TOWARDS SUSTAINABLE DEVELOPMENT: A PARTICIPATORY MODEL FOR THE WATER SERVICES SECTOR IN SOUTH AFRICA

PATRICK THIPE NTSIME

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PATRICK THIPE NTSIME

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I declare that "Towards sustainable development: A participatory model for the water services sector in South Africa" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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SIGNATURE
(MR P. NTSIME)

_____05/09/2002_____
DATE

DEDICATION

I dedicate this thesis to my mother, wife and children for all their support and inspiration.

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SUMMARY

This study is non-empirical and its design is based on three forms of analysis: conceptualisation, theoretical justification and strategic considerations for a participatory model in the water services sector in South Africa. In terms of the conceptualisation, the study addresses the old and new paradigms of sustainable development. First, it argues that for many years the concept of sustainable development has long dominated the development discourse. Second, the theoretical justification traces the evolution and meanings of sustainable development and also patterns and trends of the legacies of colonialism and apartheid. The descriptive analysis of apartheid and colonialism suggests a new development path for inclusive people-centred development. The study therefore postulates that in the South African context, sustainable development is both a political and a historical construct. This is the basis within which sustainable development should be understood.

Third, the study concludes that context plays an important part in understanding and challenging the immoral and unjust practices of colonialism and apartheid which have militated against sustainable human development. The study further provides a description of the local government and water sectors and their underpinned legislative and policy framework, and notes impressive results in the delivery of basic water supply since 1994. However, the study argues that in order for municipalities to fulfil their constitutional responsibilities as water services authorities, they need to adopt a participatory model towards sustainable development since this is currently lacking. In doing so, the water services sector needs to overcome dangers of parochialism which were more evident from the supply-driven policy of the government. The study therefore draws lessons from three Latin American countries: Chile, Bolivia and Nicaragua, and proposes a new developmental path which conforms to the principles of sustainability. This development path is represented in the form of a dynamic, diagrammatic model for participatory sustainable development. This model displays successive stages and cycles of transaction between stakeholders. The model represents a decision support system which provides a conceptual framework for the diagnosis, consolidation and analysis of information. The model is thus a useful tool which can be applied in the public sector during project or programme implementation.

KEY WORDS

Sustainable development, participatory model, water services delivery, developed and developing countries, Department of Water Affairs and Forestry, Community Water Supply and Sanitation, apartheid and colonial legacies, local government, public participation, sustainability, power relations, tools and methodologies, preparation and organisation, diagnosis, development strategy, implementation, impact assessment, Latin American experiences, water services authorities, decentralisation, governance, context, analysis, Integrated Development Plan.

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CHAPTER 1

ORIENTATION AND STATEMENT OF THE PROBLEM

1.1   INTRODUCTION

It has become common practice for politicians around the world to meet and pontificate about the disastrous effects of unsustainable development. Such meetings have generated numerous agreements and pledges, with member states having to commit themselves to implementing sound and stricter development programmes that promote good environmental practices and improve the quality of human lives. In responding to such programmes, most democratic governments have embarked on institutional reforms to bolster democratic governance, hasten decentralisation and increase public participation. They continue to do so, with the aim of enhancing the possibility of sustainable development. Some of the practical measures which have so far been developed across the world include dynamic models, programmes and sophisticated systems (Van den Bergh 1991: 58; Rao 2000: 211-323; Van den Bergh & Van der Straaten 1994: 209; Kunchera cited in Bender & Simonovic 1997: 496; Haimes 1992: 89-192; Ginther, Denters & de Waart 1995; McMahon 1997: 506). While this study focuses on South African issues, it is clear that the concept of sustainable development appeals to many people and organisations world-wide.

This study looks at macro and micro issues associated with sustainable development. The macro issues concern international relations between different countries and their quest to respond, in a sustainable manner, to a myriad of development challenges. Macro issues also provide an indication of the complexity of the challenges we face in seeking sustainable development. Some of the well-known declarations signed to date include the 1992 Rio declaration, the 1972 Copenhagen declaration and the 2000 Kyoto declaration. The main weakness of such declarations against unsustainable development is that they are not legally binding. Non-legal provisions may strengthen international conduct, but they do not enforce compliance (Ginther *et al* 1995: 41). The likelihood is, therefore, that signatories will respond differently to different challenges because they have their own wide-ranging interests and priorities. In addition, developing and developed countries do not have the same vision and inclination to address issues of sustainable development. What bind developing and

developed countries are documents rather than common implementation strategies such as efforts to combat poverty. The prevalence of poverty in developing countries is a manifestation of the conflicting priorities of rich developed and poor developing nations. These nations are often united in their discussions of sustainable human development issues, but their pragmatic approaches are different. This situation deepens the gulf between rich and poor nations and impedes the pursuit of equality. One of the consequences of inequality is that it drives the poor to self-destruction, which severely compromises their capacity to use resources in a sustainable manner.

World bodies and governments which make pledges to support sustainable development need to consider measures to alleviate structural poverty. According to the annual report of the World Bank (1998), 37% of the population living in Latin America and the Caribbean countries, for example, live below the poverty line and 16% live in extreme poverty. The report goes on saying that 70% of households in countries such as Bolivia, Panama, Peru, Guatemala and Haiti live in poverty. This shows that the extent of poverty distribution is greater in many Third World countries (developing countries). It is still a great challenge to ensure how these problems, which are structural in nature, can be addressed amicably. A positive change in income patterns amongst the poor could significantly improve their livelihoods. Thus sustainable development cannot be trusted to make a positive, meaningful contribution to the quality of life on the planet unless there is also an awareness of the processes leading to poverty and resource deprivation (Rao 2000: 235). Poverty therefore emerges as a major threat to sustainable development.

Proponents of sustainable development argue that persistent poverty jeopardises any form of sustainability because if people do not have access to development opportunities, they are unlikely to have the means to be conscious of sustainability. The way in which resources are distributed provides an indication of the extent to which the problems of poverty and inequality can be addressed. In many circles it is argued that processes such as globalisation create winners (the rich) and losers (the poor), thereby creating greater inequality (Melchior, Tell & Wiig 2000: 1; Hallowes 1993; Sagasti cited in UN 1997; Tsikata 2000; Tulloch cited in De Santa Ana 1998: 99). Unless persistent inequality caused by globalisation is addressed by world bodies, the developing countries will continue to face problems of under-development.

Glorification of economic advances and globalisation is all very well, but these need to be integrated with the desired outcome of sustainable development. Unless issues of unsustainable development form part of the mainstream economic development planning processes, global economic advances cannot become meaningful (De Santa Ana 1998; Budlender 1999; World Bank 1998; Amoako 1999; Tsikata 2000; Melchior *et al* 2000; Shepherd 1998). There seems to be a widely held view that globalisation can bring about good economic prospects and synergies in trade relations. However, there are also contradictions associated with this notion. These contradictions depict the power relations which exist between various world economies and trading partners. If these views are correct, it can therefore be argued that there exists a correlation between increasing poverty and globalisation.

Notwithstanding the above macro context, the South African micro context presents complex issues which can be associated with historical patterns and trends in local development. This study examines South Africa's political history in order to assess the extent of the racial development gap in water services delivery and establish how this could be addressed by the implementation of the proposed participatory model. Focusing on the local South African context is important since it reveals and elucidates various characteristics of South Africa's profound apathy and poverty, especially in the rural areas. However, it also needs to be pointed out that South Africa too is equally affected by macro economic and development trends such as globalisation.

The picture in South Africa's urban and peri-urban areas is different from the rural situation because historically, they experienced a greater degree of social and economic development. This results from the political and ideological problems which are discussed in detail in chapters four and five. The contrast between these areas is such that South Africa is arguably two countries in one, where class and race co-exist. One of these is a developed country, which comprises a large number of White South Africans and a relatively small number of middle class Blacks. The second is a developing country, which comprises a large number of Black South Africans who live in rural areas in conditions of abject poverty.

For historical and political reasons, the majority of Blacks have neither had access to, nor participated in, water services development planning, which is the focus of this study. Very probably because of this deprivation, the majority of the rural poor have not realised and

understood the social, human, economic and environmental value of water. In the rural areas, most people still perceive water as a free commodity provided by God. It is therefore clear that there are issues of contrasts and contradictions which could impact negatively on sustainable development, and that South Africa's history has been profoundly influenced by a number of these contrasts and contradictions. In order to address these issues, this study proposes a model to promote the process of sustainable development in order to improve, over time, the social well-being, self-esteem and self-reliance of a people, their overall development and their quality of life. It is against this background that the issue of participatory sustainable development in the South African water services sector needs to be understood.

1.2   BACKGROUND TO AND MOTIVATION FOR THE STUDY

South Africa is a country where water is scarce. There is an unevenly distributed rainfall (43% of the rainfalls on 13% of the land), with high annual variability and unpredictability (Abrams 1996: 2). The national Department of Water Affairs and Forestry, which is responsible for water resources[1], has historically invested in large-scale aspects of water infrastructure, such as dams, in order to protect, preserve and conserve water resources. However, the historical bias in government's approach to water resources prompted the present government to identify water services as a key function in addressing backlogs in the supply of water and provision of sanitation facilities. After the democratic elections of 1994, South Africa experienced major policy reforms in terms of community water supply and sanitation.

Under previous dispensations, South Africa lacked a model that would take account of the social, economic and developmental importance of water. As a result, water services delivery was approached from a purely commercial point of view. The social, institutional and developmental implications remained unexamined until 1994. Up until then, government was based on discriminatory policies of separate governance, social and institutional development

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[1] This is according to the National Water Act, 1998 (Act 117 of 1998)

for different racial groups. This meant that water services delivery was managed by various public institutions and, as a result, delivery was fragmented and costly.

Prior to 1994, water services became the responsibility of major cities such as Johannesburg and of other public institutions such as the water boards. Water boards were mainly concerned about bulk reticulation and hence their commercial viability. Sectors such as mining and agriculture provided a viable market base for water boards in that they used large volumes of water. Water was abstracted, treated, distributed and reticulated in and around large White cities and towns. Johannesburg, for example, became the industrial heartland of South Africa. Inter-basin transfer schemes have been created as a consequence (Abrams 1996: 2). Water was thus a public monopoly geared towards White cities and towns, and the industrial, commercial and agricultural sectors. From this it is evident that in the past, South Africa's water sector was predominantly driven by commercial rather than by social and human development imperatives.

Proceeding from the above statement, it can be argued that there exists a gap between commercial, social and human development imperatives. This is further proven by the past government's role in creating and perpetuating local separation and inequity with regards to service delivery in general. It is therefore important to understand the impact of apartheid on service delivery and the subsequent institutional framework which developed as a result. As entities whose key responsibility was to ensure delivery of services during the apartheid era, the homelands relied heavily on central government for their fiscal survival. There was a strong partnership between central government and the homeland institutions. In order to sustain and nurture the policy of separate development, large subsidies were paid out and there were no stringent measures for controlling how taxpayers' money was used. Services like water provision were rendered without full cost recovery, and this created dependence at community level. Money was spent on grand schemes and unsustainable aspects of infrastructure such as shopping complexes to bolster the image of the homelands, and service backlogs in the rural areas, particularly, and to poor communities in general, were ignored. Service delivery was thus based on consumption and less on the challenges of participation and sustainable development.

Furthermore, the poor communities were not afforded the opportunity to participate fully in the water services development planning processes. This could be attributed to a lack of

policies and systems which encouraged public participation. Other findings suggest that given this brief background, addressing sustainable development within South Africa's historical context is problematic for two key reasons. First, apartheid has brought about extreme variations in economic income and social living standards. These variations can create widely disparate interpretations of what is "sustainable". Second, the fact that South Africa's problems are manifested within towns, cities and rural areas presents a particularly daunting and challenging task.

The non-participatory nature of the apartheid water policy was symptomatic of the overall fragmented nature of service delivery in areas such as health, education, housing and water infrastructure. The consequences of the past water sector policy in particular, have been far reaching. First, it is estimated that 12 to 14 million people were without any formal water supplies and 21 million without formal sanitation. Second, it has emerged that there are serious environmental effects of poverty, which continue to impact negatively on the water resource base in the country. Third, non-participatory policy approaches have created a huge gap which prompted the new government, through the Department of Water Affairs and Forestry, to address the important issue of policy reforms as quickly as possible (Abrams 1998: 3).

Prior to 1994, the Department of Water Affairs and Forestry was still operating under the old Water Act of 1956 and was responsible, *inter alia,* for water resources management. The main reason was that there were no appropriate institutions at local level to undertake the water services functions. South Africa's transitional local government arrangements were introduced in 1995, followed by the first democratic system in 2000. Notwithstanding that current arrangements are appropriate, legitimate and democratic, local governments still face capacity and resource constraints that prevent them from assuming their full responsibilities. Before improvements in overall service delivery, such as uninterrupted delivery over a period of time, are achieved, local government will have to be given additional support by central government. However, within this juxtaposition lie opportunities and innovative measures to bring about participatory and sustainable development, most particularly in the water services sector (Hamann & O'Riordan cited in Dodds 1997).

The new government has introduced a number of participatory legislative measures, such as Batho Pele[2] (People First), to complement its attempt to decentralise service delivery responsibilities to local government. South Africa is, clearly, adopting the international trends of decentralisation and public participation in service delivery. Abrams (1998: 3) maintains that all the wisdom of the developing world regarding water supply and sanitation services indicates that the local level is the deciding factor in whether or not development will succeed. Decentralisation has become a strategic vantage point for democratic governments to provide opportunities for local communities to take control of service provision. By devolving responsibilities to municipalities in this way, the chances for sustainable development are being maximised. Therefore, for sustainable development to be achieved, public participation becomes critical. Legislation alone can neither guarantee nor promote sustainable development. And indeed, the processes of public participation in service delivery are becoming more commonplace in South Africa, although they have not yet become entrenched throughout the political system.

South Africa's new constitution and its new water legislation[3] regard local government as responsible for ensuring access to basic services such as water services. Local government thus has an important role to play, first, in ensuring access to all basic services and, second, as a vehicle to assist in the consolidation of the existing democracy at local level. For the purposes of this study, local government is taken to mean municipalities as government institutions, the key responsibilities of which include governing and ensuring delivery of services at local level. According to the Water Services Act No 108 of 1997 (subsequently referred to as "the 1997 Act"), any municipality which performs water services functions is termed a water services authority. These institutional arrangements came into existence in 1997 after the enactment of the 1997 Act and they are also in line with the constitution.

South Africa's constitution rates water as a basic human right, and access to water is guaranteed by one of the main objects[4] of the 1997 Act. The water sector receives a substantial allocation of resources from the State Treasury and donor organisations,

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[2] See chapter four table 4.1.
[3] Water Services Act, 1997 (Act 108 of 1997) and the National Water Act, 1998 (Act 117 of 1998)

particularly when compared with the health, education and welfare sectors. Money allocated to the Community Water Supply and Sanitation (CWSS) programme was and is still spent on the following activities (DWAF 1996/7: 25-26):

(a)   integrated and participatory planning, including pre-project planning and identification of projects

(b)   empowering communities to drive their own development processes

(c)   implementation of water and sanitation projects

(d)   operating and maintaining projects in the transfer process

(e)   supporting local governments in building capacity to assume their constitutional responsibility of providing potable water and sanitation

(f)   establishing new institutional arrangements such as water boards

(g)   transforming the Department of Water Affairs and Forestry and internal human resources development.

Besides the Community Water Supply and Sanitation programme, the Department of Water Affairs and Forestry has also invested millions of Rands in a private sector initiative called Build, operate, Train and Transfer (BoTT), which aims to develop rural infrastructure and accelerate delivery of services, mainly in the former homelands. Build, operate, Train and Transfer was introduced by the Department of Water Affairs and Forestry in Mpumalanga, Northern Province (now called the Limpopo Province), KwaZulu Natal and the Eastern Cape. The period between 1994 and 2000 was thus a transitional period for the new government during which two key challenges were addressed, that is, accelerated water services delivery and the refurbishment of former homeland schemes. Having now moved on from that transitional phase, however, the key challenge for local government is to create and/or facilitate developmental services. In other words, services delivered by municipalities are expected, over a certain period of time, to yield a social outcome. According to South

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[4] Object 2 (a) and section 3 (1).

Africa's White Paper on Local Government (South Africa 1998a: 17), a developmental local government means a:

> local government committed to working with citizens and groups within the community to find *sustainable ways* to meet their social, economic and material needs and improve the quality of their lives.

The terms "developmental" and "sustainable" are action-oriented and complement each other. Both terms take into account a broad spectrum of factors associated with the quality of human lives. They both also refer to a need for outcomes-based processes at local level to meet the needs of citizens and groups of people.

This study attempts to contextualise sustainable development within the old and the new government systems of service delivery. Inherent in the process of sustainable development is the need for a political system which embraces effective public participation in decision-making for good governance (Ginther *et al* 1995: 20). What can be deduced from the above discussion is that South Africa's history of separate development did not create a foundation for sustained and sustainable delivery of basic services. A major backlog of potable water supplies and sanitation existed in the former homelands where water schemes were undermined by factors such as poor operations and maintenance and a disregard of cost recovery. An international assessment of rural water schemes shows that up to 50% no longer function a few years after completion (Weekes cited in Wellman 1999: 2). Breakages, lack of spare parts and the non-availability of fuel are cited as problems.

While one of these may well be the physical symptom, it could be suggested that any failure of a system is ultimately the result of institutional and economic factors, not technical factors. Continued failure of a system is the result of inadequate finance, poor administration, lack of community support as demonstrated through failure to pay for services, and lack of adequately trained technical staff. This is typical of the situation in the former homeland areas where the financial viability and sustainability of water schemes were grossly compromised and where the legacy of the schemes implemented in 1994 has placed a considerable financial burden on the new government.

It is important to note that South Africa's new government is also experiencing similar problems of unsustainable water schemes. However, the collapse has not entirely been

through government's fault, but lies also with some recipient communities who are guilty of rampant vandalism and water piracy (Jackson cited in Wellman 1999: 2). This study argues that such problems are symptoms of historical water policies which neither encouraged public participation nor promoted access to basic water services for all communities. From the foregoing it is clear that South Africa's past and present modes of governance, systems and structures must be taken as a point of departure for moving towards a new paradigm for sustainable development. This study is therefore justified in looking at sustainable development, within the context of the water services sector[5].

1.3 PROBLEM STATEMENT AND RESEARCH OBJECTIVES

In contrast to the old government, the new government has impressive water policies that favour holistic, integrated development. However, while many of these policies embrace the concept of sustainable development, they fall short of contextualising it as an outcomes-based developmental approach. Policy makers and practitioners at government level are also inclined to adopt input-oriented and supply-driven programmes which run counter to effective public participation. In addition, there is a tendency for the policies to remain theoretical and not to be translated into action. Often, success is based on how much the government spends (inputs) and how many water taps it provides to communities (outputs) and not so much on the quality or impact (outcome) of the programmes.

This study argues that in considering options for sustainable development, the outcome is far more important than the inputs and outputs. The current water policy arrangements in South Africa are structured in such a way that success is measured in terms of input costs and less on outcomes. For the water services sector, measuring outcomes implies moving beyond the physical successes such as the number of people served with water and sanitation.

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[5] There is a distinction between the water resources and the water services sectors. Water resources deals with environmental factors of a resource and water services deals with the supply side. They together constitute the water sector.

1.3.1   Key constraints within the water services sector

The following constraints can be identified in the water services sector:

1.3.1.1   Lack of a sustainable, participatory development model

Lack of a model can lead to persistent duplication of effort and fragmentation of the planning processes of water services development. Since 1994 there has been accelerated delivery of water infrastructure in South Africa as a result of initiatives undertaken by the Department of Water Affairs and Forestry, the private sector, donor organisations and non-governmental organisations. However, minimal efforts were made to integrate and co-ordinate programmes, and while it is accepted that the urgency of addressing past backlogs was the major contributing factor then, this problem still persists at the time of writing this thesis.

1.3.1.2   Lack of demand responsiveness and minimal public participation

Apartheid policies created apathy and low self-esteem among the majority of South Africans. Currently there is a heavy reliance on government to deliver basic services, and while this reliance is arguably a result of the past history of discrimination, it can also lead to a culture of dependence. In fact, this culture has already taken hold to some extent, as may be seen in the unwillingness of many communities to pay for services. Further encouragement is given to the development of such a culture by the fact that most of the present government's policies are inherently supply-driven. This is, for example, the case with the accelerated programmes of the Reconstruction and Development Programme that have been implemented since 1994, and the Community Water Supply and Sanitation programme is another example (see chapter five 5.2 (a) and (b). Over and above the problem of reliance on government, supply-driven programmes do not stimulate consumer responsibility or participation, nor do they generate ownership of programmes.

The current practice of public participation through water project steering committees is not entirely effective or desirable. Although these committees played a critical role during the initial stages of the water infrastructure development projects initiated from 1994 onwards, their lifespan is short and their representativeness is poor. They are characterised by gender imbalances and opinionated representatives and are, regrettably, elitist. They merely fulfil the need for project acceptance at community level, without which consultants would rarely have access to projects. The notion of having a project steering committee is therefore a way in

which consultants and other implementing agents of the Department of Water Affairs and Forestry gain credibility from communities, thereby making it easier to access funds. Without a strong participatory culture at community and public level, this situation is subject to abuse from many quarters.

1.3.1.3 Lack of operational, technical and management capacity

Through the existing technical and engineering capacity in the water services sector, the present government is succeeding in capital water infrastructure investments. Considerable progress has been made with job creation, skills training and access to basic water services for millions of South Africans. However, since the new constitution regards water services as a local government competency rather than a responsibility of central government, as was previously the case, the building of operational, technical and management capacity, especially in former homeland areas, remains a grave challenge. Institutional development through capacity building and training is therefore critical for local government.

1.3.1.4 The dangers of parochialism

South Africa's water sector has a comprehensive legislative, legal, policy and regulatory framework, which addresses a number of social, institutional, economic, developmental and structural issues. The 1997 Act, which was the first piece of legislation enacted in 1997, is built on the premise that water services delivery will take place in a sustainable, affordable, equitable and developmental manner, through participatory methods and approaches. However, the thinking behind this premise was based on an ideal situation, in that public participation was conceived of as a theoretical rather than as a practical phenomenon. No serious consideration was given to lessons learnt by other developing countries (such as Bolivia and Chile) with similar experiences of public participation and water services development planning processes. This is what makes the South African water services sector so unique and parochial, and it also offers a possible explanation for the constraints now being felt in the water sector. One of the dangers of parochialism is its potential for wastage of resources, which could easily lead to costly and non-sustainable results.

Against the background of the above constraints, this study has the objectives set out below.

1.3.2   Research objectives

The primary objective of this study is to propose a participatory model for the water services sector, which could lead towards sustainable development in South Africa. The secondary objectives of the study are the following:

(a)   To provide a conceptual justification for sustainable development and the processes, methods, principles and approaches that underpin it.

(b)   To provide a brief historical descriptive analysis of the system of racial discrimination and its underlying patterns of development, with particular reference to the water services sector.

(c)   To undertake a sectoral analysis of the water services sector with reference to prospects for sustainable development in South Africa.

(d)   To contextualise sustainable development and sustainable water services delivery within South Africa's local government system.

(e)   To describe municipal participatory planning processes with reference to Chile, Nicaragua and Bolivia, to draw lessons for South Africa from the experiences of these three countries and to determine the prospects for sustainable water services delivery in South Africa.

(f)   To explore the strategic considerations of a model for the water services sector in South Africa.

1.4   SCOPE OF THE STUDY

As the above discussion has pointed out, the scope of this study is limited to a participatory model for sustainable development, with reference to the sectoral analysis of water services in South Africa. Since 1994, there has been growing concern about the sustainability of water services in South Africa. Like other developing countries, South Africa began to embark on water reform processes in order to ensure access and to promote health and hygiene within the poor communities (see chapter seven table 7.2). These actions were indirectly motivated by the pressure to conserve, protect and manage water resources in the most effective and efficient manner. However, it is important to trace the evolution and proliferation of development theories and briefly to describe how they have influenced current thinking in

development studies. These theories can be classified as the neo-classical development theories (before the 1950s), the Marxist, modernist and dependency theories (1950s–1980s), and the post-modernist and neo-liberal theories (1980s–1990s). The concept of sustainable development gained popularity in the 1990s and has emerged as a common denominator in the unification of diverse development discourses. The author is therefore mindful of these development discourses which have influenced the evolution, theory and practice of sustainable development (see chapter two section 2.2.1). The following brief discussion places the development paradigm and the underpinning paradigmatic shifts in perspective.

1.4.1 Overview of development theory

Contemporary development theory comprises a set of ideas which were promulgated many years ago through the inception of colonisation. The colonisation period underpins the expansion of the European capitalist system which defined parameters for the colonial legacy and the subsequent creation of colonial territories (Preston 1996: 139). The significance of such parameters is that they laid the basis upon which First World countries pursued development. The pursuit of development was characterised by patterns of production, economic growth models, and trade and industry, which clearly distinguished the core (First World countries) from the periphery (Third World countries). The concept of "development" became institutionalised by First World countries to reflect their widely held beliefs and ideas about what constituted change in human development, economic development, environmental development and technological advancement. This concept still permeates development policy agendas of governments the world over. The concept has therefore succeeded in responding to diverse and complex world systems, bringing about a synergy of disciplines and also bridging cross-cutting intellectual concerns (Booth cited in Schuurman 1993: 50). As argued by Esteva (cited in Crush 1995: 1), this concept occupies the centre of an incredibly powerful semantic constellation, often so convincing that those who apply it become trapped in the discourse. As a result of this moral and intellectual stagnation, the development concept will forever be applied as an epistemological basis for any particular theory which advocates and glorifies goodness in society. Therefore, for a thorough understanding of development, we need to understand the theory behind it.

A theory represents experiences and meanings that people attach to objects or subjects. It also provides insight into why certain things happen, and therefore provides assumptions and

perspectives about life in general. Booth (cited in Schuurman 1993: 65) identifies three concepts which characterise theory, that is; its relevance, realism and choice. These characteristics purport that theory should be relevant, should respond to the real world and should offer people opportunities to make informed choices. Development praxis concerns the practical contribution of development to the resolution of problems and other issues which impact negatively on the plight of the poor across the world. This study is based on the same premise. However, it should also be noted that there are different levels of theories which address a variety and multiplicity of development discourses (Mouton cited in Stewart 1997: 7-8). These are:

(a) first-order theory: Mouton's "pragmatic interest"

This theory concerns the promotion of indigenous knowledge and practical skills. The theory seems to dwell on ordinary experiences.

(b) second-order theory: Mouton's "world of science"

This theory is concerned with the main level at which development and other sciences operate. That is, the world of science, new inventions and the production of knowledge systems.

(c) third-order theory: metatheory or philosophy of science

This theory concerns the validation of science, new inventions and knowledge produced, such as in (b). The emphasis is therefore not on the study of development but on the theory of development. As indicated previously, the latter occupies a moral high ground in society and, as such, bears its own legitimisation. Over the years the theory of development has been applied in the production of knowledge about enlightenment ideals, such as economic growth. These ideals portray development theory as the panacea for addressing societal problems (Tucker cited in Munck & O'Hearn 1999: 5). Interestingly, the development theory has laid a framework for understanding desirable developed conditions such as those in First World countries and undesirable underdeveloped conditions in Third World countries (Stewart 1997: 84). As a result of these underdeveloped conditions, Third World countries

have become objects of knowledge and therefore the target of development theories (Escobar cited in Crush 1995: 214).

The above discussion emphasises that development does not occur in a vacuum. Development theory is influenced by the experiences of the theorists and people associated with the theory. The theory (text) is derived from a particular experience (context). However, even though development has been the subject of research and policy formulation in the past, it has remained weak in its implementation. It has been reduced simply to another form of faddish intellectualism which, as argued by Crush (1995: 4), is destined, like others, to bloom and fade. The challenge is therefore to re-orientate development as a kind of armchair contemplation of a concept which can assist in generating practical solutions for addressing the needs of present and future generations (see chapter eight). Authors such as Hettne, Schuurman, Crush and Escobar have written at length about the development impasse of the 1980s. These writings portray mainstream development theories as populist, although they place emphasis on how new perspectives can accommodate diverse development issues. Some of the development theories referred to are briefly discussed below.

(a) modernisation theory versus dependency theory

Both theories were dominant between the 1950s and the 1980s. On the one hand, the modernisation theory advocated progressive modernised values, social structures and prosperity prevalent within First World countries; on the other hand, the dependency theory rejected the notion that First World countries should become models for Third World countries (Stewart 1997: 41-44). The two theories were in conflict with each other. These theories are manifested in the experiences of Latin American countries, especially during the 1980s. The dependency theorists believed that First World countries exploited Third World countries (core) and that the wealth they had accumulated was as a result of raw materials supplied by Third World countries (periphery). The dependency theorists believed that by exporting primary products overseas, Latin American countries occupied a subservient position. The temptation on the part of the dependency theorists to reject modernisation was based on the inability of most Latin American countries to rise above their economic problems. These problems could be explained in terms of the debilitating structural circumstances of the economies of Latin America within the global system (Preston 1996: 184). Dependency theory thus represented the aspirations of Third World countries whereas

the modernisation theory represented the orthodox development theory which affirmed the powerful role of First World countries.

(b) neo-liberalism versus Marxist development theory

Both theories portray a dichotomous relationship between Third World and First World countries. This relationship addresses material production as a unit of analysis. Neo-liberalism affirms the role of the free market whereas Marxism rejects the free market as advancing exclusively the capitalist and imperialist tendencies of the First World. Neo-liberalism, like post-modernism, subscribes to neo-classical economic theory, which postulates that through a competitive exploitation of natural resources, First World countries can enhance productivity and economic growth, which is meant to have a direct economic spin-off for Third World countries (see chapter two section 2.2.2.1). Marxism rejected the economic growth model as an attempt by the liberal First World countries to shy away from the real issues of exploitation, unequal power relations and control of economic and natural resources. Over many years neo-liberal politics have prevailed in many parts of the world as a dominant development discourse. To date, many democratic governments, including South Africa, embrace neo-liberal principles which are inherent in their liberal constitutions and liberal economic policies.

(c) post-modernist development theory

This theory effects a single point of convergence in that it proposes an alternative development path which recognises diverse approaches to development (Schuurman 1993). The theory advocates the transformation of capitalism by bringing about changes in production systems and patterns of trade between First World and Third World countries. According to Bryceson and Bank (2001: 18):

> neo-liberal economic goals are being quietly disowned, while longstanding development concepts are being undermined by a post-modernist insistence on the recognition of diversity and its incomparability.

However, it is also clear that a post-modernist agenda has not succeeded in bringing about practical measures to address real problems of unsustainable development. This discussion points out that although mainstream development thinking provides sufficient intellectual

basis for understanding developed and underdeveloped situations and the motives behind them, thinking has tended to become populist in that it appeals for poverty alleviation in Third World countries. Due to its strong ideals, post-modernism has become synonymous with globalisation in that it has brought about neo-monetarist economic policies. The coming of age of globalisation, neo-liberalism and post-modernism can be related to the prescriptions of the World Bank and the International Monetary Fund. It is important to note that Latin American countries such as Chile[6], Bolivia and Argentina are examples of Third World countries which liberalised their economies in the 1980s by adopting neo-liberal globalisation policies (Slater cited in Schuurman 1993: 94, 108; Lee & Jouravlev 1997: 7). This trend saw many of these countries, even those which were still under military dictatorship (see chapter seven table 7.1), moving towards liberalisation and privatisation of state assets, coupled with decentralisation of service delivery to local government with a concomitant increase in public participation. These development trends and patterns are particularly visible in the water sector during the 1990s (see chapter seven table 7.2 and section 7.4).

