providers within the same municipality, the other provider being the municipality in the old KwaDukuza area. This has also resulted in different tariffs and different service-level options available to customers within the same jurisdiction. The dilemma that now faces councillors, is whether to release another tender for a private service-provider to cover other areas or do they allow SWC to extend its services to include the former KwaDukuza municipality. The byelaws of the Dolphin Coast have been particularly geared towards incorporating private sector participation, whilst those of the former KwaDukuza municipality are focused on public sector delivery.

⁹³ See Chapter 9 for a discussion.

The contract, although binding in its expected performance areas from the private sector, does make allowance for negotiation. The impression given is that although the municipality would want strict contract compliance from its chosen private sector provider, it also does not want to see the concession failing. This is a reasonable expectation, given the importance of WSS provision, as an essential good required in everyday life functions. Also, as a pilot project for national government, failure of the project could possibly jeopardise attempts by other municipalities embarking on similar projects. It would also vindicate SAMWU's opposition stance on the whole issue. In effect, an *official* failure of this project would probably significantly hinder the private sector participation process in WSS in South Africa.

Considering that the concession went ahead despite considerable opposition, its failure would reflect badly on the municipality. Thus, in many of the contract clauses, there are windows for the concessionaire to seek the municipality's leniency, either in the event of major problems that would result in the inability of the concessionaire to provide the WSS services, or if the profit envisaged, or lack of it, diminishes considerably.

These "bridging" clauses are prevalent throughout the contract. In actual fact, the municipality stipulates that, in the event of the incorporation of any new area into the concessionaire's area of operations, government grants or subsidies would be readily given to the concessionaire, if available, for infrastructure development. Considering the financing required by the SWC itself, it is questionable that these grants are available to the private sector provider for infrastructure development. It would almost seem that, without government funding and assistance, these concessions would not be financially viable.

The term of the concession contract is indicated to be thirty years. This amount of time would be required for the concessionaire to make a sufficient profit on the project. It is envisaged that the first five to seven years of the project lifecycle would actually be a loss-making period for the concessionaire and it is only after this period that the venture would actually start to break-even on outlaid capital expenses, which is a common approach of such concessions, globally.

This is mainly due to the high start-up costs of contract implementation, and also the high investment capital required for early infrastructure development. The contract also allows for the concession to be extended after the thirty-year period, as long as both the concessionaire and the municipality agree to the terms and conditions at least twenty-four months prior to the termination of the first concessionary period. This may be argued as against the spirit of a free-market paradigm, indicating a monopoly of the system. Due to the high ex-ante transaction costs associated with a possible changeover and the current concessionaire's familiarity with the system, the likelihood is that the concession will be extended.

d) Lost Water Minimisation

Although the concessionaire has decreased water losses, these are not necessarily as a result of a well-maintained network infrastructure system, but rather because of an extremely strict or non-pliable credit-control policy. As lost water includes water lost through poor infrastructure, *and* incorporates poor customer payment, that is, water "lost" through unpaid accounts. It is the latter parameter has been considerably targeted in lost water minimisation.

There have been no great technological advances, except that water losses are now at 16 percent, which is not a very difficult target to achieve. In fact, the Durban Metropolitan Authority recently (September 2002) received accolades as the best-run city in Africa, with townships (which has very poor residents) experiencing a 20% water loss, which is inclusive of non-paying customers and / or poor infrastructure. When one compares the sheer differences in size and the socio-economic status of the two areas, then a 16% water loss is not as significant achievement as SWC has purported it to be.

e) Superior Software

Despite the concessionaire and municipality's claims, the concessionaire's "superior technology", is not apparent, considering the fact that non-users receive WSS bills.

Mr. X has made it clear that the SWC's methodologies do not exceed that of any local WSS utility company in South Africa. SWC's internal customer management software

programme serves as a “glorified spreadsheet programme”. There are many South African software companies that could provide similar software (and with a South African focus), including socio-economic singularities, which generically global software programmes, would not have. (Mr. X, Interview: 21.11.2001)

From the questionnaire analysis, it also became apparent that people who were not receiving any services from SWC, were given accounts to pay. This is an indication of a probable flaw in the software billing system or the way that it is operated. (See Chapter 9 for a discussion on Umgeni Water’s view on this billing system.)

f) New Connections

According to the contract, in 1999, there would be a start-up water connection cost for new houses at an average of R1200 a connection. In terms of sewerage, all houses would require start-up connection fees, averaging about R800 per house depending on effluent pipe size. By 1999, there were approximately 4500 houses, and every year 1865 houses would be built. This implies that there would be approximately 1865 household connections every year. This represents a 41% increase in water connections every year, which is quite significant, although not difficult to achieve. This is also due to private housing developers putting up yard connections.

g) Length of Infrastructure Network

From discussions with the Managing Director of SWC, there were no significant increases in the length of the infrastructure network to affect the ratio of piping length to number of people served. Such an indicator is generally used as an international benchmark.

8.14. The Pilot Project as an Indicator of Success

From the researcher’s experience with local government in South Africa (see Appendix 8), from all the municipalities (non-metropolitan) in South Africa, the Dolphin Coast has been regarded as a flagship municipality, by officials of most municipalities and municipal organisations. Dolphin Coast was viewed as having astute leadership, a

coherent municipal council that worked towards co-operative governance, and it had a history of outsourcing certain services. This “special status” is also exemplified by the fact that it has extensive external support from national government and national government was also partial towards Dolphin Coast with regards to government grants. Essentially, Dolphin Coast has a facilitative and enabling environment for innovative projects that is not realisable at other municipalities. The conditions that were prevalent at the Dolphin Coast for the privatisation attempt to be successful, was *better* than the conditions that any other non-metropolitan municipality could have provided.

Further to this, national government funding and its momentum of support for the privatisation attempt at Dolphin Coast, cannot not be sustained for future privatisation projects at other municipalities. With the DBSA and the MIIU (both autonomous government vehicles) providing R2.4 million of financial support to facilitate this process, the likelihood of similar funding for other municipalities, is minimal. This financial aid pledged by national government excludes its institutional support that was offered to Dolphin Coast through time and research from their staff.

Because this project has not been sustainable⁹⁴, the outcome has been that even *with* such extensive support, the Dolphin Coast privatisation attempt failed. The implications are, that future privatisation attempts at non-metropolitan municipalities in South Africa is also most likely to be unsustainable as well.

The imminent project failure had prompted the municipal authorities to intervene to vastly increase WSS tariffs and decrease lease payments. The project continues solely on the municipality’s cushioning of the concessionaire from failure. On the other hand, even if the project had been a success, considering the significant extenuating circumstances of this particular project, future privatisation projects in other municipalities would only work, subject to the provisos that similar or better conditions to the Dolphin Coast, facilitated the privatisation attempt. The possibilities of a more facilitative environment for privatisation seems highly unlikely, however, considering Dolphin Coast’s charismatic status over a significant period of time.

⁹⁴ See the hypothesis in Chapter 1 for a definition of the term “unsustainable”.

8.15. Concluding Remarks

The following sensitivity parameter table has been developed from the discussion: -

TABLE 8.22. DOLPHIN COAST SENSITIVITY PARAMETER TABLE

| Domain | Area | Key Performance Indicators / Factors |
|---------------------------------------|--|---|
| The Emergence of Privatisation | The Reasons for Privatisation | <ul style="list-style-type: none"> • Lack of municipal funds for capital infrastructure investment and operations and maintenance of existing infrastructure. • The municipality did not have the capacity to manage the WSS system. • High urban migration required urgent WSS service coverage increases: about R200 million needed for WSS infrastructure development. |
| | The Transition Period into Privatisation | <ul style="list-style-type: none"> • There was staggered progression into PPP's as the municipality had outsourced other smaller services to the private sector in the last decade. |
| | Public Support for Privatisation | <ul style="list-style-type: none"> • The municipality sought public buy-in through community workshops. • Public support diminished rapidly due to high comparative tariffs, disconnections, and lack of welfare prerogative from SWC. • Complaints about tariffs increased with increasing affluence, although interviews with poor communities did indicate that certain pockets were not happy with current tariffs, especially after the extraordinary review. • In terms of relative percentage of household income, poor people were paying 17 times as much as their affluent counterparts. • After the PPP, as much as 56% of the people of Dolphin Coast felt that the municipality should be the WSS service provider. |
| | The Role of the State in Privatisation | <ul style="list-style-type: none"> • There was a strong, cohesive council and it had charismatic leadership. • There was supportive legislation in place. • The council set-up a focused water committee to deal with issues. • National government supported the municipality significantly. |
| | The Opposition to Privatisation | <ul style="list-style-type: none"> • There was an initial buy-in from local unions according to the council. • The council were strong enough to supercede union opposition. • Union arguments in this case, were weak, as affected employees were protected by the council in the transfer. |
| | The Pilot Project as an Indicator of Success | <ul style="list-style-type: none"> • There were too many supportive factors for a PPP at Dolphin Coast, such as astute leadership, external funding, national government support, flagship municipality status, and a prior record of outsourcing; to assume that such factors would prevail in other similar-sized municipalities attempting a WSS PPP. |

| Domain | Area | Key Performance Indicators / Factors |
|--|---|---|
| Privatisation Efficiencies and Ethics | Financial Issues | <ul style="list-style-type: none"> • Tariffs were increased by about 61% prior to handover. This is typical of municipalities to minimise the opposition to private sector tariff increases after handover. Effectively a manufactured increase. • Tariff increases are not in line with inflation. Increases over a five year period are as follows: - [61%:8%:30%:20%.] • Poor people were paying as much as 17% of total household income in the poorer areas. • Although ATP is low, WTP is high. About 20000 people (50%) of the population have a PCI less than R220 per month. WTP is high solely because of the concessionaire's ability to increase account payments through less attention on the development-ethic as compared to the municipality. |
| | Privatisation Efficiencies | <ul style="list-style-type: none"> • The contract binding the PPP was fairly detailed, but provided avenues for the municipality to assist the concessionaire if market failure was imminent. • There was a low degree of technical problems after handover. • Significant increase in the number of connections for water per year (41%), whilst new sanitation access systems were not provided as fast. • Negligible increase in the length of network infrastructure per capita. • There was an increase in the number of employees after handover. However, this is inconclusive as an efficiency, as total WSS service was fragmented between two different entities prior to the PPP. • There were no forced retrenchments. • There was a decrease in water losses to about 16% from 35% before handover. However "lost water" includes water that is now paid for by the indigent, so this is not necessarily an indication of SWC's technical competency in terms of infrastructure rehabilitation. |
| | The Role of Regulation in Privatisation | <ul style="list-style-type: none"> • Regulation is piecemeal and fragmented. • Little funding for regulation. • Regulators' reports are not open to public scrutiny. • Regulators are not pro-active, just ensures contract compliance. • Regulators have no real power in contract negotiations. |

| Domain | Area | Key Performance Indicators / Factors |
|----------------------|--|---|
| Globalisation Issues | Transnational Companies and Foreign Technology | <ul style="list-style-type: none"> • The concessionaire has a TSC as its major shareholder (58%). • The concessionaire has outsourced much of its work to local contractors under the guise of skills transfer, when the actuality was that it did not have the knowledge of the local environment to administer the project from a social and technical perspective. • SAUR had the economies-of-scale to manage large-scale WSS systems. • Advanced foreign technology has not been apparent • Customer management has increased due to kiosks and increase in number of employees hired, including a marketing manager. |
| | Foreign Direct Investment | <ul style="list-style-type: none"> • There was investment from the private sector, although it is minimal when compared to the total expected turnover over the 30-year lifetime of the project. Ratio of FDI:Turnover for lifetime of project = 7:2200. Any further investment from the concessionaire would come from customer sales turnover. • Funding has come from some foreign sources, but there has been a great degree of local funding as well. About 70% of the R7.2m initial investment was foreign capital. • Expected exit of 0.58x29% of investment. Over thirty years = R344m. (SAUR owned 58% of SWC.) |

Source: Researcher's Analysis

The essential reason underpinning the Dolphin Coast privatisation was that it was the only immediately realisable solution to address the significant problem of its WSS infrastructure backlog. With Dolphin Coast's high-risk credit ratings⁹⁵ (as per most municipalities in South Africa), banks and other sources of infrastructure financing were not options that were immediately available. Most non-metropolitan municipalities in South Africa are viewed as high-risk customers by the banking sector. This is not necessarily as a result of municipalities' competence or lack of it, but because banks do not view individual municipal services, such as WSS, as being financially viable, ring-fenced business units in *municipal* hands. Banks are aware of the traditional low rates-

⁹⁵ Dolphin Coast's flagship status is relative to the other non-metropolitan municipalities in South Africa. It is *still* a high-risk financing client, regardless of this status.

paying base that municipalities have, to make their services sustainable, and that municipalities have credit-control policies for tariff-collection that are lenient.

With the municipality not seeing any short-term alternative solution, Dolphin Coast sought private sector assistance. This WSS infrastructure backlog and lack of access to finance is a problem that is faced by most municipalities in South Africa. The other benefits that the privatisation was supposed to bring, such as privatisation efficiencies, foreign technologies, etc., were secondary to the urgency created by the WSS infrastructure backlog-financing problem.

Dolphin Coast's period of transition into privatisation was approximately ten years, with the municipality seeking buy-in from both the community and the unions. Over this ten-year period, the municipality had already outsourced many of its services to the private sector, which meant that the ease into privatisation of a major municipal service such as WSS would have staggered entry and be more readily accepted. This would have facilitated greater acceptance by employees and the public as compared to other municipalities, whose entry into privatisation would be considerably swifter.

With a strong council and management, and the support of national government, the Dolphin Coast established South Africa's first PPP in WSS provision. Although it has failed in terms of the conditions of sustainability⁹⁶, cognisance must be taken of the fact that this failure is not necessarily an indictment on the poor operational abilities of the private sector service provider, but rather, on the fact that the Dolphin Coast did not have the economies-of-scale, that is, a large enough affluent rates-paying base⁹⁷, to sustain the project. From the perspective of the state's (both national and local tiers of government) responsibility towards the privatisation attempt, the Dolphin Coast had an charismatic financial and institutional government support base.

The unions initially seemed to buy into the idea of privatising the WSS services, although they reneged upon this, when the idea started to become a reality. The union's general standpoint about privatisation bringing-in job losses, is weakened in the Dolphin Coast privatisation case, as the number of workers actually *increased*, post the

⁹⁶ See hypothesis in Chapter 1.

⁹⁷ To sustain any comprehensive tariff subsidisation from the affluent to the indigent.

privatisation. Considering the WSS infrastructure backlogs at other municipalities in South Africa, the likelihood would be that worker numbers would increase to support the increasing customer base. This increase in workforce is dependant upon the financing being available, which seems only realisable from the private sector at present. The unions' views on workers' bargaining rights being negatively affected by the privatisation, have also been speculative. In the Dolphin Coast case, all of its members were more than adequately compensated when affected by the transfer. Their working conditions did not worsen and their multi-skilling abilities increased, along with their training and development. Their bargaining rights were maintained with all workers having the option to remain with SAMWU, but the affected workers declined this prerogative.

SWC had indicated to the municipality that the current lease payment and tariffing system was not sustainable to generate a profit as a commercial entity. This resulted in what is termed, an "extraordinary" review of the financial aspects of the contract by the municipality. The financial analysis calculated in this study was conducted using the data that was submitted at the beginning of the project. The fact that this profit was not realisable later-on, would imply that SWC was unable to ensure a comprehensive cost-recovery system in alignment with its earlier predictions. This resulted in the *unofficial* commercial failure of the operations.

The privatisation failure provided evidence and fuel for the opponents of private sector participation to intensify their attack against private sector participation of any form in WSS provision. The reasons underpinning the failure would probably be inconsequential to the public, as the opponents of privatisation would publicise the failure itself and not *why* it has failed.

As a result of the municipal intervention to change the financial terms of the contract, it can be reasonably concluded that, in *theory*, the project has failed. If the municipality did not concede to changing the annual lease fee payments and allowing an extraordinary review of WSS tariffs, SWC claimed it would not have been able to generate a profit (although there was no evidence of any verification by the regulator). The basis for this impasse being reached, was the initial poor forecasting of the population growth estimates by the concessionaire. In light of the parent company's

(SAUR's) considerable experience in WSS provision in developing countries, this population forecasting error raises questions as to whether it was an actual predictive error by the concessionaire, or an attempt to win the tender but presenting lower presented tariffs than its competitors in the bid.

Thus, three years down the line, there has been an extraordinary review of tariffs to counteract the effects of this "miscalculation", and the municipality has agreed to the increased tariffs, changes in lease payments, and a decrease in the free water block consumption. The increase of the bulk water charges by Umgeni Water (who the concessionaire purchases the bulk purified water from), also played a role in the increase in tariffs that was negotiated to the concessionaire's benefit.

From a financing perspective, the initial FDI was approximately R7.2 million, which seems insignificant when compared to the R2.2 billion that the project will generate in terms of revenue in the 30-year lifetime of the concession. With this project alone, the South African economy would have seen a net exit of approximately R344 million⁹⁸ out of the country. Even with an upper capping on profits by the municipality of 15 percent post the privatisation failure and assuming that there would be a total revenue of about R1 billion as per the initial official predictions, there would still be a net exit of about R87 million. It is unknown what the current scenario is, after the extraordinary review by the municipality. However, considering that the national government was amenable to profits of R87 million (their estimates), R344 million (these calculations), the likelihood is, that the new terms and conditions of the concession would still favour the concessionaire quite considerably.

The empowerment arm of the concessionaire has proven to be meaningless and a front for an "uninterested" Black component shareholder. There has been no skills transfer, except for the provision of a probable significant return on shareholder value later on in the lifetime of the project. The major shareholder, SAUR (the TSC), in order to win this bid, also went so far as to lend the empowerment shareholders the financing to procure equity in the concession company. The Black empowerment shareholder merely served as a "pawn" in the tendering process. The empowerment wing provided SAUR the edge

⁹⁸ Using the 27 percent net profit calculation determined earlier, and SAUR's 58 percent equity in SWC.

in winning the tender, closely followed by Umgeni Water's bid. The decision to select SAUR as the winning bidder almost seems spurious in hindsight, especially when juxtaposed against its inability to sustain the momentum of the project.

Regulation has proven to be reactive and small-scale. The regulators have no real powers to ensure contract delivery and compliance. Such small-scale privatisations do not provide the funding required for effective regulation. Regulation, to be effective, requires economies-of-scale⁹⁹, as well as autonomy of independence and powers of jurisdiction in order to effect its function successfully.

The supposed "gains" of foreign technology, and access to technical superiority have proven to be unjustifiable. The software, touted as being world-class, churned out inaccurate accounts and in some cases, non-users of the system were actually sent accounts. Considering that foreign technology was one of the secondary reasons used by the municipality to seek foreign assistance, the implications are quite significant for the assessment of any future concessions bids for prospective winners in other municipalities.

The concessionaire, being essentially a foreign entity, has also proven that it does not have the ability to manage the concession without local knowledge. The expected skills-transfer from the concessionaire to local companies has not occurred. An anonymous source, who has a significant functional role in the concession, sees this as a trial-run for SAUR to tender for larger and more lucrative privatisation projects in other South African cities, that will emerge once the opposition to privatisation has been won over, if national government continues to see the privatisation of WSS as an inevitability.

The development-ethic seems to have been completely circumvented by the concessionaire. In cases of non-payment of services, there have been disconnections of services without any due process from a legal perspective. This does not mean however, that it is not legally done, but it compares polemically to a municipal provider, who would take a significant number of steps before a disconnection is considered, if at all. To the concessionaire's defence, taking a soft stance with regards to credit-control

⁹⁹ Meaning a significant affluent community to subsidise the indigent, which is only realisable in metropolitan authorities in South Africa.

would have significant implications in terms of cashflow and would also be against the ethos of the South African national government's "user-pays" principle. In terms of business sustainability, to be more charitable with regards to service provision, would probably be unrealistic. The decommmodification of water (see discussion in Chapter 7) does not seem sustainable in South Africa.

Issues of sovereignty and FDI should also feature as a paramount factor in the promotion of any WSS privatisation venture, as foreign technology in WSS provision does not seem to have surpassed South Africa's technology. Furthermore these privatisation ventures with TSC's in WSS provision results in a significant exit of local capital from the host country.

With the failure experienced at Dolphin Coast, WSS privatisation would also be unsustainable in other non-metropolitan municipalities. The likelihood of a municipality in South Africa of similar population size, that is, a non-metropolitan municipality, succeeding in a similar project is unlikely, as conditions would not be on par with that of the Dolphin Coast. The fact that this flagship municipality and pilot project could not sustain a privatisation attempt despite significant national government institutional support, indicates that South Africa may yet have to keep WSS provision in municipal hands with a great emphasis on development issues. However the problem still exists, as to where the urgent funding would be sourced.

CHAPTER 9: OTHER SOUTH AFRICAN CASE STUDIES

9.1. Local Case Study Investigation: Stanger

9.1.1. Introduction

The KwaDukuza¹⁰⁰ municipality is now an amalgam of the old KwaDukuza (Stanger) and Dolphin Coast municipalities, after demarcation in November 2000. In this study, reference is made to the old municipal jurisdiction of Stanger, that is, prior to the demarcation. With the advent of the demarcation, an unusual situation has developed with one municipality, now having two major water supply and sanitation (WSS) service providers. Siza Water Company (SWC) services the old Dolphin Coast area under the public-private-partnership (PPP) arrangement (see Dolphin Coast discussion in Chapter 8), whilst the old Stanger area is still serviced by the municipality. The amalgamated KwaDukuza municipality now faces the dilemma of either an extending the current privatisation arrangement with SWC, choosing another service provider, or continuing with the current status quo. The last scenario could result in problems for those residents that may pay more for tariffs with their respective service provider, even though they form part of the same municipality.

9.1.2. Aim of this Case Study

This study serves a three-fold purpose. Firstly, it serves to canvass public opinion on private sector participation in their WSS provision. This was conducted prior to an actual privatisation proposal being tendered. Secondly, it serves as a contrast between two similar-sized, and formerly neighbouring municipalities, with differences in approach to municipal management and development, and different impediments faced in a privatisation campaign. The Dolphin Coast has attempted small-scale private sector partnership interventions for over a decade in other services, such as verge-cutting and refuse-collection. The Dolphin Coast is then, a comparative to Stanger's focus on municipal service provision in the past. In essence, the impetus for privatisation was

¹⁰⁰ KwaDukuza was originally called Stanger, until it was renamed in the mid-1990's. To ease the understanding of this case study, the old KwaDukuza area is referred to, here as Stanger. The new amalgam of Stanger and the Dolphin Coast after the demarcation in 2000, is now *also* officially referred to as the KwaDukuza municipality.

much greater in Dolphin Coast, than in Stanger. The Dolphin Coast was also a key pilot project test municipality for national government. Funding and institutional capacities essentially flowed more easily to the Dolphin Coast than to other municipalities, as was certainly the case in Stanger. Finally, it provides a view into the internal environment of a municipality that is contemplating the privatisation of its WSS service.

9.1.3. Research Methodology

The theoretical framework for this research is found in Chapter 1. Here, the actual data-gathering methodology that is specific to this case study investigation, is discussed.

Research for this study was sourced through literature reviews, interviews, consultancy work, and attendance at municipal meetings, as well as a questionnaire survey. The methods used in the distribution of questionnaires was not as rigorous as the method used in the Dolphin Coast. This case study serves as an ancillary case study to the Dolphin Coast case, although precision and research methodology were not compromised. The questionnaires were systematically placed in post office boxes at the local post office. Questionnaires were also left at the local rates-paying office for completion.

There were five hundred questionnaires distributed for completion. A return of about 257 questionnaires constituted a success-rate of approximately 50 percent. These questionnaires were not analysed using the socio-economic stratification method used in the Dolphin Coast case study. Thus, the sample that used in the analysis is not a socio-economically representative one. Whereas in the Dolphin Coast survey, the aim was to assess the impact of the concession, especially on the indigent, in the Stanger case, it was a case of determining the blanket public support for a PPP in WSS.

The interviews for this study were conducted with the town engineer, Jogie Naidoo, as well as Mr. W.T. Byrnes, who, by 2000, had been the Town Clerk [now called Chief Executive Officer (CEO)] of the Stanger municipality for over thirty years. Whilst initially very optimistic about some form of privatisation being the solution to Stanger's WSS challenges, Byrnes (Interview: 23.05.2001) is now more cautious, especially after

the recent failure of SWC to manage its annual lease payments to the Dolphin Coast municipality. (See Dolphin Coast case study in Chapter 8.)

Carte blanche was also taken in using data that the researcher obtained independently of this research, in early 2000, as part of his consulting work for a multinational management-consulting firm. (See Appendix 8 for a discussion.) This research consisted of a questionnaire survey, interviews, and workshops with local heads of departments (HOD's), unions, and councillors at the Stanger municipality, to assess the degree of support for private sector participation in municipal services at the time. This was essentially a feasibility study conducted to determine the viability of PPP's as an option for implementation. Part of this investigation included gauging the level of support from all town officials in fostering such systems of local governance and their understanding of these PPP systems. The municipality's technical, organisational, financial, and infrastructure capacities were also investigated in the study. An initial first-run investigative interview was conducted with the CEO to determine the relevant stakeholders, and gain an understanding of the level of success of previous attempts in setting up PPP's. Thereafter, a questionnaire was devised to obtain feedback with regards to issues. (See Appendix 5 for the questionnaire.)

9.1.4. The Reasons for Privatisation

Byrnes saw Stanger as a once-thriving municipality on a steady decline since the first amalgamation in 1994. The municipality has always provided a full bouquet of public services to the community and continues to provide most of these services. (Byrnes, Interview: 23.05.2001)

Stanger differed from Dolphin Coast, in that the majority of Stanger's bulk water supply used to come from its own purification and storage works, and a little was initially supplied from the Umgeni Water bulk provision service. Byrnes saw the WSS service as being susceptible to "Acts-of-God", in that, the local abstraction river, the Umvoti, is susceptible to drought. He added that Stanger used to abstract and purify its own bulk water, until the council sold its bulk water treatment plant to Umgeni Water, to circumvent this susceptibility to droughts. There had been some transfer of staff from the municipality to Umgeni Water in the process. This transition was a relatively

smooth process with no opposition, as the transfer was from one public entity to another, and provided better employee benefits. (See Umgeni Water case study later in Chapter 9.) (Byrnes, Interview: 23.05.2001)

According to Naidoo, in 2000, the Stanger municipal WSS department provided water to about 6500 houses in the Stanger area. Of these 6500 households, it provided metered water to about 6200 houses and 5000 sewer connections. The water supply system was mainly through reticulation, from a main water distribution reservoir. In some areas, water was accessed through sunken boreholes. Most sewerage was water-borne (high service-level), except in the peripheral areas, where sewerage was managed via septic tanks and conservancy tanks (intermediate service-level). (Naidoo, Interview: 23.05.2001)

By 2000, the town engineer had 52 dedicated WSS employees, 38 of whom were unskilled. There were 9 semi-skilled workers and about 5 skilled artisans and operators. This effectively provided the public with about 8.4 employees per 1000 connections, which, by global standards, is relatively high¹⁰¹. (Naidoo, Interview: 23.05.2001)

By 2000, bargaining agreements on PPP proposals were already in place with the unions, although the municipal council had not passed any formal resolution on a PPP in WSS. Wide-scale arrears in terms of the non-payment of services existed at the time. WSS featured high on this backlog of unpaid tariffs, which stood at about 66 percent for water supply and 41 percent for sewerage. At the end of July 1999, this translated into a total backlog in WSS of over R5 million for that year. It is precisely because of this tariff-collection backlog that discussions have emerged about possible PPP's being a solution. (Naidoo, Interview: 23.05.2001)

The municipality thus faces a crisis with this poor customer willingness-to-pay (WTP) or ability-to-pay (ATP). Added to these challenges, is the fact that the municipality needs to extend reticulation services to the poor and upgrade existing infrastructure. The sewerage system is not as critical, except in certain outlying areas where septic and

¹⁰¹ Compare 2-3 persons per 1000 connections as the global norm. See Buenos Aires study in Chapter 5.

conservancy tanks needs to be changed to water-borne sewerage systems. (Naidoo, Interview: 23.05.2001)

9.1.5. Public Support for Privatisation

According to the Byrnes (Interview: 23.05.2001), the council had already entered into discussions with relevant stakeholder groups on a possible change in management of the WSS services provision system. These included the following entities: -

- The local chamber of commerce and industry.
- Civil society organisations.
- Water committees.
- Community Based Organisations (CBO's)
- Trade unions.
- Ratepayer organisations.

The public survey questionnaire is found in Appendix 2.

The following discussion is an analysis of the questionnaires: -

a) Satisfaction with Current Service

97 percent of all respondents indicated that they were satisfied with the current overall service provision of WSS by the municipality.

b) Income Distribution

Most respondents were in the middle-income group (R4000-R6000 per month per household).

The income profile was as follows: -

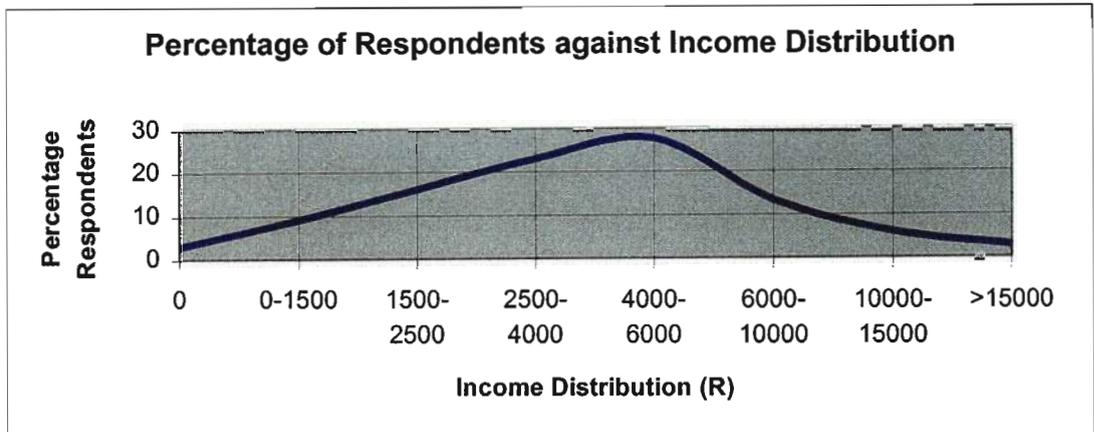


FIGURE 9.1. RESPONDENTS' HOUSEHOLD INCOME

Source: Researcher's Analysis

c) Household Number

The average number of people per household for the Stanger area was determined to be approximately 4.7 people per household. (This is a blanket calculation and is not calculated using the stratified weighting method used in the Dolphin Coast analysis.)

d) Level of Service

Most of the respondents indicated that they had water-borne sewerage and received their water supply through household connections. This supports the town engineer's view that most residents had a relatively high service-level.

e) Fairness of Tariffs

97 percent of respondents indicated that they were satisfied with the current tariffs levied on WSS by the municipality. Most of the respondents paid WSS accounts that were in the R200-R300 category.

f) Occurrence of Technical Problems

93 percent of respondents indicated that they seldom experienced technical problems with their WSS services.

g) Ideal Entity to Provide WSS Service

There was no support for a private sector entity to provide any WSS services. Most respondents indicated that the municipality should provide the WSS services. Some did indicate that Umgeni Water or the Durban Metropolitan Authority¹⁰² would also be welcome as WSS service providers.

h) Extension of Services to the Poor

87 percent of respondents felt that the municipality was still capable of extending WSS infrastructure services to the indigent in the area.

9.1.6. Financial Issues

By January 2000, the WSS tariff-schedule for Stanger was as follows: -

For water supply < 5 kl: R2.20 / kl.

For water supply > 5 kl: R 3.10 / kl.

Sewerage tariffs were paid based on the value of the land and buildings (municipal rating). For January 2000, this charge was 1.236 cents per municipal Rand value per annum.

¹⁰² A large metropolitan municipality, whose northern boundary is approximately 35km from Stanger. See Appendix 6.

Thus, in comparison to a house in the eastern area of Dolphin Coast using 40 k l of water and a house in Stanger (value, R200000), the following charges were determined: -

TABLE 9.1. COMPARISON OF TARIFFS BETWEEN MUNICIPALITIES

| Area | Water (R) | Sewer (R) | Totals (R) |
|---------------|-----------|-----------|------------|
| Stanger | 119.50 | 206.00 | 325.50 |
| Dolphin Coast | 111.10 | 160.60 | 271.70 |

Source: Researcher's Analysis

Table 9.1.'s analysis indicates that, in January 2000, SWC was providing a cheaper service than its public sector counterpart in Stanger. Effectively, SWC's charges were about 17 percent less. However, if one juxtaposes SWC's collection success rate of 84 percent at the time, to Stanger municipality's collection rate of about 50 percent, then the reasons underpinning Stanger's slightly higher tariffs is understandable. Furthermore, Stanger did not provide any "free water block" in January 2000. This exemplifies the misnomer of "free water", which is essentially a manufactured cost absorption, and, emphasises the fact that SWC charges connection costs, which subsidises this supposed "free-water" block.

The above analysis does not take into account SWC's extraordinary tariff review in 2001 (see Chapter 8, Table 8.21), which escalated its tariffs to equal that of Stanger's. Also, by August 2001, talk of a free water block had already been discussed by the Stanger municipality and had been passed; the first 6k l of water would be provided free to customers with *no* connection charge. This would probably bring Stanger's total tariff below that of SWC's. (The welfare aspect of municipal provision is exemplified when one considers the fact that Stanger had a significantly smaller collection rate, yet its new tariffs would still have been lower than SWC's.)

9.1.7. The Role of the State in Privatisation

Questionnaires (see Appendix 5) were sent to all HOD's, union representatives, and councillors. Of the 29 questionnaires that were distributed, 14 or 48 percent were received.

Questionnaires were sent to the following entities: -

TABLE 9.2. QUESTIONNAIRE RESPONDENTS FOR STANGER

| Parameter | Town Officials | Councillors | Unions |
|-------------------------|----------------|-------------|--------|
| Questionnaires sent | 9 | 18 | 2 |
| Questionnaires received | 7 | 6 | 1 |
| Percentage return | 78 | 33 | 50 |

This sample is assumed to statistically represent the views of the overall candidates that received questionnaires.

It was determined that the following services were already outsourced: -

- Plot cleaning.
- Equipment maintenance.
- Chemical analysis.
- Publicity and advertising.
- Housing development (partially).

The following services were being proposed for outsourcing: -

- Water supply.
- Sanitation.
- Sanitary landfill.

The following services and the acceptance of outsourcing services were determined: -

TABLE 9.3. ACCEPTANCE OF OUTSOURCED SERVICES

| Service | Councillors (%) | | Officials (%) | | Unions (%) | | Overall (%) | |
|---------------------------------|-----------------|--------|---------------|--------|------------|--------|-------------|--------|
| | Accept | Reject | Accept | Reject | Accept | Reject | Accept | Reject |
| Emergency | 83 | 17 | 100 | 0 | 0 | 100 | 86 | 14 |
| Water supply | 83 | 17 | 86 | 14 | 0 | 100 | 86 | 14 |
| Sanitation | 83 | 17 | 86 | 14 | 0 | 100 | 86 | 14 |
| Sanitary landfill | 83 | 17 | 86 | 14 | 0 | 100 | 86 | 14 |
| Housing | 33 | 67 | 57 | 43 | 0 | 100 | 43 | 57 |
| Workshop | 33 | 67 | 86 | 14 | 0 | 100 | 57 | 43 |
| Electricity | 33 | 67 | 57 | 43 | 0 | 100 | 43 | 57 |
| Health services | 17 | 83 | 86 | 14 | 0 | 100 | 50 | 50 |
| Solid waste / refuse collection | 83 | 17 | 86 | 14 | 0 | 100 | 79 | 21 |
| Fleet management | 50 | 50 | 86 | 14 | 0 | 100 | 64 | 36 |
| Plot cleaning | 100 | 0 | 86 | 14 | 0 | 100 | 86 | 14 |
| Verge cutting | 100 | 0 | 86 | 14 | 0 | 100 | 86 | 14 |
| Sport and recreation | 100 | 0 | 86 | 14 | 0 | 100 | 86 | 14 |
| Local Economic Development | 33 | 67 | 86 | 14 | 0 | 100 | 57 | 43 |
| Summons | 33 | 67 | 43 | 57 | 0 | 100 | 35 | 65 |
| Maintenance | 67 | 33 | 86 | 14 | 0 | 100 | 71 | 29 |
| Road repairs | 83 | 17 | 86 | 14 | 0 | 100 | 79 | 21 |
| Street sweeping | 100 | 0 | 86 | 14 | 0 | 100 | 86 | 14 |
| Chemical analysis | 83 | 17 | 86 | 14 | 0 | 100 | 79 | 21 |
| Publicity and advertising | 50 | 50 | 71 | 29 | 0 | 100 | 57 | 43 |
| Computer support | 67 | 33 | 86 | 14 | 0 | 100 | 71 | 29 |
| Radio control | 33 | 67 | 71 | 29 | 0 | 100 | 29 | 71 |

Source: Researcher's Analysis

Other suggestions for possible outsourcing of services included: -

TABLE 9.4. OTHER POSSIBLE SERVICES TO OUTSOURCE

| Entity | Suggestion |
|--------------------|--|
| Unions | <ul style="list-style-type: none"> • No suggestions. |
| Councillors | <ul style="list-style-type: none"> • Community facilities – halls, pools, crèches. • Housing flats. • Tourism. • Conveyancing, land administration, and civil buildings. • Treasury. • Typing. • Cleaning. • Testing station. • Motor licensing. • Traffic control. • Internal audit. • Debt collection. • Town planning. |
| Officials | <ul style="list-style-type: none"> • Stores. • Internal Audit. • Treasury. • Street-lighting and repairs. • Meter reading. • Cut-offs for non-payment. • Town planning. • Minor capital works. • Museum. • Libraries. • Compost making. |

Source: Researcher's Analysis

The following is a summary of the feedback from questionnaires: -

a) What does each entity (councillors, unions, and officials) think the view of the other two stakeholders would be on PPP's?

From the questionnaires it was gauged that each entity felt that the other did not support PPP's and viewed it as a threat. Even though most respondents indicated an overall support for PPP's in most services, each entity thought that the other would not support any PPP implementation and would view the outsourcing of services as a threat. The

views of the unions, however, were accurately predicted. There was considerable (but not total) buy-in from councillors and officials. (The probability was that these were more senior officials, as the unions represent the lower-level employees, although this is speculative.)

b) Support for PPP's

All respondents, except the unions indicated an overwhelming support for the fostering of PPP's. Some officials, however, did indicate that they would prefer to be consulted in the initial stages of each process of outsourcing.

The unions indicated that PPP's would hinder co-operation between staff and management, but no supporting opinion was given to supplement this statement.

c) Capacity to Support PPP's

Most respondents gave unsubstantiated views, as to what they felt was the proper capacity to implement PPP's. The general trend that emerged from the supporting questionnaires was that a potential capacity did exist, but it needed direction and refinement.

d) Training on PPP's

Two respondents had attended training courses on PPP's. Other respondents indicated that they had an understanding of the concept, but lacked a proper understanding of the system in operation. The unions felt that they were not consulted or informed on the processes and consequently had little or no knowledge of the implementation of such systems.

e) The Role of Consultants in Implementing PPP's

Many respondents differed on the question of the other consultants' roles and success in trying to implement PPP's. One respondent felt that consultants had not formulated mechanisms that would actually create the formation of PPP's. No proper

implementation plans were procured. The unions also rejected the role of consultants as they felt that preceding consultants had not added any value to the system. Furthermore, the unions felt that they were more aware of inherent problems, and that the implementation of PPP's was not the solution to the municipality's management capacity problems.

f) Benefits / Negative Impacts from PPP's

The following benefits were noted by respondents: -

TABLE 9.5. EXPERIENCE OF OTHER OUTSOURCED SERVICES

| Service | Benefit |
|--|---------------------------------------|
| Water reticulation. | More efficient. |
| Billing and cut-offs. | More funds. |
| Plot cleaning. | More efficiency, cleaner environment. |
| Electricity disconnections. | More efficiency, debt recollections. |
| Road maintenance and surfacing. | More efficient. |
| Capital works. | More efficient. |
| Security services. | More efficient. |
| Panel beating and spray-painting. | Better utilisation of existing staff. |
| Puncture repairs. | Savings on capital equipment. |
| Oil purification. | Savings on capital equipment. |
| Relay testing. | Independent source of information. |
| Housing. | Very efficient, lower costs. |
| Chemical analysis. | Very efficient, lower costs. |
| After hours budget energy cards – electricity. | More efficient, better service-level. |
| Photocopying machine. | Better service-level. |

Source: Researcher's Analysis

g) Possible Obstacles that Would Impede the Fostering of PPP's

The following possible problems / fears were submitted by respondents regarding the development of PPP's: -

i) Employee Concerns

- Retrenchment: fear from the officials and unions.
- Reprisal and victimisation by the unions.
- Union concerns: diminished employee benefits, conditions of service, and workers' rights.
- Type of contract decision-making.
- Loss of security.
- No guarantees secured for employees.

ii) Financing Concerns

- Higher cost of service might occur in outsourcing. There is no available financing for this. (Refer to the ex-ante costs discussed in Chapters 3 and 4.)
- Correct tariffing is difficult to determine.
- Sustainability of the scheme might be jeopardised by privatisation..
- Cost-effectiveness of the project.

iii) Institutional Concerns

- Loss of control and power for the municipality.
- Lack of capacity to compile adequate documentation about PPP's.
- Lack of capacity to adjudicate proposals to select a preferred bidder.
- Opposition from public.
- Stigma of the municipality's incompetence.
- Monitoring and regulation issues.
- Lack of expertise on PPP's.
- Exploitation of the municipality.

iv) Efficiency Issues

- Lower service-levels and standards might emerge.
- Less productivity.
- Investment would be very high as present infrastructure may be too old to sustain a PPP.

9.1.8. Concluding Remarks

As no privatisation had actually occurred, a sensitivity analysis table is not used as in the previous studies.

As has been determined from the official, councillor, and union questionnaires, there is a considerable level of support for the implementation of PPP's (except from the unions). Many senior officials and councillors support the paradigm shift towards private sector service provision in municipalities. They recognise that, although municipalities are responsible for ensuring that these services are provided, it does not necessarily have to be managed by the municipality, which could maintain a facilitation role. They also accepted that the municipality lacks the finance or access to it, for the extension of WSS services to new areas, incorporated after the demarcation.

There is considerable evidence that the unions would not support the setting up of PPP's. Their argument is based on retrenchment fears, the loss of employee privileges, and bargaining rights. However, as the Dolphin Coast experience has illustrated, there is a minimal chance of retrenchments occurring, even with current high employee to customer ratio. The Dolphin Coast municipality protected the employees that were transferred during the transition, and their job security, amongst other concerns, was considerably placated. With the infrastructure backlog to address, it is highly unlikely that employees would be retrenched with private sector participation, as there would now be financing to extend the services, which would sustain the higher employee numbers.

It is also recognised that, although officials and councillors are not entirely confident in their knowledge of the PPP solution, they are willing to support any initiative that

would uplift the present WSS service delivery abilities of the municipality, including increased coverages.

The public indicated satisfaction with the current service-levels received, and there was no resentment against the council in terms of tariffs. Most residents, with access to WSS, had water-borne sewerage and piped water to their households. With its scarce resources and low levels of tariff-collection, Stanger municipality managed a relatively adequate service provision. However, it is not a sustainable service, due to the financing requirements for future expansion. This was the decisive factor that prompted the municipality to conduct feasibility studies into possible private sector options. The public also has a false sense of the municipality's financial sustainability in extending services to the poor. Whilst the municipality has strongly indicated that it does not have the finances to extend these services, the public has assumed that the municipality could manage this extended coverage.

The public was strongly supportive of public sector delivery, with a considerable percentage looking at the possible transfer of services to Umgeni Water. (This is an option that has merit, as the later discussion in Chapter 9 on Umgeni Water will illustrate.)

The public also indicated satisfaction with the current municipal delivery of WSS, with few problems of a technical nature. They also felt that the tariffs charged were quite fair. However, the majority of respondents were from the middle-income group.

Considering Stanger's low tariff-collection in comparison to that of SWC's in the Dolphin Coast, the fact that Stanger's WSS tariffs were on par with that of SWC's, illustrates the leniency that the municipality will adopt towards indigent customers. However, this relaxation on tariff-collection towards the indigent by the municipality is not viable, as it does not augur well for long-term sustainability and the extension of operations to other currently unserved areas.

9.2. Local Case Study Investigation: Estcourt and Newcastle

9.2.1. Introduction

Both Newcastle and Estcourt underwent separate amalgamations in 1995, with Estcourt absorbing the nearby former African township of Wembezi, and Newcastle absorbing the African townships of Madadeni and Osizweni. With the amalgamation of townships and other rural areas and the later demarcation in 2000 (see Chapter 1 for a description of these processes), these former well-functioning municipalities face a WSS infrastructure crisis as well as a new service recipient base, which also had a low ability-to-pay (ATP) for WSS services.

Both are medium-sized South African towns in northern KwaZulu-Natal (KZN), with Newcastle being slightly bigger in area in terms of the size of its Central Business District (CBD) and its industrial base. (See map in Appendix 6.)

9.2.2. Research Methodology

Refer to the research methodology in Chapter 1 for a description of data-gathering techniques. Here, only the data-gathering that is specific to this case study, is discussed.