During the 1990s, post-modernism became a unifying concern which commanded broad respect from both leftist and rightist movements. Concepts such as social democracy and expressions such as "capitalism with a human face" became more common. As a result of this wide societal acceptance of these neo-populist discourses, other concepts such as community empowerment and public participation emerged (Long & Villarreal cited in Schuurman 1993: 160). The introduction of participatory methodologies emerged as an attempt to create synergies among the public sector, communities and the private sector (Evans 2002: 44). To date, partnership arrangements across different sectors are becoming increasingly popular. Interactive (public) participation is also emerging as a viable option and a prerequisite for sustainable development (see chapter three table 3.2).

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[6] Due to its impressive economic growth rates in the 1980s and 1990s, Chile is often cited as a success story for Latin America (World Bank 2002; Estache *et al* 2002).

Private sector participation (PSP)[7] in the provision of water services is by no means a panacea, but it has brought about positive spin-offs in the optimisation of efficiency and effectiveness (Jackson 2000; Lee & Jouravlev 1997; Estache *et al* 2002; World Bank 2002). Depending on the situation, the PSP approach offers a menu of options which can be adjusted to suit a particular situation. These include management contracts, lease agreements and concessions. The latter is popular because under a concession contract, the government grants to a private firm an exclusive right to operate, manage and maintain infrastructure. The contracts are designed to cover a 20 to 30 year period to allow the concessionaire to depreciate investment and to provide a reasonable return to the equity partners (Lee & Jouravlev 1997: 44). Although there are several success stories, such as private sector participation in service delivery in Chile, it is also important to note that such participation is monitored by strong regulatory authorities. Contracts are diligently monitored and the needs of consumers are protected (Jackson 2000). However, issues of affordability and the general culture of non-payment for services pose predicaments to government and the private sector. Cross-subsidisation of services and government subsidies are not sufficient to bring about the sustained delivery of services.

The above discussion indicates that all over the world the emphasis is now on development theories which promote pro-poor development policies; that is, those which are diverse and interactive rather than linear (Munck & O'Hearn 1999; Thomas & Grindle 1990; Evans 2000; Schuurman 1993; Adams cited in Schuurman 1993: 218). The notion of Public-Private Partnerships (PPPs) is widely accepted as a noble attempt by governments to effect access to basic infrastructure and services. Public participation is also accepted as the only basis for successful development and, as such, is a better model to facilitate people's own development (Edwards cited in Schuurman 1993: 65-66). Since 1994, South Africa, like other developing countries such as Chile, has embarked on the implementation of neo-liberal economic policies. The Reconstruction and Development Programme became a government initiative to

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[7] Only two major water concession agreements have been signed in South Africa. These are the Dolphin Coast and the Nelspruit concessions. These are similar arrangements as those which were signed in Argentina, Chile and Bolivia.

address and meet the basic needs of the poor whilst growing the economy and creating sustainable jobs.

The discussion so far indicates also that understanding development theory is not about choosing the theory which professes prosperity or poverty alleviation, but rather that which offers practical solutions. As noted from the report of the South Commission (1990: 13):

> Development should be seen as (sic) a process of self-reliant growth, achieved through the participation of the people acting in their own interests as they see them, and under their own control.

Currently the challenge is to deconstruct the existing development discourses and implement alternative approaches. This would require borrowing analytical methods from post-structuralism which address issues of power and knowledge (Hettne and Escobar cited in Munck & O'Hearn 1999: 178-205; Booth cited in Schuurman 1993; Bryceson & Bank 2001). Examples can be derived from post-structuralists such as Foucault (discourse analysis) and Derrida (deconstruction), who provide rigorous analysis of development discourse.

The discussion above points out that development discourse has given rise to a number of populist approaches, such as sustainable development. Unlike other contemporary theories, sustainable development seems to cater for diverse developmental approaches and this can be noted from its historical patterns and trends (see chapters two and three). However, this study argues that problems facing South Africa's water sector, and probably other sectors as well, can mainly be addressed through participatory methods of sustainable development which emphasise listening to the people, understanding local knowledge, strengthening local organisational capacity and developing alternative development strategies (Long & Villarreal cited in Schuurman 1993: 160). The choice of the water services sector is motivated by the fact that water is one of the services receiving priority from the South African government and that there is a desperate need to ensure that people living in rural areas have access to potable water. Promotion of access to basic services implies that the government should play an interventionist role (Van Niekerk 2001: 36). Such a role would require the government to regulate private sector participation and to ensure that public participation becomes an effective monitoring mechanism (see chapter seven section 7.4).

This study is important for two key reasons. First, it addresses water services as a basic human right; second, it examines water services delivery as a competency of local government. The study is influenced by the author's personal experiences and contact with rural communities in the former homelands of apartheid South Africa. Its point of departure is, in essence, the hardships associated with lack of access to potable water. Lack of access demonstrates an abuse of human rights under apartheid in the shape of denial of dignity, self-respect and self-development. All these elements are reviewed to show that although South Africa now has a democratic government, this does not imply that the majority of South Africans know and understand their basic human rights. Contemporary development theory is taken as a point of departure, but its practical application in the South African context is paramount for this study (see chapter eight).

The delimitation of the study is therefore twofold. First, it examines the broad conceptual and theoretical justification of sustainable development with reference to South Africa's water services sector. Second, it draws critical lessons for conceiving and implementing a participatory municipal development planning model from three Latin American countries, namely Bolivia, Chile and Nicaragua. Such a model is particularly relevant because South Africa's development history is rife with vicious cycles of social, economic and political distress which were similarly characterised by the powerful core (apartheid state) and the subservient periphery (former homelands)[8].

1.4.2   Focus on the South African water services sector

In the past, water in South Africa was regarded as one of the essential services for domestic and commercial or industrial use. However, this situation changed significantly in 1994 when the first democratic government came into power and the supply of water for domestic use was identified as the top priority in the water services sector. The design of the water supply and sanitation programme introduced by government to address the country's water needs was based on the standards of the Reconstruction and Development Programme, which define basic water services as 25 litres per person per day, available within 200

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[8] Graaf (1990) equates the dependency theory to South Africa's apartheid history.

metres of his/her residence (South Africa 1997a). This is intended for those who cannot afford higher levels of service, but who can at least pay operational and maintenance costs. The major challenge during the transitional period of democratic governance was to transform the bad practices of water management in the least disruptive manner, and at the same time to maintain the good ones. The old practices were predominantly linked to the discriminatory policies of the apartheid era and the new practices to policies and legislation that promote access to basic services. Although the present government has succeeded in its implementation programmes, sustainability remains a great challenge. Since the 1994 general elections, government has committed billions of rands to the national infrastructure programme with the purpose of providing an internal bulk and connector infrastructure in support of a household infrastructure for the needy (see chapter six tables 6.2 and 6.3). The programme also offers support to provinces in terms of basic infrastructure/services such as water, sanitation, electricity and roads.

The 1997 Water Services Act requires municipalities (water services authorities) to ensure access to water services. This involves providing efficient, affordable, economical and sustainable access to water services[9]. Furthermore, water services authorities must also prepare draft water services development plans as part of the process of preparing an integrated development plan in terms of the Local Government Transition Act, No 209 of 1993[10]. From this discussion it can be deduced that the responsibilities of local government in South Africa are clear. However, political responsibilities go hand in hand with operational and institutional capacity. The ability to govern and the ability to manage services are inseparable. Many of the studies conducted on water services to date point to the desperate need for local government capacity building (Jackson & Hlahla 1999: 551; Nickson 1997: 165; Morgan 2002: 26; Nickson 2001a; Plummer & Nhemachema 2001; Plummer 2000: 39; Hall 2001: 38; Sinclair 1999: 585). It is not surprising that South Africa is struggling to produce developmental service delivery results after many years of international isolation. After all, South Africa, like all the other developing countries, has embraced globalisation. The challenge, therefore, is to transform the local governance system and to orientate it in

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[9] Section 11 (1) of the Water Services Act No 108 of 1997.
[10] Section 12 (1) (b) of the Water Services Act No 108 of 1997.

line with global development trends. In so doing, practical solutions which can assist municipalities to adopt sustainable development actions must be found.

Globalisation brings with it issues of private sector participation in the provision of water services. Some people are in favour of private sector participation while others are violently against it. Notwithstanding the reasons advanced for both positions, globalisation has become part and parcel of our lives and is here to stay. Perhaps the debate is not how to get rid of it, but rather how to spend our energy influencing it in such as a way that it benefits the poor of the Third World countries. As Morgan (2002: 59) expresses it:

> Globalisation presents new potentials and impetus for local and global manifestations of creativity, collaboration, interactions and harmony as a counter-force to the tendencies for segregation and conflict and degradation.

Globalisation does and will influence, negatively or positively, the ability of any country to govern and deliver basic services to the poor (Hirst & Thompson cited in Ballard & Schwella 2000: 740-747; Morgan 2002; Dollar & Collier 2001). As the responsible authority for water services provision, local government in South Africa faces the huge task of overcoming service delivery backlogs[11]. The challenge is to move beyond ideological fixations and to embrace models which are tailored-made for South Africa's situation to address the above-mentioned backlogs. There is mounting pressure on municipalities to take a stand because rapid urbanisation, which is a symptom of globalisation, is gradually increasing the demand for water (Nickson 1997: 165). This shows that service delivery should not become a mere technical, administrative or bureaucratic exercise, but should take into consideration tried and tested models, methods, service coverage and levels as well as financing options (Morgan 2002: 35). In the South African context, effective and efficient service delivery requires a robust partnership between government, business and communities. It is important to note that since 1994, South Africa has embarked on a tough course to redress the imbalances of

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[11] See chapter five figure 5.2(b).

the past by experimenting with a number of private sector participation models[12] (Hlahla 1999: 656; Plummer 2000; Bryceson & Bank 2001). Despite reservations expressed by the labour movement and other critics of the private sector, this is an indication that South Africa already embraces private sector participation. However, it is also important to note that private sector participation is not a panacea for sustainable water services provision (Hall 2001; Van Niekerk 2001).

The majority of municipalities in South Africa lack good track records when it comes to commercial viability and therefore cannot access the much needed capital for infrastructure development. Dependence on the national fiscus jeopardises chances for economically viable and sustainable municipalities. The key motives for private sector participation should be efficiency gains and mobilisation of private finance which national treasury alone cannot raise. However, this should not imply that public sector organisations or utilities are not in a position to perform similar functions. There have been experiences of successful public utilities elsewhere (Alfaro 1997; Morgan 2002: 74). Unfortunately, these experiences are few and there are vast differences in different situations. In fact, it has been proven that the water sector provides a rare example of a situation in which the public sector can apply robust regulatory pressure in response to poor performance by the private sector (Nickson 2001b: 11). What should be recognised is that private sector firms are motivated by profit. The issue is therefore not to demonise private sector participation, but to ensure that profit is earned in the most acceptable manner. Checks and balances must be in place to militate against any abuses by the private sector (Jackson & Hlahla 1999: 558). These checks and balances should include a clearly defined regulatory and legislative framework which takes into consideration the interests of workers and consumers (Kotze *et al* 1999: 626). The framework should also ensure a fair, transparent and competitive bidding process which ultimately brings about value for money and affordability of services (Heyman & Schur 1999: 607; Sinclair 1999; Kotze *et al* 1999; Jackson 2000).

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[12] For further discussion on models for private sector participation, see Heymans & Schur (1999: 607); Kotze *et al* (1999); Plummer & Slater (2001); Plummer & Nhemachema (2001); Nickson 2001b; ECLAC (1995); Lee & Jouravlev (1997: 13).

Other international experiences show that an effective regulatory framework is important to counter the adverse effects of private sector participation (Nickson 1997: 179; Plummer & Slater 2001; Nickson 2001b; Plummer 2000; Rosensweig & Perez 1999; Alfaro 1997; see chapter seven table 7.3). An effective regulatory arrangement is one which covers a broad spectrum or chain of services provided by the water industry, with reference to environmental standards, affordable prices, quality and quantity of water provided and, most importantly, consumer satisfaction (Nickson 1997; see chapter five figure 5.1). Certainly, effectiveness also implies that regulatory control should be free from political bias, that participating institutions should have access to legal recourse and that the regulatory authority should have the strength to challenge the private operator (Nickson 1997:179). These are some of the fundamental requirements for a successful water management system which are currently lacking in South Africa.

It should be noted, however, that the success of a regulatory arrangement and private sector participation is dependent on the extent of public participation. Research shows that to date efforts in South Africa to bring about participatory approaches at local level have been disappointing. The meaningful application of sustainable development requires a special approach which recognises untapped resources, both natural and human (Morgan 2002: 13). Public participation is thus a vehicle which could be used by government to counter the adverse effects of private sector participation and also those of globalisation. An important lesson to be drawn from the above analysis of the development theory is that the goal of development should not be that of an orthodox interventionist position. Rather, a service delivery approach in South Africa should always cater for a dissolution and reconsideration of new approaches towards development (Preston 1996: 235). The evolution of development theories has interesting lessons to be learnt, particularly from other countries such as those in Latin America.

1.4.3   Lessons from three Latin American countries

In identifying the lessons that South Africa can learn from international experiences, the author has focused specifically on the three Latin American countries referred to above (Bolivia, Chile and Nicaragua). The rationale for this choice is explained below.

The key motivation for drawing lessons from these countries is that there are many parallels between Latin America and South Africa. These countries have similar geographic,

demographic and social stratification, economic and political features (Wolhuter 1995: 22). Latin American countries have experienced various reforms dating back many years (see chapter seven section 7.1 and 7.2). In addition a large number of Latin American countries have, since the 1980s, developed national sustainable development strategies in order to resolve complex problems of service delivery and the involvement of stakeholders (Ornat 1997: 3-5). Latin American countries used the following criteria in developing their strategies and models:

(a)   inter-sectoral collaboration

(b)   participatory planning

(c)   the use of consensus documents for policy formulation

(d)   development of a clearly defined action plan.

This study therefore draws on the above criteria and the important experiences of Bolivia, Chile and Nicaragua in their pursuit of participatory national sustainable development strategies. A common thread in the experiences of the three countries is that the processes they adopted were framed within the concept of sustainable development, with the strategic aim of bringing a qualitative difference (outcome) to the lives of the people at local government level. All three countries underwent processes of decentralisation and display similar patterns and frameworks of social equity and co-operative governance. South Africa is currently striving towards the kinds of outcomes already achieved by these countries. To substantiate this motivation, the study examines a number of comparative studies conducted in South Africa that look at patterns and trends of governance in South Africa and the three Latin American countries (DPLG 2000; Ornat 1997; Lawrence 1990; De Beer 2000; Wolhuter 1995).

Whilst this study acknowledges that South Africa's institutional arrangements are well defined, there are areas for further improvement. First, there is a need to clarify roles and responsibilities of stakeholders and to improve co-ordination mechanisms. Second, central government could introduce policy reforms which discourage the supply-driven nature of water services. Since South Africa lacks a long track record of sustainable water and local government services, lessons from the three Latin American countries are relevant to South Africa. South Africa also has a well-developed constitution and legislative arrangements, but

very weak local government structures. It is important to note, as well, that South Africa is still a centrist state in that central government seems to have a strong presence vis-à-vis provincial and local government. This makes decentralisation difficult to achieve, especially if there is no practical model for participatory sustainable development.

Considerable attention is given to the Bolivian approach to municipal development planning processes, from which South Africa can derive much that is useful with regard to the institutionalisation of a strong participatory culture at local level. This study proposes interactive participation as an essential ingredient of a participatory model towards sustainable development. Interactive participation is viewed by the author as a method which provides a profound vision aimed at social change and transformation. Such a method is integral to the proposed model which is derived from the experiences of Bolivia. As noted from these experiences, indications are that a number of benefits[13] can accrue from modelling (Gear 1974: 33-34), that is:

(a)   modelling enables most important factors and processes to be treated in one analysis

(b)   modelling enables decision making to occur in a systematic way

(c)   modelling can be used to simulate outcomes

(d)   modelling can be used in conjunction with a computer to search millions of alternatives

(e)   modelling simplifies situations.

Another relevant component of the Latin American experiences is the regulatory arrangements in the water sector. During the field visits, it was noted that independent regulators are used to regulate the quality of services, determine tariffs, secure, monitor and measure consumer satisfaction. This initiative is also intended, in part, to promote sustainable development. Municipalities co-operate with regulators by enforcing the regulations through contracts and competitive bidding processes. The Department of Water Affairs and Forestry has also instituted sound regulations and, since 2000, a process to develop a regulatory

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[13] See chapters seven and eight (figure 8.1) for more details.

framework for the water sector has begun. This implies that South Africa can learn from the experiences of countries such as those discussed in this thesis. It could therefore make economic sense to look elsewhere for similar experiences. It is also important that, as the responsibilities for water services are transferred to municipalities and regulatory arrangements are being designed and tested, effective public participation should be promoted. Sustainable development provides an ideal situation for the South African government and communities to strive towards participatory approaches, with a view to achieving sustainable outcomes rather than top-down, technocratic approaches (Local agenda 21 2001: session 20).

1.5   RESEARCH DESIGN AND METHODOLOGY

This study is non-empirical and its design is based on three forms of analysis, namely the conceptual background of sustainable development, the theoretical justification for a new paradigm shift and the strategic consideration for a water services sector model in South Africa. The conceptual analysis clarifies various perspectives and dimensions of sustainable development. The theoretical analysis examines the participatory approach and the principles of human-centred sustainable development. The strategic consideration draws significant lessons from the three Latin American countries into a practical model for South Africa.

The theoretical justification is informed by outcomes-based principles in that it emphasises the impact of development programmes on the lives of the beneficiaries. It is contended that outcome is an appropriate unit of analysis in this context. The unit can be calculated as *inputs + outputs = outcome*. *Inputs* are defined as the sum total of resources the government invests in the process; these include time, levels of effort, budgets and participatory methodologies and approaches used by consultants and/or officials during programme implementation. *Outputs* relate to the products or services which arise out of the variety of actions undertaken by consultants and/or officials. *Outcome* is the qualitative difference brought about by the products or services delivered.

1.5.1   Data collection: methods and techniques

The process to collect data was characterised by various methods and techniques. This was an attempt to bring about a justification for a participatory model in South Africa's water services sector. In doing this, the study explored a number of important sources (primary

and secondary) which further confirmed a need for a participatory sustainable development model. These sources are discussed below.

1.5.1.1 Primary sources

Primary sources include a review of materials from the Department of Water Affairs and Forestry and also progress reports of the Reconstruction and Development Programme, including water projects, annual reports, consultants' reports, donor evaluation reports and impact assessments reports. South Africa's past experiences, trends and patterns of development were drawn from these sources. Materials collected from the three Latin American countries, in the form of government reports and draft policy documents, were also reviewed.

Additional information was obtained through the translation of Spanish literature and reports with the assistance of the Centre for Latin American Studies at the University of South Africa. Reasonable conclusions regarding an appropriate model for sustainable development were based on aspects of the key development policy frameworks implemented in Chile, Bolivia and Nicaragua. However, the study did not make an in-depth investigation of the policy and legislative framework and links with sustainable development initiatives in these countries. This is a possible area for further research.

Despite the author's difficulties with the Spanish language, sufficient access was available to English-speaking South American-based contacts who have worked in the three countries. Between 1998 and 2000, the author worked with a number of advisers in South Africa and was fortunate enough to be able to build a network of contacts, who contributed substantially to this study by providing information about water sector reform experiences in Latin America. Most have had extensive experience in the water sector as advisers to governments and donors and in their capacity as private consultants.

The author's interest in this area stemmed initially from his involvement during the feasibility studies for the establishment of water boards between 1997 and 1999 and the subsequent participatory planning processes. Easy access to information and research findings from the Department of Water Affairs and Forestry, through the author's involvement in senior and strategic management decision-making processes, has made it

less complicated than would ordinarily have been the case to carry out surveys and gather anecdotal data.

1.5.1.2 Secondary resources

Secondary data were gathered from a number of government reports such as annual reports, census data, books from libraries across the country which mainly provided a theoretical basis for sustainable development, policy documents, various pieces of old and new legislation and journal articles.

The secondary literature reviewed was based on identified sources and issues of interest applicable to this study. The reason for this is that in South Africa only limited literature is available on participatory models for sustainable human development. Key observations and conclusions were therefore drawn from the classical views on and approaches to sustainable development that dominate the literature. Reference was made to the work of various scholars (Auty & Brown 1992; Agarwal & Narain 1997; Dietz & Street 1987) in order to arrive at an appreciation of the evolutionary nature of the concept of sustainability.

The above classical views on the literature for sustainable development are located within the economical, ecological, technological and environmental issues (Van den Bergh 1991; Van den Bergh & Van der Straaten 1994; Van der Bergh & Van der Straaten 1996; Rao 2000; Lawn 2001; Angell *et al* 1990). However, there is also considerable recognition of and support for the social and institutional dimensions of sustainable development, which could possibly contribute towards a better quality of life for the poor (Lelè 1991; Fitzgerald *et al* 1997; Redclift 1987; Savio 1995; Shepherd 1998; Mbaka 1998; Cernea 1993; Estes 1993). Reference is also made to the contribution of world bodies concerned with sustainable development, specifically concerning what is regarded as best practice for developing countries (WCED 1987; United Nations Development Programme 1998; United Nations report 1992; Cole 1994; Carew-Reid, Allen-Prescott, Bass & Dalal-Clayton 1994).

1.5.1.3 Fieldwork

A sponsorship was obtained from the United States Agency for International Development (USAID), through the Institute of International Education (IIE). A visit to Latin America was undertaken between 31 July and 18 August 2000, during which numerous discussions

were held with various experts in the field. Interviews were held with key informants such as the Chief Executive Officers (known as superintendents) of the regulators, senior government officials, politicians, non-governmental organisations (NGOs), donors and consultants. Thus the people interviewed held very senior positions and were well able to provide a clear overview of the water sector and experiences in those countries.

These meetings and discussions were complemented by technical field trips to water schemes, meetings with selected municipalities[14] and a number of consumers[15]. The methodology used provides a sufficient basis for reaching conclusions and recommendations as provided for in chapter nine.

1.5.1.4   Thematic data analysis

In formulating the research objectives, the author used a conceptual framework (key themes), which provides various dimensions related to content analysis of static, spatial and dynamic characteristics of sustainable development. This framework was also helpful in categorising chunks of information derived from Latin American literature and discussions held with key informants. The unit and method of analysis are contextualised in the form of descriptive, conceptual and theoretical perspectives of sustainable development.

What this means is that the content of the entire study is classified into different units (categories of information). In order to fulfil the academic requirement of being original, such units will emerge in different forms of presentation, which describe and conceptualise various components of the study such as the institutional (water and local government sectors), legislative and regulatory arrangements (obligations) and participatory methods for sustainable development (tools and guidelines).

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[14] Meetings held with the municipality of La Paz, hosted by Mr Waldo Valle, sector co-ordinator in Bolivia The municipality of Maipu, hosted by the mayor, Mr Herman Silva and his senior management in Chile. The municipality of Jenotega/Matagalpa, hosted by Water Services Manager, Mr Noel Amador in Nicaragua.
[15] Trip to El Alto (peri-urban) and Barrio Ferrviario organised by Mr Luis Lobo, El Alto (Project Manager for the World Bank funded project). Discussions held with selected community members.

The author has compiled the following table which clarifies the structure of these units.

TABLE 1.1: COMPONENTS OF ANALYSIS

CONTENT ANALYSIS	DESCRIPTION
(a) Theoretical dimensions of sustainable development	Normative approaches, principles and methods (chapter two)
(b) Theoretical justification for a new sustainable development paradigm	New paradigm, principles, methods, tools and approaches (chapter three)
(c) Setting the scene for sustainable development in South Africa	Trends and patterns of development in South Africa (chapter four)
(d) Sustainability of water services	Prospects for sustainable water services (chapter five)
(e) The local government system and the transitional arrangements for water services	Municipal participatory planning processes (chapter six)
(f) Strategic considerations from Latin American participatory methodologies	Lessons learnt from Chile, Bolivia and Nicaragua (chapter seven)
(g) A proposed model for the water services sector	Tools and guidelines (chapter eight)
(h) Conclusions and recommendations	Policy design, strategic planning, implementation, monitoring and evaluation and impact assessment (chapter nine)

The above table sets out the context appropriate for the study, especially since there is not much descriptive literature, regarding outcomes-based sustainable development programmes, available in South Africa's water sector. An in-depth analysis of the trends and patterns of development is better done in the context of the above table. Furthermore, the fact that the role of water services authorities is clearly defined in the legislation makes it possible to design a participatory model towards sustainable development. The analysis goes further in aligning the legislative, programmatic, institutional and other issues pertinent to sustainable development. A content analysis is therefore critical for this study because the outcome is to identify the desired steps to achieve sustainable development at local government level. In order to fulfil the desired outcome of sustainable development, this study argues for a people-centred approach whereby in the delivery of water services, for example, consumers must come first. Outcome measures and baseline indicators are critical for the consumer appraisal process (Schalock 2001: 30-31). Consumer satisfaction is therefore a key success factor for municipalities in South Africa.

1.5.1.5   Limitations

A number of limitations have been identified and are noted below:

(a)   The study does not cover broad issues of service delivery, however, it recognises their importance, especially in the context of local government programmes.

(b)   Although water services means water supply and sanitation, this study does not cover sanitation. Historically there has been less emphasis on rural sanitation in South Africa. Therefore sanitation is an important area which deserves its own special research focus.

(c)   Not much research exists in the field covered by this study. Studies carried out during the early stages of implementing water projects through the Reconstruction and Development Programme were mainly concerned about targets (quantitative results). This study therefore relies on anecdotal reports and the policy framework used to implement projects since 1994.

(d)   The water services sector does not provide historical literature on social and institutional development issues, probably because in the past, the water sector was more engineering and technically oriented.

(e)   Many of the interviews carried out in Latin America and the subsequent literature reviewed were in Spanish. The author therefore had to rely on a third party or a translation. However, this difficulty was minimised by using the services of the Centre for Latin American Studies at the University of South Africa for the translation of relevant Spanish material.

(f)   Despite the use of a translator in some of the discussions with key informants, the language problem made it impossible to undertake further investigation into best practice experiences or to carry out a possible comparative analysis. This was an important consideration in dissuading the author from doing a comparative study and convincing him to focus on lessons for South Africa.

1.6   STRUCTURAL PRESENTATION OF THE STUDY

Chapter one looks at the motivation for and background of the study, primary and secondary objectives of the study and key justifications. It also describes the scope of the study, the research design and the methodology.

Chapter two focuses on the conceptual background, with particular reference to the key dimensions of sustainable development, namely the environmental, technological, economic, social and institutional dimensions. These are approached in terms of their traditional and normative applications. The chapter shows what factors work for developed countries and in terms of traditional approaches. The analysis uses the spatial, temporal and dynamic characteristics of sustainable development.

Chapter three focuses on the theoretical justification for a new paradigm in South Africa's water services sector. The new paradigm is in line with the proposed participatory sustainable development model for the water services sector. The chapter integrates the principles and key elements of sustainable development, such as public participation, decentralisation and local government. This integration is used to consolidate a basis for a national sustainable development model in the water services sector in South Africa.

Chapter four sets the scene for sustainable development in South Africa. It provides a historical descriptive analysis of the system of separate development which was integral to the apartheid ideology. The chapter explores significant historical trends of the colonial and apartheid past and examines their influence on the present conceptualisation of sustainable development in South Africa. It therefore demonstrates the significance of introducing sustainable development in South Africa.

Chapter five provides a sectoral analysis of water affairs in South Africa. The chapter argues that since water has a range of different benefits it also provides good prospects for sustainable development. Critical dimensions and principles applicable to water services sustainability are explored. Looking at both past and present experiences, the chapter also draws together some of the weaknesses and strengths of the water services sector.

Chapter six locates water services provision in the local government system. Current legislation regards district municipalities as water services authorities[16]. The chapter argues that since the best form of public participation is at the local level, the water services authorities are in the best position to carry out water services in a developmental manner. Other opportunities identified include provisions for the adoption of an Integrated Development Plan[17], which incorporates a Water Services Development Plan. This chapter argues that unless a balance is created within all settlements - urban, peri-urban or rural - in terms of equitable and sustainable allocation of resources, attaining sustainable development at local government level may not be feasible.

Chapter seven refers to strategic considerations which can be regarded as possible lessons for South Africa. These considerations are derived from patterns and trends of participatory sustainable development practices in Latin America. The chapter sets out the author's findings from discussions held with key government officials, politicians, the private sector and donor organisations. It concludes that a combination of a sound legislative and policy framework and best practices from elsewhere, may enhance the chances for sustainable development in South Africa.

Chapter eight suggests a participatory model that could bring about the required outcomes for sustainable development in the water services sector in South Africa.

Chapter nine provides a summary, an analysis and recommendations which are consolidated from the above chapters.

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[16] A water services authority is any municipality authorised in terms of the Municipal Structures Act (No 117 of 1998) and the Municipal Structures Amendment Act (No 33 of 2000) and the Water Services Act (No 108 of 1997) to ensure access to water services.
[17] See chapter five of the Municipal Systems Act (No 32 of 2000).

CHAPTER 2

THEORETICAL DIMENSIONS OF SUSTAINABLE DEVELOPMENT

2.1   INTRODUCTION

Chapter one outlined the basis and orientation of the study and pointed out key challenges and opportunities inherent in sustainable development in South Africa. Chapter two aims to explore the critical, theoretical dimensions of sustainable development and the underpinning historical, intellectual precedents. The chapter provides a conceptual framework and discusses the basis upon which developed countries have perceived and applied sustainable development.

2.2   LITERATURE REVIEW ON SUSTAINABLE DEVELOPMENT

The concept of sustainable development has received great attention in the past and continues to be one of the most commonly used concepts in development studies today. Its flexibility has given rise to a proliferation of definitions and this issue continues to exist as a dominant development discourse of the twenty first century. Sustainable development has therefore become the quintessential paradigm for addressing the world-wide dilemmas, models, approaches and philosophies that deal with the management of large-scale and complex systems (Haimes 1992: 187). As a result, the multi-dimensional nature of sustainable development is covered by various disciplines in the form of studies of economic sustainability, environmental sustainability, technological sustainability, institutional sustainability and financial sustainability. There is sufficient evidence to suggest that through various disciplines, many scholars contribute extensively to the vast knowledge of the concept of sustainable development (Van den Bergh 1991; Van den Bergh & Van der Straaten 1994; Rao 2000 and Hallowes 1993). As mentioned by Pearce *et al* (cited in Shotter & Vorster 1996: 161), there is arguably "a gallery of definitions" on sustainable development which address many inherent complexities of the concept.

However, it is interesting to note that the bulk of current literature employs common classical perspectives which mainly reflect environmental and economic considerations for sustainable development (see sections 2.2.2.1 and 2.2.2.2). There is also strong consideration for future generations, or what is called intragenerational and intergenerational equity. This thread emanates from a definition which has become commonly used in our time, developed by the World Commission on Environment and Development (WCED 1987: 43), which states that:

> Sustainable development is a development that meets the needs of the present without compromising .the ability of future generations to meet their own needs.

The definition of the World Commission on Environment and Development came at a time when sustainable development was gaining popularity in the 1980s, through the Brundtland report, *Our Common Future*. Since then there have been two opposing views, those concerned with the ecological-environmental issues or the "green issues" and those concerned about poverty and the quality of people's lives or "brown issues". The former seems to be more popular amongst the developed countries and the latter amongst the developing countries.

Logically, this situation implies that developed and developing countries find themselves at different stages of socio-economic development, and thereby face different challenges and pursue different interests. However, there is growing sympathy for developing countries because the challenges which they face seem by far to be the most critical. Since the 1980s there has been a proliferation of interest groups who fight vigorously to influence the debates in favour of the "brown issues". It can be argued that the attention given to "brown issues" is in line with the above World Commission on Environment and Development definition, which ensures that the needs of the present and future generations are not compromised.

Consensus regarding critical issues of unsustainable development in the world has largely arisen from world conventions and declarations. The World Conservation Union, for example, made significant contributions towards bringing together states, government agencies and diverse groups of affected stakeholders in a participation unique in the world (Ornat 1997). This evolution of considerations for sustainable development has led to the 1992 United Nations Conference on Environment and Development, commonly known as

the Rio declaration. As noted from Ginther *et al* (1995: 16), the preamble of the declaration emphasised development as being:

> Comprehensive economic, social, cultural and political processes, which aim at constant improvement and the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in fair distribution of benefits resulting therefrom.

The above definition points towards a strong convergence of some of the key dimensions of sustainable development (see chapter eight table 8.4). Convergence of dimensions enhances meaningful participation in development processes by the poor and also signifies a fair distribution of benefits to all. The principles of participation and equity therefore pose a major challenge to the developed countries because historically, these countries had a large accumulation, or concentration, of wealth and the greatest share as compared to the developing countries.

There are various theoretical arguments, regarding the disparities and power relations which exist between the developed and developing countries, which this study will not attempt to address; however, it is critical to note some of the contradictions and concerns caused by developed countries. The refusal by George Bush[18] to sign the Kyoto protocol during the G8 summit[19], for example, is indicative of the double standards applied by developed countries. This demonstrates that power relations do have an influence on the manner in which agreements are structured and indicates that whilst all countries might be united in finding sustainable solutions for meeting the development needs of the present generation, the challenge remains to do so in a fair and transparent manner.

Evidence in support of the last statement comes from the United Nations Conference on Environment and Development (1992) in Rio, which shows that in terms of action, poverty alleviation was largely an issue the conference forgot. Rather, the conference emphasised the global responsibility for protecting the environment, but no global programmes have

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[18] President of the United States of America since 2000.

[19] G8 refers to a group of the most powerful and influential countries in the world today.

been developed to help the poor re-establish a stable and sustainable relationship with their natural resource base (Agarwal & Narain 1997: 4).

The discussion so far indicates that the concept of sustainable development is rife with contradictions and contrasts. Most particularly, power relations between the developed and developing countries show that the former have more authority and influence over the nature of definitions, declarations and their application. Literature also shows that the vast majority of important events which took place in the past, were directly or indirectly driven by developed countries (Van den Bergh & Van der Straaten 1994: 5; Rao 2000: 23-26). As a result of this dominance, the values and principles underpinning the development discourse have tended to suit the interests of these countries. Notwithstanding such influences, developing countries have also begun to assert themselves. Whilst they face other challenges such as economic development, developing countries tend to argue more in favour of human development, as a precondition for sustainable development.

Human development is a moral dimension of sustainable development. Generally speaking, developing countries embrace the concept of human development because they believe this is the correct approach for the present generation of their poor people. As expressed by Fitzgerald *et al* (1997: 4):

> Making development sustainable means moving beyond a narrow, albeit important, concern with economic growth per se, to considerations relating to the quality of that growth. That is, ensuring that people's basic needs are being met, that the resource base is conserved, that there is a sustainable population level, that environment and cross sectoral concerns are integrated into decision making processes, and that communities are empowered.

Fitzgerald provides a core understanding of human development. It is within this context that sustainable development becomes much more complex. That is, sustainable development is not simply about meeting the needs of the present and future generations, but about empowering them too. However, there is no single-prescription definition for sustainable development. Since the 1990s, what has emerged is a need to explore practical measures for sustainable development, with a strong message to address inequalities and poverty. Furthermore, unless developed nations prove their leadership by becoming fair and transparent, sustainable development will continue to exist as theory, devoid of reality (Khor

cited in Hallowes 1993: 18). A detailed historical background and understanding of the concept as presently understood is provided below.

2.2.1 Evolution, meanings and critique

The adjective "sustainable" stems from a Latin verb *"sustinere"*, which means to uphold. The English verb "to sustain" means to maintain, to keep going, to keep from falling, to carry on (Little cited in Zbigniew & Kundzewicz 1997: 467). Development could mean that which is brought into being, but surely also involves a notion of growth, of positive change. Many definitions of sustainable development stem from this action-oriented approach. Understandings of the concept of science evolved as it became popular in recent times. The origin of the concept sustainable development dates as far back as 7500 years ago, during a period when people lived in relatively small and slowly changing times, as opposed to the present-day complex and ever-changing global world (Veltrop 1996: 30). Human beings have historically appreciated the need to prolong or sustain their natural environments and livelihoods. As research into scientific justifications for environmental management gained more impetus, concerns for sustainable development also emerged. According to Zbigniew & Kundzewicz (1997: 449-467), sustainable development is an old concept which has evolved and acquired connotations from different sectors and as such has become jargon or a cliché, especially for environmental activists. As mentioned by Lelè (1991: 609), the concept originated in the context of renewable resources such as forests and fisheries and has subsequently been adopted as a broad slogan by the environmental movement. Bender & Simonovic (1997: 495) call this "the evolution of sustainability of ecosystems".

Meadows *et al* (1972: 307) argue that the rising concern for environmental consequences of development can largely be traced back to the rise of alternative development approaches in the 1970s. This is also evident from early studies and literature (such as Rachel Carson's book: *Silent Spring*, 1965) which devoted themselves to environmental issues within developed countries of the North, focusing on pollution and preservation of species (Stewart 1997: 124; Rao 2000: 7). In 1972, the Club of Rome also issued a report entitled *The Limits to Growth*, which warned that life as we know it faces a sudden apocalyptic end if development practices are not dramatically altered to respect the earth's physical limits to growth (Brohman 1996: 307; Van den Bergh 1991: 6). As remarked above, contrary to the commitment by developed countries to environmental-ecological issues, developing

countries have taken a different stance, in that they have become devoted to maintaining or improving people's quality of life.

Sustainable development is therefore caught up between the different interests of developed and developing countries. These interests are further evident from their approach towards issues of globalisation. On the one hand developed countries drive the global market economy and advance a growth-oriented approach towards sustainable development. On the other hand developing countries, because of their weak economies, fall behind. Redclift (1987) raises critical questions regarding the growth-oriented views of sustainable development. In his book, *Sustainable development: exploring the contradictions*, he explores inherent contradictions and therefore provides a well-defined conceptual analysis, which in a way seeks to deconstruct the sustainability discourse. According to him, sustainable development, if it is not devoid of analytical content, means more than seeking a compromise between environment and the pursuit of economic growth. That is, as developed countries exploit natural resources so as to accumulate wealth, millions of the poor across the world continue to live in poverty and squalor: a situation that leaves them little choice but to go on undermining the conditions of life itself, the environment and natural resource base.

According to Dietz & Street (1987: 103) developed countries have always had the advantage of an assurance in the greater share of the wealth created through their exploitation of the raw materials provided by developing countries. This is a point of departure in understanding the evolutionary nature of sustainability and the inherent power relations which continue to exist between the developed and the less developed nations. Power relations have become a point of contention in that many left-wing scholars have criticised the conventional growth-oriented paradigm of development which is pursued by the developed nations (Auty & Brown cited in Morrison 1992:11). It can therefore be argued that unequal power relations have an influence in the manner in which natural resources are exploited, processed and distributed. As a result of the unequal and inequitable distribution of resources, poverty levels have increased significantly over the past few years. Raanan (cited in Todaro 1994: 3) further mentions that:

> While humanity shares one planet, it is a planet on which there are two
> worlds, the world of the rich and the world of the poor.

Understanding sustainable development in a global sense therefore requires a critical and an historical analysis of the events that shaped sustainable development. In this study, what emerges is a link between sustainable development and the discourse of power in society. Further links can be made with Foucault's theory of discourse, which serves as a basis for the analysis of history and the exercise of power in society (Azzi 1985: 141, 154). The concept of sustainable development and its global application, fit the description of a power discourse. Power is about who controls resources. It is about the powerful and the powerless. Sustainable development has become a discourse which requires rigorous critical analysis because it is apparent in this study that the rich nations dominate the agendas for sustainable development. As argued by Abugre (cited in Hallowes 1993: 14), there is a need to consider "justice for and justice to all".

Furthermore, fully understanding sustainable development also requires ethical considerations of power, justice and issues of human rights. Development practices without justice and protection of human rights cannot be sustainable. In any democratic society, respect for human rights is an important precondition for sustainable development (see chapters three, four, five and six). As maintained by Lelè (1991: 618), it is important to address the multi-dimensions of sustainable development, but at the same time, to develop measures, criteria and principles for its application (see chapter eight). If justice does not prevail now, chances of it prevailing in future cannot be guaranteed. Social, economic and political justice are integral parts of a human rights culture. Such a culture should become a centre-fold of world summits. Instead, as indicated by Schmitz (cited in Moore *et al* 1995: 56), there is a tendency by world summits on sustainable development to avoid, as much as possible, historical-political analyses which may interfere with such summits. As a result, there is a tendency for consensus-building which revolves around "technocratised" solutions.

Contrary to the above view, a significant number of authors, such as Aspegren *et al* (1997: 34-40), Butler & Parkinson (cited in Henze *et al* 1997: 53), Bender & Simonovic (1997: 495), Wiggering & Rennings (1997: 71), suggest that even though there is still considerable contrasts and uncertainty about the operationalisation of sustainable development, developing countries must formulate solutions for themselves. Such solutions would require strong political leadership and commitment towards implementing sustainable programmes.

In general, the discussion is further pointing towards a need to create a better understanding of sustainable development on an international, national or regional level. Furthermore, it is critical to create opportunities for appropriate institutional arrangements and an infrastructure which is capable of co-ordinating and implementing sustainable development, as well as to marshal the needed political will and courage, scientific capabilities and societal commitment (Haimes 1992: 192). This point is corroborated by Lelè (1991: 618) that:

> to accept the existence of structural, technological and cultural causes of poverty and environmental degradation, it becomes essential to develop methodologies for estimating the relative importance of interactions between these causes in specific situations and explore political, institutional and educational solutions for them.

The discussion so far has indicated that whilst one must recognise that human development is a critical dimension for sustainable development, it is important to address the interaction of the human dimension with other dimensions such as the political, institutional and economic (see chapter eight figure 8.3). The theoretical declarations which arise from world summits and the lack of concrete practical steps which members take should be replaced by practical solutions. It is in this manner that the needs of the present generations will be addressed genuinely, and not simply debated.

Developing countries still find themselves in the deepening crises of human suffering and poverty, which seem unabated. Africa is one of the developing continents which is affected by grave structural poverty and the HIV-AIDS pandemic. As a developing continent which experiences grave structural, political and social problems, Africa's current issues of development can be said to be a crisis of its institutions and their history (Kifle cited in Wohlgemuth *et al* 1998: 48). As stated by Carlsson *et al* (cited in Wohlgemuth *et al* 1998: 13):

> ...indeed, the poverty of institutional and organisational resources available to governments in Africa probably distinguishes the region from other parts of the developing world, albeit in the context of wide-intra-regional differences.

Johnston (cited in Wohlgemuth *et al* 1998: 48) further argues that these structural or institutional problems are deeply rooted in the damage inflicted by the Structural Adjustment Programmes (SAPs) of the 1980s which created a negative climate, which then

rendered the ability of most African countries to repay ineffective. Johnston & Wohlgemuth and Gibbon & Olukoshi (cited in Wohlgemuth *et al* 1998: 48) went further by adding that as a result of the Structural Adjustment Programmes, the capacity and legitimacy of most African countries bled away.

African countries have experienced severe losses such as the exodus of skills after independence in the 1960s. This created a skills vacuum, which compelled these countries to build extra capacity from the beginning. This situation can best be described as a chain reaction of events as they proceeded from the colonial era to the neo-colonial era. Shepherd (1998: 92-93) draws comparisons between the impact of the colonial legacy and that of the post-colonial legacy on the development of Third World countries. Ostrom *et al* (1993: 165) also trace the aftermaths of independence and concomitant decentralisation measures, and investigate how this situation gave rise to institutional changes, particularly in the former colonies of Great Britain. Brinkerhoff & Goldsmith (1990: 11) hint that many Third World countries lack the governance ability and institutional capacity to carry out the complex and exacting duties which are needed to tackle development issues of the 1990s. In general, literature shows some missing links between the capacity of African governments to formulate policy and implement development programmes at local government level (Ndorukwigira, Andersson & Winai cited in Wohlgemuth *et al* 1998: 9).

Despite Africa's complex problems, current trends suggest that local governance provides opportunities for localised decision-making processes. Buttimer's study (cited in Gallopin & Raskin 1998: 12-15) further supports the present research on how to make sustainability work at the local level, confirming the notion that one should "think globally but act locally". The ability of any nation to follow sustainable development paths is therefore determined to a large extent by the capacity of its people, its local institutions and other prevailing conditions (Sitartz 1994: 305). This shows that addressing sustainable development issues in the African context requires an overhaul of the entire system of governance and the establishment of appropriate institutional arrangements. Authors like Deng (1998: 66) call for a:

> New framework which must address the issues of reconciling indigenous and transplanted institutions and value systems, sequencing of reform measures and policy mix and prioritisation of actions ...

It is clear from the above statement that as inhabitants of an African country, by drawing lessons from other countries, South Africans can learn from others by creating their own solutions. Though separate development did not create opportunities for sustainability, available legislation and policies now do provide a sound theoretical basis. From these, localised decision making for sustainability is critical. South Africans can thus formulate their own meanings for sustainable human development. As argued by Haq (1995: 19):

> It matters little whether the paradigm is labeled "sustainable human development" or "sustainable development" or simply "human development". What is important is to understand that the essence of the human development paradigm is that everyone should have equal access to development opportunities, now and in future.

Localised solutions for human development are essential in that they can respond directly to issues of equity and social justice. It will not help if a one-fits-all approach is adopted without considering local conditions. Adopting the "analytical fix" created by developed countries is futile on its own because experiences of developed countries do not mirror the diversity of conditions in developing countries. Developing countries should therefore adjust to popular approaches, thereby generate their own local solutions. Local conditions need to be treated within a local context so as to ensure maximum impact of any model or strategy to address unsustainable development. The following dimensions attempt to provide a framework within which sustainable development is conceptualised and applied, especially by developed countries.

2.2.2. Dimensions of sustainable development

The Rio declaration of the United Nations Conference on the Environment and Development (1992), like its counterpart, the 1972 Stockholm declaration, pledged commitment towards international agreements which respect the interests of all and protect the integrity of the global environment and development system (Ginther *et al* 1995: 29). These pledges were concretised into 27 principles which address a wide range of issues such as the economic, environmental, social and technological. These principles are arguably the

key dimensions of sustainable development[20]. Several authors have written substantially about these dimensions (Rao 2000: 70; Van den Bergh 1991; Van den Bergh 1996: 59; Van den Bergh & Van der Straaten 1994: 6). Some of these are discussed below.

2.2.2.1 Economic

The economic dimension is covered by principle 8 (Rio declaration), which indicates that:

> To achieve sustainable development and a higher quality of life for all people, states should reduce and eliminate unsustainable patterns of production and consumption and promote demographic policies.

This dimension emphasises the economics of supply and demand, the allocation of correct prices and the external effects of cost-benefit analysis. It is concerned about the future outlook of resources demand and about measures to protect or augment existing ones. In the case of water resources, it examines water demand projections and compares these with supplies from various sources, by region, season, whether national or international, taking into account factors such as drought and its impact (European Commission 1998: 110). Water tariffs are drawn from the outcome of such projections which are economically justified. Reliable as they might be, often the poor cannot afford high tariffs or prices (Oelofse cited in Local agenda 21 2001: 7).

On the one hand, this dimension presupposes national product of growth (Y) as a precondition for the satisfaction of people's material basic needs (B), which comes at the cost of exploiting scarce natural resources. On the other hand, people offer their labour (L) for wealth and capital generation (R). This can be represented as a formula:

$$Y = B\ (L+R)$$

The assumption is that the sum total of $L+R$ is B (products essential for meeting basic needs). The economic dimension is preoccupied with figures and complicated formulae. It is

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[20] For more dimensions of sustainable development such as peace and security, see Ginther *et al* (1995: 443-461).

more concerned about the production of wealth and less about human development. Econometrists are more interested in the economic value brought about by production, by emphasising sustainability of production, economic efficiencies and other competing interests such as over-exploitation of resources and high labour costs.

Sometimes the economic dimension does incorporate a concern for the "brown issues". However in general, it does not strive for a human balance sheet which recognises levels of skill, income distribution, levels of employment and unemployment and also the cultural and other social factors (Haq 1995: 5). This is arguably what should be the thrust of sustainable development in that this dimension, like the human dimension (see 2.2.2.4), should be concerned about the reduction of the growing disparity of incomes and access to health care and other services. Economic justice can best represent "brown issues" if issues of access to basic services are addressed. As the economic dimension is structured, "brown issues" do not receive much attention.

Different economic specialists or professionals provide analyses which seek to demonstrate or justify the correlation between economic issues and "brown issues". Rubenstein (cited in Shotter & Vorster 1996: 182), for example, mentions three perspectives, one of which presupposes equity of demand (economics) and societal distribution (people) as an integral building block of sustainable development. This assertion indicates that the economic growth model is critical for sustainable development, especially when applied in the context of developing countries, where there is greater demand for social equity. Often, developing countries are in need of capital markets to promote and stimulate longer-term investment, more so than developed countries. This, according to Rada & Trisoglio (cited in Shotter & Vorster 1996: 182) is the most efficient and effective way for governments in the developing countries to promote sustainable development.

Issues of economics and the above perceived positive effect on the developing countries are further complemented by the economic growth model or a "trickle down approach" which is commonly adopted by post-industrial societies (developed countries). This approach emphasises the pursuit of economic growth by highly industrialised rich nations in anticipation of high social and economic spin-offs. Brohman (1996: 133) also mentions that many of these efforts (in the trickle down approach) have been aimed at reducing private consumption so that an increasing proportion of the national economy could be devoted

towards private investment, thereby allowing the trickle down mechanism to address socio-economic problems.

What emerges from the above discussion is that the economic growth model is regarded as a panacea for addressing social problems. The norm being that developed countries will process natural resources as finished products. This is despite the fact that the benefits of economic growth come at great costs in terms of resource depletion and pollution, whereby developing countries are the most affected in that they provide vast amounts of unprocessed natural resources (Miller 1995: 3). Furthermore, developing countries do not necessarily benefit materially from the final products. This is therefore a contradiction which is inherent in the economic dimension.

The above discussion points out that in order to create sustainable solutions for developing countries, the economic dimension requires a critical review. As seen from the experiences of the developed countries, the most popular and holistic considerations for economic growth have a potential to hamper progress in developing countries (Lemons & Brown 1995: 22). This statement is supported by Korten (cited in Bauzon & Russack 1992: 53 and Kruijer 1987: 27). Furthermore, Estes (1993: 3) provides an outline which demonstrates that:

(a)   economic growth does not automatically improve people's lives, either within nations or internationally;

(b)   rich and poor countries compete in the global market as unequal partners;

(c)   neither the free market, dependency, nor Marxist paradigms of development respond adequately to the needs of the world's poorest and slowest developing countries;

(d)   the socio-economic conditions of the world's least developing countries (LDCs) in the main, though with important exceptions, have become worse during the past 20 years.

The discussion of the economic dimension confirms the contradictions and contrasts identified previously, in that developing countries do not seem to gain an equitable share of the resources they produce or of those produced by developed countries. Existing economic development models also seem to favour developed countries and further alienate developing

countries, making it extremely difficult for the latter to meet the objectives of addressing the quality of life of the present generation.

2.2.2.2 Environment

This dimension is covered under various principles: 4 and 6 of the United Nations Conference on Environment and Development (1992) which indicate that:

> In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it (principle 4).

> The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority. International actions in field of environment and development should address the interests and needs of all countries (principle 6).

Environmental concerns for sustainable development have received greater consideration in the past. As new theories regarding sustainability emerged, so did environmental justifications. As indicated before, this dimension is often referred to as addressing "green issues" because of its bias towards the promotion of frugal use and protection of natural resources. Its major concern is the present generation and how it uses the resources at its disposal without compromising the same resources for the future generation.

Environmental impact assessment has become a common principle for the environmental dimension (principle 17). Such assessments strive to maintain the environmental integrity (Simonovic 1996: 225). The World Commission on Environment and Development's (1987) definition is built on the same understanding of maintaining a correct balance (intergenerational equity) and integrity towards resource exploitation. The environmental-ecological integrity emphasises that conserving bio-diversity will provide food, energy, raw materials, industrial chemicals, and medicine, as well as important social and cultural benefits. However, there has been a progressively evolving value-system which has influenced ethical behaviours for the anthropocentric objective of intergenerational justice (Van den Bergh 1991: 33; Rao 2000: 69-70). Intergenerational justice is about the trade-off between the environment and people. The World Commission on Environment and Development's definition that the present generation should preserve resources for other

generations is derived from the same logic. This is what has strengthened arguments for environmental concerns and why the environment is critical for sustainable development.

Agenda 21[21] recognises the importance of the natural environment and its protection, and the influence this will have on sustainable development (Rao 2000: 11). The concept of the natural environment is explained in two ways. First, renewable resources are defined as those which possess the capacity to regenerate, or be regenerated, over time periods relevant to human objectives. Second, non-renewable resources are those where resources do not regenerate, they decline (Van den Bergh 1991: 28-29; Rao 2000: 33-39). The two explanations are derived from the concept of the ecosystem, trends and patterns of ecology and environmental concerns which have dominated the discourse of sustainability for many years.

Often, the environmental dimension is seen as complementary to economic reforms, as it promotes practices which embrace clean technology and diminished environmental pollution. As argued by developed countries in particular, such practices serve as the necessary condition for environmental improvement. This is yet another contradiction because arguably, there is a common perception that highly industrialising countries are the greatest polluters of the environment. According to Bartelmus (1986: 19), the North (developed countries) for example, focuses their environmental concerns on air pollution, cancer and potentially toxic chemicals (Stewart 1997: 125). The environment, especially in rural areas, is a contested domain because the poor people derive value from it. Their sustainable livelihood is integrally linked to the exploitation of natural resources. It is the sphere in which value is created through the application of human labour to nature. What the environmental dimension needs to advocate is the development of a new range of environmental policies and institutions, adapted to suit democratic, market-based societies, which are geared towards the improvement of human lives and also the performance of democracies in transition, especially in the developing countries. Previous lessons have also

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[21] The earth summit declaration which took place in Rio de Janeiro in June 1992. South Africa will host the 2002 earth summit. This thesis could offer guidance in terms of a participatory model towards sustainable development to the 2002 event.

revealed that the environmental objectives of the North (developed countries) will differ considerably from those of the South (developing countries).

Developing countries and their environmental movements are adopting alternative development agendas which link problems of environmental destruction to issues of basic needs provision, distributional equity and social justice, local self-reliance and popular empowerment (Brohman 1996: 319). Most of these countries use various instruments to monitor, protect and manage their environmental resources[22]. This shows that environmental concerns cannot simply be brushed aside. The present discussion points out that these days there is by far a much greater concern for environmental protection as a means towards achieving sustained development. As argued by Haq (1995: 79):

> Environmental concerns are not science fiction - they are real. The facts of environmental degradation are far more than the exaggerations of excited minds. And they are shocking[23].

Perhaps what remains a challenge is the integration of the environmental and the human development concerns. As the situation stands today, the former still occupies high status because it is supported by countries and organisations which have sufficient resources and power.

2.2.2.3   Technological

Like the economic dimension, the technological dimension is seen as a panacea for solving human problems. Since the 1980s, technology has further assumed a high status in terms of scientific advances which became branded a great success in terms of aiding development issues.

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[22] Such countries apply the "polluter pays" principle which is a common and regulated instrument applied by most developed countries (principle 16).

[23] According to Haq (1995: 79), 80% of people living in Latin America, 60% in Asia and 50% in Africa, live in the most ecologically vulnerable areas.

This led to the notion of appropriate technology, which was subsequently linked to principle 14 of the United Nations Conference on Environment and Development (1992), which indicates that:

> In order to protect the environment, the precautionary approach shall be widely applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The above principle seems to emphasise a technocratic solution of technical problems. It also emphasises the use of appropriate or cleaner technology and the limiting of the global effects on the atmosphere. According to Haimes (1992: 189), this dimension promotes a creative application of technology which encompasses the responsibility to plan, design and construct those systems that will not only solve the immediate problems, but are sensitive to the long term interactions that affect the sustainability of the solutions. Application is derived from available knowledge and skills. It is only when a country has the right knowledge, expertise and appropriate technological know-how (skilled human resources) that technological advancement can be achieved. Countries which rely on high technology (which is capital intensive) require a sophisticated and diverse profile of technical expertise. Technical expertise and technological advancement have become the major building blocks of capitalist economies. These economies are striving more and more towards unlocking the human potential of the production sector. It is arguably the developed countries which best meet these criteria.

As the entire world strives towards technological advancement, environmentally safe technologies are also being used to contribute towards sustainable development (Haq 1995: 86). Furthermore, a range of methodologies and tools exists to leverage the efficiency and effectiveness of people, through the use of the so-called "appropriate technology" (European Commission 1998: 113). In terms of the previous discussion related to the power relations which exist between developed and developing countries, however, the idea of the appropriateness of technology brings out another contradiction which can be related to the question: From whose perspective is it appropriate technology and why? The point here is that there are popular views about technology being a suitable vehicle to address development issues. However, the technological dimension requires a critical examination of different situations, which because of the different conditions, will probably require other

appropriate solutions. In the light of the inherent contrasts and unequal relationships between developed and developing countries, the conventional use of the notion "appropriate technology" raises suspicions on the part of developing countries.

2.2.2.4 Human

Like the environmental dimension, the human dimension is also covered by a number of principles such as principle 5 of the United Nations Conference on Environment and Development (1992), which indicates that:

> All states and all people shall co-operate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

The human dimension is about the quality of life. As indicated previously, it is about "brown issues". The human dimension recognises the social benefits which accrue from environmental efforts by the public and private sector. This dimension sees people not only as beneficiaries, but also as agents of change. The dimension seems to subscribe to the notion of interactive participation (see chapter three table 3.2) and is further complemented by principle 10, which emphasises extensive public participation[24] in decision making and access to information and legal remedies with regards to the environment (Ginther *et al* 1995: 33).

The human dimension therefore recognises significant links between the environmental, technological and economic dimensions. It also recognises a need for the creation of an enabling environment for the full utilisation of human resources. It is concerned about empowerment and capacity building. As mentioned by Haq (1995: 5), empowerment comes

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[24] Principles 20 and 22 particularly emphasise the involvement of the marginalised groups, women and the poor (indigenous people). These principles were promoted primarily by countries such as Bolivia (Ginther *et al* 1995: 36). See chapter seven regarding lessons learnt from Bolivia.

about through a decentralised community participation in national development plans. Such efforts are typical characteristics of adjustment processes in Latin America and elsewhere (see chapter seven). In such instances, governments have showed a political will and commitment towards improving quality of people's lives. According to the World Resources report (1992-3: 5), beyond meeting basic needs, sustainable development means improving social well-being, protecting cultural diversity and investing in human capital. This dimension also recognises a need to consider the broader social imperatives within which poverty and underdevelopment are embedded.

By addressing poverty and empowering people, the human dimension recognises that people will ultimately become sustainers of development, and could thus sustain their own development. Empowerment is motivated by the fact that the poor people in many developing countries have not received a fair chance of development. Some of the reasons for this unfairness stems from political, ideological and economic factors. As spelt out by Fitzgerald *et al* (1997: 278, 289), the central challenge is one of human resource capacity building and institutional strengthening for the management of sustainable development.

Agenda 21 and the world summit on sustainable development[25] (Copenhagen declaration), and their pursuit of poverty alleviation strategies, are convincing signs of the seriousness of the world about sustaining human development. The following priority actions drawn from the declarations substantiate such a commitment from most countries:

(a)   improvement of access to sustainable livelihoods, entrepreneurial opportunities and productive resources

(b)   empowerment[26] of people living in poverty and of their organisations

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[25] The most important chapters of Agenda 21 (from the Rio declaration) which are applicable to this study are: Chapter 3 (combating poverty), Chapter 7 (promoting sustainable human settlements), Chapter 8 (integrating environment and development in decision making), Chapter 36 (promoting education, public awareness and training) and Chapter 37 (national mechanisms and international co-operation for capacity building in developing countries) (United Nations Conference on Environment & Development 1992).

[26] Empowerment is a process by which people become conscious of the crises of their poverty or exploitation, then organise to use their collective skills, energies and resources to alter those conditions (Savio 1995: 7).

(c)   addressing the disproportionate impact of poverty on women.

The human dimension, as compared to other dimensions, promotes a progressive stance against poverty. However, this study advocates a pragmatic approach and a review of the concept, sustainability.

2.3   THE CONCEPT "SUSTAINABILITY"

The above four dimensions represent the classical perspectives of sustainable development. These perspectives emphasise economic and environmental concerns. As indicated in the previous sections, these concerns are commonly shared by developed countries because, historically, these countries seem to pursue different interests from those of developing countries. Existing contrasts and variations in economic income and standards of living between the developed and developing countries suggest that there are different perspectives on the application of sustainable development. Perhaps what has become a common theoretical analysis in both kinds of country is the use of the concept sustainability.

There is no fundamental difference between sustainability and sustainable development. The only difference is that "development" is the outcome and often "sustainable" or "sustainability" is perceived as a process, an objective or an activity leading towards sustainable development (Abrams 1996). The concept sustainability is mostly used within projects. When projects continue to operate long after their completion, without assistance from external groups such as donors, often, such projects are regarded as sustainable (Abrams 1996). The striking similarity between sustainability and sustainable development has been that the envisaged outcome and the planned process(es) cannot materialise unless people are involved. The inherent principle within the concepts sustainability and sustainable development is that they are both pointing towards the development of people. However, as indicated above, developed countries appear to have a different perspective because the challenges they face seem to be biased more towards environmental issues than people-development issues.