Interviews were conducted with officials from Estcourt and Newcastle from 1999. Whilst this was initially part of a consulting exercise completed under the auspices of a management consultancy firm by the researcher (See appendix 8 for a discussion on this), these findings have been incorporated into the study. Interviews were held with officials, councillors, as well as unions.

Questionnaires (see Appendix 4) were also sent for completion to the head of development services and the town engineer in both towns, which were facilitated by Ndlovu and Patterson, from Newcastle and Estcourt respectively.

9.2.3. Aim of this Case Study

Of both towns, only Newcastle faces a WSS infrastructure crisis and is investigating the possibilities of private sector participation. Both towns are comparable to the Dolphin Coast and Stanger cases, as they are all similar-sized towns in KwaZulu-Natal and will probably face similar challenges in terms of union and other stakeholder resistance to the process.

The Estcourt officials have indicated that they are able to continue with municipal service provision. Estcourt has also indicated that it has the finances and sustainability to extend WSS services to the poor in newly-incorporated areas. This case study also aims to determine the efficacy of this assertion and the ability of Estcourt to sustain municipal service delivery of WSS. (Estcourt Town Officials, Consultancy Investigation: 12.03.1999)

9.2.4. The Reasons for Privatisation

According to the town engineer, Estcourt has an abundance of water from a nearby dam. The dam has a catchment area of 800 square kilometres and was designed to contain 60 million cubic meters of water, which is well in excess of predicted demand. Estcourt is supplied with potable water from the municipal water-works, where 18000 kilolitres of water is purified each day. Estcourt abstracts its raw water from the nearby river and dam. The modern water-works and dam are sufficiently large enough to ensure an adequate water supply even in the most severe drought conditions. Further to this, Estcourt has very competitive municipal charges. In 2000, the water tariff was 62 cents per kilolitre, plus value added tax (VAT). (Patterson, Interview: 29.05.2001)

According to Ndlovu, Newcastle serves as the largest concentration of industry in the northwest KZN region, covering about 222 square kilometres. It has a population of more than 300000 people. The most significant challenges facing Newcastle include the gap between its developed and developing areas, new sources of funding for capital expenditure, and being able to build its administrative and management capacities. (Ndlovu, Interview: 29.05.2001)

9.2.5. Public Support for Privatisation

TABLE 9.6. LEVEL OF SUPPORT FROM DIFFERENT ENTITIES

| Group | Newcastle | Estcourt |
|----------------------------|------------------|-----------------|
| Councillors | Medium | Medium |
| Senior Municipal Officials | Low | Low |
| Municipal Workers | Low | Low |
| Unions | Low | Low |
| Industry | Medium | Medium |
| Public – low income | Low | Medium |
| Public – medium income | Low | Medium |
| Public – high income | Low | Medium |

Source: Researcher's Analysis

Table 9.6. indicates that there is minimal support from all stakeholders for private sector participation in the provision of WSS.

Both municipalities indicated that the general public was satisfied with the current service-levels and tariffs. However, the requirements of poorer communities still had to be addressed. They received Reconstruction Programme and Development¹⁰³ (RDP) minimal standards of service, but still wanted better service-levels. This was counter-balanced by the fact that many poorer groups did not pay for WSS services received. (Ndlovu and Patterson, Questionnaires: 24.05.2001)

9.2.6. The Role of the State in Privatisation

Ndlovu indicated that Newcastle did not have the money to meet the WSS infrastructure backlog. By 2000, their total bulk WSS infrastructure needs was approximately R56 million. Estcourt indicated that provided they had the funding for capital infrastructure needs, which stood at about R20 million in 2000, they would be able to provide the service. It was the lack of a viable operations and maintenance (O&M) funding

¹⁰³ See Chapter 7 for a discussion on RDP standards.

mechanism that prevented them from providing equitable access to all. (Ndlovu, Questionnaire: 24.05.2001)

9.2.7. Financial Issues

Ndlovu indicated that Newcastle does not have the creditworthiness to raise the finances required from banking institutions to facilitate comprehensive bulk infrastructure provision. (Ndlovu, Questionnaire: 24.05.2001)

At the moment, Estcourt still has the creditworthiness to raise finances to meet its infrastructure needs in terms of WSS. (Patterson, Questionnaire: 24.05.2001)

However, from the researcher's previous consulting work in Estcourt, it is known that Estcourt was about to implement a prepaid water meter system in the newly-acquired African townships. This essentially was a PPP, as it involves a private sector company supplying the meters freely, with periodic O&M of the meters. The municipality still abstracts, and purifies the water. The distribution of the water to individual households is achieved through the customer buying a prepaid meter card and slotting it into the meter. This opens the meter sluices, to allow the proportionate amount of water to the value of the card, to exit the system. The card can be periodically updated. The private sector operator sources its income by taking a portion of the revenue from this prepaid system. The other portion goes into the municipality's coffers. (Researcher, Consultancy Investigation: 24.03.1999)

Both Ndlovu and Patterson indicated that their municipalities felt that donor funding was one of the alternative ways of providing bridge-financing. They also felt that infrastructure funding with a ring-fenced public infrastructure fund at a national level, would assist in meeting the backlog. (Ndlovu and Patterson, Questionnaires: 24.05.2001)

9.2.8. Privatisation Efficiencies

Both municipalities indicated that better service-levels and lower tariffs were not the pertinent issues. Rather, it was the procurement of funding in order to maintain the WSS

system and the rate-recovery base that facilitated this. They believed that the WSS system was only as good as the infrastructure that supported it. (Ndlovu and Patterson, Questionnaires: 24.05.2001)

9.2.9. The Opposition to Privatisation

Although officials in general were opposed to any private sector participation in WSS, they still felt that the unions' stance was too. The officials were not against smaller PPP contracts such as management contracts to the private sector for operations and maintenance. (Ndlovu and Patterson, Questionnaires: 24.05.2001)

Both Estcourt and Newcastle do not foresee any private sector participation in WSS in the next five years. Whilst Estcourt indicates that due to the Municipal Structures Bill (see Chapter 7 for a discussion on South African enabling legislation for privatisation), it is quite likely that private sector participation will occur at some stage. Newcastle adds that, with the union resistance, it is highly unlikely this will occur in the near future. (Ndlovu and Patterson, Questionnaires: 24.05.2001)

Newcastle went further with their privatisation investigation, with a feasibility study being done by the Municipal Infrastructure Investment Unit (MIIU), and an English WSS utility company conducting a pre-qualification tender feasibility analysis. However, with firm union opposition, Newcastle's plans to privatise were impeded very early in the process. (Ndlovu, Interview: 24.05.2001)

9.2.10. Concluding Remarks

Due to there not being any privatisation attempt at either Estcourt or Newcastle, a sensitivity analysis table is not used.

The evidence reveals that the level of support for private sector participation in WSS is minimal at both municipalities. The public is relatively satisfied with the service-level provided and tariffs charged, for WSS services.

In Estcourt, municipal officials are certain that the private sector would not be able to provide lower tariffs than the municipality and if private sector did, it would only be in the short-term, in order to win a prospective bid. Estcourt's tariffs are extremely competitive and very low in comparison to global prices. The indications are that they have a successful water resource management system in place that facilitates a WSS system that is sustainable under the auspices of the municipality.

However, Estcourt has inadvertently extended WSS services into the private domain with its prepaid water system. The prepaid water system is not without controversy, and has been it is opposed vigorously in developed countries as a method of tariff collection. Many people oppose the idea of paying for water upfront, as it also minimises the issue of ATP's of the indigent. Estcourt also investigated the provision of a monthly free water block through these prepaid meters. These meters are susceptible to vandalism, as many householders have displayed ingenuity in bypassing the meters to gain unlimited and free access to the water supply. The meter system is not an effective and welfare-focused method of water supply and is not sustainable in a developing country.

Conclusively, Newcastle's situation is more critical than that of Estcourt's. However, both municipalities are faced with finding a solution to the cumulative effects of development challenges that cannot be financed by either municipality. This trend is arguably evident in most of the non-metropolitan municipalities in South Africa.

9.3. Local Case Study Investigation: Umgeni Water

9.3.1. Introduction

Umgeni Water is a parastatal organisation , a quasi-government WSS utility, instituted by the Department of Water Affairs and Forestry (DWAF) to mainly manage rural WSS operations in the vicinity of the city of Pietermaritzburg and its surrounding areas in KZN. Umgeni Water is the second largest WSS authority in South Africa, second only to Rand Water in terms of its size and area of operations. Its area of operations covers about 24000 square kilometres. It services about 40 rural communities, that is, a total population of about six million people. In addition, it serves as the bulk water supplier to most towns in the area, including the Durban Metropolitan Authority.

9.3.2. Aim of this Case Study

The parameters that guide the aim of this case study analysis are as follows: -

- Umgeni Water is a corporatised public sector WSS utility, which serves as a contrast to the public sector WSS service delivery of municipalities. It is a public utility, which operates on private sector business principles. (See discussion on corporatisation in Chapter 2.)
- It has the economies-of-scale with its large jurisdictional area of service provision, to achieve cross-subsidisation from the affluent to the indigent.

These parameters are important in gleaning an understanding of the success that a public sector utility can achieve through corporatisation and geographical economies-of-scale. It is also referred to as an option to consider in Chapter 10.

9.3.3. Research Methodology

A general framework for the research is set-out in Chapter 1. Here, only the data-gathering that is specific to the Umgeni case study, is discussed.

The researcher has had extensive contact with Umgeni Water through his previous work in the DWAF. (See Appendix 8 for a discussion on this.) The researcher has networked with many personnel from Umgeni Water, and has concomitantly developed an understanding of Umgeni Water's methods of operations and general functioning as an organisation. As a result, some of the research that has been incorporated into this study, has been through the researcher's work experience. Interviews were held with employees of Umgeni Water, who were responsible for new business development, who have chosen to remain anonymous due to the sensitivity of their views on other WSS service providers. They are referred to as Messes. Y in this investigation. (See later in this case study, for a discussion on their perspectives.)

9.3.4. The Role of the State in Privatisation

Umgeni Water sees raw water¹⁰⁴ as a strategic national resource, and envisages that the responsibility for management should be integrated on a three-tier system. The role of national government in the WSS sector, encompasses managing the nation's water resources in the public interest and ensuring that all citizens have access to adequate WSS services. It is also the responsibility of national government to establish national policy guidelines, a national WSS development strategy, the formulation of criteria for state subsidies, and the setting of minimum service standards. Provincial and regional governments are responsible for the provision of WSS and other related services, specifically through the promotion of effective local government structures. (Messes. Y, Interview: 17.04.2002)

Umgeni Water plays an important role in this sphere as it forms a link between national government and municipalities, through their responsibilities in the provision of bulk services. As it seems unlikely that effective municipal structures will be established to manage their responsibilities at the distribution level for some time, the DWAF has expanded the mandate of the Water Boards, such as Umgeni Water, enabling them to provide WSS services to the final customer, especially in former rural areas that have just been incorporated into municipalities under the demarcation process. (See Chapter 1 for a discussion on the demarcation.) Umgeni Water is committed to delivering a cost-

¹⁰⁴ Raw water is water found in rivers, lakes, and dam reservoirs, which has not been purified.

effective supply to meet the increasing demand for potable water. As the costs of water treatment increase, relative to the quality of the water at intake, and due to increasing costs of technology and labour, it is in Umgeni Water's interest to encourage a reduction in the sources of pollution of raw water in water-ways such as rivers and dams. (Researcher's Experience 1996-2000: Appendix 8).

Umgeni Water is not without controversy. It has had a recent spate of debacles, with the media publicising the alleged abuse of company credit cards by senior staff stationed at Umgeni Water. In 2000, the CEO of Umgeni Water was also suspended, as he had used an unauthorised amount of finance from Umgeni Water coffers to fund personal endeavours. (Researcher's Experience 1996-2000: Appendix 8).

9.3.5. Financial Issues

Umgeni Water's operations are financed mainly through the sale of potable bulk and local supply of water. It also charges tariffs for the treatment of wastewater. In addition, capital is raised through the issue of bonds on the Johannesburg Stock Exchange (JSE). These stocks are consolidated into two highly successful gilt megabonds trading on the JSE. (Messes. Y, Interview: 17.04.2002)

Umgeni Water has an AA+ rating for long-term loans and a F1+ rating for short-term loans with the banks, from Fitch, which is a global credit-rating institution. These are the best ratings that a utility can actually obtain. Umgeni Water is thus able to procure a loan from any of the development or commercial banks, because of its excellent credit-worthiness. Although staff admit that Umgeni Water is still risk-averse, they justify this by stating that it is an acceptable practice for an organisation managing public funds. However, they believe that they have the equity and capacity to manage any WSS concession. To provide collateral for any loans taken out, Umgeni Water has R4 billion in bonds and stocks as a guarantee. These stocks are daily managed on a continuous basis by dedicated professionals stationed at Umgeni Water. (Messes. Y, Interview: 17.04.2002)

Umgeni has no funding from the government and is thus, a self-funded utility. Umgeni Water budgets its annual revenue to exceed expenditure and also generates surplus

funds. This is not regarded as profit and is deposited into a capital reserve fund. This fund is used to finance capital infrastructure development, including major renewal and maintenance expenditure, which reduces the need for borrowing from external finance sources. (Messers. Y, Interview: 17.04.2002)

By the end of 2000, Umgeni Water had seen a steady decline in bulk water sales. Durban Metropolitan Authority, who is Umgeni Water's biggest buyer of bulk water, buying some 80 percent of its treated bulk water, had begun to successfully implement a demand-management practice that had begun to minimise water losses after receipt of bulk water from Umgeni Water. (Messers. Y, Interview: 17.04.2002)

As a result of this water control programme, implemented by the Durban Metropolitan Authority and a rehabilitated reticulation system, Durban Metropolitan Authority bought less bulk water from Umgeni Water. With this decrease in sales, Umgeni Water was forced to increase the cost of bulk water, although at a cost that is comparable national and globally. However, notwithstanding this decline in sales, Umgeni still predicted a surplus revenue of approximately R11.6 million for the following financial year (2001). (Messers. Y, Interview: 17.04.2002)

This also should be considered in context of the fact that Umgeni Water bridge-financed the DWAF's RDP rural funding schemes for WSS, and also provides cross-subsidised or free capital infrastructure to the indigent. Under the auspices of its WSS development plans, it has delivered successfully to more than one million people in rural and peri-urban areas. Umgeni Water is committed to financial prudence and is determined not to utilise its financial reserves to bridge any decrease in water sales. The parastatal's partial reliance on the banking sector for financing mechanisms makes it imperative that their financial policies are accepted positively by the investor community. It was with this scenario in mind, that Umgeni Water has been forced to resort to the 13 percent increase in tariffs for bulk sales of water in 2001. (Messers. Y, Interview: 17.04.2002)

The following graph indicates Umgeni Water’s infrastructure capital expenditure over the previous decade: -

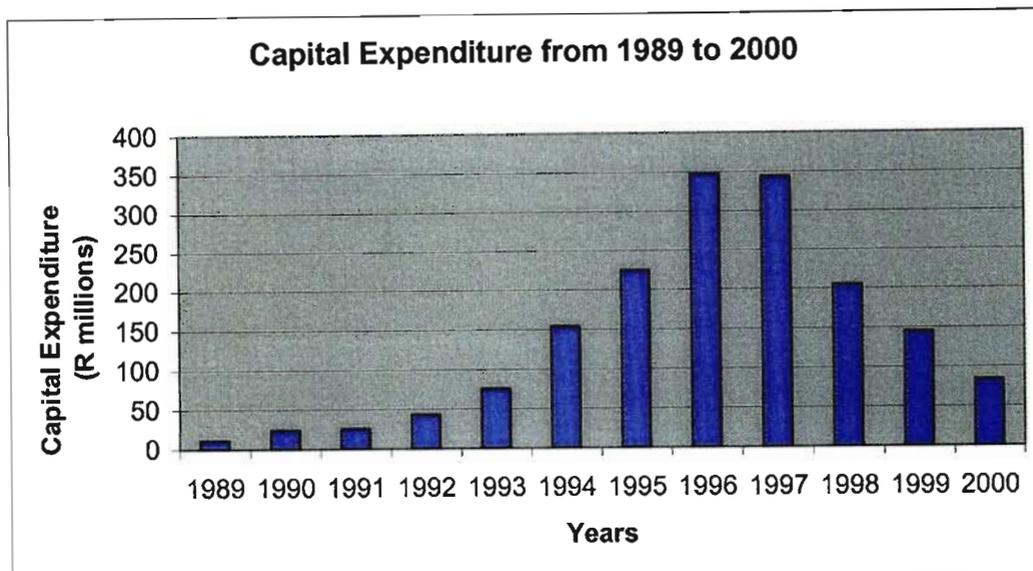


FIGURE 9.2. UMGENI WATER CAPITAL EXPENDITURE FOR NEW WORKS

Source: Umgeni Water

Figure 9.2. indicates the amount of expenditure for new works capital infrastructure financed by Umgeni Water over the 1990’s. In addition to the above, Umgeni Water’s net expenditure in 2000, alone, for operations and maintenance works was in the region of R235 million.

9.3.6. Privatisation Efficiencies

Whilst Umgeni Water is not a privatised entity, it is a corporatised public sector organisation, which operates on business principles. (See Chapter 2 for a discussion on corporatisation.) This corporatisation of the business, has led to great success in the sustainability of its operations, whilst maintaining its focus on the indigent and their welfare. (Researcher’s Experience 1996-2000: Appendix 8).

A Chief Executive Officer (CEO) and six directors, who head up the various divisions of Operations, Human Resources, Finance and Administration, Scientific Services and Corporate Services, manage the parastatal. New Business Development is one of the

new directorates that have also been created under Umgeni Water's wing. (Researcher's Experience 1996-2000: Appendix 8).

Service functions are mainly centralised whilst Operations is decentralised into two regions, namely, the inland and coastal regions. [See Appendix 6 for a map of KZN.] In addition, Umgeni Water has a board consisting of fifteen members comprising of people nominated mainly by customer organisations and appointed by the Minister of Water Affairs and Forestry. (Researcher's Experience 1996-2000: Appendix 8).

Umgeni Water's success as a WSS utility is well-entrenched, voted the best WSS utility company in South Africa in 1999 by 56 of the largest corporate, industrial, and municipal customers in South Africa. (Messers. Y, Interview: 17.04.2002)

Umgeni Water has been a leading organisation in KZN with its policies for the upliftment of both its employees and the wider community, which it serves. The primary objective of the organisation is to provide water in sufficient quantities, safe for consumption, at an affordable cost, and adequate sanitation measures. Besides its commitment to community development in terms of WSS infrastructure as well as through adult literacy programmes, Umgeni Water has supply contracts with nearly one hundred small, medium and micro enterprises (SMME's) which have been established. (Researcher's Work Experience Appendix 8, Consultancy Work, 1999-2000).

Umgeni Water staff believe that with the surplus revenue that Umgeni Water makes, they are able to cross-subsidise poorer areas where the ATP is low. Most of the surplus is injected back into the communities, albeit in different areas. (Messers. Y, Interview: 17.04.2002)

Umgeni Water is credited with having a world-renowned scientific services laboratory, which offers its services on a commercial basis, and is the only water testing laboratory in South Africa that has received accreditation from the South African Bureau of Standards (SABS). (Messers. Y, Interview: 17.04.2002)

Umgeni Water shares a fairly healthy relationship with both its staff and unions. Staffs have access to exceptional benefits, including, housing subsidies, fixed at 12 percent¹⁰⁵ for the full 20-year bond cycle and more than R1000 as monthly housing subsidy perks, car allowances or subsidies, and the other normal range of big company benefits. (Messés. Y, Interview: 17.04.2002)

9.3.7. Transnational Companies and Foreign Technology

Umgeni Water has also initiated a totally commercial subsidiary, which is an autonomous wing of Umgeni Water, called Umgeni Water Services (Pty) Ltd., and this is *legislatively* acceptable after the amendment of the Water Services Act in 1997. Umgeni Water Services has gained experience with local companies as well as WSS TSC's. This entity operates purely on business principles. It markets its services, not just as a utility company, but also as a professional WSS consulting company, not just in South Africa, but internationally as well. (See case studies on India in Chapter 6 and the Dolphin Coast in Chapter 8.) (Messés. Y, Interview: 17.04.2002)

Umgeni Water Services was one of the bidders on the Dolphin Coast concession as a partner to one of the international French WSS TSC's. In interviews with some staff members, it was revealed that Umgeni Water Services lost the bid by a fraction of a cent per kilolitre in the tariffs for water. It was revealed by the Dolphin Coast tender committee, that Umgeni Water Services also lost because it did not have an empowerment wing. The reasons for this are questionable, as Umgeni Water Services itself is an empowerment company in its own right, except that there are no private shareholders listed in the equity of the business. Umgeni Water Services is wholly-owned by Umgeni Water, a public vehicle focusing on equitable WSS for the indigent. Effectively, it serves the same principles as Black empowerment in that it is focused on the upliftment of the formerly disadvantaged. (Messés. Y, Interview: 17.04.2002)

In further discussions with Umgeni Water staff, some feel that Siza Water Company (SWC) is "a front" for a French multinational (SAUR), in South Africa to siphon huge profits out of the country. Umgeni Water staff feel that SWC does not see the Dolphin

¹⁰⁵ Current (July 2003) prime bank lending rates for housing loans is approximately 16 percent.

Coast as the “big prize”, as it was used to get SAUR’s “foot-in-the-door” in South Africa. The larger profits would be generated from the concessioning of the metropolitan authorities. (Vivendi¹⁰⁶ has already established a relationship with the Durban Metropolitan Authority, with one of its staff members having been stationed temporarily at the Durban Metro Water’s head office.) (Messés. Y, Interview: 17.04.2002)

On being asked their views on the supposed “low” water loss rate of 16 percent at the Dolphin Coast in such a short space of time, staff members at Umgeni Water stated that such targets were easily achievable, and that they were exceeding such targets in less affluent areas. (Messés. Y, Interview: 17.04.2002)

Umgeni Water staff were indignant about the software used by SWC, and stated that they could provide software through a locally-based software company. This would incorporate the socio-economic dynamics found in the South African context, instead of “doctoring” a French information technology management system into the South African context. (Messés. Y, Interview: 17.04.2002)

Umgeni Water Services also lost out to a bid in the largest city in South Africa and Africa’s most affluent city, Johannesburg. Staff members at Umgeni Water are quoted as saying that the RFP stated that the city authorities were specifically looking for a TSC, who could bring foreign direct investment (FDI) into the country. However, the researcher has not verified this assertion with the Johannesburg Metropolitan Authority. Umgeni Water stated that they lost the bid because of marginally higher tariff-prices again, but once Suez-Lyonnaise des Eaux had won the bid, they changed their mind about the tendered tariffs, and this was renegotiated. (Messés. Y, Interview: 17.04.2002)

9.3.8. Concluding Remarks

Evidence from the investigation reveals that Umgeni Water is a public sector utility capable of effective and sustainable service delivery of WSS services. Although Umgeni Water operates as a public sector vehicle in the rubric of a developing country,

¹⁰⁶ See Chapter 4 for a discussion on Vivendi.

it has employed geographical economies-of-scale and corporatisation to ensure that its WSS services are sustainable.