Like sustainable development, the concept of sustainability is an issue which has received global attention. Often, the debates around these issues have created tension in terms of practical application and relevance. However, the striking sincerity regarding practical application has been an acknowledgement of the hard realities of success and failure, of both

local and international experiences, and of the urgent necessity to find answers to questions which affect billions of people around the world (Abrams *et al* 1998: 3).

Concerns for people development arise from human rights issues. The world over, initiatives which embrace people development have become central to the argument for a transcendental shift away from rigid environmental concerns towards human rights issues. Since the late 1980s, even proponents of environmental perspectives have become more concerned about human development issues and as a result, have advocated an integration of human development issues with economic policies. This call has emerged from both the developed and developing countries because it has become common logic that unsustainable development can have a negative impact on the entire world. As supported by Abrams *et al* (1998: 2), in the global debate sustainability is considered primarily in terms of the continuing quest to improve human well-being, whilst not undermining the natural resource base on which future generations will have to depend. As a fundamental human rights issue, the concept of sustainability has become a moral ideal, much like democracy and justice (Hamann & O'Riordan 2000: 1).

2.3.1 Project versus service

Although this study addresses narrow considerations of sustainability in water services provision, the discussion focuses on broader participatory perspectives of sustainable development. According to the author, although there is consensus on the principle of human dimensions for sustainable development, public participation has become a critical issue, which has often been undermined. This study is therefore not about participation in projects as is often the case. It is about service provision and participatory processes which should underpin provision. The project is in fact just a phase in the process of service provision. One is the end and the other the means (Abrams *et al* 1998: 4). In most cases, one of the problems associated with issues of sustainability is that governments address sustainability from a project and not a service point of view (see chapter five).

The majority of the literature locates both sustainability and sustainable development within projects rather than within services. The general norm which prevails is that projects bring about development. Often, a government's success is measured in terms of the number of projects implemented and not in terms of the quality of service provided. For example, a water project may be initiated in order to address issues of livelihood or access to water

services. As mentioned by Cusworth & Franks (cited in Cornwell & Modiga 1998: 3), the term project refers to "the investment of capital in a time-bound intervention to create productive assets". There is nothing wrong with projects because projects have a specific objective and a time-frame. Similarly, the term project is also used interchangeably with programme. The latter can be regarded as a combination of projects because it seeks to address an outcome, whether qualitative or quantitative. Both concepts follow similar planning processes and activities; however, programmes are conceptualised at a higher level because they often focus on strategic policy objectives. For purposes of this study, what is more important for the sake of sustainable development, is what happens beyond completion of the project. This study is therefore concerned about the qualitative, rather than the quantitative, outcomes.

Projects in South Africa are common phenomena. However, given the current local government system, which is rooted in past racial separate development policies, understanding sustainability and sustainable development becomes a daunting task. The existing disparities between rural and urban areas pose further challenges in terms of reconciling two key perspectives, the White dominated and Black dominated perspectives on what constitutes sustainable development. Furthermore, such perspectives also constitute a point of departure in their conceptualisation of sustainable development.

2.3.2   Deconstructing popular notions of sustainable development

The discussion so far has pointed out that although there are dimensions of sustainable development, there still exists a single, narrow view of the definition and application of the concept itself. Developing countries still find themselves caught up in applying the most popular notions of sustainable development, adjusting them to address their own unique situation. Existing literature further confirms popular views by putting most emphasis on the ecological, environmental and economic dimensions of sustainable development. Often, the most powerful world bodies embrace the human dimension and its related issues of poverty, but in real terms, there has been very little progress in alleviating poverty across the world. This situation calls for a complete deconstruction of sustainable development (see chapter nine section 9.2).

Meanings and applications of the concept need to be seen in the context of their use by each country and its people. Public participation in development should become the vehicle for

addressing the needs of the present generation. It does not make sense even to contemplate preserving the needs of the future generation unless we have addressed adequately the needs of the present generation. Chapter three attempts to lay a conceptual foundation of alternative methods for and approaches to sustainable development.

2.4   CONCLUSION

From the above discussion, it can be concluded that the definitions of the concepts of sustainability and sustainable development do not pose major problems, except for the key issue of their practical application. This chapter explored the mainstream dimensions of sustainable development and provided perspectives on each. The chapter argued that these perspectives referred to above are commonly shared by developed countries, because they do not necessarily face issues of human development.

However, the chapter also identified areas of convergence around people development as a critical dimension of sustainable development. Furthermore, the chapter identified another issue of development, public participation, as an important conditionality of sustainable development. Lastly, the chapter argued that whereas the project approach towards development is important, more emphasis should be placed on qualitative and not on quantitative measures. The argument is that human development needs to be measured in terms of qualitative measures. Sustainable development needs to be measured by using participatory methodologies, and assessing their appropriateness and effectiveness.

CHAPTER 3

THEORETICAL JUSTIFICATION FOR A NEW SUSTAINABLE DEVELOPMENT PARADIGM

3.1 INTRODUCTION

Chapter two provided a theoretical background for sustainable development and its dimensions. Chapter two also argued that, often, developed countries unfairly apply the traditional theoretical basis to measure the progress of sustainable development in developing countries. Chapter three attempts to bring about a fundamental shift away from the normative approaches of sustainable development towards a human centred development approach. This chapter will focus on the rationale and relevance of such a development approach in South Africa.

3.2 A PARTICIPATORY SUSTAINABLE DEVELOPMENT APPROACH

What has emerged from chapter two is that the traditional approach towards sustainable development focuses more on the desired effects rather than on participatory processes. The desired effects can represent anything from the environmental or technological fields to economic development. However, participation is often not an integral part of the above traditional dimensions. This study moves towards a participatory sustainable development approach, with emphasis on processes of empowerment and human development.

Concerns for empowerment and human development are about people and their immediate living environment. They are also about people participating in matters which affect them directly or indirectly. Their full participation depends on a number of factors such as the methods and approaches used, steps and activities undertaken and models applied. These factors demonstrate that the field of development studies comprises complex and dynamic processes. Often, this field is also saturated with a variety of interpretations of the term "development". These interpretations, depending on their application, often refer to change or an improved state of something. Change can also be influenced by natural phenomena or by human beings themselves. A development approach can also reflect a desire to change.

In the field of development studies, such a desire is often motivated by policy imperatives by means of which governments seek solutions for social and economic issues. Policy makers therefore face the challenge of creating an enabling legislative, regulatory, and policy environment, in order to achieve certain development goals. These goals can become meaningful if public participation is considered a priority by governments.

There are numerous experiences of public participation around the world. It is also reported that the most effective popular participation is reflected in some developing countries of Asia and the Pacific (Tolentino cited in Ginther *et al* 1995: 145). However, effective public participation can also become a potential threat to governments. That is, a vocal civil society can easily identify vulnerable areas of a government. A vulnerable government is therefore more likely to react negatively and its credibility could therefore be affected. For example, the People's Republic of China is well renowned for its participatory planning approaches at community or grassroots level (Tolentino cited in Ginther *et al* 1995: 145). However, it is also alleged that the Peoples' Republic of China is known to be repressive.

Public participation needs to be looked at as a human rights issue. According to Taylor (cited in Ginther *et al* 1995: 205), the United Nations World Conference on human rights emphasised that:

> The human person (sic) is the central subject of human rights and fundamental freedoms, and consequently should be the principal beneficiary and should participate actively in the realisation of rights and freedoms.

A new theoretical paradigm which promotes human rights is feasible; however, it requires a critical look at a country's internal, local, resources and the historical situation in which a country finds itself (see chapter four). The previous discussion pointed out that sustainable development is a process which aims to bring about a desired change, either through environmental, economic or technological means. However, such a change is perceived differently by different people.

What is important is that the concept of sustainable development should be understood as the integral systemic complex process which has as its objective, a quest to improve the quality of life of the whole population. It should put more emphasis on an integral productive development, a social development with equity and full citizens' participation,

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based on the principle of conservation of the base of natural resources and the preservation of environmental quality. This implies that there is a need for people's participation as a means towards achieving a better quality of life for them. Such an achievement would require an interplay of factors such as the economic, environmental, technological and institutional, thereby doing justice to the complex nature of sustainable development. For example, economic growth which is not centred around human beings is not sustainable; that is to say that we have to overcome the technocratic and environmentalist vision by which development is conceptualised and operationalised. Overcoming technocratic and bureaucratic systems implies that the government should decentralise responsibilities by placing them with local government, thereby doing away with centralised systems and structures which hinder good governance. For example, the current local government system in South Africa is indicative of the government's commitment towards good governance. However, good governance requires sound management, administrative and human resources capacities and fewer bureaucratic and technocratic systems. These systems should be geared towards and designed to advance human development.

The discussion points out that the human dimension of sustainable development can become better operationalised at local government level. This implies that every so-called democratic government which embraces the notion of decentralisation has an overall responsibility to effectively improve the quality of lives of the people. Such a responsibility implies that for a country to succeed, it has to encourage sustainable development through the promotion of effective public participation. The government should play a role in promoting a new culture and a vision for public participation. The new culture should emphasise decentralised forms of governance, choice in services at local level, consumer responsibility in payment for services and an effective monitoring of municipal development programmes. Given its diverse focus, it is clear that sustainable development is not an end in itself, but a process towards building the capacities of people through economic, environmental, technological, institutional, cultural, social and political means (see chapter eight table 8.4).

Diverse application of the concept of sustainable development implies that it is important to consider the context within which participation takes place. Common logic points out that participation takes place during project development, as indicated in chapter two. However, it should be noted that neither project planning nor project development processes are

sufficient to bring about the desired end results of sustainable development. Project development is often used as a basis for assessing sustainability. This is so because projects are characterised by a number of sequences and processes which are easy to measure over a specific time. The author compiled a table which shows an overview of a typical project cycle:

TABLE 3.1:   PROJECT PLANNING AND DEVELOPMENT

STAGE	ELEMENTS	DESCRIPTION
1	Needs assessment and project identification	Communities are consulted, prioritisation takes place, consensus is reached, information gathering and analysis takes place, training needs assessment is completed. Project steering committee is formulated
2	Project design	Communities are consulted on appropriate technology, assess levels of service, a training programme is designed and training of project steering committee members takes place
3	Project implementation	Physical infrastructure (such as pipes) is laid down, ongoing on-site training conducted
4	Operations and maintenance	Responsible community or municipality takes over the project. Costs are recovered
5	Monitoring and evaluation	Ongoing throughout

The above table provides a classical simplified version of what constitutes a project cycle. This table highlights key activities and processes which are undertaken, from the beginning to the end. The project planning process has become predictable and conventional in that it tends to follow the same pattern of events and sequences. Simultaneously, it tends to suggest that if the cycle is completed successfully in the sequence provided, then there are better prospects for sustainability. As argued by Abrams (1998: 3), this is a common "clockwise myth" which often develops false expectations. This implies that the beginning and the end of a project pose serious problems. First, the sponsors of a project such as donors or government become satisfied when the project has reached its final stage and second, beneficiaries assume further responsibilities, unprepared for future challenges. The two assumptions are wrong and misleading in that the end of the project is in fact the beginning of a tough process for beneficiaries. The project cycle is static or time-bound and therefore does not take into consideration the dynamic nature of projects in service delivery. This dynamism is in fact the point of departure in understanding sustainable development, as a process and not simply a product arising from project implementation.

Depending on their nature and scope, projects differ in their life-span, commonly ranging from one year to five years. Experience shows that often the project steering committees are perceived as representatives of communities. That is, community participation is reduced to a steering committee. Due to capacity constraints and time factors, what should have been participation is replaced by mere consultation of the community. Because contractors are under pressure to implement and complete projects, real participation is compromised.

Table 3.2 outlines various typologies of participation which form an important theoretical component for sustainable development.

TABLE 3.2:   TYPOLOGY OF PARTICIPATION

TYPOLOGY	COMPONENTS OF EACH TYPE
Passive participation	People are told what to expect. There is no ownership of information and process
Consultation participation	People are consulted but do not take part in decision-making
Incentive-based participation	People's motive to participate is based on material gains (for example, in labour intensive projects). However, there is no guarantee that their involvement will be continued
Functional participation	People participate by forming groups to meet predetermined objectives related to a project. Involvement occurs after major policy decisions have been taken
Interactive participation	People participate in joint analysis, which leads to action plans and the formation of local groups or strengthening of existing ones. It tends to involve interdisciplinary methodologies and participatory approaches. Groups have control over local decisions

Adapted from De Beer (2000: 14)

Table 3.2 demonstrates the two extremes of participation, from the weakest (passive) to the strongest (interactive). The former can be associated with the concept of involvement. Involvement is a typical typology which calculates numbers of people and not the value they add to the project or programme. Often, it is used as a criterion to test the number of women involved in a project.

The extremes indicated in the table further demonstrate that the concept of participation is also rife with contradictions, especially in situations in which participation is becoming meaningless. While there is much consensus on the principles of participation and development, what is still lacking is a comprehensive and critical examination of their semantic, conceptual and practical application (Ginther *et al* 1995: 25). The consensus does not emphasise their contribution in decision making, but their presence serves a great

purpose. As argued above, this approach compromises the integrity of the process of sustainable development. Contrary to the passive typology, the interactive typology is quite intense. It recognises people's potential, and where possible, it strives towards improving the potential of those who are involved in a project. People being treated as subjects (decision makers) and not objects (numbers).

The above table shows that development is void of sustainability unless it takes into consideration meaningful forms of participation. Participatory methods of sustainability are effective in situations in which the outcomes of a project or its continuation are emphasised (see above: table 3.2 on interactive participation). A strategic approach, rather than a conventional project approach, is ideal for participatory sustainable development. A participatory sustainable development approach should be seen as a strategic process, in which strategies (Ornat 1997: 3) are defined as:

> participatory and cyclical processes of planning and action to achieve three objectives such as economic, ecological and social.

Planning is an important element of participation. Often, strategic planning is perceived merely as the creation of a document which outlines the vision, mission, strategic goals, time-frames and budget of government or organisations. Such an approach becomes an end in itself, thereby defeating the entire purpose of having a strategy. A strategy should guide the implementation process. It should be a process and not a document which guides an organisation. According to Ornat (1997: 25):

> Strategies are processes leading towards a comprehensive, complex objective, namely sustainable development.

A strategic planning process should approach strategy as a management tool to assist an organisation to reach certain decisions. To reach key decisions, strategies can be applied to generate a practical model. Such a model can be applied to operationalise a strategy or policy. Implementers or practitioners of sustainable development should be able to apply the information they have about their organisation and understand the purpose for its existence. While they implement policies, they should also test the applicability and appropriateness of the model and its impact. They should exchange information based either on best practice experiences, or their livelihood community or political experiences. That is, existing community knowledge is put under scrutiny, not for criticism, but to assess whether or not

the priorities chosen are realistic. Moore (cited in Stewart 1999: 29) calls this "a diagnosis of political expectations". It is about a reality check and also the setting of clear targets and time-frames. Therefore, it is clear that strategic planning and public participation co-exist. A planning process driven solely by government officials and consultants in the form of a simple project-cycle, is not desirable, as it cannot guarantee sustainable development. It is in this context that members of a community are empowered through interactive planning methods so that they are in a position to address issues of sustainable livelihoods. Projects should thus be seen in the broader process of service delivery, and not as mere activities or events leading to a conclusion of a process.

Drawing from the above conceptual framework for participation in development, further illustrations of how interactive methods of participation can add value to sustainability can be adduced. As noted from Lammerick (2001), Participatory Action Development (PAD) is another method used to empower communities and the public in improving the management of services such as the water supply. This method involves various activities clustered into three key phases: diagnosing, experimenting and sustaining. What is impressive about this method is its logical and sequenced approach. It provides a clear road map for facilitators of public participation and ensures that at no stage is a participant left out or left behind. As it appears, this method is in line with other traditional methods such as the Participatory Rural Appraisal (PRA) and the Municipal Development Plans (see chapter seven). The table below illustrates a Participatory Action Development approach.

TABLE 3.3:   PHASES OF PARTICIPATORY ACTION DEVELOPMENT

DIAGNOSING	EXPERIMENTING	SUSTAINING
(a) Preparation by putting together a multi-disciplinary support team (b) Orientation and induction of team (c) Identifying and selecting beneficiary communities (d) Identifying problems and possible solutions	(a) Experiential learning and capacity building (b) Evaluating possible solutions	(a) Sharing results or twinning arrangements (b) Evaluation and impact assessment

Source: Adapted from Lammerick (2001)

The Participatory Action Development model provides an alternative approach towards the project cycle. It puts emphasis on the process of participation. The **diagnosing phase**

ensures that both the facilitators (multi-disciplinary team) and the participants (communities) develop a common understanding regarding the objectives of the process. This process involves a combination of other factors such as information gathering, stakeholder analysis and scenario planning. It is about the clarification of role and purpose. Since this stage includes technical designs, there are opportunities for communities to benefit from skills transfer.

The experimenting phase demonstrates a certain degree of confidence building within communities. This is a phase when consensus has been reached so that communities are empowered to experiment with other projects in their own areas. They can create their own development strategies because they have the tools and the know-how. They can begin to assist other needy communities by providing a supportive environment. Communities can evaluate their own strengths and weaknesses, thereby generating more options for future work.

The sustaining phase is a critical phase which represents the outcome of the above processes. In this case, outcome refers to the impact of the project. Communities can improve techniques and tools they find obsolete, or learn best practices from other communities. In general, this phase suggests that communities are able to create their own livelihoods and become independent.

The above discussion indicates that the project cycle approach needs to be broadened to accommodate the possibility of sustainable development. Sustainability is derived from two major phases: initiation and continuation. As indicated in table 3.1, initiation represents the project identification and needs assessment. Drawing from the above Participatory Action Development in Lammerick's approach, initiation represents the diagnosis phase. The initiation phase of sustainability represents the recognition that a service is needed by the community. It also represents the articulation of a demand for a service, the design and construction of the physical infrastructure and the commissioning (Abrams 1998: 4).

The continuation phase, or the monitoring and evaluation (see table 3.1), or the sustaining phase (Lammerick 2001), includes the operational aspects of the service. Consumer satisfaction is of the utmost importance. Continuation is there to promote sustainability; however, often it is the factor which does not receive attention because as soon as a project

comes to an end, sponsors look elsewhere for other projects. As argued by Abrams (1998: 4), the key to sustainability in the continuation phase is the support system or a capacity development component which seeks to provide skills training and guidance.

The above phases provide a good base for strategic planning at government level. Since participatory methods are fairly new within the field of sustainable development, it is critical that government planners and policy makers familiarise themselves with such methods. Development planning requires appropriate skills and expertise. Conventional notions of projects are critical; however, they do not provide opportunities for strategic thinking because they are centred around rigid processes and activities. The table below outlines a number of strategic considerations which are essential during the implementation of participatory planning methods.

TABLE 3.4:   KEY STRATEGIC CONSIDERATIONS

KEY STRATEGIC CONSIDERATIONS
(a) Developing a policy, legislative, regulatory and institutional framework
(b) Developing a new cross sectoral decision-making matrix
(c) Developing an integrated capacity building and training programme
(d) Conducting risk analysis and forecasting
(e) Linking old and current programmes and projects
(f) Identifying and linking budgets, targets and time-frames
(g) Monitoring and evaluating

Adapted from Carew-Reid *et al* (1994: 119)

Table 3.4 clearly outlines key strategic considerations for a participatory development planning process. These considerations provide a sufficient basis to make choices for short, medium or longer term planning. They are sequenced and can therefore become measurable. They are also results oriented. Achieving measurable results at government level provides an indication of impact, which is a key feature of a participatory development approach.

Development planners and policy makers in government generally lack the necessary tools and guidelines to implement sustainable development. This stems from the fact that in general, the public sector is not expected to operate with the same level of sophisticated management principles as the private sector. Often, this situation leads to services being rendered on an ad-hoc basis, without strategic considerations regarding their being sustained. As a result, the entire exercise becomes less cost effective and ultimately non-

sustainable. Public participation is also compromised along the way because it becomes expected that the government will deliver in any event. The advent of democratic local government in South Africa implies that such a situation cannot be allowed to occur because it has potentially negative consequences for the rest of the country.

What emerges thus far is that in order for local governments to execute their responsibilities as water services authorities, there is a need to institutionalise key competencies for development and management. The latter will require the application of key management tools. The following table shows tools for governance which are essential for operationalising sustainable development.

TABLE 3.5:   TOOLS FOR GOVERNANCE ACTION

MANAGEMENT TOOLS	TRADITIONAL POLICY AND DEVELOPMENTAL TOOLS	POLICY TOOLS
Planning	Analysis	Legislation
Project management	Research	Regulation
Benchmarking	Forecasting	Incentives
Risk management	Stakeholder participation	Leadership
Cost benefit	Advocacy and communication	Information

Source: Adapted from Stewart (1999: 1)

The above table is divided into three key types of tools: management tools, traditional policy and developmental tools and policy tools. It can be argued that South Africa's strength lies in existing policy tools. As indicated previously, South Africa is well known for its well-articulated policy and legislative framework. However, in general, the public sector does not have a pool of such tools and knowledge. The above table therefore provides opportunities for public sector managers to conceptualise, analyse and implement development programmes in the most effective and cost-effective manner. It makes sense for government to attract the best managers, so as to be in a position to implement some of the best policies in the world.

Furthermore, a competent manager would be in a position to implement appropriate participatory methods and approaches using the commonly used tools available. If participatory sustainable development approaches were adopted as the government's development philosophy, then managers would be required to understand the principles underpinning such a philosophy. Table 3.5 also shows that government is faced with

complex development challenges which require a programmatic, rather than a project, approach. The following principles seek to provide solutions to these challenges.

3.3 PRINCIPLES FOR PARTICIPATORY SUSTAINABLE DEVELOPMENT

Section 3.2 clearly outlines a key methodological and conceptual basis for participatory planning and governance. The following principles further support the basis referred to:

3.3.1 Sustainability

The concept of sustainability has attracted much interest over many years from many disciplines. Its application is evident during project implementation, and concepts such as project sustainability, financial sustainability and project viability emerged as a result. However, the concepts of human and social sustainability seem to become more relevant and appropriate in those societies which experience challenges concerning people development. That is, as opposed to the normal convention of sustainable development which places natural resources at the centre, sustainability of human and social opportunities can create good prospects for future generations of *people*.

As argued in this study, the human dimensions of sustainability are critical to South Africa's situation. The main reason is that due to its history of racial discrimination, which saw the promotion of unequal distribution of resources, South Africa has a huge development gap to close, in terms of social and human factors. Sustainability is a principle which underpins people's capacity to plan, to manage their institutions, to develop their potential and therefore develop the ability to maintain their resources. Institutional sustainability is paramount in this regard because it serves as a core element which integrates resources (financial, human and technical). Sustainability therefore depends on how each organisation manages and protects its resources, and on how individuals' performance is nurtured and rewarded. The assumption being made here is that without effective institutions, chances for sustainable development would be lessened. Likewise, if institutions and resources are not properly managed, chances for sustainable development could be jeopardised. The discussion so far has indicated that there is a multi-dimensional view of sustainable development and that a combination of factors can bring about the desired end result, which is the improvement of the quality of life of people.

The reason why the definition of sustainability has become vacuous is that those who apply it do not show tangible or measurable results. The greatest challenge which faces governments, after projects are completed at community level, is their continual functional existence (sustainability). Functional sustainability is concerned about whether or not institutions carry on after the schemes are inaugurated. According to the WHO & UNDP (2000: 1), from the African perspective, there is greater consensus regarding issues which lead towards sustainability, such as:

(a)   community participation in all stages of project planning, design, implementation, management and operation, with consideration given to gender issues

(b)   political commitment

(c)   inter-sectoral co-ordination, collaboration and co-operation

(d)   adequate institutional frameworks

(e)   human resources development

(f)   self-improvement of communities

(g)   use of appropriate technology

(h)   involvement of the private sector through sound regulatory and controlling measures.

However, it should be pointed out that functional existence is not an end in itself. As indicated by (f) above, it is a means towards people attaining a livelihood. This is a point of departure in contextualising sustainable livelihoods as a concept which is also used in the development field to strengthen arguments for advancing sustainable development. As both a practical solution and a conceptual framework which attempts to lay down corrective actions for sustainable development, the idea of sustainable livelihoods[27] is introduced by

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[27] The concept of sustainable livelihoods has emerged over the last decade. The Brundtland Commission in 1987 introduced sustainable livelihoods in terms of resource ownership and access, basic needs and security of livelihoods, especially in rural areas. This approach (SL) is also used widely by donor organisations for programming purposes. It has mainly been applied as an alternative to mainstream development policies, in order to alleviate poverty and to avoid deepening environmental crises (Savio 1995: 1).

the author to provide a way forward, especially as a short to medium term solution, in preparation for the achievement of the long term goal, sustainable development. This approach (sustainable livelihoods) slightly deviates from the popular definition of sustainable development in that it is concerned about the short-term needs essential for human development. That is, while pursuing long-term solutions for sustainable development, it is important for local government not to overlook day-to-day activities which provide people's livelihood. People should receive basic services and be able to go on with their lives, rather than have to wait for long-term development gains.

It is clear that initiatives which are based on the sustainable livelihoods approach seek to bridge the gap between short term needs and long term gains of sustainable development. That is, sustainable livelihoods give further impetus and awareness to ways of improving the possibilities of combating poverty. As argued by Farrington *et al* (1999: 2):

> A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintains or embraces its capabilities and assets both now and in the future, while not undermining the national resources. Surely, if this is the intention to maximise the possibilities of making sustainable development a success, then sustainable livelihoods is the correct approach.

In supporting the statement above, Anthrobus (cited in Savio 1995: 1) further indicates that:

> The focus on sustainable livelihoods comes at a time when there is growing frustrations and skepticism among people who have seen their hopes and beliefs in the possibilities of global action to promote the well-being of present and future generations and the planet, increasingly shattered by the unwillingness of our governments and international institutions to confront contradictions in the current socio-economic and political structures which perpetuate poverty, injustices and environmental degradation.

As an alternative approach for enhancing the chance of bringing sustainable development into being, the notion of sustainable livelihoods provides concrete measures which are human or people-centred, and therefore have the capacity to build or restore confidence on the part of consumers and communities.

3.3.2   Equity through access

Equity is about access to opportunities, resources and choices. The human development dimension of sustainable development values equity through access to resources. Equity through access is linked to the principles of intragenerational and intergenerational equity, which indicate that equitable access to environmental resources should be available both within the present generation as well as to future generations (Okoth-Ogendo cited in Ginther *et al* 1995: 115). Social development comes about when people are given the opportunity to take control of their lives, to participate in their own development and to decide on their destinies.

Equity through access is about the creation of more equal opportunities for people. Unlike the traditional methods of development planning, in which a government plans for the people and not with the people, equity ensures fairness and justice. Therefore, it is critical to emphasise the principle of equity through access and also the need for equitable distribution of resources. People cannot achieve personal growth in an environment which does not recognise their basic human rights. Likewise, development cannot become sustainable unless people become part of that process. Ability, and the means, to make decisions are therefore integral components of sustainable social development.

Access to knowledge and information is paramount in the process of sustainable development. If people lack knowledge, they will find it difficult to contribute effectively during the decision making processes (see table 3.2: interactive participation). Equally, if they do not have the correct information, they may end up making the wrong decisions. Access to decision-making power is also important in that it builds confidence and transforms power relations. However, the main barrier hindering access to information and knowledge is lack of power. Power relations can therefore hamper efforts towards sustainable development. Through creating clear mechanisms for participatory planning processes, a government can address skewed power relations, thereby according those who are powerless, opportunities to make themselves heard. As argued by Haq (1995: 17):

> if development is to enlarge people's choices, people must enjoy equitable
> access to opportunities.

3.3.3 Human capacity

Human capacity is an important dimension of sustainable development. The capacity of people plays an important role in self-empowerment, self-worth and self-reliance. Often, the rural poor are the ones who are in need of greater capacity because by virtue of being poor, they seldom possess knowledge and skills. They are therefore rated low in the class strata and generally rely on the government to supply basic services.

Capacity involves acquired knowledge and skills, and sustained use of one's capacity is an essential ingredient of sustainable development. Local community capacity building is about empowerment. Empowerment of people should come about through organisational and institutional development. However, it should also be borne in mind that institutional development and capacity building remain buzzwords in the development field. In the South African situation, these concepts are commonly-used and are central to most policy frameworks; however, translating them into action remains difficult. This could be partly attributed to the fact that not many public service managers have received the opportunity to be trained in human development and participatory approaches and methods.

The phrases capacity building and institutional development are often used interchangeably to refer to the ability of individuals and organisations to perform optimally in a sustainable manner. The definitions imply that there is a process to be followed when implementing capacity building and institutional development programmes. It should be recognised that human beings are effectively utilised, and that the overall context within which organisations undertake their functions becomes a priority, in capacity development (United Nations Development Programme 1998: 2). In this study, these concepts will be applied in their normal generic form to denote a comprehensive ability to plan, take decisions, implement and monitor and evaluate the impact of development programmes.

The precondition in the current context is that local government (water services authorities) require a certain degree of autonomy to be able to ensure capacity development, both at human resources and institutional level. This introduces the concept of decentralisation of water services, which in the view of this study, enhances the chances for capacity development, citizens' participation and therefore sustainable development. Capacity building is heralded as one of the preconditions for sustainable development (Lisk 1996). The world over, governments are investing in capacity building, and donor communities

offer high level technical assistance in its name. Others argue that capacity building is not a new concept and that it simply takes over the new umbrella term for a mixture of approaches, such as training and technical assistance (IIED 1996: 1). Since the 1980s there has been a proliferation of capacity building organisations and service providers. This signals the seriousness with which the attempt to enhance of the chances for sustainable development is accompanied.

The human capacity principle indicates that organisations cannot function effectively if they are not staffed by fully skilled personnel. In this case, capacity building must include development of systems for management, structures, procedures and processes. An enabling environment will be essential. This could include an incentive system such as a performance bonus, which has been proven to enhance levels of performance. Effective performance of any functions at government level requires well-trained individuals. An accelerated career path development programme must be put in place to increase the motivation of personnel.

3.3.4   Synergy

Various factors impact directly and indirectly on human life, such as spiritual, racial, cultural and religious aspects. These are all-important components of human development. A holistic and synergistic approach to human development is important because it recognises all aspects of human life. This approach can also be contextualised within a systems approach, which regards the whole as more than the sum of its parts. South Africa, for example, is a highly divided and diverse society. In order to build a basis for sustained human development, South Africans from various backgrounds require space and time to interact with one another, to trust one another and to respect one another. This statement implies that sustainable development is another form of nation building. The two co-exist. Haq (1995: 20-21) provides a broad outline of aspects essential for the holistic approach, which indicate that:

(a)   development must put people at the centre of its concerns

(b)   the purpose of development is to enlarge all human choices, not just income

(c)   the human development paradigm is concerned both with building up human capabilities (through investment in people) and with using those capabilities fully (through an enabling framework for growth and development)

(d) the human development paradigm defines the ends of development and analyses sensible options for achieving them.