There is also a minimisation of ex-ante transaction costs in its holistic service provision. This is evident in it being the bulk water supplier, as well as the service provider in some cases. In this capacity, the services are bundled and ring-fenced and provided effectively through one utility.

The corporatisation of its functions and operations has created an amicable environment for employees and also resulted in a more business focus. The combination of the corporatisation and economies-of-scale have effectively generated a surplus of revenues, that have been used to augment services to the indigent, in mitigation of their low ATP's.

Umgeni Water's criticisms and predictions of the TSC's with regards to their profit-focus and their tender bid prices being unsustainable in the long-term, has proven to be accurate. (See discussion on Dolphin Coast in Chapter 8.) Effectively, the Umgeni Water business model has proven to be a success and is used in Chapter 10, to create a way forward for effective and sustainable WSS service delivery.

PART D: CONCLUSION AND RECOMMENDATIONS

Part D provides the concluding chapter (Chapter 10) to this study. This includes the conclusion and recommendations for the way forward in South Africa. The conclusion integrates the evidence from the case study analyses and assesses their implications for the South African context. After a discussion of these issues and their implications for the South African context have been linked, a conclusion is provided to the hypothesis. Chapter 10 continues with possible long-term solutions to the challenges that face South Africa in terms of sustainable water supply and sanitation provision. It provides a framework as to what structures need to be instituted, so that comprehensive water supply and sanitation delivery can be swifter. Examples of successful delivery are used from the case studies to support any suggested options.

CHAPTER 10: CONCLUSION AND RECOMMENDATIONS

10.1. Conclusion

Private sector participation in water supply and sanitation (WSS) in the developed countries, emerged primarily for reasons of efficiency. In South Africa and the rest of the developing world, this emergence of the private sector occurred due to the inability of municipalities to meet capital investment needs for infrastructure backlogs.

Effectively, the developed world embarked on a neoliberal trajectory with existing first-world infrastructure for WSS. South Africa and most developing nations are still very far from achieving this level of service-delivery. The developed nations met their backlog of basic infrastructure over a generation, from the application of Keynesian economics and its emphasis on a strong state in the 1940's, to a market-centric economy in the 1970's.

Developed nations were able to amicably bridge the service-delivery gap between rich and poor, through large-scale nation-building under the auspices of an extremely strong state. The state was seen as the only effective vehicle that could facilitate the provision of solutions to such development concerns. Juxtaposed against the South African situation and that of other developing nations, the sometimes, neoliberal advocacy of the World Bank and other influential international donor agencies, seem to fast-track development through privatisation without focussing on the need for large-scale state-led initiatives.

The evidence from the South African case studies indicates that, in South Africa considering the public good character of WSS, there should be a more holistic appreciation by service providers of the socio-economic benefits that flow from WSS access, which are not necessarily focused-upon by a private sector company. As discussed in Chapter 1, these include improvements in public health, the prevention of related diseases, and the indirect socio-economic spin-offs. The treatment of WSS services as private commodities, to be sold according to commercial principles, also tends to underestimate their contribution to health, welfare, educational achievement,

social stability, and the other positive socio-economic results that are generated by equitable access for all communities.

Considering South Africa's infrastructure and service delivery challenges, the ideal situation would be for WSS to be classed as a merit good. However, the reality is that it cannot be decommodified completely (see discussion on McDonald's views in Chapter 7), as the evidence indicates that this is *immediately* unsustainable, as vast infrastructure backlogs exist, which require significant financing to diminish. Essentially, all the studies have provided evidence that a critical mass of tariff-collection is required in order to sustain a well-functioning WSS system. Acceptable levels of tariff-collection is also required to amortise the costs of providing any new infrastructure and ensuring the long-term sustainability of the service. In South Africa, this WSS infrastructure backlog runs into billions of Rands.

In providing any conclusive arguments to the hypothesis and the research questions, the crucial issue is whether the private sector can succinctly respond to the WSS requirements of low-income households *within* their abilities-to-pay (ATP), whilst still maintaining the *commercial* viability of its operations. Essentially, is private sector participation in WSS provision in non-metropolitan municipalities¹⁰⁷, sustainable in South Africa? Considering the high incidence of indigent communities who cannot provide a sustainable source of tariff-collection to facilitate this scenario has been a source of great debate.

A. The Emergence of Privatisation

10.1.1. The Reasons for Privatisation

The English privatisation case is an example of what is *cumulatively* a successful privatisation case. Considering its already extensive WSS infrastructure at the time of privatisation (although it required rehabilitation), and the higher ATP's of its customers, its privatisation was in essence, more sustainable because of the resultant higher tariff-collection rate.

¹⁰⁷ See Chapter 1 for definition.

The reasons underpinning the Buenos Aires privatisation case differ from that of the English case. Prior to the privatisation, Buenos Aires had a poorly-functioning, bloated public sector organisation managing WSS delivery. This organisation's investment in capital works and the operations and maintenance (O&M) of existing infrastructure, was negligible. The WSS service faced a burgeoning crisis in public sector hands. The only *immediate* solution to combat the situation was to bring-in the private sector, which had access to finance that could alleviate this crisis that had reached, what were arguably endemic proportions.

The Indian case study provided varying reasons for its "peripheral" entry into privatisation. Besides the common developing-country factor of inadequate state funding for the financing of infrastructure development, privatisation also proffered a solution to the low levels of tariff-collection that pervaded WSS delivery. Corruption was rife in some of the government organisations that provided WSS, and privatisation was seen as a possible solution to this problem, which would increase the accountability of the service provider through strong, external regulation.

The reasons underpinning the Karachi privatisation attempt, parallel that of Buenos Aires. Both were large metropolitans and Karachi's WSS services were also provided by an ailing and bloated public sector organisation. Although World Bank officials assessed customers as having apparently high willingness-to-pay (WTP) because of the tariffs paid to private small-scale vendors in areas that the municipality did not cover, this was only out of necessity and the urgency for WSS services. Karachi also faced an infrastructure crisis, which could not be adequately dealt with by the current municipal service provider. Privatisation was seen as the only immediately realisable solution to this problem.

The common thread running through the reasons underpinning the privatisation option in South Africa, is also embedded in the lack of finance. The Dolphin Coast faced a crisis that emerged swiftly, with the amalgamation of a former well-functioning municipality with neighbouring, poorer communities, who had poor or no access to WSS infrastructure and low ATP's. It also experienced a high urban immigrant population, who required access to basic services. With low credit-ratings from banks to borrow funds for infrastructure development, the Dolphin Coast municipality saw no

immediate alternative but to bring-in the private sector to counteract the burgeoning situation, because the private sector had the immediate access to infrastructure finance.

The reasons underpinning Stanger and Newcastle's discussions on ushering-in the private sector, are similar to that of Dolphin Coast. Although Estcourt stated that it did not require private sector assistance currently, the evidence from the case study indicated that it had, in fact, already entered into a partnership with the private sector with its pre-paid water meter system.

As in the South African case and arguably most developing countries, there is a lack of municipal funds to finance the vast backlogs of WSS infrastructure. The lack of appropriate supporting institutions in developing countries and comprehensive feasibility studies investigating private sector participation suitability, suggest that such countries do not provide the facilitative environment that privatisation requires to be successful in its implementation and sustainability. This is especially evident in non-metropolitan municipalities, which lack the economies-of-scale that an large affluent customer base would provide.

Thus, the reasons for privatisation differ globally, depending on the socio-economic status of countries. The English study provides evidence that privatisation was used as a mechanism to leverage efficiency gains. The Buenos Aires, Indians, Karachi, and South African studies provide evidence that privatisation was chosen as an option to mitigate WSS infrastructure deficiencies.

In the English privatisation, although the WSS infrastructure required some degree of rehabilitation, there still existed a comprehensive spread of WSS infrastructure. As a developed nation, the English customers also had a higher ATP for WSS services in comparison to the developing nations. With the combination of the existing, more comprehensive WSS infrastructure and high ATP's of customers, the English privatisation case had a greater chance of succeeding, when compared to the Buenos Aires, Indian, Karachi, and South African examples. These latter, developing-nation cases, are plagued with the two-fold combination of a significant WSS infrastructure backlog and low ATP's of customers. These developing-nation studies have provided

evidence that this combination of factors, generally do not underpin a successful privatisation attempt.

10.1.2. The Transition Period into Privatisation

The case of England is arguably an example of successful privatisation. The transition occurred over a twenty-year period in a phased manner. The regional municipal WSS providers were initially corporatised to become public limited companies, and this was followed by full privatisation, twenty years later. It provided an extensive period for business principles to be effected, including retrenchments, which were conducted under *public* ownership. The opposition to the retrenchments was less than if it had occurred in private hands, as profit-incentives would not be viewed as the driving force, but sustainability of the operations.

The Buenos Aires privatisation was achieved over a very small period. Considering the crisis that it faced, which was compounded by a period of prolonged hyperinflation, this was understandable. Although privatisation attempts were initiated in the 1980's, these attempts were thwarted by significant opposition at that time.

The emergence of privatisation in the Indian case, has been slow, as there has been considerable opposition from some state bureaucrats that are focused on keeping the power that WSS service provision brings, in their hands. These privatisation cases have been piecemeal, with there being no evidence of any financial risk from the private sector.

The Karachi case parallels that of Buenos Aires, with the proposed introduction of privatisation occurring over an insignificant period to counteract the WSS crisis. The assistance of the World Bank was sought in easing Karachi's Greenfield entry into privatisation.

In the South African case, at a national level, private sector options were first *officially* discussed in its Reconstruction and Development Plan (RDP) policy document in 1994. However, this reference to private sector assistance was found in the rubric of references to state-led initiatives. With the increasing role of the private sector in WSS

provision under the auspices of the RDP, national government released a document that officially revealed its increasing dependence on private sector resources. With the introduction of the neoliberal Growth, Employment and Redistribution (GEAR) economic policy in 1996, this firmly entrenched national government's adoption of privatisation options to fast-track service delivery. It was about a year later, that privatisation options were discussed at the Dolphin Coast.

The Dolphin Coast, in comparison with other municipalities, had begun outsourcing some of its services about a decade prior to the WSS privatisation. This staggered entry into privatisation at a local level, facilitated a greater acceptance of the WSS privatisation, initially.

The period of transition from the public sector provision of services to privatisation has significant implications for privatisation success. Privatisation attempts in developing countries have occurred rapidly, and comprehensive long-term feasibility analyses to assess the suitability of the private sector provider in WSS delivery, have been inadequate.

The development of privatisation at a global level (see Chapter 2) reveals the historical strength of the state, particularly in the developed nations, before the private sector was sought to bring-in efficiency gains. The case studies have shown that rapid privatisation, without public support and consultation with relevant stakeholders, will not achieve the envisaged levels of success and sustainability of the operations.

Public support and tariff-collection from the indigent, who constitute the majority of the citizens of developing nations, are interlinked. The indigent are less likely to pay for WSS services, if they see the private operator as being unreasonable in setting high tariffs. The Dolphin Coast case study survey in Chapter 8 on public support for privatisation provides evidence of this.

The entry of privatisation paradigms into a country should occur over an amicable period allowing for comprehensive stakeholder participation and consultation, and providing an enabling environment for privatisation to occur. Phased privatisation through the intermediate stage of the corporatisation of the service in public sector

hands, provides a longer period for public and other stakeholder support to be procured for privatisation. It also provides a large enough window period for applicable localised legislation and feasibility studies to be conducted on the suitability of any privatisation model.

10.1.3. Public Support for Privatisation

The support for privatisation in the English case was from approximately a quarter of the WSS customers, implying that the privatisation went ahead without significant support from the public. However, later on, post the privatisation, nearly half of all customers had indicated their approval of the privatisation of the WSS services. With a relatively acceptable level of satisfaction from customers, their WTP for WSS services was high. This means that tariff-collection was adequate enough to operate a successful WSS system and generate a significant profit to the private operators.

The Buenos Aires privatisation proceeded without any amicable public consultation. Due to the urgency facing the municipality, privatisation seemed to be the only option, regardless of public opinion.

The Indian examples of privatisation have indicated that there was an initial apathetic involvement from the public. However, with the increasing globalisation of anti-privatisation coalitions, there is a stronger civil sector disobedience that is rising against privatisation endeavours. Their effect on the Indian case, is still too early to gauge.

For the Karachi case, there was initially firm opposition to the privatisation by the public. This resulted in the formation of a special privatisation committee to investigate the possibilities of a range of private sector options that would placate the public's concerns. The poorer communities saw privatisation as not being beneficial to them, as there was no apparent special indigent tariff policy highlighted in the privatisation discussions.

The Dolphin Coast privatisation reveals that there was some degree of buy-in from the public prior to the privatisation due to the municipality hosting community privatisation discussion workshops. However, three years after privatisation, with the increasing

tariffs, the public support for the privatisation has dwindled. Post the privatisation, more than half of all customers surveyed felt that the service should be in municipal hands.

The Stanger case provided a unique opportunity to gauge the opinion of the public on privatisation, before it had occurred. An overwhelming majority of customers (97 percent), preferred WSS services to be left in municipal hands. They were also happy with the tariffs that the municipality charged. In Newcastle the public support for privatisation was low. Estcourt had a slightly stronger case for privatisation support from the public.

The evidence provided by the case studies in developing countries, reveal that public support for privatisation is minimal. Even in cases where there might have been initial support from the public for any privatisation endeavour, this has rapidly decreased after high tariff escalations by the private sector provider. This is in contrast to the English case, where the public's support for privatisation has *increased* after privatisation. If the public's opinion is used as a parameter to assess the success of privatisation, then the case for privatisation in developing nations is not substantive.

The buy-in of the public is vital to the success of any privatisation, as dissatisfaction with the WSS services or the tariffs, is likely to have a negative effect on tariff-collection. (See Chapter 1 for a discussion of the vicious cycle effect in South Africa.) Regardless of the ATP of customers, their WTP would have significant effects on the sustainability of the private operations. Considering South Africa's culture-of-entitlement amongst some of the indigent, customers may refuse to pay for WSS services, *despite* their ability to actually pay in some cases. Without the support for this transition towards the private sector from the general public, the likelihood is, that there would be less urgency from customers to pay for services. The potential then exists for the culture-of-entitlement situation to be exacerbated. The public view the provision of essential services as a democratic right. However, this also needs to be balanced with the sustainability of WSS provision. Cognisance must be taken that, in the case of municipal service provision not being sustainable, other forms of service provision would have to be implemented, regardless of the public's veto, as they are ultimately affected by the service's sustainability.

10.1.4. The Role of the State in Privatisation

The English privatisation indicated that initially, the state did not seek any buy-in from the public. The state had also failed to assess alternative options to the full divestment alternative that it had chosen. However, it designed adequate legislation to govern the privatisation of WSS, with an extensive focus on institutional mechanisms such as regulation.

The Buenos Aires privatisation revealed that the state had not developed any comprehensive legislation to facilitate the entry of privatisation into the country. The state was also guilty of bypassing the regulator on major tariffing issues, post the privatisation, which considerably weakened the credibility and powers of the regulator.

The Indian case study reveals that the state has only set-up a national institution to investigate the possibilities of privatisation. Its legislative framework governing privatisation at a national and municipal level, is still in its developmental stages. Without a legislative framework for privatisation, this does not provide a facilitative environment for its initiation.

The Karachi case study indicates that the intended privatisation of its WSS services was swift, with the state acknowledging its lack of experience in privatisation. To counteract this knowledge gap, it sought the institutional assistance of the World Bank to manage the privatisation process. The state also displayed its institutional weakness in terms of privatisation, as it was willing to create a very monopolistic environment for the prospective private operator, by wanting to set soft financial responsibilities for the private operator in the privatisation.

In South Africa, at a national level, the state has taken a consultative approach to procuring the buy-in of all stakeholders in the privatisation process. It has been committed to working towards an effective strategy for promoting private sector participation delivery. Additionally, it has created and billed the relevant legislation and guidelines on private sector participation implementation strategies. In comparison to other developing countries, South Africa's role in attempting to procure buy-in through a stakeholder participation process and the development of a facilitative environment

from a legislative perspective, provides evidence that South Africa has taken a more structured (but also swift) approach in easing in the privatisation paradigm. (See Chapter 7 for a discussion of the South African legislative context.)

White Papers¹⁰⁸ on these strategies have been circulated as drafts for comment and input before they have been passed in parliament as Acts. In effect, due to the covert nature of South Africa's past apartheid government, the present government's strategy of consultation and grassroots-level participation is exemplary in comparison to the other developing-country case studies that were investigated.

The South African national government has provided very specific legislation pertaining to private sector participation in the different areas of community service delivery and has invited international experts to assist in private sector participation strategies. The state has set up national public private partnership (PPP) vehicles within most of its ministries, which includes the PPP unit under the auspices of National Treasury, and the Municipal Infrastructure Investment Unit (MIIU) within the auspices of the Department of Provincial and Local Government. The MIIU has been the driving force behind the process of private sector participation in municipal services. These vehicles essentially bridge the gap in privatisation knowledge that is prevalent in municipalities.

The South African national government, under the auspices of the ruling political party, the African National Congress (ANC) initially campaigned on a nationalisation agenda before embarking on a more neoliberal economic strategy later on. This had implications for private sector participation within its various organs of state and municipal authorities. Concomitantly, the South African government has been contradictory in passing various legislative frameworks in parliament, which initially promulgated the state as being the preferred vehicle for the delivery of services. Its subsequent changes to legislation and the establishment of institutional networks to deal with this new macro-economic paradigm shift towards private sector delivery, has resulted in disillusionment from former union allies, as well as some public sector employees.

¹⁰⁸ These are draft policy papers that are circulated by national government for stakeholder comment, pertaining to proposed legislation that has not yet been passed by national government.

The unions have provided a formidable opposition to the private sector provision of former municipal services. This has resulted in the development of an agreement, between the government and the unions, which has disabled the process for private sector participation in municipal service provision, to a large extent. (See Chapter 7.)

The South African national government (as with other developing countries included in this study) has failed to make a comprehensive assessment of the effects of private sector management in the WSS sector. Much of the empirical evidence has revealed that privatised WSS contracts have proven to be fraught with problems of corruption and the pursuit of profit-maximisation by the private sector. The empirical and case study investigations provide extensive evidence of questionable practices by the private sector. These include the consistent under-pricing of tariffs in tender bids, tariff escalations that exceed inflation, non-committal policies for the indigent, rent-seeking by international private sector lobbies, and poor regulation in developing countries. The empirical evidence on private sector participation in WSS has concomitantly been more negative than positive. (See literature survey in Chapter 2.)

The South African national government did not explore alternative options, which would be more applicable to the South African situation or that of a developing country. (See Chapter 11 for a discussion on these options.) The government saw an immediate need for the financing of its WSS infrastructure backlog, which seemed only realisable from the private sector in the short-term, and more specifically, foreign transnational service companies (TSC's). Whilst this urgent need for immediate financing is a reasonable argument to bring-in the private sector, seemingly in the lack of other immediate options, the swift transition of the government from nationalisation to a neoliberal strategy, indicates that there has not been much attention given to alternative options. Some members of the opposition also view national government as being under the influence of the World Bank, which generally promotes a neoliberal approach to service delivery.

There has also been sufficient evidence to indicate that most of the developed world achieved its development objectives over an extensive period under state-led initiatives. It was only once their development objectives were met, that the governments of

developed economies changed their policies to facilitate a more market-based economy. (See Chapter 2 and empirical study on the English privatisation in Chapter 5.)

The Dolphin Coast case was unique with regards to the role of the state at a local level. It had a strong, cohesive council with charismatic leadership. It also had significant national government support, both financially and institutionally.

The Stanger case study indicated that even though privatisation of the WSS service had been provisionally approved by the municipality, most councillors and officials did not have an adequate understanding of privatisation mechanisms and how it could benefit the municipality.

The case study of Umgeni Water provides evidence, that with the employment of economies-of-scale that are created through regional areas of service provision, and the vertical bundling of services like bulk water provision and end-customer service provision, ex-ante costs can be minimised. This case study also shows that by vertically *bundling* bulk water and water service provision delivery components in WSS within the vehicle of a corporatised institution, allows for a state agency to be a sustainable WSS provider. This enhances the economies-of-scale, which is also can leverage larger areas of service provision.

Thus, one of the important factors in ensuring seamless private sector participation, is the role that the state plays in easing-in this paradigm shift. There has to be participative involvement at a national, federal and local level to ensure that reliance on the private sector is succinctly interwoven into the fabric of all tiers of government, if the privatisation route is chosen.

However, in hindsight of the Dolphin Coast experience, the evidence indicates that both national and municipal governments have been too swift in turning to the private sector to alleviate the challenges that they face. Although it had competent officials, the Dolphin Coast did not account for the lack of economies-of-scale to ensure adequate regulation and the low ATP's of the indigent, or the facilitation of a sustainable service for the private sector, without the high risk of commercial failure. Such knowledge could have been learnt from the experiences of other countries that had undergone

similar service delivery changes with commonalities in their external environments. It is arguably likely that if Umgeni Water, being the bulk water provider, had won the tender as the WSS *service* provider, the synergies that could have been generated, would have rendered Umgeni as being more likely to achieve sustainable WSS delivery at Dolphin Coast, than Siza Water Company (SWC).

10.1.5. The Opposition to Privatisation

Despite privatisation initially being opposed by parliament, later on, there was minimal opposition in the English case. The English case also provides evidence of a corporatisation phase occurring whilst the service was still in public sector hands. This meant that most of the retrenchments would have occurred in this phase. As retrenchment issues are rated highly on the agenda of the arguments of unions who oppose privatisation, this argument was considerably weakened by the restructuring occurring in public hands.

In the Buenos Aires concession, the unions proved to be at the opposite end of the spectrum in comparison to the strong South African unions. The Buenos Aires case saw unions being bought through rent-seeking means, *even* with large-scale cuts to its workforce. Such a possibility is not foreseeable in South Africa considering the unions' strength and almost unflinching commitment to its members in South Africa.

As the Indian case study analysis has revealed, the unions are strong only in certain areas. Unions have localised areas of opposition, but there is no national cohesiveness like the anti-privatisation campaign led by the South African Municipal Workers' Union (SAMWU) in South Africa. India's private sector participation campaign is actually debilitated more by the rent-seeking of bureaucratic politicians than through any large-scale national union opposition. These politicians leverage the WSS provision as a source of power for their own self-benediction.

In many countries, WSS privatisation has been stopped or impeded, but not through union intervention at a national level. In Karachi, the unions challenged the private sector participation and won the case in the High Court. However, this was not due to union opposition on an ideological stance against privatisation, as there were indications

of large-scale retrenchments of municipal employees in the imminent privatisation. Effectively, the union had a legitimate reason in opposing the privatisation based on these intended retrenchments. The actual private sector participation *strategy* for Karachi was also extremely weak, with almost no capital investments required of the privatising entity, and the state standing as a full guarantor for the proposed concession. The risk of commercial failure of the prospective private sector operator had been mitigated. The Pakistan High Court ruled in the unions' favour only because of this weakness.

The unions in South Africa, especially SAMWU, occupy a traditionally strong position in South African political environment. (See discussion in Chapter 7 for a discussion on the power that unions have in South Africa.) Traditionally, SAMWU, under the auspices of the union coalition body, the Congress of South African Trade Unions (COSATU), has been part of the tripartite alliance in conjunction with the Communist Party and the ANC, who collectively took a unified stance in their opposition to the previous apartheid government. As a result, there are many ex-COSATU members that occupy high positions of office in the South African government. It is this link with the ANC government that has provided the impetus for COSATU to become an extremely powerful governing union body. It has a very strong network of members and affiliates (especially with its SAMWU affiliate) and has the support from labour-based organisations and non-governmental organisations (NGO's). It also developed a high institutional capacity during its opposition to the apartheid government, which it currently sustains. SAMWU also has strong links with Public Sector International, which is a research organisation based in England that provides empirical evidence of privatisation failures globally.

With the election of a democratic government, SAMWU's role has not streamlined into only focusing on the protection of the rights of its members. It has adhered to the "struggle-mentality" developed in its previous role and continues to be actively involved in municipal service delivery options, for which it arguably has no supportive mandate. The case of the Dolphin Coast privatisation provides evidence of a lack of expertise, as when SAMWU was requested by the municipality to provide a suitable alternative to the PPP arrangement chosen by the municipality, SAMWU proposed that the municipal WSS department be restructured towards more focused service delivery.

Effectively, the restructuring option provided by SAMWU was one-dimensional and failed to address the immediate need for sources of finance for urgent infrastructure investment to combat backlogs.

From the case study analyses, it is evident that this strong stance taken by SAMWU is not a universal union phenomenon. South Africa's union opposition is essentially a solitary example of national unity and power when compared globally to its counterparts, having successfully temporarily impeded the entry of further private sector participation into WSS service delivery. Some quarters arguably see this as an ideological stance as encapsulated in the words of Mamphela Ramphele, ex-Vice Chancellor of the University of Cape Town, and now the Managing Director of one of the World Bank directorates, when she asserts against the unions: "Why protest *us*? *We* are now the establishment. And that is how it should be!"¹⁰⁹

Ostensibly, the union stance taken against privatisation in South Africa arguably seems to be based on *unsubstantiated* reasons. The case of Dolphin Coast has provided evidence that the rights of employees affected by privatisation were absolutely guaranteed. With South Africa's WSS infrastructure backlog, the likelihood is that employee numbers would increase rather than decrease, so retrenchment is unlikely. Even the Stanger municipality, which has excess staff in comparison to global employee benchmark norms, would not have to retrench staff. With extra financing, there would be a considerable increase in the customer base with increased coverage of services after demarcation. This would therefore warrant an *increase* employee numbers. The case of Buenos Aires (Chapter 5) also provides evidence of an eventual increase in employee numbers in the long-term. This only occurred after financing had been procured for infrastructure expansion. In South Africa, the unions may have inadvertently prevented employment opportunities that could have been generated, by having opposed privatisation, which *may* have eventually provided similar opportunities as the Buenos Aires case.

Chapter 7 also reviewed the opposition stance that has been taken by some researchers against private sector participation in WSS provision. Some of the research that they

¹⁰⁹ See Patrick Bond's (2001) work: "South Africa's Elite Transition from Racial to Class Segregation".

have provided as evidence against private sector participation highlights the need to integrate social research with technical research, to facilitate a more comprehensive and holistic view in major feasibility studies for infrastructure projects. Although these opposition researchers play a vital role as unofficial regulators of private sector projects, the coalition that they have formed with union bodies and international anti-privatisation organisations has become an alliance that has successfully slackened (or stopped) the pace of privatisation. Notwithstanding the lack of evidence that underpins some of their arguments, they have the power to mobilise communities against privatisation and concomitantly decrease tariff collection. Effectively, they have *become* one of the factors impeding the success of any privatisation attempt.

10.1.6. The Pilot Project as an Indicator of Success

The Indian case has had small-scale partnerships that were instituted in WSS provision. However, these partnerships were not necessarily with the private sector. As these cases are quite small, and involved the employment of economies-of-scale through the amalgamation of neighbouring municipalities, it is likely that these successes could be repeated.

Evidence from the Karachi case study and that of Buenos Aires also reveals the attention and support given by the World Bank and their respective national governments, would not be sustainable in other successive projects.

As the Dolphin Coast case study has illustrated, the council had dynamic leadership, focused on comprehensive and swift service delivery. The municipality's Chief Executive Officer (CEO) was the former CEO of the provincial local government association and was renowned for his astute leadership. (He has now been headhunted by a private sector management consulting company to consult back to local government.) The Dolphin Coast also employed an official who was adept at sourcing funding and ensuring delivery at a pace that far exceeded his counterparts in other municipalities. The council's cohesion was, in effect, the complete antithesis of many other municipalities in South Africa, where council resolutions go through extended debate, voting and vetoing, resulting in slow reactions to municipal needs.

The Dolphin Coast had already embarked on its own small-scale neoliberal exercises by outsourcing many of its other services for over a decade prior to the concession. Added to this, is the institutional support, funding, and feasibility studies provided freely by the Development Bank of South Africa and the MIU. As feasibility studies are highly localised and not generically transferable, the issue is, as to whether such funding and external institutional support is sustainable for every municipality that embarks on a similar strategy. In essence, the Dolphin Coast had the more enabling local environment within which the concessioning of its WSS services could occur. The Dolphin Coast was not indicative of the average municipality in South Africa. To use this municipality then, as a generic pilot test to predict the success or failure of successive private sector participation WSS projects in other municipalities, would have been short-sighted, had the project actually been a success. The enabling factors that the Dolphin Coast possessed was not prevalent in many other municipalities.

However, the Dolphin Coast privatisation project has proven to be a unsustainable, resulting in significant municipal intervention. The concession has been saved from market failure by the municipality, arguably in order to mitigate the strong stance it took in “marginalising” any opposition to its neoliberal exercise and to ensure continuity of essential service provision. If this was a normal commercial venture and a private company had failed under the normal mechanisms of market failure, the company would *not* survive. However, due to the essence of WSS delivery being a natural monopoly and a merit good service delivery system, more negative effects would have occurred if the municipality had not decreased the lifeline tariff from ten to six kilolitres and renegotiated the lease payments to smaller amounts. SWC continues to survive because of the essential nature of its service delivery, its natural monopoly status, and the “saving grace” exercise of all tiers of government in ensuring its survival. Essentially, if the Dolphin Coast concession failed, the likelihood of privatisation attempts in other similar-sized or non-metropolitan municipalities in South Africa, succeeding, is highly improbable. Thus, it is only in the case of failure that the WSS privatisation pilot project serves as a good indicator of the probable failure of future projects, as the enabling environments of future projects would undoubtedly be less supportive in comparison to the pilot projects.

Many governments test the effectiveness of new macro-economic strategies through pilot projects. However, in choosing these pilot projects, they tend not to choose the test subject that is indicative of the average case. General conclusions surmised from the pilot project cannot be applied to successive projects. Conclusively, for WSS privatisation, successful pilot projects are not suitable indicators of success for future projects.

B. Privatisation Efficiencies and Ethics

10.1.7. Financial Issues

The English case indicates that tariffs were increased prior to privatisation and were essentially manufactured increases. Post the privatisation, there was an escalation of tariffs that exceeded figures when the service was in public sector hands. However, with the efficiencies generated by the private sector, a 12 percent reduction in tariffs was instituted, after a period of ten years.

The Buenos Aires case also provides evidence that tariffs were increased just prior to the handover of the WSS services to the private operator. Once the private operator took-over the service, the tariffs were decreased. These deliberate manufactured increases and decreases are seen as mechanisms of procuring the public's buy-in, as the impression given, is that the private sector provides cheaper services than the municipality, which would justify its entry. Later-on in the concession, it was found that the tariffs charges to the indigent were too high after the privatisation, and a new tariffing mechanism of cross-subsidisation had to be instituted to facilitate the low ATP's of the indigent customers.

The Indian case study has revealed that the culture-of-entitlement still prevails, even after fifty years of independence from colonial rulers. The implications are, that this syndrome is *not* based on an *immediate* reaction to a post-colonialism era, but on the actual ability-to-pay (ATP) of the indigent. If the Indian experience is a reflection of what South Africa can expect, then the expectations are that this culture-of-entitlement will not dissipate in the short-term, as long as poverty still prevails in significant proportions.

South Africa, like other developing countries, has a poor culture-of-payment for services. This can be linked to a combination of factors. A culture-of-entitlement pervades some of the formerly disadvantaged in South Africa. Many indigent people believed that with the demise of apartheid, they were due essential service benefits. (See Chapter 1 for a discussion on these expectations and a discussion of McDonald's argument in Chapter 7.)

The motives for public and private sector service delivery are divergent. The public sector is morally and constitutionally bound to provide WSS infrastructure and services to all its citizens, that is, it has a development-incentive, whilst the private sector follows a profit-maximisation incentive. If one compares the case of Stanger (municipal provision) and the Dolphin Coast (private sector provision), they both charge equivalent tariffs now, but whilst the Dolphin Coast has a tariff-collection rate of 84 percent, Stanger has a 50 percent margin. Stanger effectively provides its WSS services at a tariff that does not reflect its actual cost. The motive behind Stanger's low tariff-collection rate is not based on any lack of efficiency, but highlights the development motive of the municipality.

Whilst this soft municipal credit-control practice is not sustainable and does not facilitate network infrastructure expansion, it does indicate the difference in motives that exist between the public and private sector. Essentially, in these case studies, the municipalities' inability to ensure a higher receipt of tariff payments, is indicative of their development approach to the indigent and not an indictment on their abilities. The welfare motive that has made Stanger's WSS municipal operations unsustainable is a microcosm of the challenging decisions that face most municipalities in South Africa.

The other possibility is that the indigent *actually* do have too low ATP's, which means that privatisation in any financial-equity form, without the economies-of-scale that a larger paying customer base would provide, is susceptible to imminent market failure in South Africa's smaller municipalities.

South Africa faces a WSS infrastructure investment crisis, in urgent need of large-scale financing. Faced with negative credit histories, these municipalities have been forced to seek the assistance of the private sector to manage WSS systems. This has emerged as

the common argument to promote a move towards private sector provision in all developing country case studies. Even in the case of Estcourt (see Chapter 9), which focused on municipal service delivery, it inadvertently brought-in the private sector by negotiating a pre-paid water meter system contract with a private sector operator, effectively creating a PPP.

In all cases of privatisation in developing countries, there have been rapid, manufactured, or unacceptable increases in tariffs for WSS. This has come under criticism by many opponents of privatisation. This trend of “manufactured” increases effected by the municipality prior to privatisation, is so that the successful private sector bidder is portrayed as a fair service provider, when it decreases the WSS tariffs immediately after the handover of the WSS operations. This is essentially to deceive the public and placate any initial concerns about the private operator increasing WSS tariffs. It is essentially a questionable method of generating the impression amongst the public that the private service provider is development-orientated in setting tariffs, due to the initial decreases in tariffs that they bring.

The low tariffs submitted in winning tenders in developing country case studies, and the concomitant extraordinary review of tariffs (see Chapter 5 on Buenos Aires and Chapter 8 on the Dolphin Coast) suggests that any privatisation arrangement cannot work without some assistance from the state. This is a result of a combination of low ATP's by the poor and inappropriate forecasting methods by the private sector. These are used to set tariffs initially, or a deliberate attempt to win the project by tendering low tariffs.

In the case of non-metropolitan municipalities, the private sector cannot provide a successful service provision in South Africa, without having to escalate its tariffs to levels that are unaffordable to the indigent. The evidence indicates that private sector providers cannot generate significant savings from efficiencies and synergies to augment lower tariffs for the poor.

The infrastructure financing issue has been the only substantive argument in support of the private sector participation in WSS service delivery, which is evident from the studies. The sustainability of WSS services in municipal hands is jeopardised by its welfare approach with regards to tariff-collection. This is not, however, indicative of a

lack of institutional capacity in South African municipalities to actually deliver WSS services.

10.1.8. Privatisation Efficiencies

The English privatisation did not indicate any major efficiencies that were brought-in. However, the WSS infrastructure that was in need of rehabilitation, was attended to amicably. Annually, there is an estimated £3 billion that is invested in the WSS system for capital projects, and operations and maintenance.

For the Buenos Aires case, the privatisation efficiencies have been significant. There has been an extensive increase in infrastructure and customers served. Tariff-collection has also increased, although this is not without controversy, as the indigent are finding these account payments difficult.

The Dolphin Coast case indicated that there has been a marginal increase in WSS infrastructure. However, technical problems with the WSS system did decrease after the privatisation. Water losses also decreased significantly, however, this includes the collection of tariffs that were previously unaccounted-for, in municipal hands. The evidence also reveals that customer relationship management does increase with private sector management in comparison to the municipalities.

The case studies have indicated that in the South African situation, there is no evidence to prove that the private sector generates significant efficiencies in comparison to the public sector. In South Africa, as in concessions elsewhere in the developing world, case studies have revealed that the private sector has emerged as a provider of WSS services, due to a lack of municipal funds to finance the infrastructure backlog. In South Africa, these public sector WSS providers are generally non-metropolitan municipalities that have poor credit ratings with banking institutions. South African banks are averse to the high risk that lending finance to municipalities might entail. Thus, the argument of pro-private sector supporters that privatisation would provide a more efficient and sustainable WSS service, is not a *primary* motive behind this transition to private sector delivery.

What has become evident, is that facilitative and enabling conditions of the internal and external environments are the key to a sustainable and effective WSS delivery. The Umgeni Water case has illustrated that the corporatisation of its operations, and the employment of economies-of-scale can result in effective, sustainable WSS service delivery, whilst still maintaining a welfare approach to the indigent, and keeping the entity in the public domain. The Umgeni Water case study also provides evidence that the efficiencies extracted from the corporatisation of a public sector entity can achieve both, healthy organisational corporate governance sustainability, as well as maintain a focus on the welfare of the indigent. They are not necessarily polar objectives of an organisation, as the Umgeni Water case study has illustrated.

However, there are *some* indications that the private sector may be more efficient in certain areas. From a productivity point of view, in comparison to the general municipality, the private sector employs fewer people. Stanger has over 8 employees per 1000 customers, whilst the Dolphin Coast concessionaire has just over 4 employees per 1000 customers, a difference of about 100 percent. Similarly, OSN in Buenos Aires had a bloated staff contingent in relation to global staff benchmarks. The implications are, that a limited number of staff have a greater responsibility in the operation of the WSS system. Concomitantly, the Dolphin Coast and Buenos Aires case studies have provided evidence of greater training and development for employees, as well as greater opportunities for multi-skilling.

There has been evidence that private sector management can bring about some degree of efficiency through quality management in some cases. The case of Buenos Aires provides sufficient evidence that innovation was also key to improving the WSS system, without necessarily requiring initial finance to ignite the change. Efficient inventory control, the investigation and disconnection of illegal connections, centrally-managed procurement systems, and improved customer management systems, are not capital-intensive activities, and were used by the private operator to achieve greater efficiencies through decreased expenses.

The evidence from the Dolphin Coast case study has revealed that there have been no new technologies generated by the private sector provision of WSS. The learning curve has actually benefited the foreign private sector operator, rather than there being any

empowerment of local companies. Effectively, the private sector operator has not generated greater delivery with the same amount of funds as the municipality. Extended coverage has been generated only because of extra finances accessed by the private sector operator in comparison to the municipality. Concomitantly, the Stanger, Estcourt, and Newcastle municipalities are not lacking in efficiency due to any incompetence. Their efficiencies are retarded by the lack of finance to rehabilitate their existing WSS networks and plants.

The perceived efficiencies of WSS privatisation are not discernable in the South African context. What does emerge, is that efficiencies are mainly dependent on financing, which is a constant issue that emerges in this study.

10.1.9. The Role of Regulation in Privatisation

The English divestment provided evidence of strong regulation, which was sustainable due to the economies-of-scale that were exploited by using three national regulators for each aspect of the service. The regulation was independent and well-funded, which underpinned its effectiveness. However, the English divestments were viewed as being over-regulated by privatised companies. This has not had any long-term negative effects, although this is disputed by some of the private WSS companies in England.

The Buenos Aires privatisation provided evidence of weak regulation, which was superceded by state intervention. The state chose to bypass the regulator in granting financial latitude to the private operator of the concession. This practice was effected a number of times during the first ten years of the thirty-year project. There has been a significant degree of regulatory evasion, especially with regards to the relationship formed between the state and the concessionaire. With poor regulation, the concessionaire reneged on many contract compliance clauses, and the effects were negative for poor people. In addition, the concessionaire made unacceptably high profits, not only for such an early period in the concession (concessions are designed to make a loss in the first seven years of commissioning), but throughout any period of the concession.

The Dolphin Coast case provided evidence of under-funded regulation, due to the privatisation being too small-scale to facilitate an adequate regulatory body. This regulation has been reactive, with the main criticisms of the concessionaire by the regulator, focusing on technical issues. In resorting to the extraordinary review of the tariffs and major amendments to the terms of reference of the contract between the municipality and the regulator, this indicates that the role of the regulator is that of a perfunctory one.

In all the case studies on private sector participation in developing countries, there is a commonality of poor regulatory mechanisms and structures with little real power to enforce contract compliance. It is only in the one empirical study analysis of the English divestment, that an effective regulator (in this case it was three, separate but cohesive bodies) was able to ensure suitable regulatory control and monitoring.

As smaller South African municipalities are considering privatisation in isolation from other municipalities, regulation would probably be fragmented and lacking any real strength because the economies-of-scale are not realisable. There is not enough money generated from the smaller concessions to support a comprehensive regulatory body. Besides other factors that are discussed, powerful and effective regulation is pertinent to ensuring the success of private sector participation.

For regulation to be independent and effective, it needs the finance and institutional capacity to monitor the private sector and ensure contract compliance. The single-municipality privatisation model that has been implemented at the Dolphin Coast has proven to be ineffective. At a global level, the regulation of private WSS operators has proven to be ineffective for developing countries. Conclusively, regulation is an important component of a successful privatisation in meeting the needs of society. This does not seem realisable in the present model of isolated non-metropolitan municipality private sector participation attempts in South Africa.

C. Globalisation Issues

10.1.10. Transnational Companies and Foreign Technology

Private sector innovation has proven to be effective in the Buenos Aires case. There have been technological improvements to the system, which were not investigated under the municipality's operations. These improvements were not necessarily due to new technologies being implemented, but rather, a tightening on the control mechanism in private sector hands. The major shareholder in the private sector consortium was a French transnational service company (TSC).

The Dolphin Coast case has provided no evidence of any technological¹¹⁰ innovations. Even from a technical point of view, SWC has been known to outsource much of its work to local companies, due to their lack of knowledge of the local network system and the intricacies that accompany the local socio-economic domain. Thus, it seems that the TSC is benefiting from the knowledge gleaned from the concession, rather than the local companies. Claims by the TSC of knowledge-transfer to local companies have been false.

Significant attention has been focused on SWC's "technologically-advanced" software customer management system. The case study has provided evidence that this system is essentially a simple spreadsheet system, with a "user-friendly" interface. South Africa has the intellectual capacity to provide software that can be specifically designed to integrate local peculiarities. (See case study on Umgeni Water in Chapter 9.) In contrast, SWC has to align globally generic-software to South African parameters. This software has proven to be defective or incorrectly used by SWC, as some people have received accounts from SWC, even though they are *not* customers. Customers in the Dolphin Coast concession complain about receiving incorrect accounts, and some former customers still receive accounts long after their services have actually been disconnected. This seems to contradict the superior management ability of the software system asserted by SWC.

¹¹⁰ Here, technology would refer to micro-issues such as the improved chemical treatment of waste-water, whilst technical issues would refer to macro-issues such as construction activities.

Ostensibly, there has been no evidence of any technological innovation by SWC that would be beyond the capabilities of a local company.

Besides the access to immediate external finance that such companies bring to developing economies, other arguments supporting their entry, include their supposed technological expertise and efficiencies.

Essentially, WSS is not a technology-specific service, that is, it does not require large-scale technological input to improve the quality of the service. South African technologies for treating raw water and waste-water have proven to be fairly advanced in terms of global standards. Not many countries (including some developed countries) provide potable¹¹¹ water through their infrastructure networks. The likelihood that South Africa needs foreign technology in its WSS system, is negligible. In fact, South Africa remains one of the most inexpensive countries globally, in the treatment of raw-water and waste-water. (World Bank Website 2000: www.worldbank.org)

10.1.11. Foreign Direct Investment

The English case reveals concessions on the part of national government, which sold assets at 10 percent of their value and writing-off debts, whilst providing rebates to the companies in the divestment of its WSS services. Considering that privatisation was supposed to *bring-in* money, these financial concessions are arguably a contradictory act of the government. When the divestiture actually occurred, there was significant opposition to the fact that foreign-owned entities had bought large shares in the privatised WSS companies. Ironically, seven of these ten companies are now marketing *their* services on the international market.

In Buenos Aires, the foreign direct investment (FDI) has been minimal in comparison to the profits generated and repatriated back to the parent country of the TSC. Most of the infrastructure has been financed by tariffs, rather than any initial equity-debt financing by the private operator. In effect, it is the customer who carried the burden for infrastructure expansion.

¹¹¹ Potable water is fit for human consumption.

In the case of Karachi, a supposedly “cash-strapped” government was willing to stand guarantor in the case of commercial failure by the private sector bidder, which creates speculation about the supposed lack of capital for infrastructure expansion. The Pakistani national and provincial governments were also amenable to writing-off existing debts in the sale.

As TSC’s expand their activities globally, the driving force behind their expansion is increased profits in the long-term. Initially it may bring-in monies from external financing mechanisms, such as the R7.2 million for the Dolphin Coast concession, but over a space of thirty years, this concession virtually guarantees a return of over 20 percent on total sales revenue. As the Dolphin Coast concession has been publicised as the R1 billion, a profit of nearly R210 million in current values, over the lifetime of the project, is envisaged. As SAUR is the majority shareholder of SWC, a major portion (R122 million) of this revenue would exit South Africa as a return on investments or dividends to the parent company. It is also highly unlikely that the SWC would have used equity-debt financing throughout the lifetime of the project to finance new infrastructure. Even with an upper capping limit of 15 percent on profits, there would still be a minimum net exit of about R87 million. The calculations used in this study, reveal that there is a greater likelihood of there being a revenue generation of about R2.2 billion over the thirty-year lifecycle, which would generate a profit on investment of R344 million for SAUR to repatriate to France.