3.3.5 Trust, openness and integrity

Trust, openness and integrity reflect the level of confidence citizens have in public servants. The public should look at public servants as information givers, enablers, supporters and helpers. Integrity is both a social value and a political construct. It is a social construct because it is based on the social meanings people attach to an object or subject. It is a political construct because it carries politically motivated ideals. The process of successful sustainable human development is therefore based on trust, openness and integrity between stakeholders.

Society needs to maintain its integrity in the preservation of natural resources, human development and most importantly, in promoting gender empowerment. There is enough evidence to prove that in the water sector, for example, women play a more important role in decision making than males. According to Duncker (1999: 8), gender refers to:

> The roles and responsibilities of women and men. These roles and responsibilities differ from country to country, place to place and even community to community and are influenced by class, religion, culture and social, political and economic factors.

It is therefore important that depending on the individual context, gender issues should be desegregated to reflect the social roles of men and women as opposed to biological differences. As argued by the European Commission (1998: 258):

> analysis of gender differences entails identifying the distribution of tasks, activities and rewards associated with the gender division of labour as well as the relative positions of women and men.

Society can maintain its integrity in dealing with all social and political constructs which elevate the status of women, by recognising their role in sustainable development.

3.3.6 Good governance through public participation

Participation has been part of development thinking for such a long time that it is part of the norm in any development agency (De Beer 2000: 7). Public participation should provide

organs of civil society with the opportunity to interact within development planning processes. Over the past years various methodologies and participatory tools[28] have been used to legitimise and strengthen policy making processes. Public participation is also a planning tool which is common in countries such as Bolivia, because it has yielded more value for municipal development planning processes (see chapter seven figure 7.1). Common stages of development which are used in these processes are: problem identification, planning, implementation, operation and maintenance, and evaluation. It is especially in the planning stages that the public or large consumers have to become involved. Municipalities should facilitate a greater and appropriate control by the public of the operations and the use of public resources. They should also take decisions on fundamental aspects such as the orientation and priorities of development of the municipalities and the public actions which will allow their fulfilment.

3.3.7   Indigenous knowledge

Recognising the indigenous knowledge, culture and language of the people is a powerful way of advancing prospects for sustainability. This is because people appreciate being recognised. They prefer processes which consider their thoughts, feelings, experiences and perceptions. The government should develop policies for sustainable development using participatory approaches where people express themselves in their own indigenous languages. Experience elsewhere shows that public participation is a vehicle which can enhance the self expression and empowerment of the marginalized groups. However, public participation is not an end in itself. It needs to be complemented by factors such as political commitment.

3.3.8   Multi-objectivity

Multi-objectivity is a process of recognising various objectives which can contribute towards sustainable development. It emphasises the co-ordination and integration of development programmes and recognition of complex, technical and dynamic planning systems. Likewise, it also recognises the key elements of sustainable development; namely,

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[28] The rapid rural appraisal method is one example.

if the economic, technological, environmental, institutional and social areas are not properly co-ordinated, this could minimise chances for sustainable development. A common issue which exists in most developing countries today is the duplication of effort and wastage of resources. The potential to optimise chances for sustainable human development can drain away if attention is not given to the concept of multi-objectivity.

Multi-objectivity recognises the diverse nature of sustainable development and therefore draws from diverse experiences of people and the lessons learnt from others, and also recognises the interrelationships between sustainable development, public participation and good governance.

3.3.9   Risk[29]

Risks can be differentiated into different categories such as the environmental, political, economic and financial, social and policy risks. Often the public sector, like the private sector, is confronted by a myriad of risks. However, the most common risks which face the public sector are the social, policy and political risks. For example, the introduction of free basic services in South Africa was a political and a policy decision by government, to address social problems. For the government, the benefits associated with this decision exceed the costs of implementing it. That is, the government's goal is to fulfil people's right of access to basic services at any cost. In this case, major risks lie with municipalities which are pressured to deliver basic services to consumers. They have to work out the best possible options, which should not prejudice them financially. However, not all municipalities are financially ready to implement this political and policy decision. If they do, they run the risk of being financially unsustainable. If they don't, they run the risk of being unpopular with their constituencies.

The above description of risk application in the public sector indicates that certain decisions have a bearing on the degree of sustainable development. It is clear that political leadership

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[29] Risk is a measure of the probability and severity of adverse effects. That is, what can go wrong, what can be done if something does go wrong, what options are available.

does play a major role in terms of contributing positively towards the overall quality of people's lives. Political will is a major risk and if based on a sound decision making process, can enhance chances for the achievement of a sustainable development.

3.3.10   A demand-driven approach

There is a high likelihood that every government policy on development emphasises a demand-driven approach, directly or indirectly. According to Rall (2001: 2), the core principles of the Demand Responsive Approach (DRA) have been well developed and refined over many years by institutions such as the World Bank. Community management and public participation in decision making processes appear to be a critical principle of a Demand Responsive Approach. A careful look at a Demand Responsive Approach is critical because the poor do not always have the capacity or courage or knowledge to "demand" services. At least, demand in South Africa has political connotations whereby during the apartheid era, communities demanded services from government by force. Awareness raising is therefore critical in addressing issues of supply versus demand-driven approaches.

3.4   PERFORMANCE MONITORING AND IMPACT ASSESSMENT

Ongoing monitoring and evaluation of a municipal plan is critical. Appropriate tools and guidelines will have to be applied to assess its progress and value for money. In this instance, the local government municipal planning and performance management regulations (DPLG 2001: 5) clearly outline the nature of a municipality's performance management system, which entails:

> 7. (1) a framework that describes and represents how the municipality's cycle and processes of performance planning, monitoring, measurement, review, reporting and improvement will be conducted, organised and managed, including determining the roles of different role-players.

As no municipality or water services authority can delegate its governance roles, the implication of the above regulation is that the success of central government depends on the overall conduct and performance of municipalities. The analysis provided by Gills & Rocamora (cited in Leftwich 1994: 364) is that the issues of sustaining democracy and the conditions for sustainability have received little attention in Third World societies. There is therefore a strong probability that good governance characteristics and sustainable

development experiences will differ from continent to continent. This is primarily so because each country has gone through different experiences. Campos & Nugent (1999: 444-446) argue that although there is no formal theoretical model for institutional development measurements, it is still possible to test differences in institutional characteristics and the correlations which exist between different countries. These authors conducted studies in Latin America and Asia and concluded that governance characteristics and development experiences can only be measured over a certain period and across countries. It is thus important to compare governance issues in South Africa with those in other countries which have had long term development experiences.

It is for the above reason that various government levels should undertake an impact assessment of services rendered on a regular basis. Social impact assessment represents the core of the participatory model towards sustainable development. It conveys to the participants an idea of how well or how poorly the government is performing. Over the years various methods associated with social impact assessment, such as monitoring and evaluating, have been used widely. These methods have different choices regarding impact assessments. Often, most organisations opt to choose the monitoring of the actual physical achievements as a measure of their success. This has become a major shortcoming in measuring sustainable social development because, as argued in this study, sustainable development is about the outcome or benefits of a programme, and not necessarily, although they are important, about the inputs (input costs and other resources used). The outcomes should be linked to the context of the lives of those who are affected.

Monitoring and evaluation are ongoing activities from the beginning to the end of the process. Their main concern is to assess the levels of effort and input costs (financial, time, human resources) against the outputs (results or changes brought about by the implementation). Impact assessment is on the whole a long-term activity in that it addresses the outcome or the impact of the programme on the lives of the targeted people. The main purpose of monitoring and evaluation is to assess progress, possible constraints (human, financial, political), and to adjust or strengthen the participatory model (see chapter eight figure 8.3).

There are various types of impact assessments such as the social impact assessment and the environmental impact assessment. For purposes of this study, the discussion is only limited to the social impact assessment. Donnelly *et al* (1998: 7-8) defines impact assessment as a:

> process to improve decision making and to ensure that the development options under consideration are environmentally and socially sound and sustainable. It is concerned with identifying, predicting and evaluating the foreseeable impacts.

Social impact assessment is therefore an appropriate management tool which can bring about various opportunities such as cost saving, improving the viability of projects and enhancing chances for improving the quality of lives and above all, sustainable development. As mentioned by Cloete & Wissink (2000: 24), social impact assessment procedures include normal project management processes designed to achieve certain results. However, in order to maximise the cumulative effect of this tool, it is important to consider the context within which it is applied.

Often, elements of the context referred to include language, cultural barriers, mistrust, physical proximity, education and indigenous knowledge, gender issues, political and ideological differences. All these elements characterise relationships between human beings. Since development is about people, it is therefore essential to consider these elements as and when impact assessments are conducted. As mentioned by the European Commission (1998: 255):

> It is especially important to understand the ways in which different communities and groups manage their social livelihoods (sic) and are able to assess the impact that any changes may have on the way of life.

In South Africa, implementing an outcomes-based development programme is becoming a common process. This approach places results at the centre of an evaluation and it is also very useful in development programmes. Quality outcomes should be measured against the total social, human and economic benefits and not be solely based on how many funds the government, for example, spent on water infrastructure projects or how many taps were provided to the community. Through setting up a participatory sustainable development model, this study attempts to bridge the above perceived gap between the physical and human considerations of development projects. It is argued that this gap can be dealt with through participatory development methodologies and approaches.

The above discussion points out the critical need for policy in service delivery to incorporate outcome-based targets. Such an approach would change the manner in which programmes and polices are currently being evaluated and impact measured. Quality and not necessarily quantity, would become a core unit of analysis.

3.5   CONCLUSION

This chapter departed from the traditional classical views of sustainable development in advocating participatory methods and approaches. The proposed new paradigm is simply an attempt to show that if it continues to be viewed within the current traditional and classical environmental definitions, sustainable development will cease to be a valuable factor in social and human development. The chapter not only provided a theoretical justification for a new paradigm, but also applied concepts, methodologies and tools which are important for advancing the goals of sustainable development.

Furthermore, the discussion also placed more emphasis on the need for government to match existing policy implementation with the best available human resources. Transforming the current mind-sets of civil servants into innovative ideas seems to be the major catalyst for government's delivery programmes. The chapter therefore made an attempt to lay a solid basis for a new policy framework which could enforce new thinking and creative solutions. However, it is also critical to understand the context within which these solutions are formulated.

CHAPTER 4

SETTING THE SCENE FOR SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA

4.1 INTRODUCTION

Chapter three provided an alternative participatory approach and a new theoretical paradigm for sustainable development. The chapter argued that developing countries need to conceptualise sustainable development, using their own participatory methods and approaches. This would maximise the potential for better understanding on their part, thereby leading towards localised decision making. As a developing country, South Africa too needs to develop and implement models applicable to its situation. This chapter attempts to lay a conceptual framework and create a sounder understanding of South Africa's context and prospects with regards to sustainable development. The chapter addresses the context by exploring some of the fundamental factors which in the past militated against participatory sustainable development.

4.2 SUSTAINABLE DEVELOPMENT IN CONTEXT

Context is about circumstances related to facts. This study addresses sustainable development as a factual and critical issue, which dominates the development literature today. Before any methods or models for sustainable development are introduced in any situation such as South Africa, a thorough understanding of the context is critical. Therefore chapter two addressed the context of sustainable development, by exploring its historical trends and patterns. This history associated the concept of sustainable development with the development discourse in developing countries. This discourse was shown to be in favour of the environmental concerns of sustainable development.

Being a developing country, it is interesting to note that South Africa's historical development context is also rooted in environmental concerns. This is evident from South Africa's colonial history, which clearly shows traces of values which embrace environmental concerns. Management of water, for example, was based on water resources

and not water services. This implies that water management was based on technical, environmental and engineering considerations rather than on the domestic supply side. South Africa's development experiences therefore reflect an institutional paradigm which did not place direct emphasis on human beings. However, the focus on environmental concerns shifted towards development considerations for basic human needs in the 1980s (Munslow *et al* 1997: 3). This change was influenced by international and local political pressure groups against unjust apartheid development practices. The struggle for liberation was not only a political struggle, but also a means towards putting South Africa on a sound development path. It was a means towards addressing the country's institutional, social, economic, environmental and human resources development problems. It is within this historical context that sustainable development in South Africa needs to be understood.

As a developing country, South Africa is faced with a development history muddied with racial discrimination and unequal distribution of resources. Consideration of South Africa's context is therefore important for two reasons. First, concerns about the unique historical context and unequal distribution of resources are the point of departure in understanding racism and its underpinning actions against sustainable development. Second, approaches associated with a culture of basic human rights are enshrined in South Africa's 1996 constitution, which is critical for public participation. The latter is further supported by the Charter of the United Nations and the Declaration of the Rights of Development. As mentioned by Slinn (cited in Ginther *et al* 1995: 167), the nature of South Africa's constitution and the Bill of Rights create better prospects for sustainable development than in the past. However, as pointed out by Mahlangu (cited in Theron *et al* 2000: 30):

> It would be wise of us, to take stock of what we have and then chart a way
> forward on how to utilise what we have to entrench democracy and meet
> basic needs of the poorest of the poor.

The above considerations indicate a need to revisit the negative impact which apartheid development practices had on human development in South Africa. Likewise, sustainable development cannot be understood outside the human development context. This context is critical for sustainability because sustainability is about people, and their capacity and willingness to take part in their own development. It can therefore be argued that development requires awareness raising through massive educational programmes. People need to become self-reliant and a government should make efforts to create an enabling

legislative and policy environment. Understanding the history of apartheid means that South Africans can begin to appreciate the damage inflicted by apartheid on the psyches of the people.

In order to understand how development can become sustainable, South Africans need to ask themselves what sustainable development means for them. As mentioned by Munslow *et al* (1997: 4), sustainable development should represent a truth commission of some sort. People need to confront issues of racial discrimination and what they meant for those who did not receive adequate shelter, food and clean water services. This self-introspective process should thus lay the basis for the sustainable development process in South Africa. Self-introspection requires South Africans to think about the effects of the changes which have occurred over the years, such as the tremendous social policy changes which were motivated by growing political changes in South Africa (Lund cited in Alcock & Craig 2001: 221). Sustainable development will therefore require a major effort to transform, reconstruct and correct the perceptions people had about themselves and about others. What this implies is that understanding the evolution of sustainable development requires an extensive analysis of the methods and practices of exclusivity implemented under apartheid.

The apartheid policy was based on racial development practices, ethics and morals. Its overall value system was unjustly developed and operationalised in order to undermine the human rights of the majority of South Africans. As a result, it compromised the development of a large percentage of South Africans, thereby leaving behind the legacy of an under-developed society. Scheepers (2000: 3) defines development as a process which is people-centred and associates it with a road travelled by people to reach a certain destination. Some authors (Van Wyk 2000: 2; Kirsten 2000: 2) all define sustainable human development as a process. This is particularly important to note because in South Africa this process was rooted in a particular content and context, which can be analysed together to arrive at some assumptions about what lines to draw in defining sustainable development. As seen in South Africa's colonial and apartheid history, the road travelled by the members of the past generation, Blacks and Whites, was certainly neither that to a common

destination nor that of people-centred development. It was, rather, characterised by an unfair[30] competition for land, water and other resources (Mckendrick 1990: 11-15). However, qualitatively and quantitatively, there are good reasons to argue that the past practices, while they did not benefit Blacks materially or psychologically, had a positive impact on South Africa's overall infrastructure development which still serves a vital purpose in the present day South Africa.

South Africa's situation can best be understood within the colonial-apartheid context. This context is important in that it raises questions about social injustice and social equity. As seen from the myriad of definitions referred to in chapter two, sustainable development is about distribution of social costs and benefits of development between and within generations. This distribution should be based on the ethical and moral values of a society which cares about the social welfare of its people. Often, a fair distribution is associated with poverty alleviation, equal opportunities and public participation (Briassoulis 1999: 227; Hediger 1999: 482). A South African history suggests an ideological history which fits what Moore (cited from Moore & Schmitz 1995: 1) calls "a history of development discourse in which the dominant class and race organises its material, social and political base".

Clearly, we are dealing with a unique case in which the development of certain people, only, was sustained over time. What can be recognised is that the application of development principles in South Africa was based on preferential development, such as liberty and freedom for the White population. These principles were well thought out and executed in order to meet the social and human development needs of the White population. Actions associated with preferential social development were indicative of a political will to succeed. It can be argued that the current social and economic problems facing South Africa emanate from the above preferential or discriminatory practices.

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[30] Whites had a competitive advantage over their counterparts because after 1910 and also in 1924 there were concerted programmes devised to mitigate their situation, which meant quality service, employment and generally a better standard of living, than Blacks.

As argued by Adelzadeh *et al* (1998: 2):

> Significant backlogs in social investment in human resources and social services have contributed to the existing widespread unsustainability of livelihoods since they have led, among others, to the underskilling, lack of access to basic services and lack of access to the critical economic assets by the majority of the Black population.

The political context of sustainable development in South Africa has values which became deeply entrenched as early as 1910, when South Africa became a Union. However, these were further encoded in the 1930s as a result of the deep psychological fears and insecurities the Afrikaners experienced (Giliomee cited in Price & Rosberg 1980: 15-16). As insecurities accelerated prospects for a Whites-only development, so did apartheid succeed with its intended consequences. It is for this reason that in the South African context, sustainable development can be regarded as having political connotations. Logically, the comprehensive policies associated with past development practices, which were racially motivated, are indicative of the extent of the distributive policies the new government has to introduce in order to close the development gap. The descriptive analysis of colonialism and apartheid, in the form of context and content, seems to suggest a new path for an inclusive people-centred development in South Africa.

It can therefore be postulated that sustainable development is both a political and a social construct and depending on the context, it could assist in creating operational mechanisms for policy review, policy formulation and its implementation. From South Africa's history of racial discrimination, there is a further indication that application of sustainable development should form part of a conscious process to promote social change and transformation (Baker *et al* 1997: 1-7). Application could also become a social change methodology which is profoundly humanistic in its emphasis on the human element of development (Hoff 1998: 17). In this way, South Africa could find new meanings and principles which embrace all of humanity. Development in South Africa could therefore cease to be driven by macro-economic forces and politics, and to a large extent, could move away from the dominant paradigm which elevates only the ecological and economic variables as important, over and above the human elements (Faucheux & O'Connor 1998: 20). It is for this reason that a model for sustainable development is proposed (see chapter eight).

4.3   THE INFLUENCE OF THE COLONIAL AND APARTHEID PAST

The understanding of sustainable development in the context of the colonial and apartheid past is important for various reasons. First, the analysis of any history forms the basis for understanding the different dynamics and processes which influenced such a history. Second, in this case, racial history influences people's perceptions and creates stereotypes between and amongst people. The context of South Africa's history is therefore important because it is located within diverse features, such as race, ethnicity, cultural and linguistic differences. These differences, if not addressed, could affect the way people relate to each other and to one another. People's relationships in South Africa are still characterised by variations in class, gender, race and other social structures which have historically given rise to patterns of inequality and prejudice. The most common characteristics are unequal access to basic services and skewed distribution of resources amongst different racial groups.

There is no doubt that the above situation had a significant impact in shaping the discourse of sustainable development in South Africa. In particular, knowledge production and a racial value system had a significant impact on the educational system of the past. As argued by Seepe (2001: 27):

> Knowledge production under apartheid perpetuated the values of apartheid society and thus served as a tool not only to justify but also to maintain and protect grossly unequal economic and social relations.

Outside South Africa, the colonial legacy is often blamed for today's political and social problems in Africa. Rightly so, as argued by Picard & Garrity (cited in Fitzgerald, Lemon & Munslow 1997: 62), this legacy has resulted in over-planned, centrist states characterised by an unplanned patronage-based civil service whose function is not to facilitate development alternatives, but to ensure political quiescence. Similarly, Leftwich (cited in Fitzgerald, Lennon & Munslow 1997: 62-3) also maintains that architects of post-colonial Africa did not create viable institutions of governance and policy implementation. Instead, as argued by Mbeki (1999a), they created an authoritarian system of governance whereby Africans were not given a say in their socio-political and economic life. Similarly, in the South African context, the colonial-apartheid era has created skewed settlement patterns of local government, dividing people according to race and ethnic group.

The above statements are supported by a number of researchers and authors who provide useful information regarding the origins of race in South Africa, as well as the pre-colonial history of Africa, the manifestations of different ideological perspectives and reasons for the gloomy state of affairs in South Africa. These include Suzman (1960), Tordoff (1984), Kirsten (2000: 1). It is important to note that the colonial legacy varied from continent to continent (Tordoff 1994: 33). However, what has emerged as a striking similarity in all these analyses, especially of race relations in South Africa, has been the lack of consistent definitions and the presence of anomalies in race classification systems[31] which were introduced by the Afrikaner after the establishment of the Union of South Africa (Suzman 1960: 339). This shows that race classification might not have been the colonisers' main goal, but that it was to protect their own self-interests. This is evident from Tordoff's (1984: 24) statements that colonial experiences in both Africa and Latin America were based on different reasons which include trade, protecting the colonisers' own interest and missionary duties. This issue will be addressed in the discussion below.

4.3.1   Sustainable development in the context of discrimination

Any form of discrimination can minimise the potential gains of social and human development. Previous discriminatory practices have proved inefficient and ineffective because they have resulted in a major development gap. The following periods outline significant historical events which demonstrate the root causes of the existing inequalities and inequities in South Africa.

4.3.1.1   Period One: Establishment and entrenchment of the colonial power discourse

This period coincides with the arrival of the Dutch and the subsequent British occupation during the 1800s. The establishment of colonies such as that at the Cape of Good Hope should be understood in the context of the rapid formation and evolution of colonial society

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[31] Suzman (1960: 342) in her analysis of the phrase "from cradle to grave" provides interesting comments on how the previous government used statutory powers to justify determining the race of people on the basis of their culture and languages through the Promotion of Bantu Self-Government Act No 46 of 1959. As argued in this chapter, most of these elements were born out of a period of conflict, of territorial conquests and expansions during which sovereignty and ownership were contested, often involving loss of life.

which can be traced back to the arrival of the Dutch East India Company (DEIC) in the Cape in 1652[32]. The colonial origin of practices of segregation can also be traced back to the early English colonialism of Wales and Ireland (Christopher cited in Maylam 1995: 22). The heyday of colonisation was a period in which grandiose attempts for territorial conquests were embedded and colonisers had a capacity, amongst other things, to assimilate the inventions of others and also a hunger for wealth (South Africa 1997a: 2). Historical territorial conquests and assimilation of others appear to have contributed towards the rankings of people according to their status in society. The colonial discourse is arguably a world-wide phenomenon which permeated and stratified many societies in order to preserve and legitimise White supremacy.

As an element of such a stratification, segregation was thus concealed to become an instrument to exert power and control over others. Class, in particular, was used to create various artificial, but effective, separations of people according to certain values and norms. History shows patterns of class relations emerging from the Western Cape during the colonial era. This occurred as slaves were brought into the Cape, and also when the Khoi people were relegated to a low status, as providing cheap labour. The African traditional value system began to be regarded as backward since it did not conform to the conventional Western values and norms.

What can be deduced from this era is a practice which culminated in schismatic and often opposing worldviews between different classes and different racial groups. Such values and norms were carried into the discourse of the powerful and the powerless, which led towards the creation of different world-views and interests for Blacks and Whites. This is arguably one of the difficulties in the present-day South Africa, in that perceptions held by both Whites and Blacks regarding, for example, sustainable development, are often contradictory.

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[32] This is the period in which Blacks and Whites first came into prolonged contact.

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Khan (1990: 23) draws on examples of conservation ideology and therefore argues that:

> The conservation ideology as it has been practiced in South Africa, incorporated the Euro-centric focus of colonial society in its tendency to idealise the natural environment with its concentrated desire to preserve it. White privilege, power and possession as extension of the colonial paradigm, formed foundations of the conservation ideology, while the perception of Blacks as environmentally destructive, accurately reflected prevailing racial attitudes. Similarly, the incorporation of White privilege and power into conservation ideology, was a manifestation of the subordinate status of Blacks within society.

Conservation ideology is a brainchild of the sustained colonial and apartheid legacy[33] in South Africa and remains a cause for concern. Therefore, South Africa must develop its own framework, which strategically places context as a point of departure in addressing the colonial and apartheid past and their effects, because such past experiences have influenced the way people perceive the extent to which social and human development issues must be tackled.

Furthermore, issues of cultural and ethnic pluralism which emerged as a result of the legacies of the past require serious attention. As argued by Leys & Mamdani (1997: 18):

> Colonial powers sought to reproduce two distinct identities through the legal and institutional apparatus: a racial identity amongst citizens, and an ethnic particularism amongst nations. Race was the identity that fragmented subjects.

As a result, the situation we face today, and unstable political systems which are characterised by one-party states, are symptomatic of past legacies. Often, such systems led to one or many forms of instability and struggles (Mbeki 1999b). Such institutionalised systems have successfully reinforced different racial stereotypes between Blacks and Whites, and ethnic prejudices/xenophobia amongst Blacks. To support this argument, Khan (1990: 13-23) provides an interesting analogy of the South African colonial past and of how

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[33] Hunter (cited in Fitzgerald, Lemon & Munslow 1997: 234) regards apartheid as a perfect example of an institutional arrangement established to fulfil an ideological vision with no thought being given to its financial viability, let alone its impact upon the people living under such a system.

White South Africans for example, have inherited environmental ideologies of the past which are also part and parcel of the Western rationality. This is a pivot of what became commonly known as apartheid, the aftermath of the colonisation period.

4.3.1.2 Period Two: The enforcement of the colonial power discourse and the advent of territorialism

Even though there was vociferous opposition, to the notion of separatism, from Black opposition groups since the 1880s[34], little or nothing could be done to stop this practice because it was deeply entrenched and enforced by colonial domination. The Afrikaners became more assertive after the Anglo-Boer War (1899-1902) and therefore reinforced their desire to protect and to secure themselves through separate development. The period between 1910 and 1948 symbolises the rise of Afrikaner nationalism and domination. They legalised and institutionalised the already hierarchical discriminatory and segregated system, which became enshrined in law and was enforced by the government (Lipton cited in Nattrass 1990: 15). This shows that unlike their colonial masters, the Afrikaners went a step further by building a system of racial hierarchy. In so doing, they perfected discrimination and racial domination. As mentioned by Robinson[35] (1990: 112) the essential reason for establishing the Union of South Africa with a strong centrist approach was to consolidate White support and a policy which would secure segregation and political control of Black people. Foundations for the local government system came about through the creation of a union and a constitution which enshrined a unitary state with three tiers of government, namely, at the local, provincial and national levels (DBSA 2000: 9). This era saw the emergence of White Afrikaner power which was wielded to steer the direction of the

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[34] Coinciding with the arrival of White settlers in the Cape in 1652 and the consolidation of power and control, Black leaders such as Reverend Tiyo Soga and John Jabavu had already begun to express their dissatisfaction. Organisations such as the Native Vigilance Association, formed in 1901and the South African Native Congress, formed in 1912, were also instrumental in putting pressure on the government. When this failed there was an obvious resentment from Blacks and as a result, the South African Native National Congress, renamed the African National Congress in 1925, became a leading voice for the majority of Blacks (South Africa Official Year Book 1978: 192-195).

[35] Robinson (1990) provides an analysis of the various dimensions of territorial development and the centralist strategy of divide and rule, with reference to Port Elizabeth between 1923 and 1972, in his PhD thesis entitled: *The power of apartheid: territoriality and state power in South African cities.*

country away from the previously, slightly more liberal English colonial domination. It was the culmination of the ideology of separatism which ultimately gave birth to apartheid. As argued by Tordoff (1984: 267) such a move was essential in order to determine development strategies, particularly for the government.

Robinson (1990: 5-6)[36] further discusses the three issues of power, politics and ideology. These three variables provided a fertile ground for the government to sustain White domination and supremacy and were thus instrumental in defining what he calls "territorial expression of the state" and in suppressing any form of opposition from Black liberation groups[37]. Blacks were subjected to their own "development" under the guise of the Bantu Administration Boards, whose main function was to develop the infrastructure of townships and to monitor a resettlement programme. Services and infrastructure provision were compromised severely.

In a way, by distancing Blacks, Afrikaners were trying to deal with their subordination by the British and, as described by Debroey (1990: 574), it was a sense of desperation and deep psychological fear and resentment which they experienced (Gilliomee cited in Price & Rosberg 1980: 15-16). This is further confirmed in a speech by Herzog (cited in Debroey 1990: 574), who said:

> We have never been fair to the Native, not on purpose, but because we
> were forced to.

Separate development was thus justified in many different ways and was legislated on the basis of such justifications. It was meant to safeguard White interests, their cultural and racial identity, and to forge healthy relationships within and amongst Whites. The rationale for this separatism was built on the premise that it would accord each racial group, Whites,

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[36] Robinson's study provides an interesting analogy of the discourse of power and the power discourse. In his contextual - structuralist analysis, he relates to the power of state and the state power, the latter being the machinery which the state uses to enforce the former over others.

[37] The South African Native Congress did not have a significant impact; instead, the apartheid system of local government established further laws such as the Natives' Land Act of 1913, the Urban Bantu Councils Act of 1961 and the Bantu Affairs Administration Act of 1971 to further weaken the position of the Congress.

Indians, Coloureds and Blacks, opportunities to exercise plural democracies and therefore arrive at democratic solutions[38] which were purely White or Black. Another form of justification was based on promises of economic opportunities and a combination of other integrated developmental actions (South African Year Book 1978: 201).

In full support of the notion of separate racial and cultural existence, General Smuts reiterated that practically this would imply "Blacks being governed by Blacks and Whites by Whites, applying different systems" (South African Year Book 1978: 212, 207, 1995: 3 and Mckendrick 1990: 21). The decision to separate Blacks from Whites laid the basis for creating two nations: the one developed and the other underdeveloped. There is clear evidence that no consideration was given to alleviating the poverty which severely affected Blacks. As a result, the main dimensions of poverty, namely, income and employment, infrastructure and housing, remained. In order to bolster the well-being of the Whites, the government increased its coverage of state sponsored social welfare and social assistance programmes[39]. Separate development therefore meant a poor quality of services and infrastructure for Blacks (Parnell *et al* 2000: 108, 114).

What emerged during this period was a territorialism which was steered towards the concept of self-governability. Territorialism gave rise to different settlement patterns according to which, after the introduction of the Administrative Boards, South Africa was thus divided into pockets of administrative components and townships were sub-divided into different zones. That is, different racial groups were compelled to conform to their own local affairs, own governments and own destinies. However, they still had to take part in economic activity through the migrant labour system and the provision of cheap labour. Although the concept of local government today is deeply rooted in connotations of participatory democracy, local governance then was underpinned by a desire to exert power and control

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[38] Such solutions were justified from different angles such as religion, territorial independence and self-determination (South African Year Book 1978: 209).

[39] Accelerated social development programmes came about through recommendations by the Report of the Carnegie Commission of Inquiry in 1932, called "The Poor White Problem". "Own affairs" meant that Whites would enjoy better quality services such as education, health and welfare (Mckendrick 1990: 11-21).

over others. Territorialism, driven by the White Afrikaners' fear of losing power, was further enhanced and concretised into a legislative dogma and the very powerful system of apartheid.