TSC’s that do take-over the operations of a WSS service, provide the necessary funds for infrastructure investment on the proviso that the venture is commercially viable and that there is a low financial risk. In order to minimise this risk and ensure profitability, private operators are extremely efficient at ensuring high tariff-collections.

The need for infrastructure development and expansion often arguably exceeds the fiscal capacities of municipalities in developing countries. (This is disputed by some, as the discussion in Chapter 7 reveals.)

The South African national and local authorities have also indicated that they do not have the finance to fund any extensions of the WSS infrastructure backlog. This has

been the primary reason for its decision to investigate private sector options in service delivery.

As South African municipalities face fiscal challenges and lack the acceptable credit-worthiness to finance from banks for financial assistance, private sector funding options have been the prime motivators the promotion of privatisation.

One of the mitigating reasons provided by such municipalities, is that institutions bring-in much-needed FDI that would finance the capital investments for new infrastructure, rehabilitate the old infrastructure, and bring foreign wealth into the country. However, an assessment of the problems associated with FDI for WSS services, have revealed that they are more welfare-negative in the long-run than welfare-enhancing for any developing country. The Dolphin Coast case study provides in-depth financial evidence of this.

SAUR, the French WSS TSC, under the auspices of its subsidiary in South Africa, SWC, has not entered South Africa to exploit cheap labour and operating costs and then sell the majority of the goods to overseas markets. The TSC in this case, services a *local* market, so it is the finances of *local* people, which eventually exits the country through tariff-collection and finally repatriated as profits to the parent company.

Conclusively, FDI does have long-term negative effects for the WSS sector in South Africa, as there would be a considerable net exit of local currency. There is also evidence from the case studies that, besides placating immediate infrastructure needs at the beginning of a project, it is likely that customer tariffs will finance any long-term WSS infrastructure expansion. Whether the rejuvenation that FDI brings to catalyse initial WSS infrastructure expansion mitigates the exit of local capital, is beyond the scope of this study. However, as there are local South Africa companies, such as Umgeni Water, that do have the competency to arguably provide sustainable WSS services. If privatisation is the only short-term solution to meeting WSS challenges, than it would be better to utilise the services of local companies to prevent this loss of capital fro South Africa. Added to this, these local companies have the knowledge of the local environment that would add greater synergies to WSS provision than a TSC would.

10.1.12. Concluding Remarks

From the previous discussion, there has been no evidence of any major privatisation efficiencies or superior foreign technology that would be beneficial to South African communities. The TSC's that have managed South African private sector participation projects, have displayed a low-level of concern about the welfare of the indigent and their ATP's. There is also evidence that these TSC's are unaware of South African legislation governing privatisation, which has serious implications for the protection of community rights.

The evidence also indicates that there is minimal public support for the privatisation of WSS services in any form in South Africa. The transition towards WSS privatisation in South Africa has been swift, based on the urgency of funding required for infrastructure development. This has resulted in negligence on the part of national government in conducting comprehensive feasibility studies on the viability of WSS privatisation in South Africa. Although national government has been consultative in developing legislation, it has also completely transformed its original macro-economic strategies from a state-led focus to a privatisation focus with implications for service delivery. This polar change in macro-economic policy has resulted in negligible buy-in to privatisation from many stakeholders.

Added to this, is the considerable opposition alliance in South Africa to any privatisation endeavour, which has forced the creation of an extended and expensive process to be followed before any municipal authority can consider privatisation options.

The evidence also reveals that regulation from a global developing country perspective for WSS privatisation projects is fragmented, as well as lacking independence, and autonomy or power to ensure adequate contract compliance. Small-scale privatisations in South Africa also do not provide the economies-of-scale to fund adequate regulation.

The Dolphin Coast case, being a pilot project, and standing a greater probability of success, has been unsustainable under the normal mechanisms of the market, from a commercial perspective, with the municipality having to enact a major financial contract

amendment to ensure the continuity of the concession. This has been to the detriment of the poor, who now have to pay higher tariffs for WSS services. This pattern has been evident in all WSS privatisation projects occurring in developing nations. There has also been considerable evidence from the developing country cases that the indigent experience difficulties in paying for services, and thus the development role of the state is still very important.

The strongest case for WSS private sector participation occurring in South Africa is the immediate sources of financing that private sector companies provide to alleviate the WSS infrastructure backlogs. However, the cumulative evidence indicates that this financing mechanism only *postpones* the challenge of sustainability. The obstacles that the low tariff-collection from the indigent communities pose in trying to recoup or amortise initial costs, has proven to be a decisive factor in the failure of WSS privatisation in South Africa.

Thus, from the evidence generated by the empirical and case study analyses, it is concluded that private sector participation in South Africa's water supply and sanitation sector *cannot* ensure a sustainable service delivery in the long-term. However, this lack of sustainability in ushering-in the private sector, is specific to the cases of the municipalities being non-metropolitan in size. These smaller municipalities lack the economies-of-scale to facilitate the adequate provision of WSS services as well as generate an acceptable profit for the private operator. These economies-of-scale can only be provided by a large affluent community, which is realisable in a metropolitan municipality, which could subsidise the tariffs that are charged to the indigent customers. As the metropolitan municipalities do have the economies-of-scale, they do not face the urgent crisis of urgent WSS infrastructure financing that the smaller municipalities have to mitigate. Arguably, privatisation in the metropolitan municipalities is not necessary.

In suggesting that private sector participation in WSS delivery is unsustainable in the long-term for these smaller municipalities, this sustainability needs to be understood in context of the *current* lack of sustainability facing municipal provision. The dilemma faced by these smaller municipalities is whether to actually privatise their WSS services and *delay* the eventual lack of sustainability, which this mechanism brings. The private

sector option brings-in urgently needed finance for infrastructure backlogs, which would ensure the almost immediate extension of services to the poor. In municipal hands, there seems to be no *immediate* alternative sources of financing. Considering the negative health-related effects that the lack of access to adequate WSS brings, the current decisions that need to be taken by municipal authorities is at a critical juncture.

10.2. Recommendations

The preceding work has shown that the dilemma faced by municipalities with regards to the lack of sustainability that the privatisation of WSS eventually may bring. As the private sector option provides immediate sources of financing for urgent infrastructure provision, that seems unrealisable in the short-term with alternative options, solutions may have to be developed in tandem with a gradual privatisation process.

The following discussions focus on possible options that South Africa can consider in lieu of private sector participation in WSS provision in the long-term.

10.2.1. Promoting Economies-of-Scale

The Umgeni Water and English case studies reveal one of the key solutions to meeting the needs of the poor. Economies-of-scale can only be achieved through the formation of regional authorities and ring-fencing the WSS sector under a national network.

Umgeni Water has provided evidence that it is possible to achieve these economies-of-scale by working across larger areas. As long as, a large-enough affluent population with the financing ability to cross-subsidise poorer communities exists, and coupled with the total quality management systems that corporatisation brings, full-scale WSS infrastructure provision can be achieved. Umgeni Water has proven its success as a public sector utility vehicle and has won bids on the international market in North Africa, and has projects pending in India.

The English divestiture also reveals that prior to the actual divestment, there were ten regional public sector WSS authorities that were able to bring about parities in terms of WSS provision and access across all sectors. England initially made this option viable

by forming regional public limited companies with economies-of-scale, not just at a municipal level, but incorporating a number of municipalities under the auspices of one WSS provider in 1973.

In this manner, in England, rural areas with extensive areas that require network infrastructure, as well as sparse and poor populations, were subsidised by the greater economies provided by neighbouring urban-dwellers. Umgeni Water has also achieved this level of subsidised governance through its sale of bulk water to the major municipalities, thus cross-subsidising the capital investments required for infrastructure in rural areas.

In KwaZulu-Natal (KZN), regions can be divided into the following areas, to incorporate at least one major town or city in each jurisdiction. (The regions are found in Appendix 6, where the map of KZN and dashed lines demarcate the proposed regions): -

TABLE 10.1. PROPOSED AREAS

| Area | Major City / Town for Economies-of-Scale | Current WSS Board in Existence |
|----------|--|--------------------------------|
| Region 1 | Richards Bay , Empangeni | Mhlathuze Water |
| Region 2 | Newcastle, Ladysmith, Dundee, Estcourt | Uthukela Water (proposed) |
| Region 3 | Pietermaritzburg | Umgeni Water |
| Region 4 | Durban, KwaDukuza | Nil |
| Region 5 | Port Shepstone, Margate, Port Edward | Nil |

Source: Researcher's Analysis

Whilst Table 10.1. only provides a rough indication of the economies-of-scale that can be achieved through establishing dedicated WSS Boards, able to cross-subsidise WSS from rich-to-poor and urban-to-rural, a more in-depth study would need to be conducted on the actual boundaries and establishment of institutional requirements.

Added to this, is the fact that these WSS Boards also become highly specialised in terms of innovation for service delivery at a regional level. Whilst the current system sees

District Councils¹¹² occupying similar regions, they are all-encompassing in terms of service delivery; covering housing, electricity, and WSS, so specialisation is not achieved and the focus is too large. Some municipalities do not have the population to fund investment structures. Richmond (see Appendix 6) is one such municipality, which occupies an extensive area, but with a widely dispersed and poor, sparse population, which requires an extensive network.

South Africa is still in the developing stages of infrastructure provision. If such a system can be rolled-out nationally, then subsidisation can even occur at an inter-provincial level. A prosperous Gauteng province could subsidise a poor Eastern Cape through this, this has been achieved to some extent in the United Kingdom, through dedicated WSS authorities. Effectively the people of Gauteng still subsidise the people of the Eastern Cape through taxes, which are translated into a government grants for development funding. This transfer of subsidised monies is not seamless, due to the money that is utilised in the process, as ex-ante transaction costs.

The system ring-fences such funding at a sectoral level (meaning WSS only) to become financially sustainable. It also allows for the state to assess and benchmark one particular sector and establish success rates without the overlapping boundaries that emanate with subsidies from other sources of state income. It facilitates the more equitable management of services through specific variables, and the consumption of finances can be measured within each regional area and smaller areas by the regional WSS Boards.

10.2.2. One National Regulator for Water Supply and Sanitation

One national, dedicated WSS regulator can be established similar to the English system, except in this case it will regulate parastatal or public sector utilities. Many synergies can be exploited within one regulatory mechanism, including the specialisation of highly-developed personnel in areas such as drinking water inspectorates, water-way pollution inspectorates, distribution equities, tariff-setting, and regulation, etc.

¹¹² These are a conglomeration of municipalities.

With the present system of concessioning within one municipality and a loose amalgam of regulators as in the case of Dolphin Coast, a reactive, low-key, and powerless regulatory mechanism exists. With the advent of one national body, the possibility of regulatory capture effect is also greatly minimised.

Such a body could be self-funding through the WSS industry itself. Assuming that each municipality is able to fund similar amounts to the value of the R500000 a year that the Dolphin Coast concession monitoring programme costs and with a total of 843 municipalities (prior to demarcation, as this has now decreased), the national regulator can be managed on a budget of the resultant R400 million generated annually from all municipalities. (This is on the assumption that with demarcation, the monitoring fees are pro-rated on the population serviced within each municipality by the national regulator.) This is indicative of the synergies that can be achieved through economies-of-scale.

10.2.3. Developing Legislation to Involve Financing Institutions

The previous solution of a single national regulator, is however, a long-term goal. It requires extensive institutional and scenario-planning, as well as economic feasibility studies. Currently, funding is imperative for capital infrastructure investments to meet the urgent infrastructure backlog in WSS.

Whilst the regulation of banks and other financing houses are not within the scope and ambit of this study, it is imperative that local financing institutions assist in rebuilding the nation through the financing of municipal infrastructure.

Despondency in municipal financial circles makes it difficult to suggest that investing in better public services by banks may be part of the solution. Changing perceptions is probably vital to the solution. If the banks are willing to bankroll private utilities in WSS services, and Umgeni Water is able to obtain the best possible rating there is, in terms of its credit-worthiness, it indicates that it is not the WSS sector itself that raises alarm within banking circles, but the inability of the state to provide a financially sustainable service-level as a result of socially lenient credit-control policies.

Whilst development banks, unlike the commercial banks would be more open to financing development infrastructure, the buy-in from the commercial banks is still required, as the infrastructure backlog is too great to fund by the development banks alone.

Concomitantly, the communities' abilities-to-pay and willingness-to-pay is not the pertinent issue for banks, as these parameters are static, regardless of whether the service provider is a private or public entity. The banks need to be convinced that the state is able to ensure a return on any long-term investments. If Umgeni Water can achieve such revenue without marginalising its social responsibilities, it should be an indication to banks that such state-led projects are viable in the long-term.

The idea of promulgating legislation to force financial commitment from banking institutions is beyond the scope of this research. If the state looked at bank-rolling such projects through development banks, and success are sustained within a short period of time, then this should encourage the commercial banks to jointly finance the WSS sector alongside development banks. Guarantorship by a national government source would also be a probable solution to this.

10.2.4. New Modes of Tariff-Setting

At present, there seems to be a linear tariffing system. With great successes in information technology and management information systems, WSS authorities should look at multi-tier billing systems in a matrix form. This effectively means that a number of parameters should be linked to the tariffing system, which includes municipal evaluations of properties, as well as free water and tariff block systems. At present, all customers at the Dolphin Coast have access to this "free water" system, which is not really necessary for many of the more affluent households.

Thus, the authority should firstly set band-widths for municipal property values, and within each band, charge a per volumetric use as a sub-band. This could also be applied to other bands.

This is a more discriminating method of determining who the indigent truly are. In some cases, for example, pensioners, who might have houses rated as being high on the municipal scale, would be charged in the higher tariff bands, which would be a glitch in the system. However, such impediments are easily remedied through the use of an indigent policy to ensure that large-scale irregularities do not occur. Many applicants can sign-up for WSS grants, with affidavits, income statements, pensioners' cards, and other official documents entered into a central database. Such endeavours can be achieved, as the researcher established a successful indigent policy for housing subsidies using similar principles in a municipality in KZN.

10.2.5. Concluding Remarks

Whilst the alternative solutions provided here are feasible in the long-term, the issue of immediate financing needs is still not answered, with the exception of the banks changing their risk assessments on the municipal provision of WSS services.

The solutions provided, based on examples from the empirical and case studies examined, are sustainable and needs to be investigated at a national level, to determine the strategy in taking this forward.

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WEBSITES

| DESCRIPTION | WEBSITE |
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| World Bank | www.worldbank.org |
| South African Municipal Workers' Union | www.samwu.org.za |
| UNDP | www.undp.org |
| Vivendi | www.vivendiwater.com |
| Aguas Argentinas | www.aguasargentinas.com.ar |
| Suez Lyonnaise des Eaux | www.suez-lyonnaise-eaux.fr |
| Department for International Development | www.dfid.gov.uk |
| Institute of Public Private Partnerships | www.ip3.org |
| South African Government Website | www.gov.za |
| Harvard University | www.harvard.edu |
| University of Yale | www.yale.edu |
| University of Natal | www.und.ac.za |

APPENDIX 1: DOLPHIN COAST: PUBLIC QUESTIONNAIRE

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|  | <p style="text-align: center;">AMAN MAHARAJ B.Sc. Civil Engineering; MBA</p> <p style="text-align: center;"><i>Postal Address:</i> P.O. Box 51078, Musgrave Road, 4062, Durban, KwaZulu-Natal, South Africa</p> <p style="text-align: center;"><i>Cellular Phone:</i> + 27 – (0) 82 3722 748</p> <p style="text-align: center;"><i>Fax:</i> +27 – (0) – 31 – 465 2211</p> <p style="text-align: center;"><i>E-mail:</i> amanmaharaj@webmail.co.za</p> <hr/> <p style="text-align: center;">CONSUMER SURVEY: WATER SUPPLY and SANITATION – DOLPHIN COAST</p> | |
|---|---|--|

As part of my doctoral studies, I am investigating the consumer acceptability to the privatisation of former public sector services. Please note that this questionnaire forms part of an independent survey and is not indicative of any past, current or future policies of the Council. When complete, please return to me via any of the above-listed contact details, addressed for my attention, or to the Council staff at the rates-paying office (treasury) at 10 Leonardo Drive, Ballito. The Council will assist purely for ease of collation of these results on my behalf.

Which part of Dolphin Coast do you stay in? Please cross/ring your choice.

| | | | | | | | | |
|--------------------|--------------|-----------------|---------|---------------|---------------|-------------|-------------|---------|
| Thompson's Bay | Salt Rock | Sheffield Beach | Foxhill | Tafeni | Nkobongo | Shakaskraal | Umlhali | Zimbali |
| Compensation Beach | Chaka's Rock | Tinley Manor | Etete | Willard Beach | Umlhali Beach | Ballito | Shakashhead | Other |

The following questions refer to the current water supply and sanitation services provided by your Council. Please cross/ring a block for the following questions: -

| | | | | | | | | | | | | | |
|---|--|--|------------------------------------|--------------------------------|--|--------------------------------|-----------------------------------|--------------|---|----|----|----|----------|
| Are you the paying consumer? | Yes | No | | | | | | | | | | | |
| How long have you paid for these services? | Under 2 Years | 2-5 Years | 5-10 Years | Over 10 Years | | | | | | | | | |
| Are you happy with these services at present? | Yes | No | | | | | | | | | | | |
| Race | African | Indian | Coloured | White | | | | | | | | | |
| No. of household members | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Above 13 |
| Total household income (take home) | R0 | R0-R1500 | R1500-R2500 | R2500-R4000 | R4000-R6000 | R6000-R10000 | R10000-R15000 | Above R15000 | | | | | |
| Gender | Male | Female | | | | | | | | | | | |
| How do you get your water? | Household Tap | Community Tap | Community Standpipe | Rain Harvesting | River, Stream | Tanker Service | Other | | | | | | |
| Is this water drinkable? | Yes | No | | | | | | | | | | | |
| What sanitation does Siza provide you? | Water Borne Sewerage (Flushing) | (VIP) Pit Latrine | Vacuum Tanker Service | Other | Nil | | | | | | | | |
| Average monthly account for both services | R0 | R0-R20 | R20-R50 | R50-R100 | R100-R200 | R200-R300 | R300-R400 | Above R400 | | | | | |
| Does Siza charge a fair tariff for these services? | Yes | No | | | | | | | | | | | |
| How often do you have technical problems with these services? | Daily | Weekly | Monthly | Quarterly | Yearly | 2 Years | Never | | | | | | |
| Who do you think should provide these services in your area? | Local Councils, e.g. KwaDukuza | Private Companies, e.g. Siza | District Councils, e.g. King Shaka | Regional Councils, e.g. Ilembe | Non-Governmental Organisations, e.g. Mvula Trust | Parastatals, e.g. Umgeni Water | Large Councils, e.g. Durban Metro | | | | | | |
| Response time to fix a service fault? | 1-5 hrs | 5-10 hrs | 10-24 hrs | 1-2 days | 2-3 days | 3-7 days | 7-14 days | Never | | | | | |
| Is there a service kiosk in your area? | Yes | No | | | | | | | | | | | |
| Do you receive a service subsidy? | Yes | No | | | | | | | | | | | |
| Do you think that Council could have extended its services to poorer communities without the private sector assistance? | Yes | No | | | | | | | | | | | |
| Who provided a better level of service overall? | Council | Siza | | | | | | | | | | | |
| What is your opinion on profit being made out of these two basic services? | Unacceptable, you cannot make a profit out of basic services | OK, as long as services and tariffs are reasonable | Doesn't make a difference to you | A very good practice | | | | | | | | | |
| Where you aware that Siza was taking over these services in 1999 from Council? | Yes | No | | | | | | | | | | | |
| Do you think that Council would have charged a lower tariff than Siza? | Yes | No | | | | | | | | | | | |
| From a customer-relations perspective, who provides a better level of service? | Siza | Council | | | | | | | | | | | |
| Do you think that your neighbouring TLC's ratepayers pay lower tariffs for these services? | Yes | Maybe | No | | | | | | | | | | |

Please feel free to write any additional comments on the back of this questionnaire.

Thank you for participating in this survey.

Aman Maharaj

APPENDIX 2: STANGER: PUBLIC QUESTIONNAIRE



AMAN MAHARAJ

B.Sc. Civil Engineering; MBA

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CONSUMER SURVEY: WATER SUPPLY and SANITATION – KWADUKUZA

As part of my doctoral studies, I am investigating the consumer acceptability to the privatisation of former public sector services. Please note that this questionnaire forms part of an independent survey and is not indicative of any past, current or future policies of the Council. When complete, please return to me via any of the above-listed contact details, addressed for my attention, or to the Council staff at the rates-paying office (treasury) in Chief Albert Luthuli Street. The Council will assist purely for ease of collation of these results on my behalf.

Which part of KwaDukuza do you stay in? Please cross/ring your choice.

| | | | | | | | | |
|------------------|------------|---------------|-----------------|------------|----------------|--------------|-----------|-------|
| Blythedale Beach | Glenhills | Stanger Manor | Stanger Heights | Rocky Park | Shakaville | Central Town | Larkfield | Other |
| Indian Village | Ocean View | Dawnside | Newtown | Townview | Lot 14, 15, 16 | High Ridge | Gledhow | |

The following questions refer to the current water supply and sanitation services provided by your Council. Please cross/ring a block for the following questions: -

| | | | | | | | | | | | | | |
|---|---------------------------------|-------------------|-----------------------|-----------------|---------------|----------------|---------------|--------------|---|----|----|----|----------|
| Are you the paying consumer? | Yes | No | | | | | | | | | | | |
| How long have you paid for these services? | Under 2 Years | 2-5 Years | 5-10 Years | Over 10 Years | | | | | | | | | |
| Are you happy with these services at present? | Yes | No | | | | | | | | | | | |
| Race | African | Indian | Coloured | White | | | | | | | | | |
| No. of household members | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Above 13 |
| Total household income (take home) | R0 | R0-R1500 | R1500-R2500 | R2500-R4000 | R4000-R6000 | R6000-R10000 | R10000-R15000 | Above R15000 | | | | | |
| Gender | Male | Female | | | | | | | | | | | |
| How do you get your water? | Household Tap | Community Tap | Community Standpipe | Rain Harvesting | River, Stream | Tanker Service | Other | | | | | | |
| Is this water drinkable? | Yes | No | | | | | | | | | | | |
| What sanitation does the Council provide you? | Water Borne Sewerage (Flushing) | (VIP) Pit Latrine | Vacuum Tanker Service | Other | Nil | | | | | | | | |
| Average monthly account for both services | R0 | R0-R20 | R20-R50 | R50-R100 | R100-R200 | R200-R300 | R300-R400 | Above R400 | | | | | |
| Does Council charge a fair tariff for these services? | Yes | No | | | | | | | | | | | |

| | | | | | | | | |
|--|--------------------------------|------------------------------------|---|---|--|--------------------------------|-----------------------------------|-------|
| How often do you have technical problems with these services? | Daily | Weekly | Monthly | Quarterly | Yearly | 2 Years | Never | |
| Who should provide these services in your area? | Local Councils, e.g. KwaDukuza | Private Companies, e.g. Siza Water | District Councils, e.g. King Shaka District Council | Regional Councils, e.g. Ilembe Regional Council | Non Governmental Organisations, e.g. Mvula Trust | Parastatals, e.g. Umgeni Water | Large Councils, e.g. Durban Metro | |
| Response time to fix a service fault? | 1-5 hrs | 5-10 hrs | 10-24 hrs | 1-2 days | 2-3 days | 3-7 days | 7-14 days | Never |
| Are your tariffs reasonable? | Yes | No | | | | | | |
| Is there a service kiosk in your area? | Yes | No | | | | | | |
| Do you receive a service subsidy? | Yes | No | | | | | | |
| Do you think that Council can extend its services to poorer communities without the private sector assistance? | Yes | No | | | | | | |

Please feel free to write any additional comments on the back of this questionnaire.

Thank you for participating in this survey.

Aman Maharaj

APPENDIX 3: DOLPHIN COAST: CONCESSIONAIRE QUESTIONNAIRE

| | | |
|---|---|--|
|  | <u>AMAN MAHARAJ</u> | <u>B.Sc. Civil Engineering; MBA</u> |
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SIZA WATER COMPANY – SENIOR MANAGEMENT: THEIR EXPERIENCE TO DATE

28 May 2001

Instructions

- To be completed by a senior official – Siza Water Company.
- Please answer as fully as possible.
- Where statistics are too specific, please use averages.
- When complete, please fax, e-mail, or post completed questionnaire as soon as possible.

A. Personal Details

| | |
|---|--|
| Name | |
| Nationality | |
| Designation | |
| Qualification/s | |
| Period to Date Served on Dolphin Coast (DC) Concession | |
| Total Number of Years with SAUR | |
| Total Number of Years involved in Water Supply and Sanitation (WSS) | |
| Total Number of Years Involved in Partnerships in WSS | |
| Approximate Number of Years Expected to Remain in DC Concession | |

B. Financial Implications

What percentage of Siza Water does SAUR constitute?

| |
|---|
| % |
|---|

What was the approximate start-up cost to the SAUR partner up to handover on the 01 April 1999? Please list description and amounts.

| Description | Amount (R) |
|-------------|------------|
| | |
| | |
| | |
| | |
| | |
| | |

What amount of foreign capital from SAUR has been invested to date? (Excluding bank finance from local or foreign lending agencies and local, provincial or national government subsidies.)

| |
|---|
| R |
|---|

How much finance has been procured from local and international lending agencies to date? Please list agencies and amounts.

| Description | Amount (R) |
|-------------|------------|
| | |
| | |
| | |
| | |
| | |

In what year of the Concession does Siza Water Company expect to break even on invested costs?

At present, are there any problems with regards to financial compliance with the DC Concession Contract? Please expand.

What capital and infrastructure grants have been provided by outside sources, i.e. other than Siza Water shareholders and from tariffs?

| Description | Amount (R) |
|-------------|------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

C. Legal Implications

Does current South African legislation provide an enabling environment for private sector participation in former public sector services? Please tick.

| Yes | No |
|-----|----|
| | |

How does the above compare with legislation from first world countries? Please substantiate.

Please list the South African legislative policies that you are aware of that govern private sector participation in the above.

| List |
|------|
| |
| |
| |
| |
| |
| |
| |
| |
| |

Does the legislation provide too much emphasis on seeking support and consulting with civic bodies and unions to the point that it would inhibit participation from the private sector? Please tick.

| Yes | No |
|-----|----|
| | |

Why would you say this is so?

Has Siza Water worked within the scope of such legislation? Please tick.

| Yes | No |
|-----|----|
| | |

Has Siza Water been able to comply with all legal requirements within the DC Concession Contract? Please tick.

| Yes | No |
|-----|----|
| | |

Please detail any problems experienced with legal compliance.

Is there a need for a regulatory body to monitor the performance of the private sector partner?

| | |
|------------|-----------|
| Yes | No |
| | |

What groups should constitute this body? Please tick.

| | | | | |
|--|------------------------------|----------------------------|---------------------|-------------------------------|
| Local Government | Provincial Government | National Government | Civic Bodies | NGO's |
| | | | | |
| Tertiary Education Institutions | Private Sector | Parastatal | Unions | International Agencies |
| | | | | |

With the new Demarcation, do you feel that you are contractually bound to provide services to newly acquired areas?

| | |
|------------|-----------|
| Yes | No |
| | |

How do you feel about the provision of the free RDP standard?

| | |
|------------|-----------|
| Yes | No |
| | |

How does Siza Water Company accommodate such a scenario?

Is there any policy in place for disconnection of non-paying consumers?

| Yes | No |
|-----|----|
| | |

Please describe this policy in brief or attach copy of policy to the back of this questionnaire.

Is the Concession Contract too lengthy?

| Yes | No |
|-----|----|
| | |

D. Technical Implications

What was the population of DC just prior to handover?

What is the current population of DC (included in new demarcations)?

What population number is Siza Water contracted to serve at present?

Has the quality of water improved in general since Siza Water Company has taken over?

| Yes | No |
|-----|----|
| | |

E. Infrastructure

What was the depreciated value of infrastructure leased from the Council at Handover?

| |
|---|
| R |
|---|

How much finance has been pumped into upgrading this infrastructure to date?

| |
|---|
| R |
|---|

What investment (present value) is expected from Siza Water in terms of new infrastructure?

| |
|---|
| R |
|---|

Will new works infrastructure work as a Build, Operate, and Transfer (BOT) contract?

| Yes | No |
|-----|----|
| | |

Please provide a list of scheduled bulk plant infrastructure plans in DC.

| List | Value (R) |
|------|-----------|
| | |
| | |
| | |
| | |

F. Worker Implications

How many employees does Siza Water have at present? What proportions of the above are managers and payroll? What is the demographic makeup of employees?

| Sector | Number of Whites | Number of other Race Groups | Number of Women | No. of Foreigners | Number of University Graduates | Number of Technikon or Tertiary College Graduates | Number of Semiskilled People |
|----------|------------------|-----------------------------|-----------------|-------------------|--------------------------------|---|------------------------------|
| Managers | | | | | | | |
| Payroll | | | | | | | |

Does Siza Water comply with Affirmative Action principles? Please substantiate.

What number of workers was transferred from the Council?

How many of these workers are still with Siza Water Company?

What were the reasons cited for any former Council workers leaving or not taking up employ with Siza Water?

Have any workers been retrenched since Handover? Please tick.

| Yes | No |
|-----|----|
| | |

Have the situations of workers improved financially and in training? Please tick.

| Yes | No |
|-----|----|
| | |

Are the workers affiliated to any Unions? Please name Unions.

After two years in the employ of Siza Water, where do you think that the workers are happier working; with Siza Water or with the Council? Please tick.

| Council | Siza Water |
|---------|------------|
| | |

Have the workers admitted to being forced to oppose private sector intervention initially by the Unions?

| Yes | No |
|-----|----|
| | |

G. Social Implications

Is Siza Water involved in any SMME development in previously disadvantaged communities? Please expand.

Has Siza Water provided any training or mentorship to previously disadvantaged individuals? What amount of money has been spent on them?

Do you use local labour and SMME's, and procure equipment from local businesses?

Do you have any pro-poor policy in place? If yes, please attach to questionnaire.

H. Customer Relations

Do you have general customer relations' kiosks? Please tick.

| Yes | No |
|------------|-----------|
| | |

Where there any kiosks prior to handover?

| Yes | No |
|------------|-----------|
| | |

What structures are in place to spread the concept of the user pays in previously disadvantaged communities?

J. Tariffs

Water Supply Levels and Sewerage Types – Please complete table.

| Area | Monthly Costs (R) Before Handover (Council Provision) | | | | Monthly Costs (R) Present (Siza Water Provision) | | | |
|--------------------|---|----------|---------------|----------------|--|----------|---------------|----------------|
| | WS Grade | WS Costs | Sewerage Type | Sewerage Costs | WS Grade | WS Costs | Sewerage Type | Sewerage Costs |
| Ballito | | | | | | | | |
| Zimbali | | | | | | | | |
| Compensation Beach | | | | | | | | |
| Willard Beach | | | | | | | | |
| Salt Rock | | | | | | | | |
| Chaka's Rock | | | | | | | | |
| Umhlali Beach | | | | | | | | |
| Thompson's Bay | | | | | | | | |
| Sheffield Beach | | | | | | | | |
| Tinley Manor | | | | | | | | |
| Shakaskraal | | | | | | | | |
| Umhlali | | | | | | | | |
| Foxhill | | | | | | | | |
| Tafeni | | | | | | | | |
| Shakashead | | | | | | | | |
| Nkobongo | | | | | | | | |
| Etete | | | | | | | | |

Levels of Payment – Please complete table.

| Area | No. of People | Racial Predominance | Total Number of Households | Total Number of Households Covered by Siza water | Average Monthly Income per Household | Percentage of Community that Pays for Services Provided by Siza Water | Percentage of Community that Paid for Services under Council Operation | Siza Water Kiosk in Community at Present |
|--------------------|----------------------|----------------------------|-----------------------------------|---|---|--|---|---|
| Ballito | | | | | | | | |
| Zimbali | | | | | | | | |
| Compensation Beach | | | | | | | | |
| Willard Beach | | | | | | | | |
| Salt Rock | | | | | | | | |
| Chaka's Rock | | | | | | | | |
| Umhlali Beach | | | | | | | | |
| Thompson's Bay | | | | | | | | |
| Sheffield Beach | | | | | | | | |
| Tinley Manor | | | | | | | | |
| Shakaskraal | | | | | | | | |
| Umhlali | | | | | | | | |
| Foxhill | | | | | | | | |
| Tafeni | | | | | | | | |
| Shakashead | | | | | | | | |
| Nkobongo | | | | | | | | |
| Etete | | | | | | | | |

K. Statistics

Please complete the following table: -

N.B. please use averages in relation to entire DC area and population.

| Description | Council Service | Siza Water Company Service at Present |
|--|-----------------|---------------------------------------|
| Length of total reticulation | | |
| Percentage of people with level 4 water supply (%) | | |
| Percentage of people with water-borne sewerage (%) | | |
| Number of full time WSS workers in area (#) | | |
| Cost of Water Connection (R) | | |
| Reconnection Charges (R) | | |
| Customer Complaint Response Time (Days) | | |
| Number of pump Stations (#) | | |
| Number of Reservoirs | | |
| Water Treatment Works | | |
| Number of household connections for WSS | | |

L. Sundry Details

As a foreign company (SAUR), what financial, technical, legal, social, educational, or other benefits can you provide that is lacking in a South African institution/company?

For what reasons do you think, that Unions oppose private sector intervention?

Does Siza Water liase regularly with other institutions such as civic bodies, NGO's, etc? On what basis?

Why do you think that South African municipalities are turning to the private sector to provide WSS services?

Is sanitation generally neglected by private sector service providers because of its low commercial value?

Is the accusation by opponents to private sector participation of private sector service providers with regards to cherry picking affluent areas an accurate assessment?

Why do foreign companies generally form subsidiaries with names using local dialects?

What other comments do you have that will enhance the knowledge of this questionnaire?
Please append other policies etc, if necessary.

APPENDIX 4: NEWCASTLE / ESTCOURT QUESTIONNAIRE

| | |
|---|--|
|  | <p style="text-align: center;"><u>AMAN MAHARAJ</u> <u>B.Sc. Civil Engineering; MBA</u></p> <p>Postal Address: P.O. 51078, Musgrave Road, 4062, Durban, KZN, South Africa</p> <p>Cellular Phone: + 27 – (0) 82 3722 748</p> <p>Fax: +27 – (0) – 31 – 465 2211</p> <p>E-mail: amanmaharaj@webmail.co.za</p> |
|---|--|

NEWCASTLE / ESTCOURT TLC: PRIVATISATION SURVEY QUESTIONNAIRE

(For Academic Purposes Only)

Instructions

- Please contact me for any clarity. This survey is part of the data for my academic studies and not to do with any endeavour by the NEWCASTLE TLC, whatsoever.
- Please answer as fully as possible.
- When complete, please fax, e-mail, or post completed questionnaire as soon as possible. See above for details. Alternatively, please submit to Mr. Ndlovu, Executive Director: Strategic Planning for my collection.

Which group are you from? You may choose more than one.

| Group | Please Tick |
|-----------------------------------|-------------|
| Councillors | |
| Senior Officials | |
| Workers | |
| Unions | |
| Low economic group from public | |
| Medium economic group from public | |
| High economic group from public | |

What is the level of support in Newcastle for private sector participation in urban water supply and sanitation from? (Please tick for all groups.)

| Group | High | Medium | Low | Don't Care |
|--------------------------|------|--------|-----|------------|
| Councillors | | | | |
| Senior Officials | | | | |
| Workers | | | | |
| Unions | | | | |
| Industry | | | | |
| Public – low economic | | | | |
| Public – medium economic | | | | |
| Public – high economic | | | | |

Do you think that the model being used by Dolphin Coast would suit your TLC? The model is a Public Private Partnership, which is a 30-year concession where the private sector partner leases, operates, maintains, and manages the full water supply and sanitation system for the Council. (Please tick.)

| Yes | No | Maybe | Not in the next five years | Don't care |
|-----|----|-------|----------------------------|------------|
| | | | | |

Do you have major water supply and sanitation infrastructure needs in poorer areas after the amalgamation and demarcation? (Please tick.)

| Yes | No |
|-----|----|
| | |

Can the TLC meet those needs without private sector partnering? If not, why not?

Does the TLC have a good creditworthiness with the banks to raise finance for water supply and sanitation infrastructure projects?

| Yes | No |
|-----|----|
| | |

What alternatives do you think there are instead of using the private sector in water supply and sanitation projects?

Can the private sector provide a better and cheaper level of service than the TLC? If so, how?

Would any type of Private Sector Partnership take off in your TLC within the next five years? If not, why so?

Is the public (all economic groups) happy with the level of service and tariffs at present?

| Group | Please Tick |
|------------------------------------|--------------------|
| Low economic group from public. | |
| Medium economic group from public. | |
| High economic group from public. | |

Would the workers transfer willingly to the private sector if the situation arises?

| Yes | No |
|------------|-----------|
| | |

If the Unions oppose private sector participation purely on practical reasons or is it on ideological reasons or fear of the unknown? What do you think the reason is?

How much investment is needed in water supply and sanitation infrastructure in your TLC to bring the level of service provided to the legislative (RDP) standards? (Please tick.)

| Below R5m | Between R5-10m | Between R10-15m | Between R15-20m | Above R20m (Please state figure) |
|-----------|----------------|-----------------|-----------------|-------------------------------------|
| | | | | |

Thank you for participating in this survey.

Aman Maharaj

APPENDIX 5: OUTSOURCING QUESTIONNAIRE - STANGER

03 August 1999

Public-Private-Partnerships (PPP's) / Municipal Service Partnerships (MSP's) / Service Outsourcement

Aim

The implementation of PPP's was one of the key issues that emerged from the initial Municipal Support Programme workshop. This questionnaire serves to gauge the views of all role-players in the KwaDukuza TLC on the implementation of PPP's and the contracting of smaller services. It is also the aim of this questionnaire to determine the obstacles that could be/are present, that would impede the process and ascertain the level of support for the implementation of PPP's.

Interview Officials

The following entities are being approached for their viewpoints: -

- Town officials – HOD's.
- Town councillors.
- Union representatives.

Anonymity

All questionnaires will be treated confidentially. There is no need to put your name on the document.

Instructions

Please reply as concisely as possible.

Some aspects may not be relevant to a respondent.

Please return all questionnaires to Mr. Byrnes' secretary before Thursday, 05 August 1999, 13h00.

Are you a town official, town councillor or a union representative?

The following table has a list of possible major and minor services that can be outsourced. Please tick the relevant box/boxes.

| Services | Is it outsourced already? | | Should it be outsourced? | |
|---|---------------------------|----|--------------------------|----|
| | YES | NO | YES | NO |
| List 1 – Major Services | | | | |
| | | | | |
| Fire and emergency services | | | | |
| Water supply and sanitation – water supply | | | | |
| Water supply and sanitation – sanitation | | | | |
| Water supply and sanitation – sanitary landfill | | | | |
| Housing | | | | |
| Mechanical workshop | | | | |
| Electricity | | | | |
| Health services – general | | | | |
| Health services – refuse removal | | | | |
| Fleet management | | | | |
| | | | | |
| Minor Services | | | | |
| | | | | |
| Plot cleaning | | | | |
| Verge cutting | | | | |
| Sport and recreation | | | | |
| Local Economic Development (LED) | | | | |

| Services | Is it outsourced already? | | Should it be outsourced? | |
|---|---------------------------|----|--------------------------|----|
| | YES | NO | YES | NO |
| Traffic fines summons | | | | |
| Equipment maintenance | | | | |
| Road repairs | | | | |
| Street sweeping | | | | |
| Chemical analysis | | | | |
| Publicity and advertising | | | | |
| Computer support | | | | |
| Radio control – first aid: emergency linkup | | | | |
| | | | | |

What other services can the TLC propose for outsourcing? Please list.

What is the view on outsourcing of services to? (Please tick).

| ENTITY | ACCEPTABLE | NOT ACCEPTABLE |
|-------------------|------------|----------------|
| Town Officials. | | |
| Town Councillors. | | |
| Workers' Unions. | | |
| General Public. | | |

Do the above entities see PPP's as a threat? Please tick.

| ENTITY | YES | NO |
|-------------------|-----|----|
| Town Officials. | | |
| Town Councillors. | | |
| Workers' Unions. | | |
| General Public. | | |

What infrastructure do you have in place to set up PPP's? Please list.

Are you personally in favour of setting up PPP's? Please tick.

| | |
|-----|----|
| YES | NO |
|-----|----|

What training have you had regarding PPP's? Please list.

Have there been other previous consultants who have proposed ideas on PPP benefits and were mechanisms created to implement these PPP's? Please tick.

| | |
|-----|----|
| YES | NO |
|-----|----|

Has there been a positive/negative impact from outsourcing any services in the past? Please list.

| Service (Name) | Impact (negative / positive) | Type of impact, e.g. better level of service, less jobs, more funds, more efficiency etc. |
|----------------|------------------------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

What present revenue increases/decreases to the TLC from outsourcing are you aware of?

| Service (Name) | Revenue increase (Amount) | Revenue decrease (Amount) |
|----------------|------------------------------|------------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

What obstacles were faced/might be faced in outsourcing TLC services?

| Service (Name) | Obstacles |
|----------------|-----------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Deloitte and Touche would like to thank you for your support in the completion of these questionnaires. We would like to iterate that all feedback would be treated in the strictest of confidence.