4.3.1.3 Period Three: The rise and consolidation of apartheid

In order to enforce separate development, apartheid ideology was adopted as law, which governed South Africa from 1948 until it was dismantled in 1991, when most discriminatory laws were repealed or scrapped. Classification of people by racial groups was used to regulate and control people's lives. Blacks found themselves on the receiving end of these regulations. Allocation of resources and opportunities was fundamentally determined by racial classification, which should therefore remain the primary explanatory variable for patterns of poverty and inequality in South Africa (Lund cited in Alcock & Craig 2001: 222). Statutory racial discrimination further legitimised territorial separation of Blacks and Whites. Territorial separation was thus a comprehensive programme designed create different breeds of a human race the one Black and the other White. As argued by Robinson (1990: 116), locating Blacks in the so-called "locations" was a strategy to provide surveillance and territorial administrative control[40]. The introduction of the homeland system was also a justification for the full independence of various ethnic groups. The apartheid state was thus a continuation of the colonial history of exclusion. The above apartheid-induced practices were also driven by the religious roots of the Afrikaner church[41], which reinforced separatism by the manner in which the government ran social services such as health and welfare and provision of basic water services. Compulsory segregation in 26 urban areas, 64 Black residential areas, was proclaimed in terms of the Native (Urban

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[40] This form of control was labelled as Black "self-governance" or decentralisation of responsibilities, which could arguably lead to self-determination of the Zulus, Xhosa and Sothos. Homelands were also referred to by D.F Malan as self-sustaining ethnic units (*selfversorgende volkseenhede*) (Giliomee & Schlemmer 1989: 35).

[41] Moodie and Mazrui (cited in Turaki 1991: 2-15) provide an extensive analysis of the religious factor in apartheid, its strong justification of its philosophy and ideology of race, ethnic groups and culture. Dr Sibusiso Bengu also provided a social and political analysis of apartheid racism in a paper which he presented in Harare, Zimbabwe, 25 – 28 November 1986. Other authors went further by linking the ideology of apartheid and that of capitalism, demonstrating how intertwined were these two ideologies and how Afrikaner businesses benefited (Dwight 1992: 90-106).

Areas) Act in 1927. Blacks were concentrated in the townships, to be closer to their places of work, and those who preferred to go along with "homeland independence" relied on subsistence agricultural farming to support their families. However, this exacerbated the problem of urbanisation and migration between homelands and cities. As a result, laws such as the Group Areas Act of 1966 were enforced in order to hinder such mobility.

The effects of the above practices are quite diverse. These came to show how the apartheid policy was sustained through racially motivated spending criteria applied to different social groups. One should note that within government, some bureaucrats and officials realised that such an indulgence in ideological spending could have a negative impact on the overall economy (Savage 1986: 3). What is particularly relevant for this study is that spatial and statutory segregation have clearly defined South Africa's racial settlement and development patterns and standard of living. The net effect of apartheid shows that as a viable system, apartheid succeeded in creating self-sustaining structures such as businesses, churches and urban municipalities which, on the one hand, generated much wealth for the White middle class and on the other hand produced profound levels of poverty for the majority of Blacks. However, apartheid could not be sustained due to local and international pressure and the challenge to the entire apartheid system through mass mobilisation.

The above view is corroborated by Dwight (1992: 102), who argues that if there is one policy which has ever been successfully administered by any South African government, it is the policy of apartheid which saw the grand development and the upliftment programme for the White population. Dwight (1992: 97) also maintains that:

> even though apartheid and separate development proved ultimately unworkable in terms of "total separation", the policies through their discriminatory effects, succeeded in empowering a majority of Afrikaners in the modern, industrial society.

The apartheid highlights the magnitude of past problems and the need to adopt a programmatic approach towards sustainable *human* development in South Africa, which will address the disparities of the past practices.

4.3.1.3.1 The cost of apartheid

The constitution of 1983 gave rise to the introduction of the Tricameral Parliament system[42] which saw Coloureds and Indians being accorded a voting status almost, but not quite, equal to the Whites. In contrast to this voting status, Blacks were accorded the lower status of "own affairs". "Own affairs" were based on the notion of self-governing territories which saw the majority of Blacks being gradually separated from Whites, Coloureds and Indians. This arrangement meant that different racial groups received different levels and qualities of services such as water supply, education and health.

As a result, decades of superior education and training have given White workers a great advantage in the labour market, and as a result, industries were more willing to employ White workers in the most skilled areas than their Black counterparts. For White workers, this meant more access to benefits such as housing and welfare, and considerable political power to protect their privileges (Lipton 1985: 8). The situation presupposes the correlation which existed between White privileges (capitalism) and apartheid. The two co-existed and depended on each other for survival. That is, without capitalism and the protection of White privileges, White governments could not have secured White votes for so many years. This was largely so even prior to the introduction of apartheid by means of which, during the period 1910-39, economically discriminatory measures were enacted against Black farmers, traders and workers to prevent them from competing with Whites and to ensure that they would instead provide cheap labour to the White farmers and mines (Lipton 1985: 18). This period also saw a rise in discriminatory labour policies[43] and a pattern of skewed income distribution in favour of Whites. This situation had a correlative effect on the levels of poverty which afflicted the majority of Blacks, especially those living in the former homelands.

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[42] This system was based on the principle of "sharing power without losing control" (Giliomee & Schlemmer 1989: 131).

[43] The 1970 Bantu Laws Amendment Act was the most far-reaching measure of job reservation yet (Lipton 1985: 33). This Law, together with other discriminatory labour legislation, led to its condemnation by the International Labour Organisation (ILO) in 1965.

South Africa's White-dominated businesses also benefited by operating under conditions which seemed favourable[44]. They were under no pressure to invest, for example, in developing human resources. They relied on a small pool of skilled White labour and the majority of their Black employees were subjected to unskilled jobs. The White government restricted commercial and industrial activities in the townships, thereby forcing Black business to move to the homelands. Compliance with environmental regulations, rather than investing in sustainable human development, could arguably be described as the paradigm within which White business operated. Greenberg (cited in Dwight 1992: 90-91) outlines key periods regarding labour mobility in South Africa:

(a) formative (1937-1948): Blacks moved from rural areas in search of wage employment

(b) innovative (1948-60): Elaborate government intervention to control the Black proletariat

(c) repressive (1960-1976): Government employs severe repressive laws and measures to control Black labour mobility.

These periods signify the intentions of the then government to regulate and control Black labour, through whatever means possible. As a capitalist-driven programme, apartheid was successful in creating a spatial, geographical economic planning strategy[45]. However, a lack of training programmes to inculcate skills in the vast majority of Blacks has led to a skills backlog. Even the mainstream White-controlled capitalist economy could not rely solely on the skills of Whites, who constituted a minority. This was again a context of continuing contradictions and demand for cheap Black labour, disguised by persistent preservation of White privileges. Bringing White capital to the former homelands was also a desperate attempt by the then government to make these homelands financially viable. Tax incentives

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[44] Due to repressive laws such as the Urban Areas Act of 1923 and the Group Areas Act of 1966, White commercial businesses thrived without any threat of labour or even political unrest. As a result, exploitative measures by business saw South Africa registering impressive economic growth rates in the 1960s and 1970s, which unfortunately, due to internal and external political pressures, could not be sustained any longer in the 1980s and 1990s.

[45] This strategy was gazetted and enforced through legislation such as the Promotion of Industrial Development Act of 1980 and the Environmental Planning Act of 1967.

were thus applied as measures to attract White entrepreneurs to the homelands, to start businesses there. This had nothing to do with the development of skills in those areas.

Further evidence to show that the apartheid government was not necessarily committed to the development and upliftment of Blacks, is the rejection of the findings of the Tomlinson Report[46]. The government still went ahead with its plan in the name of advancing the processes of political development and the emancipation of Blacks. The government then introduced its "First 5 Year Plan" worth R107, 6 million, followed by its second "5 Year Plan" worth R153, 6 million and its Third "5 Year Plan" worth about R3 billion[47] (South African Year Book 1978: 216). These amounts were nothing less than an attempt to demonstrate that the homeland system was feasible. As reported by Dwight (1992: 88), by 1985, 13% of government expenditures were dedicated towards the development of homelands. However, according to South Africa (1998a: 15), there is evidence to suggest that there were and still are:

(a)   great spatial separations and disparities between towns and townships

(b)   huge backlogs in service delivery and infrastructure

(c)   skewed settlement patterns, which are functionally inefficient and costly.

A political justification for self-determination was based on the notion that though human beings, Blacks and Whites could not be seen to share similar human rights and value systems for human development. Separate local authority structures and statutes[48] further strengthened the ideological case for separate development. Similarly, the impact of

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[46] The government commissioned a study in 1955 to investigate the socio-economic development of Blacks and the results showed that even though the Commission recognised the homeland system as viable, addressing social and economic development problems would become a costly exercise.

[47] These plans consisted of funds for agricultural development, education, physical and social development, grants and other services for homelands administration. The plans were complemented by the introduction of Corporations for Bantu Investment and Economic Development. These corporations were meant to provide entrepreneurial development for Blacks and therefore create employment.

[48] Black Authorities Act of 1951 (Act 68 of 1951) and the Promotion of Black Self-Government Act of 1959 (Act 46 of 1959).

territorial economic planning for homelands, or what Wellings and Black (1984: 1) call "industrial decentralisation", had different effects on different homelands. For example, in the former Bophuthatswana, several growth points or industries could be found at various strategic locations in the homeland. Although workers were not allowed to participate in union activities, these industries played a significant role in that they created a reasonable level of employment[49].

The discussion points out that the past homeland political structures were strongly aligned to the ideology of the central government, using race as an instrument to justify its cause. The apartheid government created a negative, but also a powerful administrative and territorial system of demarcations. These actions brought about costs to the country.The costs can be traced as far back as the colonial era and the cost of reconstructing all these factors has become enormous for the present government. Savage (1986: 4) groups the cost of apartheid into different areas, which are:

(a)   **direct costs**: involved in implementing and maintaining the apartheid programme. These include costs to support the homelands and the creation of spatial separations and disparities between townships and towns or cities. All these resulted in huge infrastructure and service delivery backlogs and concomitant skewed settlement patterns, which are functionally inefficient and costly. As colonial cities were designed according to European customs and preferences, which saw the separation of people according to class and race, apartheid cities too were designed according to a territorial segregation planning strategy (Atkinson 1989:11)

(b)   **indirect costs:** involved in implementing apartheid in terms of capital expenditure for buildings, machinery and communication and other systems which were used to carry out operations such as forced removals

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[49] This statement is based on the author's perception and not on any facts. That is, in Bophuthatswana wherein the majority of people held jobs, as compared to other homelands, most people lost their jobs in 1994 when these industries shut down; in many instances, especially in rural areas, the rate of unemployment and the level of poverty seem to have risen as a result. This is, however, contrary to a statement by Wellings & Black (1984: 1) that the system referred to here had relatively little success.

(c)   **enforcement costs:** involved in applying and policing apartheid. These include the police, army, prisons and other entities which enforced apartheid laws

(d)   **lost opportunity costs:** these involved the cost of lost opportunities in terms of the economic, social and human development capacity of South Africa

(e)   **punitive costs:** these involved the price South Africa had to pay in order to sustain its apartheid policies, such as lost trade opportunities and competitiveness

(f)   **human costs:** these involved loss of lives, loss of self-esteem, self-worth and self-respect

(g)   **regional costs:** these involved the price South Africa's neighbours had to pay in terms of apartheid's military expenditure, which led to the loss of lives in countries such as Lesotho, Botswana and Mozambique.

The above costs demonstrate the culmination of a process which had a historically significant influence and in which social development was pursued in racial terms. Under apartheid, local government and the administration of territorial structures for Blacks are undoubtedly the point of departure in understanding how the newly democratic local government structures ought to approach measures for sustainable social development. This is a major challenge facing policy developers who, before embarking on any policy directives, need to investigate the negative impact caused by racial history, both at physical and human level.

Policy makers should consider investigating, on the one hand, the costs of apartheid at the social level and the economic level, and on the other hand, the benefits of large infrastructure development, especially in the major cities. This exercise could assist in quantifying the damage and the benefits of apartheid, and the resources required for corrective action. For the purposes of this study, the argument is that apartheid was both pragmatic and strategic. Apartheid contained clearly defined goals and principles which made it effective in bringing about a better life within the White population, who benefited materially and socially (Giliomee & Schlemmer 1989: 44).

4.3.1.3.2 The creation of skewed patterns of development

The pre- and post-colonial periods provide a significant historical description of practices and of the contexts within which political development has taken place over many years (Pasteur cited in Reddy 1999: 31). African history for example, shows that, under the system of traditional leadership and indigenous self-rule, concomitant local government systems are not a new phenomenon. In the context of apartheid, the local governance system is another dimension which is important for purposes of understanding the unfolding socio-political development processes in South Africa. The institutional legacy created by the apartheid policies, both at political and social level, cannot be underestimated. This legacy was built on an effective network of legislative jurisprudence. However, as an instrument applied to promote discrimination, the same legislation brought about large-scale structural inequalities in South Africa. Since development thinking did not have a good image in apartheid South Africa, it is necessary to devise a new policy paradigm for sustainable development in South Africa (Turok 1999: 7). Furthermore, Turok (1999: 9) indicates that:

> Sustainable development aims at structural transformation and an enabling political environment.

Until 1994, the political environment was not yet conducive to structural transformation because spatial segregation led to the creation of racially based structures of local government and other administrative bodies[50]. Where these structures and administrative bodies operated, little or no development of an enabling political environment occurred. Through the Native Urban Areas Act of 1923[51], Black local authorities were expected to generate their own revenues to sustain themselves. Blacks were thus excluded from White-funded amenities because of lack of contributions towards the tax base. As a result, the standard of living for Blacks was severely compromised because of the lack of a viable

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[50] Segregation and the duality of legislation was evident from the Black Local Authorities Act, No 102 of 1982 and the exclusively White controlled Regional Services Councils. For example, unlike their White counterparts, Blacks did not have free-hold property rights.

[51] Other relevant statutes include: Black Administration Act, No 38 of 1927, Black Authorities Act, No 68 of 1951 and Black Communities Development Act, No 4 of 1984.

revenue base, which was partly due to the politically motivated culture of non-payment for services[52]. It can therefore be argued that the establishment of Black local governance in South Africa co-existed with the strategy of self-determination or separate development. The creation of townships with a physical infrastructure for the provision of municipal services and the proclamation of those areas was the first step towards institutionalising control in the name of municipal authority, without autonomy (Cloete 1982: 245; Atkinson 1989: 17).

Even though the apartheid system operated along the lines of decentralised principles of governance through structures such as the Regional Services Councils[53] (RSCs), central government still maintained the overall status quo. However, where Regional Services Councils existed, they undertook their activities in a non-developmental, paternalistic and non-democratic manner (Solomon cited in Pycroft 1998: 155). It can therefore be argued that creating municipalities within Black townships was merely an attempt to make self-determination successful, thereby realising the goals of apartheid. Some form of control over Black residences through the introduction of Regional Services Councils was therefore a well-calculated strategy which, interestingly, was rejected by Coloureds and Indians (Giliomee & Schlemmer 1989: 142).

Furthermore, through the establishment of many state departments at national, provincial and homeland level, the existence of the Regional Services Councils led towards service delivery becoming fragmented and non-responsive to the developmental needs of the majority of South Africans. In particular, the self-governing territories or homelands merely resembled the administrative system inherent during the colonial era, because policy and legislation was centrally controlled. This institutional legacy has compelled the new government to revisit past institutional arrangements and delivery mechanisms, and in some

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[52] See Siebrits, LL (1998). The politics of rent and service boycotts in the nineties. A case study of the Pretoria municipal area. Master of Arts Dissertation. University of South Africa. Pretoria.

[53] Established under the Regional Services Councils Act, No 78 of 1986, the RSCs were used to transfer financial resources for infrastructural development in townships (Giliomee & Schlemmer 1989: 130).

instances this has led to a virtual slow-down of service delivery which has led to the government being criticised for laxity and incompetence.

In terms of the apartheid constitution of South Africa, water supply was a competency given to certain municipalities who had the capacity to undertake this role. Blacks did not benefit much from these institutions, because structurally they did not reside in urban areas, unless as migrant labourers. Instead, in terms of the regulations of the Union of South Africa, which amongst other things determined the administrative control of and special arrangements for the administration of Black affairs, the development needs of Blacks and Whites were addressed separately and differently[54] (Cloete 1982: 221).

4.3.1.4 Period Four: The dawn of democratic governance, challenges and opportunities

The introduction of the Government of National Unity in 1994 signified the culmination of the first round of the debate over post-apartheid development discourse (Bond cited from Moore *et al* 1995: 149). This period ushered in a newly defined development discourse[55] and a philosophy which sought to instil different values in South Africa. The new government promised to create new governance or institutional arrangements, mechanisms and systems which would deconstruct the ideology of apartheid, thereby responding to the threat created by a systemic breakdown (Schmitz cited in Moore *et al* 1995: 55). This is evident from the enactment of the Local Government Transition Act of 1993, which proclaimed rights of recognition for any persons, institutions and bodies performing functions of local governance. As a result, this provision gave various non-statutory structures (political parties, traditional leaders, local authorities and other interest groups), the right to have full participation in the negotiations and political settlements (Pycroft cited in Munslow *et al*

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[54] Evidence can be seen from the enactment of the Black Communities Development Act of 1986 (Act 74 of 1986) and a further territorial dislocation of Blacks under the guise of independent states, which saw the establishment of Bophuthatswana, Ciskei, Lebowa, Venda, Qwaqwa, KwaZulu, Gazankulu, Kwandebele and Kwangwane.

[55] This development discourse is embedded in the government's Reconstruction and Development Programme.

1997: 394). Such provisions should be regarded as a turning point in the considerations for participatory democracy in South Africa. However, the new development paradigm is confronted by myriad effects of apartheid, which have both short and long term cost implications for the new government (Savage 1986: 4). Taking stock of the effects of the colonial and apartheid past required a detailed discussion because the old order and its bad practices has to be used as the context for constructing a new sustainability paradigm.

The perception that South Africa's political transition was a miracle places tremendous pressure on the new government, especially if it is to introduce a new social order based on multi-dimensional and sustainable development (Turok 1999: abstract). During its early stages of governance, South Africa experimented with an ambitious programme called the Reconstruction and Development Programme, which was dubbed by many as the new government's panacea for social ills. However, after the programme fell short of addressing the immediate development needs, this perception diminished. This case shows that South Africa's development programmes remain multi-faceted and cannot be addressed solely through a single programme. South Africa also found itself becoming a member of the global community, thereby having to adapt and respond to a different kind of external pressure. In the light of the developmental nature of programmes geared towards addressing poverty, South Africa was again caught between the internal problems of addressing structural issues and also the external problems of adjusting to economic pressures. In the midst of all these challenges, this study proposes a development path for South Africa with its own processes of sustainable development.

Furthermore, the new democracy brought about a new local government system which is meant to address various developmental challenges. As an institution of government, local government is mentioned here as a critical institution for sustainable development because this is where development policies and programmes are conceived, funded, implemented and managed (Brown 1998: 50). According to the Local Government White Paper (South Africa: 1998a), developmental local government entails maximising social development and economic growth, integrating and consolidating planning and service delivery, empowering communities and redistributing resources (cited in DBSA 2000: 19). The sustaining of developments by local government raises practical questions about the capacity to perform governance functions. As seen from the discussion, introducing good governance at a local level was necessary, to forestall the impending crisis of the apartheid development model,

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and was not impelled by a sudden desire to welcome democratic change in South Africa (Scmitz cited in Moore *et al* 1995: 73). Good governance is hailed as an important step towards achieving sustainable development.

South Africa's first transitional local government system between 1995 and 1996 was based on consolidating democratic governance from the apartheid period. As a result of this transitional period, local government failed to fulfil other responsibilities of delivering basic services. According to Pycroft (1999: 179):

> The lack of institutional and human resources capacity are often cited as possible problems, the constraints municipalities encountered in the geographic composition and administrative formation provide the structural dimension of municipal constraints.

The current reality shows that in most instances, it is the former White towns which are likely to have the technical, institutional, administrative prowess to manage and deliver basic services to their people. Referring to the apartheid history, this also raises difficult questions about the readiness of former Black local authorities to live up to the expectation that they will fulfil the political quest for effective governance and delivery of basic services in a sustainable manner. These constraints are linked to the issues of territorialism and separate development, as referred to in this chapter.

Whereas decentralisation or devolution is viewed in this study as a vehicle which could maximise chances for sustainable development, the existing levels of capacity within the majority of Black-dominated rural municipalities require serious consideration. There is no doubt that a decentralised form of government accords ordinary people the opportunity to participate in local decision making processes. However, it is clear that in South Africa central government is confronted with the reality of bringing about sustainable local democracy and also maintaining macro-economic stability, with view to ensuring job creation, as well as strengthening regional and sub-regional co-operation and partnerships for sustainable social development (South Africa 2001).

Since this study is concerned about sustainable water services provision at local government level, it is appropriate to point out that decentralisation is inherently a move towards laying the basis for sustainable development. As argued by Klugman (1994: 3-9), often centrally planned water supply systems fail. It has been found that in the absence of a thoroughgoing devolution of decision making power to users, the gap between local preferences and product-design generally results in poor long-term prospects for services. However, it is important to recognise that the decision to decentralise must be matched with the much needed technical assistance to municipalities. Failure to decentralise, combined with lack of local institutional capacity, could raise serious questions about the governance and management of any municipality.

The current local government system is therefore confronted by two key challenges: on the one hand, consolidating and sustaining democracy at grassroots level, and on the other hand, sustaining governance and management of services. As supported by Van Zyl (1998: 7), local government can only rise to the challenge of reversing the legacy of the past and constructing sustainable living environments for the future, if municipalities have the required financial and institutional capacities, and most particularly, if the people at grassroots level show the commitment and willingness to ensure that their municipalities succeed. Equally, the success of municipalities and other government departments in providing services depends on how effectively those services are delivered.

In order to bridge the gap between the past discriminatory practices and the new democratic participatory practices of service delivery, the present government has introduced a people-centred policy framework[56]. This framework is informed by the eight principles of Batho Pele (People First). Table 4.1 describes the principles as follows:

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[56] White Paper on the transformation of the public service (1997).

TABLE 4.1:   PRINCIPLES OF BATHO PELE

PRINCIPLE	DESCRIPTION
(a) Consultation	Citizens should be consulted, should take part in decision-making processes and should be accorded the opportunity to choose the level and quality of the public service
(b) Service standards	Citizens should be made aware of what government can contribute and what they can therefore expect
(c) Access	All citizens should have equal access to the services to which they are entitled
(d) Courtesy	Citizens should be treated with courtesy and consideration
(e) Information	Citizens should be given full information about the public services they are entitled to receive
(f) Openness and transparency	Citizens should be told how national and provincial departments are run, how much they cost, and who is in charge
(g) Redress	Citizens should have redress (receive an apology) in cases where they have been wronged
(h) Value for money	Public services should be provided economically and efficiently in order to give citizens the best possible value for money

Source: South Africa (1997c: 7)

Table 4.1 demonstrates the commitment of the South African government towards its citizens. Coincidentally, citizenship is a concept commonly used in most Latin American countries. Its application is based on the culture of public participation. Citizenship is about the pride people or citizens have in their own communities and environment in general. It is about the relationship which exists between civil society and government. It emerges from table 4.1 that South Africa has a clear basis within which a participatory national sustainable development model can be implemented.

The challenge for a democratic South Africa is not necessarily about developing policies which embrace people or public participation, but is rather about the creation of institutions which can foster and implement sustainable governance policies. Mahlangu (cited in Theron *et al* 2000: 31) provides further examples where the Batho-Pele principles are already being implemented in the public service. Esterhuyse and Fuhr (cited in Theron *et al* 2000: 61 and 64) provide ethos and a culture for good governance and public participation. Surely, South Africa can apply the above principles of Batho-Pele to inculcate the above-mentioned good governance culture amongst civil servants.

Latin American countries have adopted public participation as one of the measures to sustain their democracies (see chapter seven). South Africa, too, is beginning to create a new culture of citizenry through the transformation of the public service. However, what is

interesting from the analysis provided by Gills & Rocamora (cited in Leftwich 1994: 364) is that the notions of sustaining democracy and the conditions for sustainability have received little attention in Third World societies. There is therefore a strong probability that good governance characteristics and sustainable development experiences will differ from continent to continent. This is primarily so because each country has gone through different experiences. However, what is important is to note that governance considerations in general may be far more fundamental, in the sense that they may provide the appropriate incentives and rules within which appropriate policies are most likely to be chosen and implemented (Campos & Nugent 1999: 440-441). South Africa is thus following the correct path for sustaining democracy and setting conditions for sustainable development.

4.4   CONCLUSION

This chapter has pointed out that there is a danger that the racial attitudes and stereotypes which were created by South Africa's history could have a significant negative impact on the ultimate sustainable development discourse. This study therefore postulates that the colonial-apartheid legacies and the current dispensation could have an influence on how South Africa's policy makers, who coincidentally have come from two opposing ideological paradigms, that is, those who upheld apartheid and those who upheld democracy, perceive and design sustainable development programmes and policies without resorting to ideological bickering. As a result, it became important that past trends and patterns be understood as they form the basis for a new paradigm shift in the present-day South Africa.

This chapter also made an attempt to explore some factors which contributed to shaping South Africa's sustainable development context. As argued, this context needs to be understood, most particularly, in terms of how the colonial and apartheid past and the underpinning Whites-only development militated against the principles of participatory sustainable development. This is seen as important for this study because without understanding the context and content behind what was obviously a skewed development paradigm in South Africa, we cannot begin to address the needs of the present and future generation without running the risk of committing the same mistakes as in the past. Future models for sustainable development cannot and should not be based on racial terms because that could further prejudice the human development of the next generation. This chapter made an attempt to contextualise the development paradigm within the South African

history of racial discrimination which, as a lost opportunity, now compels the present government to address the backlog created through apartheid governance. The current situation does show good prospects for sustainable development; however, the question also remains whether or not the democratic local government, as opposed to the colonial-apartheid systems of racial governance, will be able to rise to the challenges of ensuring sustainable[57] delivery of basic services, especially to those people who were denied them in the past.

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[57] See Part 152 (b) of the Constitution (1996).

CHAPTER 5

SUSTAINABILITY OF WATER SERVICES

5.1 INTRODUCTION

Chapter four explored South Africa's historical context and the situation regarding past development practices. The chapter highlighted problems associated with the legacies of colonialism and apartheid and their negative impact on sustainable development in South Africa. Chapter five explores South Africa's water policy, both past and present. The chapter traces significant policy and legislative trends which have mitigated against participatory methods of sustainable development. Since water services has become an important social, economic and developmental sector in South Africa, chapter five lays the basis for further improvements in water policy. These improvements are in line with the proposed model in chapter eight.

5.2 SOUTH AFRICA'S WATER POLICY

The provision of a potable water supply and adequate sanitation has permeated the development programmes of many developing countries. This situation is partly influenced by international quests and pledges such as those adopted by the 1992 Agenda 21 Rio earth summit in Rio de Janeiro and subsequent proclamations of the Drinking Water Decades (Abrams *et al* 1998: 2). As a developing country, South Africa finds herself in the midst of formulating sustainable programmes for water management. However, in this case, South Africa has moved faster than other democratically elected governments in closing the gap between old and new water policy. The old water policy was conceived during the apartheid era in which government had priorities other than domestic water supply and sanitation. The new water policy was formulated in 1994 in order to counteract the old policy of the apartheid government.

Many people across the world have dubbed South Africa's first ever democracy a miracle. However, the systematic and drastic policy reforms underpinned by democratic changes have been underplayed. That is, since 1994, the new government has introduced new human

rights measures which are in line with South Africa's constitution. These measures are enshrined in the Bill of Rights and emphasise the protection of human lives and the promotion of access to basic services. During the same period (in 1994), it was estimated that more than 12 million South Africans lacked access to potable water and that 21 million were without sanitation facilities. The introduction of the 1994 White Paper on Water Supply and Sanitation was indicative of the commitment by government to guarantee certain individual rights. This demonstrates that in South Africa it took a constitutional decision to enforce access to a potable water supply and hygienic sanitation.

The overwhelming majority of Black South Africans live in rural areas and do not have access to basic water supplies and sanitation. This is despite South Africa's world-class water infrastructure which historically leveraged the economic sector, the mining industry in particular, in large cities such as Johannesburg. Drawing from the above situation, two key assumptions are inherent in South Africa's new democracy. First, it was assumed that democracy would bring about social justice. Second, that there was a likelihood that social justice would bring about sustainability. These assumptions are not far fetched and do represent a moral ideal. As noted from Hamann & O'Riordan (2000: 1) and argued previously, sustainability is a process and not an objective. The key objective which can encourage sustainability to occur is thus participatory democracy. South Africa's democratic transition has created a viable pathway for sustainability in South Africa. However, it should be noted that in South Africa, promoting social justice implies that the dignity and self-esteem of the majority of people who were denied their basic rights will have to be addressed. Participatory methods of restorative justice will have to be embraced as the government's overall development philosophy in laying the foundation for sustainable development. As the situation appears today, South Africa still lacks mechanisms for ensuring that the process of sustainability and the ultimate objective of democracy are realised.

The difficulty of locating sustainability within the water sector is that this sector has for so long been driven solely along racial, environmental and ecological concerns (see chapter two). As argued in Hamann & O'Riordan (2000: 1), the bio-physical functions of sustainability in the water sector are overshadowed by popular norms and standards which dominate the definition of sustainable development. The past status quo regarding water was modelled around apartheid policies. The rationale points out that such policies were biased

towards water resources management issues. Therefore, South Africa's water policies were focused excessively on sustaining water resources. The current challenge for South Africa is to create a balance between the sustainability of water resources and water services. After the 1994 elections, the introduction of the National Water Act, 1998 (No 117 of 1998) and the Water Services Act, 1997 (No 108 of 1997) in South Africa is a clear indication that the government regards water as a national resource which must be shared and used equitably, economically, efficiently and sustainably (South Africa 1998b and South Africa 1997b).

The distinction between the water sector and the water services sector is therefore critical. First, as indicated in the above discussion, the water sector embraces the entire chain of water, from raw water, storage, abstraction, purification, distribution to consumption (see figure 5.1). Second, the water services sector represents part of the water sector in that it is concerned about the distribution, reticulation, operations and maintenance and the consumption. However, indications are that for purposes of sustainability, both the resources (raw water) and the supply chain (water services) complement each other. The water services sector consists of key role players such as water services institutions (water boards, municipalities, water committees and water user associations). Other strategic partners are the Department of Provincial and Local Government, the South African Association of Local Government and organs of civil society. Under the apartheid rule, this arrangement was lacking. The conscious decision by the new government to build and strengthen the water services sector was as a result of a desire to promote democracy, while sustaining water services delivery, amongst other reasons. Since 1994, the Department of Water Affairs and Forestry has played a leadership role in this regard.

Whereas this study is only concerned about public participation in the water services sector, it is equally important to recognise that the public do have a role to play in the entire water sector. The management of water as a national resource requires strong public participation (Hamann cited in Hamann & O'Riordan (2000: 9). Furthermore, Hamann & O'Riordan (2000: 9) confirm that often public participation procedures are ill equipped to deal with diverse local contexts or the inability of large sections of the community to partake in the process. The latter part is evident from the role of project steering water committees, which were commonly used since 1994 to implement water projects under the Reconstruction and Development Programme. This study argues that such committees played a critical role in facilitating water infrastructure development processes. However, the time has come for

government to embrace a wider focus with regard to public participation. The proposed model is thus a means towards introducing the participatory methods which are lacking in the water services sector (see chapter eight).

As the South African government seeks sustainable solutions to promote the objectives of democracy, the water services sector is also evolving steadily to solve the backlogs associated with water services delivery. The sustaining of the supply of water services over a certain period of time is significant for this study; however, what counts more is the developmental aspect of such sustainability. Water services have an economic, social and developmental value. This study therefore attempts to contextualise participatory sustainable development within the water services sector as a phenomenon which can have a positive impact on the quality of human lives. Given South Africa's unique situation, it is in this regard that both sustainability and democracy can become juxtaposed.

The above discussion shows that water services cannot be addressed solely on a project by project basis. Since it impacts on broader social, economic and developmental aspects of society, it requires a holistic and a strategic approach. Crucially, in order to create a positive impact for strategic planning initiatives, there is a need for effective linkages between different levels and sectors in decision making processes, all within a framework of inclusive and empowering community participation (Hamann & O'Riordan 2000: 9). A new policy framework therefore requires thorough understanding of the complexity of the water sector, pre-1994.

5.2.1   The water industry: pre-1994 situation assessment

The Department of Water Affairs and Forestry is a government department responsible for water infrastructure management, water resources management, community forestry and water services provision. Historically, the policy and functions of the Department of Water Affairs and Forestry were constrained mainly towards water resources management. They included large infrastructure development, the management of large catchments and dams, and the administration of government water schemes (Abrams 1996: 2). Furthermore, the scope of work was biased towards technical and engineering functions. It is interesting to note that the department was characterised by significant name changes. Table 5.1 outlines these.

TABLE 5.1: METAMORPHOSIS OF WATER AFFAIRS

	YEAR	NAME	LEGISLATION
1.	1875	Public Works Department	Unknown
2.	1912	Union Irrigation Department	Irrigation and Water Conservation Act, 1912 (Act 8 of 1912)
3.	1956	Department of Water Affairs	Water Act, 1956 (Act 54 of 1956)
4.	1980	Department of Water Affairs, Forestry and Environmental Conservation	Water Act, 1956 (Act 54 of 1956)
5.	1984	Department of Water Affairs	Water Act, 1956 (Act 54 of 1956)
6.	1994	Department of Water Affairs and Forestry	Water Services Act, 1997 (Act 108 of 1997)

Sources: compiled from various DWA annual reports

Table 5.1 indicates that in its formation years between 1875 and 1912, the department was more responsible for provision of public services and the irrigation of schemes. Almost 96% of water supplies were developed for agricultural purposes (DWA Annual report 1987/88: 366). However, between the 1960s and 1990s, the functions of the department changed significantly over time, from the building of large water schemes and dams to urban water development. After the new government was voted into power in 1994, the focus became community water supply and sanitation.

Table 5.1 also demonstrates that the department's core business has historically mirrored the political changes in South Africa. That is, in 1912, as an irrigation department, the department's core business was to address the needs of the farmers, who were predominantly White. It is quite clear that government policy then was not geared towards domestic water supply and sanitation. It is also important to note that prior to 1994, the water sector operated in the form of a "flexible national water management strategy in which the effective management of supply, demand and quality are key elements" (DWA 1986: xvii). The Department of Water Affairs was thus viewed as a custodian of water resources and therefore had a legislative responsibility to ensure access and equitable provision of adequate quantities and quality of water to the public. However, the beneficiaries of these quality services were Whites who resided in cities and urban areas.

In pursuance of its mandate under the Water Act of 1956, the Department of Water Affairs implemented large infrastructure projects for provision of bulk regional water supply schemes (South Africa 1956). Delivery was therefore planned in such a way that it could be

done on a regional rather than a national or local level. This was done in the light of promoting economies of scale, and also to attain a competitive advantage through large coverage of the domestic, industrial, commercial and agricultural sectors. Waterworks, mainly to promote irrigation, were constructed as welfare projects. These projects were politically motivated to address unemployment amongst the White population during the economic recession. This became the turning point of an attempt by the government to use public sector institutions such as the Department of Water Affairs, in order to play an important role in forging a balance between sustained water resources management and job creation through the efficient and effective provision and management of water services.

As appears above, the government's direct public responsibility demonstrated a supply-driven approach. However, this approach changed when the government drew attention to the growing scarcity of water owing to the drought in the 1970s. This led to a demand-driven market approach, which emphasised riparian principles. Riparian rights[58] were exercised under the legislative control of the Water Act of 1956[59]. This Act made it possible for the government to proclaim key regulations and rules, which guided the water industry in South Africa. However, in 1994, the department reverted to a supply-driven approach which saw a large water infrastructure being developed for domestic water supply. This change was again motivated by a political imperative to address the problems facing the Black population.

The discussion points out that in 1875 when the Department of Water Affairs (previously Department of Public Works) was established, water was the most important service used

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[58] Riparian rights are determined by the state and represent *ipso facto* entitlement of users of water resources to use the water in the streams to which their land is riparian. As the state is a custodian of water resources in South Africa, users are authorised to use water in a restricted manner.

[59] Linked to other laws, which were either repealed or subsequently amended. These include the Irrigation and Conservation of Water Act (No 12 of 1912), the Irrigation Works Act (No 18 of 1917), the Irrigation Amendment Act (No 25 of 1934) and the subsequent Water Amendment Acts. In total, 27 amendments were made between the period 1957 to 1994.

predominantly for irrigation[60] purposes, hence the enactment of the Water Act No 8 of 1912 under the new Union Irrigation Department (DWA 1975: 31-32). The basic principles inherent in the old and the new legislation which was introduced after the arrival of the Dutch in the Cape Colony were based on the system of *dominus fluminis* or state control. Subsequent to the British occupation in 1806, principles of riparian rights in South Africa have always remained the same until the present day. However, historically, riparian rights were lined to riparian land. Riparian land[61] meant:

> land held under an original grant or deed of transfer of such grant or under
> a certificate of title, whether surveyed in one lot or more than one lot,
> whereon, or along any portion of any boundary whereof a public stream
> exists, and any sub-division of such land.

Although Water Affairs Acts did not contain any racially discriminatory statements, they were covertly biased along racial lines[62]. The majority of Blacks had neither riparian rights nor riparian land. One can assume that the history of water in South Africa was geared more towards the needs of White farmers, White land-owners, White dominated industries and commercial sectors and White dominated urban areas. A riparian owner was thus the owner of land, and the owners of land came from the White population. During the period under review, water resources management and provision were divided along geographic boundaries (urban areas versus former homelands). People in the homelands had no access to potable water and some relied mainly on contaminated sources such as rivers, streams and rain harvesting. The former homelands could not cope with providing a sustained supply because in most cases, their systems were unreliable.

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[60] In 1910 water consumption by all sectors of the population was some 3 000 million cubic meters a year. Of this, 96% was used for irrigation and stock watering (DWA 1975: 15)

[61] Definitions, section (1) of the Water Act, 1956 (No 54 of 1956:1203).

[62] English and Afrikaans newspapers were the only medium through which persons could lodge requests to use public water. Any persons using public water could only do so with the permission of water courts (Section 11 (1) (b).

Based on its riparian principles and regulations, the Water Act of 1956 clearly defined parameters for use of private water[63], provisions which were not applicable, for example,

> to any owner of land situated in the area of any municipal institution, contemplated under in Section 84 (1) (f) of the Provincial Government Act, 1961 or a local authority established under Section 2 of the Black Local Authorities.

As the sole exclusive rights to use private water were lawfully acquired only by those who owned land, this meant that the law automatically excluded the majority of Blacks who were governed under the above Black Local Authorities and who owned 13% of South Africa's land. On the one hand they did not have rights to use private water; on the other hand they also did not have better access to, or ownership of, public water because this resided with the state. Use of public water was per authorisation and it was stated that[64]:

> Any person may, while he is lawfully at any place where he has access to a public stream, take and use water from such stream for the immediate purpose of watering stock or drinking, washing or cooking, or use in a vehicle at the place.

Notwithstanding any restrictions to do with public streams and their use, most Black people who lived near to such streams used the water for their own benefit, in terms of domestic use, subsistence farming and animal breeding. Since most of their land was declared tribal land, the implication was that they were not subject to the riparian regulations of the use of the normal flow of a public stream[65]. A public stream represented a normal flow of water within or between a tributary which is riparian. The apartheid government controlled the flow of riparian water; however, it could not protect public streams being used by people living in rural areas. As a result of this lack of responsibility in government, this situation has created a pandemic of diseases such as cholera, especially in provinces such as KwaZulu Natal.

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[63] Section 5 (1) (2) and (3) of the Water Act of 1956.
[64] Section 7 (a) and (b) of the Water Act of 1956.
[65] Section 9 (1) (a) to (e) of the Water Act of 1956.

As it was not the government's policy to ensure access to potable water across the country, the government could have nothing to lose. The Minister of Water Affairs had extreme regulatory powers[66]. The Minister acted as a provider of grants, regulator of the water sector (both water services and resources), supplier of licences, rules, regulations, tariffs and prices, and as an arbitrator, mediator and the overall regulator of the entire sector. The water court[67] was used as an instrument to enforce compliance and to address disputes and control permits by offering licences. The Act also covered domestic water supply and sanitation[68]. However, whereas the government, under the regulations for water supply saw a need for permitting access to water of a quality suitable for use for domestic purposes and in sufficient quantities to satisfy basic needs, it would appear that there was no commitment to ensure sufficient universal coverage across the country. This is in the light of the fact that the Act indicated that:

> The Minister may, out of monies appropriated by Parliament for the purpose, render or cause a water supply and sanitation service to be rendered to any community ...

Unlike the Water Act of 1956, the Water Services Act of 1997[69] outlines a different, positive approach towards community water supply and sanitation. It would appear that contrary to the Water Services Act of 1997, the Water Act of 1956 allowed the government to abdicate its constitutional responsibilities to provide community water services. This is indicative of the reason why the apartheid system was implemented.

The above discussion points out that during the apartheid era, water and land were integrally linked: without one, you could not own the other. Lack of security of tenure for the majority of Blacks meant that without land, it was virtually impossible for Blacks to have riparian water rights. This situation has had both a direct and indirect effect in South Africa. For example, as a direct effect, a significant number of South Africans are landless, and as a

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[66] See Sections 2 , 3, 4, 5, 6, 7, 8, 9A, 9B, 9C, 10, 11, 12, 12B, 21, 22, 22A,23, 23A, 26, 26D, 32A, 32B, 32E, 32K, 33, 33C, 33D, 33E, 34 and 117 of the Water Act of 1956.

[67] Water court meant a water court established under section 34 of the Water Act of 1956.

[68] Section 26A (a), (b) and 26B (1) of the Water Act of 1956.

[69] This Act states clearly that water services *must*, and not *may*, be made accessible to the public (Sections 2 (a), 3 (1) and 4 (1) & (2) of the Water Services Act of 1997).

result do not have access to potable water. Indirectly, landlessness is in a way a contributing factor towards the current levels of poverty, which as a result, is leading towards high levels of crime.

What also arises from this discussion is that historically, Water Law in South Africa was severely fragmented[70]. Naturally, where there is fragmentation there is a high probability of resource wastage and gross inefficiencies. Some of the critical points raised by Monod (cited in Farrel & Hart 1998: 98) regarding patterns of fragmented water supply in the past reveal that:

(a) the services were fragmented and therefore resulted in a stark contrast between urban and rural areas

(b) the services rendered overlooked persistent poverty and inequality

(c) the services rendered manifested extreme inequalities between the White cities and the Black townships. These inequalities resulted in the water services' current backlog.

Parallel to the above inefficiencies, the government further introduced new institutional arrangements in the form of statutory bodies[71]. The more the institutions, the more the proliferation of legislative amendments[72], which further led to increased legislative measures in order to regulate, control and ensure conservation of water for domestic, agricultural, urban and industrial use; the government significantly put control of this under the water industry[73], all in one. However, in spite of the government's control, it is important to emphasise that the water sector, through the role of the Department of Water Affairs, seems to have operated under a progressive, professional value system based on economical and viable water management systems.

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[70] The Self-Governing Territorial Constitution Act (Act 21 of 1971) allowed former homelands to pass separate laws dealing with water issues under the Water Act of 1956.
[71] Rand Water, the first water board, was established in 1902; Umgeni Water and the Water Research Commission were established subsequently.
[72] More than 24 water law amendments were recorded (Water Act of 1956).
[73] The Water Act of 1956 was passed to exert central government control.

Provisions of the Water Act of 1956 had no effect on the department's dealings with national and international matters[74]. This is evident from the stance taken, during the rise of separate development and the establishment of a homeland system, by the department that "fragmented water development is impracticable" (DWA 1986). As central government divided the country into different racial pockets, the department took a slightly different approach by basing the logic of water services provision on apparently merely technical, economic and efficiency considerations. As a result, a number of agreements[75] were signed between South Africa and neighbouring states such as Zimbabwe, Lesotho, Botswana, Mozambique and Swaziland. Permanent commissions between the homeland states and the South African government were also created to ensure effective and efficient management of water resources and sustainable delivery of water services in the major cities and towns (DWA 1986: 3.3).

The Department of Water Affairs also received accolades in the 1940s for the excellent role it played in infrastructure delivery, which was undoubtedly its main strength. The department received a number of engineering awards for outstanding engineering work and was ranked high in terms of international standards. The department also presented itself as a world leader in infrastructure development and the development of big dams such as the Hendrik Verwoerd Dam (now called the Gariep Dam). This was a clear demonstration that the apartheid government had both the technical and institutional capacity to deliver services; however, the only shortcoming was that not all South Africans benefited from such services.

Discriminatory practices were evident under Section 162 of the Water Act of 1956, which provided the Minister of the Department of Water Affairs with discretionary powers over the allocation of an equitable share to municipalities, water boards and irrigation boards. Subsidies provided by the department were meant to enhance living and health standards by making available sufficient water of good quality at reasonable tariffs in cases where

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[74] Proclamation of the Water Act of 1956 could only have an influence within South Africa's boundaries and not beyond.
[75] Because of differences in ideological and political differences between these countries, Joint Permanent Technical Committees were established.

communities could not afford the full cost of water supply or water treatment (DWA 1986: 6.37). As compared to people in former homelands, those living in urban areas benefited the most. However, it is interesting to note that those who received services in the former homelands, did have access to basic water services. Comparatively, they enjoyed high levels of service, far more than the current level of 25 litres per person per day catered for through the government's Reconstruction and Development Programme. There is evidence to show that the apartheid government ran water services along efficient and effective principles in the cities and towns, which were predominantly occupied by Whites, and further subsidised the operations and maintenance of water schemes in the former homelands. However, in the former homelands, most of these schemes were non-sustainable because communities were not part of the decision making processes[76] (DWA 1986).

The above discussion points out that water planning and management was based on political and ideological principles. Fragmentation and duplication of water services were not a reflection of inefficiencies on the part of the Department of Water Affair, but were mainly due to government apartheid policies. Planning and development within this sector was heavily characterised by technical and engineering principles, and less by social and human development. As mentioned by Swilling and Boya (cited in Munslow *et al* 1997: 169), the water cycle (see figure 5.1) and waste systems were structured in a way which suited the pockets of White consumers. The Department of Water Affairs arguably ran an efficient water programme using technocratic solutions to achieve government goals of maintaining a good quality of life for the White population.

The history of South Africa's water industry clearly demonstrates a non-participatory planning process, a top-down, sectoral and technocratic approach. Water is one of the most developed industries in South Africa, having the features of the water industry in a developing country. The previous complex institutional framework suggests that there should be further policy development with a simplified institutional framework. Such a step

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[76] Since the idea was to enforce false independence and self-determination, the apartheid government did not bother to promote cost recovery in the homelands; as a result this situation created dependency, which contributed towards the culture of non-payment (see Robinson, 1990).

could also lessen the burden of duplication of effort by a number of stakeholders[77] who are eager to assist in the current reconstruction and development of the water sector. This could also reduce, clarify and simply the existing institutional fragmentation (Abrams 1996: 3). It is therefore important that whilst recognising a need for sustainable development in the water services sector, it is equally essential to address past problems which hampered such wide participation.

5.2.2 Water industry: post-1994 situation assessment

Drawing from the above-mentioned pre-1994 situation, it is important to note that the post-1994 situation was the opposite. In this case, the focus was no longer on water resource management and infrastructure management only, but it became more clearly biased towards community water and sanitation. Black people, by virtue of having been excluded for decades, became the main beneficiaries of water projects which were implemented through the new government's Reconstruction and Development Programme. The introduction of new legislative measures gave further impetus to South Africa's water sector policy reforms. Both the National Water Act, 1998 (No 36 of 1998) and the Water Services Act, 1997 (No 108 of 1997) outline a number of institutional arrangements which have a bearing on how water resources and water services should be handled. The key to the Water Services Act is the institutional framework comprising water services institutions. The National Water Act is mainly concerned with water management institutions.

The Water Services Act clarifies the complex institutional arrangements in the water services sector. It makes provision for 5 key types of water services institutions: namely, water services authority, water services provider, water board, water services intermediary and statutory water services committee.

(a)   a water services authority refers to any municipality whose responsibility is to ensure provision and access to basic water services, including sanitation[78]. No other institution

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[77] Water boards, non-governmental organisations and other private/public service providers.
[78] Section 3 (1) of the Water Services Act, 1997 (No 108 of 1997).

than a municipality can become a water services authority (South Africa 1998f and South Africa 2000)

(b)   a water services provider is an institution which provides actual water services (retail water distribution) to consumers. To do so, a water services provider requires a contract which sets out various conditions of service. This function can be provided by a water board, non-governmental organisation (NGO), community-based organisation (CBO), a private company or a municipality itself

(c)   a water board is an institution which has traditionally performed the role of a bulk water supplier on a regional basis. This institution is established by the Minister of Water Affairs and Forestry. Its key function is to deliver services (bulk and/or retail) to other water services institutions

(d)   a statutory water services committee is an institution which may be established by the Minister if the water services authority is unable to fulfil its duties. Often, the role of water services committees is to operate and maintain rural water schemes. In some cases they perform this function on a voluntary basis. In other instances communities do contribute towards an agreed wage and administrative fee. Effective operations and maintenance remain one of the key success factors for sustainability. Where communities have assumed the overall responsibility for operations and maintenance, chances for sustained delivery of water services are high. The implementation of Reconstruction Development Programme water projects in South Africa in 1994 also saw the involvement of non-statutory water committees in all projects across the country. The Department of Water Affairs and Forestry set criteria based on gender, for the involvement of women, at 30%. Such a committee is elected to perform a number of functions, which include technical, financial and social oversight. Experiences elsewhere show that water committees play an important role before and after project completion; however, these roles often last another two to three years after the project has come to completion

(e)   A water services intermediary is an institution which can be a person, or body, which provides water to people, for example a farmer to his/her workers.

The author compiled the figure below to outline the business cycle of water.

FIGURE 5.1:   THE WATER INDUSTRY
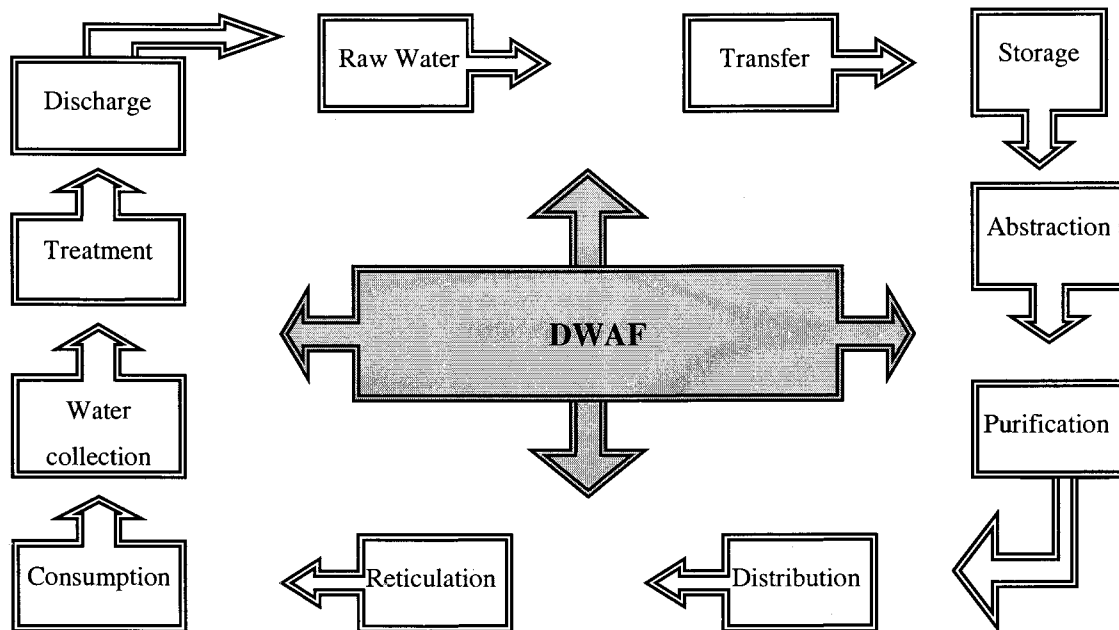
Figure 5.1 outlines an important institutional and functional cycle of the water sector in order to aid one to understand the water supply chain, and is thus very important because it presents all the institutional arrangements (suppliers, providers, distributors, operators, regulators and consumers). It shows that at each and every point of the cycle, there are certain roles and responsibilities which each stakeholder has. The costs associated with each point are an important indicator of the efficiency of water use, the rules and regulations, prices and tariffs, cost recuperation, pollution of water and its prevention, and the profit made (Ventura & Olcese 1996: 491). The ability to recover costs for services consumed is also an indication of viability because operations and maintenance would then not be easily compromised. Assessment of demand versus supply is very critical in this case. The water industry and its systems are thus very complex because South Africa still reflects a contrast between the urban (cities and towns) and rural and peri-urban areas (formal and informal

settlements). Therefore, structurally and institutionally[79], the government has a responsibility to close this divide. More resources should go to areas which were previously unserved, and the public-private sector partnerships seem to be the most viable options to meet the growing demands. As mentioned in the South African Water Bulletin (2000: 12) the role of water boards (public) and water service providers (private) in general is changing from what was primarily the function of supplying large urban centres with bulk water, running complex and expensive systems for financially strong municipalities, towards more community-based retail water management systems.

The National Water Act is mainly concerned about water resources management. Under the National Water Act, institutional arrangements are less complex. Currently, the Department of Water Affairs and Forestry plays an important role as a manager of water resources. This is in the absence of Catchment Management Agencies (CMAs) whose role is to protect, manage, control and promote the sustainable use of water resources. However, the National Water Act does make provision for their establishment. Dam building and storing of raw water in dams is also the responsibility of the Department of Water Affairs and Forestry. Abstraction, purification and distribution of bulk and retail water can either be done by any bulk provider such as a District Council or by a water board. Reticulation, waste collection, treatment and discharge, depending on who the water services authority signs a contract with, can be done by a water services provider. Unlike the past, the government views domestic or potable drinking water as a priority because water has both social and economic value.

Water services providers purchase raw water from the Department of Water Affairs and Forestry and therefore pass associated costs to the consumer. However, other costs associated with the business of running water services (bulk and retail) include:

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[79] Since 1994, South Africa possesses 18 water boards of different sizes and population coverage. This was made possible by the new government's policy of establishing border to border coverage of water boards throughout the country.

(a) the construction, rehabilitation and extension of treatment works (pump stations and bulk reservoirs)

(b) the redemption of interests or loans required for capital investments

(c) the operations and maintenance of works (including electricity supply and labour costs).

5.3 SECTORAL ANALYSIS : KEY SUCCESS FACTORS AND LESSONS LEARNT

The period between 1991 and 1994 signalled a turning point for the water services sector in South Africa. This was the same transitional period when major political groupings negotiated power sharing and a move to establish the Government of National Unity (GNU). The then Presidential Council recommended that the Department of Water Affairs should review and provide a detailed policy on water supply to communities which normally would have poor access to water sources and sanitation (DWA 1991/92: 14). Prior to the 1991/92 period, many legislative changes also began to emerge. A Community Water Supply and Sanitation division (CWSS) was established in 1994 to address the backlogs of the past. This was a new division which, for the first time in the history of the department, was established by government specifically to address rural water supply and sanitation. The government, through the Department of Water Affairs and Forestry, established a Standing Committee on Water Supply and Sanitation (SCOWSAS) whose responsibility was to review policy and legislation, thereby making recommendations regarding institutional reforms, funding and delivery mechanisms (Quirk & Ebehard cited in Friedman 1997: 883-906). The Presidential Lead Projects were developed in parts of the country where there was profound lack of access to water services. It is the culmination of the above process which strengthened the capacity of the department to formulate policy and deliver on basic water services.

5.3.1 Sector strengths and opportunities

A number of strengths and opportunities can be reported as follows:

(a) sufficient financial resources and infrastructure

The reality is that South Africa's water sector has sufficient financial resources and infrastructure to address the backlog. Through the Reconstruction and Development Programme, the government makes the initial capital investment for water projects. Institutional sustainability and the mobilisation of resources for a water supply depend upon the existence of a reliable legal framework. This is one of the major strengths of the water sector in South Africa.

(b)   political commitment

Unlike the old government, the present government shows strong signs of commitment towards improving the quality of lives. It has moved away from the Water Act of 1956, which only focused on the physical aspects, towards the Water Services Act of 1997, which has a strong emphasis on domestic water supply and sanitation.

The period between 1997 and 2000 saw many investigations being conducted so as to assess strengths and weaknesses of the water supply (World Bank 1998; Wellman 1998: 3; see footnotes 79 and 88 below). In most cases the results pointed out some of the major shortcomings of a supply-driven approach. That is, the supply-driven approach can partly be blamed for the vandalism of systems and for poor cost recovery. This points out that, despite major successes, serious challenges remain in balancing the supply-driven government imperative with a demand-driven approach. The latter is seen in this study as an appropriate approach, which could stimulate local interest and assist local government in efficient planning and effective implementation of development programmes.

The period between 1994 and 1997 also saw many reform processes in the water sector. The Department of Water Affairs and Forestry embarked on an ambitious capital programme to address the water services backlog of the past. The table below outlines some of these successes.

FIGURE 5.2:   STATUS OF WATER SERVICES PROVISION AND JOBS CREATED PER PROVINCE

a)

National - Expenditure vs. People Served

- 6,4m served with water
- R4,040m spent
- 372 000 jobs created
- 323 projects completed
- 43 Schemes transferred

People Served - 000's
FMS Expenditures - R millions
Cost per Capita - R's

Regions Cost per Capita

Months

b)

The Challenge

% of SA's water backlog
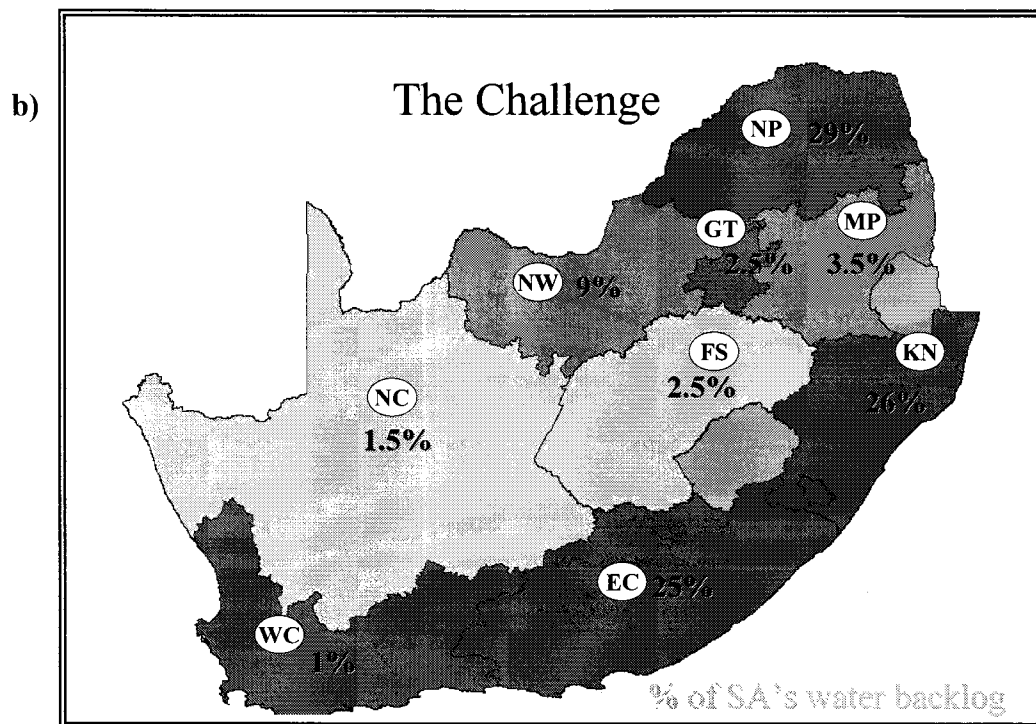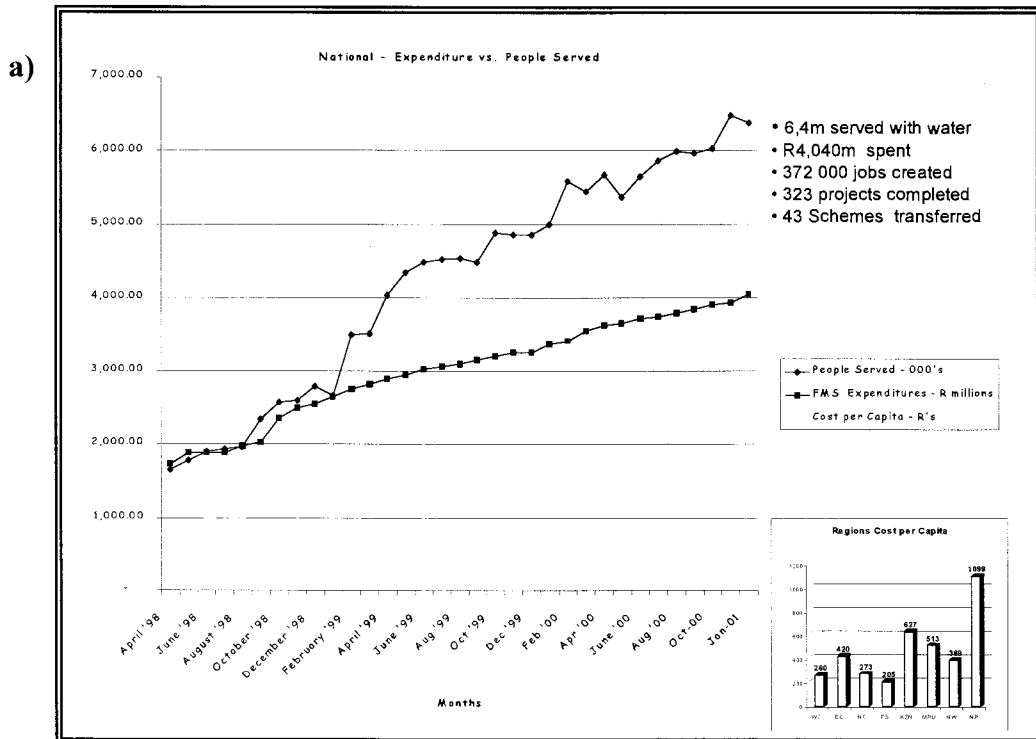
Source: DWAF (2001)

Table 5.2 (a) and (b) shows that meeting basic needs through the provision of a basic infrastructure coupled with accelerated delivery has been a critical area for the South African government[80]. The main challenge has been to respond to the poverty stricken rural environment. This is clearly indicated by the three largest provinces which are affected, namely KwaZulu Natal (26%), Eastern Cape (25%) and the Northern Province (29%) (now called the Limpopo Province). According to the department's Community Water Supply and Sanitation programme (2001: 5), as part of its poverty alleviation, the programme created approximately 18 161 jobs[81] and 1 664 people were trained. However, the dimensions of poverty in South Africa still pose a great challenge to the government. The number of jobs created through water project implementation is simply not sufficient to begin to address the spiralling levels of unemployment. On the contrary, Gauteng and the Western Cape Provinces still enjoy the benefits of the past infrastructure development and service delivery.