Aman Maharaj

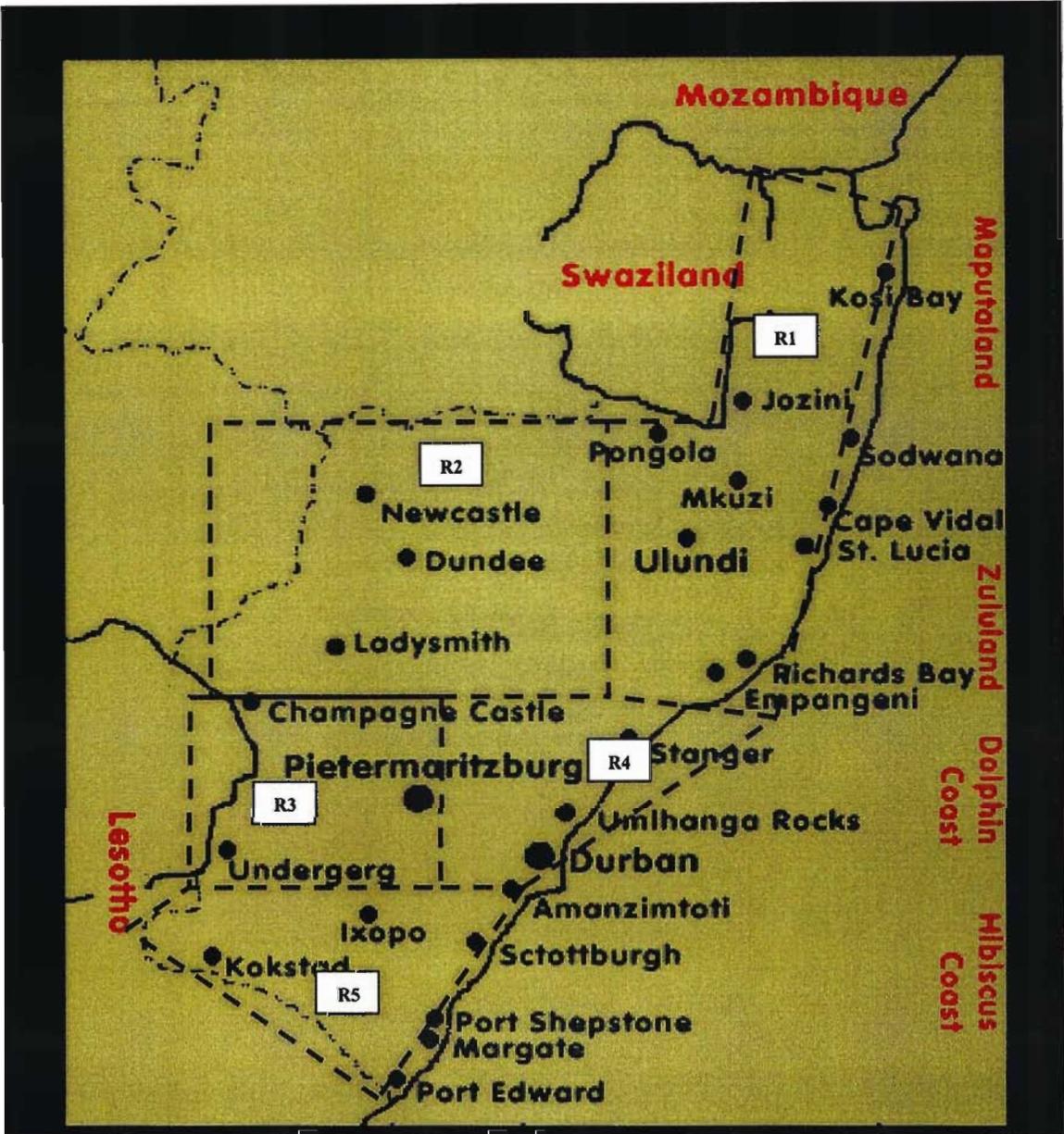


FIGURE A6.2. PROSPECTIVE REGIONS FOR ECONOMIES-OF-SCALE



FIGURE A6.4. DETAILED MAP OF DOLPHIN COAST



FIGURE A6.5. MAP OF INDIA

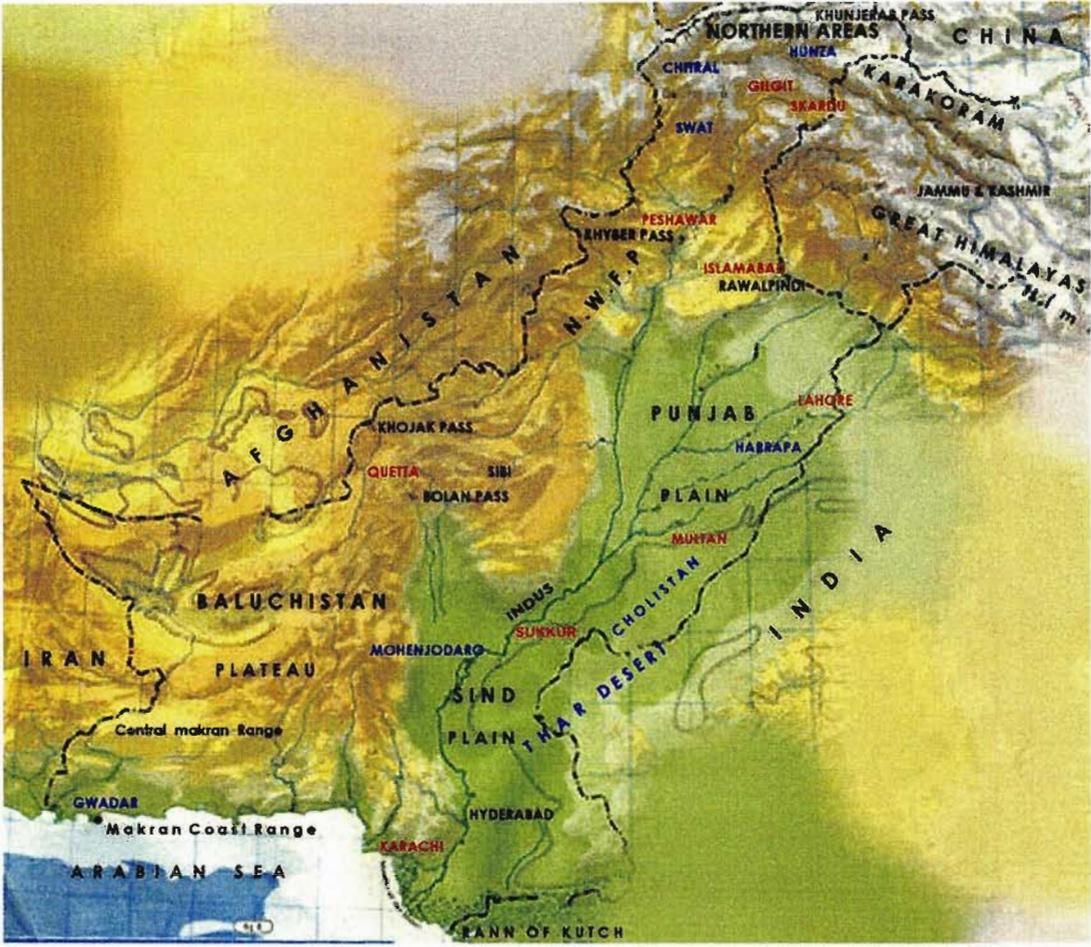


FIGURE A6.6. MAP OF PAKISTAN



FIGURE A6.7. MAP OF ARGENTINA



FIGURE A6.8. MAP OF THE UNITED KINGDOM

APPENDIX 7: CALCULATIONS FOR DOLPHIN COAST CASE STUDY

1. Expenses Calculation

a) Bulk Water Costs

Siza Water Company (SWC) buys its bulk water from Umgeni Water. In 2000, the bulk water tariff rate charged by Umgeni Water was R1.52 a kilolitre, after a 13 percent increase. An assumption of 8 percent inflation is applied for the period thereafter. Annual consumption is 2142000 k ℓ and annual growth rate is about 7 percent.

Therefore, (2000-2004) total bulk water cost
 $= \sum_{i=0:4} [2142000(1+0.07)^i] [1.52(1+0.080)^i] = R 22 196 807.$

b) Contract Implementation Fee

Contract Implementation Fee = R 200 000.

c) Average Lease Fee

Total Lease Fee (2000:2004) (from Table 11.4.) = R 17 683 484.

d) Concession Fee

Assuming 8 percent annual increase, (2000-2004) concession fee =
 $\sum_{i=0:4} [550000(1+0.08)^i] = R 3 226 631.$

e) Youth and Community Development Fund

Approximately = $\sum_{i=0:4} [75000(1+0.08)^i] = R 439 995.$

f) Social Fund

Approximately = $\sum_{i=0:4}[10000(1+0.08)^i] = R 58 666$.

g) Maintenance and Capital Infrastructure Investment

From SWC's Report, total capital investment for WSS infrastructure = R 25 709 000. However, government grants and private housing developers contributions is approximately R 7 450 000.

Therefore, net investment from SWC = R 18 259 000. However, these figures are given at 1999 values, so assuming that the above infrastructure growth is at constant rate over five years, the compound growth equation to determine inflationary costs within the 8 percent parameter is used.

Therefore, actual cost = $\sum_{i=0:4}[(18259000/5)(1+0.08)^i] = R 21 423 653$.

h) General New Office Capital Expenses: Land, Buildings and Vehicles

One main building (20 year bond assumption at R 400 000) + 4 vehicles (5 year bond).
For (2000-2004), expenses = $5(14 \text{ percent} \times 400000) + 5(4 \times 12 \times 3000) = R1000000$.

i) Rents

For a kiosk building rent at R2000 per month: -

Therefore, for five years, assumption rent = $\sum_{i=0:4}[12 \times 2000(1+0.08)^i] = R 140 798$.

j) Office Operating Expenses and Sundries (Including Marketing)

Global average = 1 percent of sales,

Therefore, for five years = $0.01 \times (86 148 022) = R 861 480$.

k) Wages and Salaries

There are 37 workers, with an average of R 4 500 cost to company per month at present. This translates to about $\{\sum_{i=0:4}[(37 \times 12 \times 4000)(1+0.08)^i]\}$ = R 11 721 469 for five years, assuming that worker numbers are static due to efficiency gains despite growth predictive rates in WSS sales.

l) Training

Equal to 3 percent of total salary and wage bill according to contract, which is equal to R 466 200 for five years.

m) Insurances, Bonds, and Guarantees

Insurances for following: -

- All Risk Construction and Public Liability.
- Professional Indemnity and Employer's Liability Cover.
- Material Damage: All Risks.
- Loss of Revenue (Business Interruption Insurance).
- Motor Insurance.
- Maintenance Bond.
- Performance Guarantee.
- Workman's Compensation.

This translates to about R 1 500 000 for five years.

n) Sewerage Treatment and Disposal Costs

From global estimates (World Bank source), these costs approximately = R0.20/kl, which translates to: -

Cost = $(0.20 \times 10\,455\,103)$ = R 2 091 021.

2. Profit Rationalisation

| Predicted Minimum Five Year Profit (R) | Year of Concession | Compound Growth at 8% Inflation | Profit in First Year (R) | Expected Minimum Profit (R) | Cumulative Profit (R) |
|--|--------------------|---------------------------------|--------------------------|-----------------------------|-----------------------|
| 107 353 106 | 1 | 1.0000 | 18 299 030 | 18 299 030 | 18 299 030 |
| | 2 | 1.0800 | | 19 762 952 | 38 061 982 |
| | 3 | 1.1664 | | 21 343 988 | 59 405 970 |
| | 4 | 1.2597 | | 23 051 507 | 82 457 478 |
| | 5 | 1.3605 | | 24 895 628 | 107 353 106 |
| | 6 | 1.4693 | | 26 887 278 | 134 240 384 |
| | 7 | 1.5869 | | 29 038 261 | 163 278 645 |
| | 8 | 1.7138 | | 31 361 321 | 194 639 966 |
| | 9 | 1.8509 | | 33 870 227 | 228 510 193 |
| | 10 | 1.9990 | | 36 579 845 | 265 090 039 |
| | 11 | 2.1589 | | 39 506 233 | 304 596 272 |
| | 12 | 2.3316 | | 42 666 732 | 347 263 003 |
| | 13 | 2.5182 | | 46 080 070 | 393 343 073 |
| | 14 | 2.7196 | | 49 766 476 | 443 109 549 |
| | 15 | 2.9372 | | 53 747 794 | 496 857 343 |
| | 16 | 3.1722 | | 58 047 617 | 554 904 960 |
| | 17 | 3.4259 | | 62 691 427 | 617 596 387 |
| | 18 | 3.7000 | | 67 706 741 | 685 303 128 |
| | 19 | 3.9960 | | 73 123 280 | 758 426 408 |
| | 20 | 4.3157 | | 78 973 142 | 837 399 550 |
| | 21 | 4.6610 | | 85 290 994 | 922 690 544 |
| | 22 | 5.0338 | | 92 114 273 | 1 014 804 817 |
| | 23 | 5.4365 | | 99 483 415 | 1 114 288 232 |
| | 24 | 5.8715 | | 107 442 088 | 1 221 730 321 |
| | 25 | 6.3412 | | 116 037 456 | 1 337 767 776 |
| | 26 | 6.8485 | | 125 320 452 | 1 463 088 228 |
| | 27 | 7.3964 | | 135 346 088 | 1 598 434 316 |
| | 28 | 7.9881 | | 146 173 775 | 1 744 608 092 |
| | 29 | 8.6271 | | 157 867 677 | 1 902 475 769 |
| | 30 | 9.3173 | | 170 497 091 | 2 072 972 860 |
| CUMULATIVE MINIMUM PROFIT | | | | 2 072 972 860 | |

TABLE A7.1. CUMULATIVE MINIMUM PROFIT CALCULATIONS FOR DOLPHIN COAST

Source: Researcher's Calculations

APPENDIX 8: THE PHASING OF THE RESEARCH PROCESS

The researcher was involved in the field of WSS for an extensive period of time, starting in January of 1996. In the initial period (1996-1998), the researcher worked in the field of WSS, under the auspices of the national Department of Water Affairs and Forestry (DWAF). During this period, the researcher also undertook a Master of Business Administration (MBA), which focused on the WSS field. It was action-based, requiring implementation of theory within the work sphere. This action research method continued in the WSS field, with a greater focus on public-private partnerships (PPP's), when the researcher joined a multinational consulting company (1999-2000). The researcher was part of the external regulatory team that was mandated by the municipality to monitor the Dolphin Coast water concession under the auspices of his employer. This role also facilitated action research techniques, because of on-going review and implementation as a regulator. This was combined with initiation of the research process for this study from December 1999. By December 2000, the researcher was no longer operationally involved in the WSS field. At this point, the research took a more conventional route, that is, with no implementation during the research process. It was during this research process, however, that it became apparent that there was a great degree of conflict with regards to private sector participation in WSS in South Africa and the rest of the developing world.

The following chronological schedule indicates the phasing of the pre-research, that is, before the commencement of this particular study, and the research processes: -

(a) Pre-Research Phase¹¹³

(i) Period January 1992 – December 1996: Undergraduate Study (4 years)

The researcher began an undergraduate degree in civil engineering. He majored in the study of fluids, which include focal areas such as dam design, fluid flow calculations, and structures. The study is mainly technical, but serves as a basis for understanding the technical reasoning behind the design of WSS-related infrastructure.

¹¹³ A description of researcher's experience is provided here, because of its relevance to the action research methodology that is discussed in Chapter 1.

- (ii) Period: April 1996 – December 1996: Department of Water Affairs and Forestry – Community Water Supply and Sanitation Division (8 months)

The researcher graduated as a civil engineer before going to work for the DWAF in the Community Water Supply and Sanitation (CWSS) division. The researcher managed RDP funding for WSS initiatives in KwaZulu-Natal¹¹⁴ (KZN) for both the rural and peri-urban areas. During this period, it became evident to the researcher that the public sector alone could not deliver these essential services to previously disadvantaged people, and that help from other sector entities needed to be obtained. The researcher found that the inability of the DWAF to deliver these WSS projects as a single entity was due to constraints, such as a lack of manpower, possible technological limitations, and historically inefficient service delivery mechanisms. This resulted in most aspects of these projects being outsourced to the private sector.

In essence, at any given instance, a particular project would have had the following external entities: -

TABLE A8.1. STAKEHOLDERS IN THE RDP WSS PROVISION PROCESS

| Role/Function | Entity |
|---|--|
| Design Consultants | Private Sector. |
| Construction Contractors | Private Sector. |
| Construction Personnel | Private Sector; and Community Labour. |
| Social Consultants | Private Sector; Parastatal; and NGO's. |
| Implementing Agents | Parastatal; and NGO's. |
| Operations and Maintenance Contractors | Private Sector; CBO's; Public Sector; and Parastatals. |
| Regulation and Facilitation of Projects and Funding | Public Sector; Private Sector. |

Source: Researcher

From Table A8.1., it is evident that there is an increasing private or quasi-government role in the delivery of bulk infrastructure projects.

¹¹⁴ A province on the eastern seaboard of South Africa.

Since 1994, the DWAF has been regarded as the leading national government department that has delivered WSS services to the people. The number of people that lack access to basic WSS services has more than halved since 1994. In essence, the preliminary indications are, that private sector participation in the former public sector utility domain of WSS has been successful in the first phase of the RDP. (DWAF Media Announcements: 1999)

On the negative side of private sector involvement at the DWAF, the researcher identified the following areas of concern: -

- Poor communication between the public and private sector partners.
- The partnership process was not completely understood, so the private sector could not be adequately monitored for legislative compliance, as there were gaps in the regulatory process.
- There was considerable tension between the private sector and public sector entities in defining roles, responsibilities, and terms of engagement.
- As there were a considerable number of role-players, more time and funds were utilised in co-ordination activities.
- Private sector participants were not easily accepted by the labour unions.

It must be noted, however, that private sector participation was procured at a time when the government faced enormous challenges in service delivery. Rather than to increase the personnel capacity of the already supposedly bloated public sector, the private sector was sourced. Furthermore, when the situation actually normalised and a reasonable degree of parity was obtained in terms of access to adequate WSS, many of these “especially-hired” personnel would have become redundant. The procurement of personnel for the DWAF to meet these challenges would have also delayed the whole process due to the training required. Commensurate with this period, the researcher also began an MBA. The MBA was action researched-based, as implementation was an essential component. The focus was on the WSS field. The researcher also attended both local and international conferences focusing on partnerships in WSS and had access to the latest developments and innovations.

(iii) Period: January 1997 – December 1997: DWAF – Water Resources Division (1 year)

The researcher transferred to a new division of the DWAF that focused on water resources management. The researcher's core function was in the assurance and design of the operations and safety manuals for dams in KZN.

(iv) Period: January 1998 – February 1999: DWAF – Water Supply and Sanitation Division (1 year, 2 months)

The researcher rejoined the Community Water Supply and Sanitation (now called Water Supply and Sanitation) division. The functions had changed as the focus was now on partnerships with the private sector.

A R100 million PPP project had been initiated with a consortium of companies to form the AquAmanzi Consortium (Aqua is the Greek equivalent for water and Amanzi is the Zulu equivalent for water). AquAmanzi comprised of a social consulting company, a construction company, training company, and an operations and maintenance company.

This was essentially a Build, Operate, Train, and Transfer (BOTT) project, as after financing, construction, and commissioning; the infrastructure was transferred to the governing district council of the area. It is essential to note that there was no financial equity-risk from the private sector, as it was funded through national government.

This type of project differed from the previous RDP WSS programmes in that other public sector entities were involved, such as NGO's and some regional councils. Less than one year after the commissioning of the project, apparent flaws were noted in the process, ranging from the construction through to the operations. The construction company erected poor quality structures and was mismanaged. It was also subsequently liquidated.

The DWAF did not have the capacity to monitor the consortium. Eventually a new private sector entity was brought in, called the Employer's Representative, to monitor the consortium on behalf of the DWAF. Whilst the previous round of RDP programmes

were deemed successful, this particular round was noted to be a large-scale failure of a multi-million Rand PPP project.

(v) Period: March 1999 – November 2001: Deloitte and Touche (1 year, 8 months)

The researcher joined a multinational management-consulting firm that specialised in public sector consulting projects. The researcher was extensively involved in municipal-related projects, particularly in facilitating and identifying PPP opportunities. With his previous experience in the WSS field, the researcher focused on opportunities that were prevalent in this area.

One of the key projects that the researcher had engaged in, was the project management of the Dolphin Coast water concession in KZN. The researcher made extensive investigations into the pertinent literature in the field of partnerships in bulk infrastructure provision, within developing countries.

(b) Research Phase

(vi) Period: January 2000 – Continuous

The researcher registered for a Ph.D. in Development Studies at the University of Natal, Durban. The following Gantt chart reveals the phasing of this undertaking: -

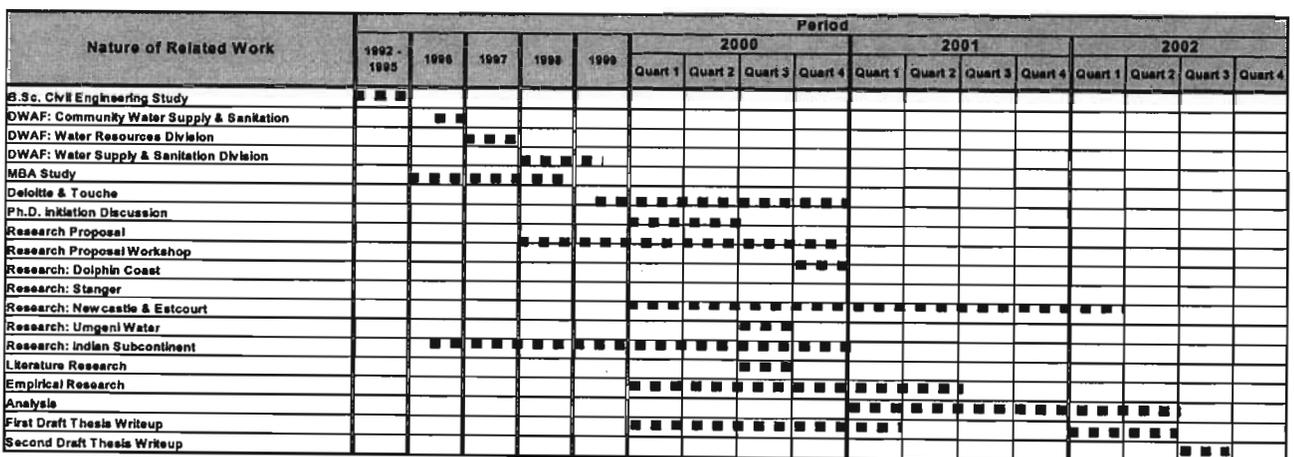


FIGURE A8.1. GANTT CHART INDICATING RESEARCH PERIODS

i) Research Phase 1: Preparation for Buy-in from Institutions Earmarked as Case Studies (January 2000 to March 2000)

After an initial trial acceptance by the university, the researcher designed a research programme. As the researcher had been extensively involved in the field of WSS, the problems experienced in private sector participation had become evident. A hypothesis was designed that related to this field. Subsidiary research questions were integrated as a test of various factors for the facilitation of successful private sector participation.

In providing a framework for suitable comparative case studies, macro issues such as the economic status and political landscape of the country were taken into consideration. Additional factors such as entity type (public, private, parastatal, or hybrid institutions) was also significant to the comparisons of successes and failures. Other issues such as accessibility to the institution were also important. Hence, the Dolphin Coast case study was chosen not only for its status as a pilot project, but its accessibility for data-gathering.

It was also important to use foreign examples to understand whether facilitative and repressive factors (for partnerships) were global or local in nature, as this would indicate an ability to overcome such obstacles. Due to the researcher's familiarity with the Indian subcontinent and its national language, and combined with the support systems the researcher had already built-up in India, it proved to be the most suitable foreign developing country comparison.

The researcher developed significant relationships with the various municipalities in KZN, private sector providers, and parastatals from his previous work in the area. However, there was a degree of resistance from certain private sector providers and assurance had to be given that the researcher was not preconceived towards conducting the research in order to justify the opposition towards private sector participation. Unfortunately, some of the findings did not facilitate the outcome that would have been preferred by the private sector.

ii) Research Phase 2: Design of the Ph.D. Proposal: March 2000 to October 2000

The proposal was designed over a period of six months, and adjusted periodically with input from the supervisor. During this time, communication frameworks were set up with the case study institutions to obtain official acceptance and permission to gather data. Requests were also sent to various WSS-related institutions for funding travel to the Indian subcontinent, although this served as a futile exercise and the research trip was self-funded.

Relationships were also built with information resource centres, for example, the Water Research Commission, National Business Initiative, Department of Local Government and Traditional Affairs, Department of Water Affairs and Forestry, World Bank, United Nations Development Programme, and aid programmes such as Danida, AusAid, the British Department for International Development, and the Snowy Mountains Engineering Corporation.

At the end of October 2000, the Ph.D. proposal was presented at a workshop at the university and the research study was accepted.

iii) Literature Research (January 2000 to June 2002)

Literature for the theory was sourced mainly from books and journals written on public goods and related issues. The Internet was not a substantive source of information, although it did provide details of relevant literature.

iv) Empirical Research (January 2000 to June 2001)

The Internet was of greater assistance with regards to the data-gathering on case study investigations by other researchers. Data sourced from the Internet, such as from the Municipal Services Project, were a vital source of information (although not necessarily in alliance with the findings of this study).

v) Investigative Data-Gathering (January 2000 to December 2001)

Within this timeframe, four methods were chosen as direct data-gathering techniques; literature survey, the interview, questionnaire survey, and consultancy work. Interviewees were chosen so that the views on privatisation from the private sector, state and opposition could be procured and compared to the actual effects of privatisation.

Local research was conducted with Estcourt, Dolphin Coast, Newcastle, Stanger, Durban, Umgeni Water, Mvula Trust, DWAF, Department of Local Government and Traditional Affairs, PPP specialists, Municipal Infrastructure Investment Unit (MIIU), and the Water Research Commission. Interviews were also conducted with local and foreign members of the academic fraternity. During this period, a research trip was made to New Delhi, India, where the researcher had built-up a significant relationship with the World Bank and United Nations Development Programme employees stationed there. Data was provided by specialists in WSS and urban planning specialists.

vi) Consolidation and Analysis of the Research (July 2001 to December 2001)

During this period, the research data was consolidated into a coherent study and analysed against a consistent framework that supported the structure of the hypothesis.

It was important that the empirical and investigative data were dovetailed to provide some degree of consistency with the available theory. Trends or patterns in the views of different entities were analysed and compared to international cases to test for internal resistances and extraneous non-supportive privatisation factors.