Furthermore, the following successes[82] are reported:

(a)   the development of various delivery mechanisms

(b)   the establishment of partnerships with other government departments, Non-Governmental Organisation and Community-Based Organisations

(c)   the establishment and training of project steering committees

(d)   the development of a variety of tools and guidelines for local authorities (during the transitional period of 1996)

(e)   the development of a monitoring and evaluation system.

The table below shows consolidated national and provincial spending for water schemes and related services.

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[80] It is reported that services increased in real terms by 516% from R196 million in 1994/5 and R1,2 billion in 1996/97 (Department of Finance 1997: 48). The 2001 November Progress Report indicates that the total of additional population served to date is 7 068 013 (DWAF 2001: 3).

[81] The average duration of a job is taken as three months (DWAF 2001: 5).

[82] When the Department's Community Water Supply and Sanitation programme was established in 1994, there were neither local government structures nor a clearly defined framework for water services delivery at local

TABLE 5.3:   CONSOLIDATED NATIONAL AND PROVINCIAL SPENDING: FINANCIAL YEAR 1995/96 TO 2001/02 (R MILLION)

1995/96	1998/99	1999/00	2000/01	2001/02[83]
1157	2521	2404	2890	3045

Source: Department of Finance (1999)

Table 5.3 shows an increasing pattern of expenditure in the water services sector. This could be an indication that this sector is receiving priority from government, especially in the light of fulfilling the constitutional imperative of facilitating access to water services.

5.3.2   Sector weaknesses and challenges

The water sector is facing difficulties such as:

(a)   a policy gap: theory versus practice[84]

Since 1994 the South African government has introduced a number of key policies in sectors such as water. However, previous evaluations point out that there exists a gap between the well-articulated and highly regarded policies in the Department of Water Affairs and Forestry and their execution (Abrams *et al* 1998: 8). What this implies is that, for example, there is a gap between the department's 1994 White Paper on Water Supply and Sanitation and what happens at service delivery level. This weakness stems from the fact that it is not a simple matter to translate concepts such as demand-driven, participatory approaches and sustainable development into action. Furthermore, the above weakness was precipitated by the fact that the Water Services Act of 1997 was one of the Acts to be enacted in 1997. The tendency then was to implement water and sanitation programme in isolation from other local development programmes. Although institutional and social development principles were integral to the Community Water Supply and Sanitation

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government level. The department started from a zero base and set up an institutional and policy framework which enabled it to reach South Africans who had never had access to potable water and sanitation services.

[83] Average figures.

[84] This is a 1997 evaluation of the Community Water Supply and Sanitation programme commissioned by the department. The study was based on three water supply Presidential Lead Projects and it comprised representatives from the department, Mvula Trust, the Development Bank of Southern Africa, Palmer Development Group and ACER (Africa).

programme, policy design was arguably conceptualised and driven by technically-oriented professionals, whose mandate was to accelerate delivery.

(b)   addressing the backlog through accelerated delivery

As a result of gross inefficiencies in the former homelands and discrepancies with regards to service delivery, issues of a backlog are still evident. Table 5.2a clearly outlines key successes; however, the government still faces many challenges in increasing the levels of access (table 5.2b). In applying the typology of participation, the author argues that acceleration of water services delivery by government (between 1994 and 2000) compromised the principles of interactive public participation, which include interdisciplinary methodologies and participatory approaches, joint planning, design and analysis. The author postulates that during the specified period, participation processes were either consultative or incentive-based and not interactive (see chapter three table 3.2).

(c)   minimal, or lack of, institutional capacity

The majority of the existing water services authorities in South Africa lack technical, administrative and institutional capacity. This is partly a historical problem, which can be attributed to the legacy of separate development of institutional and human resources in South Africa. Lack of human resources capacity can also be attributed to the fact that the new government inherited personnel from the former homelands, who still require a massive training and re-orientation capacity building programme. Capacity constraints place a burden on efficient management of water supply and sanitation systems. Operations and maintenance of schemes suffer a great deal. Schemes which do not function end up being vandalised by communities, often due to frustration about the lack of, or poor, services.

In some cases, especially where the new government has developed a rural water infrastructure, no matter what the level of operations, there is a huge problem in finding appropriate institutions to operate and manage those schemes. Where there are regional bulk water providers, there is a prevalence of organisational capacity constraints. Experience shows that as the service level drops due to a lack of operation and maintenance, the users withhold support, especially payment (WHO & UNDP 2000: 1).

Experience in South Africa shows that no service is sustainable in the long run if its cost cannot be recovered. Through its operation of government water schemes, the Department of Water Affairs and Forestry is operating at a loss. This is a another historical problem linked to the apartheid water policy. Existing inefficiency and ineffectiveness in sustainable operations can be attributed, amongst other things, to lack of appropriate financial, management, information, billing and collections and other administrative systems at local government level. Given South Africa's history of fragmented planning and systems development in rural and urban areas, much technology was not appropriately designed to become sensitive to the growing needs of the population. As a result, the water sector was left with unsustainable systems. According to Wellman (1999: 3):

> A comprehensive study by South Africa's largest water NGO, Mvula Trust and Australian Development Aid found earlier that inappropriate technology, shoddy maintenance and poor management by untrained communities was leading to the failure of many projects.

The above-mentioned problems are typically found in municipalities which are located within the former homelands.

(d)   poverty and lack of affordability

About 42% of South Africans are either unemployed or under-employed. This is a major concern because unemployment means lack of income. Lack of income can present problems with regard to poverty and lack of means to pay for services.

(e)   lack of co-ordination and duplication of effort

South Africa's water services sector attracts considerable financial support from its international donors. There are also several non-governmental organisations and community-based organisations which are involved in community water supply and sanitation, either as agents of the Department of Water Affairs and Forestry or as water services providers contracted by municipalities or communities. The Department of Water Affairs and Forestry also runs a billion rand capital investment or infrastructure and local

government support programme. The sector is thus well resourced to be in a position to ensure sustainable development in the water services sector in South Africa as a whole. Yet there are still problems of duplication, fragmentation and lack of co-ordination[85], which existed even during the apartheid years.

Where there is duplication, there is significant wastage of resources. The current situation, combined with the government's supply-driven approach, minimises prospects for sustainable development.

(f)   vandalism

Often, vandalism is a symptom of lack of ownership regarding something. In this instance, a water tap or pipe is a typical example. Vandalism is common in situations where people are not satisfied with the service or when there is no service at all. Experience shows that vandalism is likely in situations where people share a communal tap or when there are constant interruptions of supply. The chances of vandalism in yard connections are minimal because the owner is responsible and does have a sense of ownership. A lack of interactive participation means less or no ownership. Often, vandalism occurs as a result of lack of ownership of government programmes by the community.

(g)   poor cost recovery levels

Poor cost recovery can be attributed to a number of factors such as lack of administrative and management billing systems at local level. Since the new government had a major task in expanding coverage across the country in terms of water services, the implementation of the capital programme was mainly supply-driven. The supply-driven imperatives of the new government are similar to those of the old government. However, contrary to the new government's Reconstruction and Development Programme's levels of basic service, the difference is that the old government promoted higher levels of service. The present

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[85] Donors run parallel support programmes for local government. Non-governmental organisations and research institutions rarely collaborate on research projects and strategic planning for the sector.

government is promoting basic levels of supply, which are below what the old government supplied[86].

Furthermore, in South Africa, sustainability of water services has often been perceived in terms of financial management. Since 1994, cost recovery has become widely used to demonstrate the viability of water schemes. Different variables, related to continuing operations and maintenance, have been used to depict viability. These include reliability of service, operational time, benefits or continuing access and billing and collection. Since these factors are input-oriented rather than outcome-oriented, the approach does limit the scope for achieving sustainable development. As this study argues, outcomes (quality), rather than inputs (quantity), are the key to sustainable development. A choice has to be made between the long-term impact of viable water schemes against the short term physical infrastructure gains.

5.4   TOWARDS A NEW WATER SERVICES POLICY

The above discussion points out that, historically, water and the overall technology behind its management was an occupation for technocrats only. As noted from South Africa's colonial history, water management was located within environmental and ecological concerns. It only became evident in the 1980s that concerns for human beings had become critical (Abrams 1998: 3). This implies that South Africa has a huge human development gap to fill. At this point it is evident that South Africa has a myriad of factors which have militated against sustainable development in the water services sector.

Historically, water in South Africa was an unknown phenomenon until 1994, when its importance gained the public's interest. The results of the Opinion '99 survey conducted from 6 April to 30 April 1999 reveal that between 1994 and 1999 water was actually rated low, as compared to other priority issues such as job creation, housing, education and crime

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[86] The old South African government had previously designed water projects around higher levels of service, that is, 60 litres per person per day.

(Public service report 1999/2000: 39). The table below compares public opinion on various issues and the public's opinion regarding water in South Africa.

TABLE 5.4:   OPINIONS AND PRIORITY AREAS AMONGST THE SOUTH AFRICAN PUBLIC

	1994	1995	1997	1998	1999
Job creation	67%	74%	68%	75%	79%
Crime & security	6%	32%	58%	61%	65%
Housing	46%	54%	44%	34%	32%
Education	34%	20%	20%	23%	26%
Water	*0%*	*5%*	*4%*	*13%*	*11%*
Poverty	9%	6%	3%	12%	9%

Adapted from Opinion '99 Survey (cited in Public service report 1999/2000: 40)

The above table shows the pattern of priorities since 1994, during South Africa's first democratic process. Reasons for a high rating in job creation suggest that when the new government came into power, there were high expectations regarding job creation. These expectations are growing steadily. This is a sign that a significant number of South Africans are unemployed and therefore live under poor conditions. It would also appear that there is a correlation between poverty and high unemployment. This raises the likelihood that increased income through employment could bring high levels of poverty down. Equally, should poverty levels be decreased, the crime rate could also decrease.

The fact that the public opinion regarding water services was poor in 1994 confirms the suggestion that historically, the previous government only concentrated mainly on water resources and the supply of bulk water services to major cities and towns, hence mainly to industries and other commercial entities. The above opinions reflect a negative trend which resulted from the government's skewed development approaches. It is arguably the majority of Blacks whose interest remained low in the past because of the probable perception that water was a mere commodity. As argued previously, the water sector mainly applied to the White population because the government subsidised their services and provided a large bulk infrastructure. The present government promotes and puts more resources towards water services. This has further heightened opinions of consumers regarding the importance of water in South Africa, from 0% in 1994 to 11% in 1999.

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Access to potable basic water is a constitutional imperative in South Africa's water industry. Water is therefore seen as a basic right and not as a commodity, like other services such as electricity and telecommunications. In developing countries, water is also a health and hygiene issue which, if not given priority, can threaten the lives of people in terms of water borne diseases. Unhygienic water supply and sanitation facilities lie at the root of some 80% of the disease and ill-health in the world. In South Africa, incidents of cholera in KwaZulu Natal bear testimony to this problem (Hukka & Katko 1997: 161).

5.4.1 A water services authority

As noted previously, a water services authority is a municipality whose responsibility is to ensure sustainable water services at community level. The Water Services Act clearly outlines key functions of water services authorities. These are governance and provision of water services. Democratic governance is a function which must be carried out to ensure access to basic services, drafting and adoption of regulations, by-laws and the Water Services Development Plan (WSDP). Since the advent of new legislation such as the Water Services Act of 1997, every water services authority has the right to either undertake the provision function itself or choose to outsource it. Although the provision function complements the governance function, for the purposes of this study the focus is on the governance function. The latter carries far greater constitutional responsibilities in that municipalities cannot outsource it in any way or form.

5.4.1.1 Ensuring access to basic water services

Water services authorities have the legislative responsibility of ensuring the provision of sustainable water services. In this case, this also implies free basic water services. This is probably the one important legislative clause which guarantees all South Africans a constitutional right to potable water. Unlike the previous water legislation, the Water Act of 1956, the Water Services Act of 1997 makes certain commitments which are geared towards access to water services. This is evident from many sections of the Act which repeatedly use the word "must", instead of "may" or "should". Both "may" and "should" provide a relatively non-obligatory legislative stance, which could lead to non-compliance by other interested parties. "Must" is appropriate in a situation in which the government wants to exert its authority and carry out its belief in ensuring the right of access to basic services.

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However, rights are relative. That is, there are certain limitations to the rule. This is another important area essential to highlight during public awareness campaigns, because it could be misrepresented as being absolute. The same applies to free basic water services. 'Basic' implies that a water services authority must take reasonable measures to ensure the upholding of the prescribed minimum standard of services necessary for the safe, hygienic and adequate collection, removal, disposal or purification of human excreta, domestic water and sewage from households, including informal households.

It is also important to note that the use of the word "must" also implies the responsibility and accountability of those who are entrusted with these powers and functions. Their failure to act responsibly makes a mockery of legislation. Linked to access to basic water services is the emphasis on sustainability and viability of water services. Certainly, this is a critical area for water services authorities because most of them are not ready yet to guarantee the right to access, let alone to ensure the sustainability of water services. The implication is that central government, while it is entitled to enforce rules and regulations, also has to commit resources to create viable and sustainable water services authorities. Some of the basic actions a water services authority needs to take in order to conduct its governance and/or provision functions are:

(a)   water conservation and demand management

(b)   the development and enforcement of regulations and by-laws

(c)   billing and collection

(d)   ensuring a sustained culture of payment for services.

5.4.1.2   Drafting and adoption of by-laws[87]

In order to fulfil its governance and management responsibilities, a water services authority must:

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[87] Section 21 (1), (2) and (3) of the Water Services Act, 1997 (No 108 of 1997).

(a)   set standards and conditions of supply[88]

(b)   develop and implement credit control measures

(c)   set tariffs and prevent unlawful connections

(d)   aim at consumer awareness raising and capacity building.

5.4.1.3   Planning and development under the Water Services Act No 108 of 1997

Under the Water Services Act No 108 of 1997, a water services authority is required to draft and submit a Water Services Development Plan[89]. A Water Services Development Plan is a planning tool which enables every water services authority to implement by-laws and other policy imperatives. This tool forms an integral part of the Integrated Development Plan (see chapter six section 6.3.1). Like the Integrated Development Plan, a Water Services Development Plan requires the inputs of the public or the community it serves. The overall objective of the Water Services Development Plan is to ensure co-ordination and integration of water services planning at regional level. Broadly, this is also an attempt to align water services planning with other sectoral interests such as land development and economic issues. Every draft Water Services Development Plan must contain some of the following details[90]:

(a)   physical attributes of the area to be served

(b)   size and distribution of the population within the area to be served

(c)   time frame for the plan, including the five year implementation programme

(d)   an analysis of existing water services, industrial water use, industrial effluent disposed of within the area of jurisdiction of the relevant municipality

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[88] As prescribed in section 9 (1) and (2), these standards and conditions are important for long term viability and sustainability relating to the provision of water services.
[89] Sections 12 (1), (13), (14) and (15) of the Water Services Act, 1997 (No 108 of 1997).
[90] Section 13 (a) to (j) of the Water Services Act, 1997 (No 108 of 1997).

(e)	future provision, including identified water services providers and proposed contracts, planned capital infrastructure, availability of water resources, capital, operating and maintenance costs.

The above governance responsibilities and functions of a water services authority provide an important basis for central government's commitment towards decentralisation and consumer participation. It is therefore important to note that central government, in this regard the Minister of Water Affairs and Forestry, has far reaching powers. For example, in the event that a water services authority fails to perform its functions, the Minister can, through consultation with the Minister of Provincial and Local Government, intervene[91]. Intervention could mean implementing corrective measures or a complete take-over by the Department of Water Affairs and Forestry. This indicates that water services management and decentralised forms of government are still subject to national government's scrutiny.

The discussion so far has pointed out that the water sector operates within a clear legislative and policy framework. Although there might be areas which still require clarification, in the legislation that governs the water services sector, an enabling framework has been laid out for all role players. However, like the local government sector (see chapter six), the water services sector also has its own share of problems, such as capacity constraints. Capacity constraints in the water services sector can be divided into two main categories; namely, human resources and institutional. Both constraints can be traced back from the past system of service delivery, which was based on unequal and inequitable allocation of resources. As mentioned in this study, there was a clear contrast between rural (former homelands) and urban areas. The latter attracted the most qualified staff because the predominantly White consumers expected to receive clean drinking water. Rural areas, by virtue of the policy of separate development, could not attract the same attention. This arrangement led to the fragmentation of water services and subsequently a duplication of effort and resources. Capacity constraints have a potential negative effect on sustainable water services delivery.

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[91] Section 63 (1), (2), (3), (4), (5), (6) of the Water Services Act, 1997 (No 108 of 1997).

Another factor contributing towards sustainable water services delivery is the water services policy. The White Paper on Water Supply and Sanitation, as it was developed in 1994 to guide the implementation of water projects, is built around a supply-driven approach. Its key objective is to provide access to basic water supply and sanitation. The policy demonstrates the government's genuine concern for and commitment towards providing a rural water supply. Although communities are expected to pay for services consumed, this has never been the case. As a result, through its trading account[92], the Department of Water Affairs and Forestry has spent hundreds of millions of rands in keeping up with operations and maintenance of water schemes. In many instances, cost recovery has been very poor. Water services providers also face similar problems of cost recovery and this is a major challenge regarding future viability. The risk factors associated with the delivery of water services in South Africa are thus high.

5.4.2   Water sector regulatory framework

As indicated by table 5.2 (a) and (b), South Africa has invested considerably in water infrastructure projects since 1994 and post 1994. A major remaining challenge is related to the continuing operation and maintenance of the completed schemes. Since various water services providers will be keen to enter into provision contracts with municipalities, the institutional framework in the sector needs to be reviewed. To be specific, the regulatory framework needs to be formulated so as to clarify the roles and responsibilities of various water services institutions. However, the current situation suggests that not all municipalities have the technical, institutional and administrative capacity to manage and regulate contracts. It is in this light that a regulatory framework could decrease the risk of contracting unscrupulous water service providers.

In South Africa, water services delivery has historically been the responsibility of municipalities (including District or Regional Councils), in terms of retail distribution, and of water boards, in terms of bulk provision. South Africa has typical examples of private sector water management such as the Johannesburg and Nelspruit contracts. South Africa

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[92] This account covers operations and maintenance of rural water schemes, most of which were inherited from

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has also experimented with a type of public-private partnership called Built, operate, Train and Transfer. This arrangement was introduced as part of the government's efforts to accelerate delivery of water services, especially in the rural areas. Several evaluations were conducted during the life of the Build, operate, Train and Transfer programme and these revealed mixed findings[93]. On the one hand, it was found that the programme succeeded in facilitating rural water infrastructure development but on the other hand, it proved to be a costly option. Despite the shortcomings arising from the above findings, what is important is that there is sufficient evidence to prove that private sector involvement can leverage government rural and peri-urban water projects and contribute towards sustainable water services provision (see chapter seven section 7.4.4).

Private sector participation[94] is as yet a contentious issue between labour and the government. However, this study argues that if the right quantities and qualities of capacity are provided to municipalities, they will be in a position to make informed decisions whenever they are confronted with choices for an appropriate water services provider, be it the public-private or public-public partnership arrangements. What is lacking at this stage in South Africa's water industry is the development of a viable regulatory system which will enforce norms and standards, which are a necessity in terms of good customer care, water quality, tariffs setting and efficiency, amongst other things. Good customer care is essential for customer satisfaction, which in turn is essential for sustainable services delivery. The latter, as argued in this study, lays good prospects for sustainable development. However, what is more important is that a water services authority must sign a contract with an appropriate water services provider to operate in its area of jurisdiction[95]. Legislation gives a water services authority sufficient powers to enforce regulations, which after all, are meant to protect the interests of consumers.

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the former homelands.

[93] This is according to the 1997 study conducted by the European Union and Mvula Trust on the BoTT programme and also the 1998 evaluation conducted by the World Bank on the same programme.

[94] PSP refers to the involvement of the private sector in some form, at some stage, in the delivery of services. It is a general term that is used to cover a wide range of private sector involvement from the service contract, management contract, concession and BoTT type contracts (Plummer 2000: iv).

[95] Section 22 (1), (2) and (3) of the Water Services Act (No 108 of 1997).

South Africa has never had an independent[96] water sector regulator. Historically, the sector was ruled by decree and all powers were vested in the Minister of Water Affairs. Even under the control of the new government, there has been no decision as to whether an independent regulator will be established. The regulatory and policy framework in South Africa is undergoing an incremental and developmental process. However, the Minister does have regulatory powers. Various water services institutions[97] perform different roles in water services provision. The government has also passed different legislation and regulations[98] in order to address gaps of the past. However, there is still a strong need for clarity regarding South Africa's water sector regulatory arrangements.

The only gap still left is, of course, the lack of a regulatory framework which guides water services provision in the country. Whereas in the past and still currently, the Department of Water Affairs and Forestry has played a key role as custodian of water, water services provider, water sector regulator and supporter of municipalities, the government should ensure that an independent regulator is established so as to institutionalise credibility in the sector. Although critics could argue that the Department of Water Affairs and Forestry is currently playing many conflicting roles, this does not suggest that such credibility does not exist in the sector. However, best practice experiences elsewhere could expedite this process, even make it more cost-effective. This study argues that for purposes of sustainable development in the water services sector, the sector requires a strong regulatory regime to normalise[99] the situation and also ensure that the government's mission is realised. It is important therefore to ensure that regulatory objectives yield the desired outcomes and that potential benefits must exceed their potential costs (Stewart 1999: 378). In this case, the outcome for the South African government, as stated above, is to ensure access to water services for all South Africans. The most practical action, therefore, is not to duplicate what

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[96] Independent means that it will not experience any government influence or control. It will pass its own policies and establish its own appeal or arbitration courts.

[97] Section (1) (xxi) of the Water Services Act (No 108 of 1997).

[98] Section 19, 20 and 21 of the Water Services Act (No 108 of 1997).

[99] The current situation is abnormal because millions of South Africans still do not have access to clean potable water and that there is no independent regulator for the sector.

has been experienced in other parts of the world[100]. Best practice experiences, adapted to the South African situation, should be followed. This action will minimise the short term costs of developing the framework, drafting regulations and policies and establishing the body. Since South Africa already has experience with establishing other regulators such as the South African Telecommunications Regulatory Authority (SATRA) and several others, certainly there should be existing benchmarks[101] for the regulatory functions in place. Other best practices can be sought outside South Africa. According to the DWAF (2000), the mission of the water services function is to meet:

> the social, economic and environmental objectives of the country and to see that the government must ensure that all South Africans have equitable access to effective, efficient, affordable, economical and sustainable water services.

The regulatory reform process is therefore meant to create an enabling environment for the government to exercise control in terms of key delivery and governance functions. Regulatory control strengthens the likelihood for water services providers to perform optimally and comply with regulations. However, the tendency is that often governments lack the capacity and systems to monitor the impact of regulators. Governments focus more on the perceived regulatory benefits and less on the systematic evaluation of the cost-effectiveness of their regulations (Braithwaite cited in Stewart 1999: 386).

The implications for the establishment of a water sector regulator are that there are key processes which should be undertaken prior to establishment. First, there is a need to ensure that the sector as a whole, including consumers, knows exactly what the implications of establishing a regulatory institution are. Education and awareness raising are critical. The Department of Water Affairs and Forestry could undertake an extensive consultative process, which will assist in defining the purpose, outline benefits, roles and responsibilities, the possible form and structure, powers and functions of the regulator. It is important to note

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[100] Australia, France, Britain, Chile and Colombia are some of the countries which already have well-established regulatory authorities in the water sector.
[101] Process benchmarking is applicable in this case because it provides an analysis of the activities and tasks that turn resources inputs into outputs and outcomes (Stewart 1999: 102).

that some of these processes are currently being implemented. Certainly, local government support becomes more critical because in terms of capacity, the majority of South Africa's municipalities are not ready yet to develop by-laws in line with the regulations.

5.5 CONCLUSION

South Africa's 1994 water policy is commendable because it has laid an important framework for delivery. However, the key challenge lies with future water supply programmes. The reality is that the future requires a different set of participatory methods. Such methods should clearly demonstrate pragmatism on the part of municipalities. Real participatory planning methods will to a large extent guarantee some confidence in sustainable development at local government level.

It is also evident that in 1994, the new government made strategic choices such as the establishment of the water services sector, which has an important role to play in social, economic and human development. Unlike the old apartheid government, South Africa's democratic government has laid an important basis for water services delivery. This is evident from the infrastructure development programme which has characterised South Africa's water sector since 1994. It would seem that one of the achievements of this programme has notably been the creation of access to basic water services for more than seven million South Africans. However, the author argues that since water infrastructure development in the past was not demand-driven and therefore not underpinned by public participation, chances for sustaining this infrastructure in the future are minimal.

The author concludes that since 1994, consumers have taken full advantage of the government's supply-driven approach in water projects. Because services were not demand-driven and because consumers have not taken responsibilities which include paying for those services, consumers seem to have taken advantage of the situation. The chapter has argued that since providing water services is now a new competency of local government, participatory methods of sustainable development are critical.

CHAPTER 6

SOUTH AFRICA'S LOCAL GOVERNMENT SYSTEM: WATER SERVICES IN TRANSITION

6.1   INTRODUCTION

Chapter five contextualised the water services sector within the pre- and post-apartheid eras. The chapter argued that water is an important sector in that it benefits people socially, economically and developmentally. Since water services is a new competency of water services authorities, this chapter will show important linkages between the two sectors, local government and the water services sector. These linkages are significant for understanding the transition between the role played by the Department of Water Affairs and Forestry (between 1994 and 2003/4) and the new role of the Department of Provincial and Local Government (2003/4 onwards). Furthermore, this chapter outlines the developmental challenges facing local government in South Africa.

6.2   LOCAL GOVERNMENT TRANSFORMATION: TERRITORIAL ALIGNMENT

Events regarding local government transformation over the past few years suggest that South Africa is moving towards a progressive development path which seeks to address the legacy of apartheid. Some of the reported success stories of this transformation process include, amongst other things, the:

(a)   reduction of municipalities from 843 to about 284

(b)   amalgamation of systems (human, financial, information technology) from former homelands and

(c)   the demarcation or redefinition of territorial boundaries, which seeks to bring about equity between and integration of towns and people who were racially segregated in the past.

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The system of territorial alignment seems common amongst countries which have undergone democratic changes. After the new government was put in place, Bolivia for example, proclaimed new laws of public administration in order to consolidate previously fragmented units. The new local government system in South Africa also has dimensions similar to the Bolivian geographical, social and political criteria. These criteria resemble five dimensions which were previously used by the Demarcation Board in South Africa (Razin 2000: 18), that is:

(a)   the territorial dimension

(b)   functional dimension

(c)   political dimension

(d)   the fiscal dimension

(e)   the electoral dimension.

The above dimensions will be applied in a conceptual framework to address critical issues facing South Africa's local government.

6.2.1   Territorial dimension

Because the old local government system was fragmented, the new government has needed to consolidate the systems, procedures and structures essential for effective governance. These included cross-subsidisation and a number of tasks related to integrating poor municipalities with rich ones. This implies that the territorial dimension seeks to bring about a coherent process of local governance, with the particular aim of amalgamating former homeland structures and administrative systems. Most of these areas fall under a new structure of government called a District Council (DC).

The concept of a District Council is not something new. It has emerged with the advent of post-independence developments within many developing countries. African countries such

as Tanzania[102] and Botswana, for example, have implemented the concept of District Councils in order to enforce democratic representation, and also use District Councils as the main policy-making bodies in the local authority system in respect of the delegated functions (Jerve & Crook 1991: 72 and Alexander *et al* 1993: 15). In the South African context, the same principles apply in that the Municipal Structures Act, 1998 (117 of 1998) makes reference to the creation of District Councils (South Africa 1998c). This trend of governance through territorial districts can be termed districtalisation[103].

The decentralised model of governance is not particularly unique to African countries. Latin America too has had its own fair share of decentralisation problems (see chapter seven). What this implies is that although an assumption is being made in this study that decentralisation or districtalisation can bring about better prospects for sustainable development, it is also equally important to acknowledge the possible constraints which often affect the successful implementation of such models. These include power relations such as those induced by party politics, political elitist groups and traditional versus political power relations.

Apart from its inherent political problems, the main goal of districtalisation is to align government structures and therefore to maximise the impact of service delivery at local government level. Like decentralisation, districtalisation seeks to improve local government finance through equitable allocation of revenue. However, decentralisation is also triggered by various motivations such as the need to reduce the central government budget deficit and a need for democratic governance. The latter has been a well talked about subject since the 1960s, and South Africa's governance system seems to be based on this model.

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[102] Tanzania's governance system was guided by the 1953 Local Government Ordinance. In Botswana the system was a combination of the traditional/tribal system of governance and the political system of District Councils created by the Municipal Government White Paper No 21 of 1964 (Jerre & Crook 1991: 72).

[103] Districtalisation, like decentralization, is a process which entails the moving of responsibilities from the higher levels (central government) towards lower levels (local government).

It can therefore be argued that both concepts, districtalisation and decentralisation, can be seen as a prerequisite for improving efficiency and responsiveness towards service delivery (Kim 1997: 17).

Since government is the main sponsor of municipalities, the challenge is how to make inter-governmental transfers compatible with a response to the preferences and expenditure priorities of recipient municipalities, and furthermore, how to allocate the funds in a predictable, reliable and timely manner, without jeopardising local governments' incentives to tap their own sources of revenue (Kim 1997: 21). It is also important to note that most local municipalities, especially rural based municipalities, cannot afford to raise their own revenues and thus depend on central government to make grants available. Debt financing and capital investment remain some of the critical issues which require immediate attention, failing which, municipalities will not be in a position to meet their mandate. The question then is: how do they maintain their autonomy if they are so dependent on central government? Again, if they do not have the necessary capacity to administer these grants, is it worthwhile to consider the decentralisation option? These are some of the difficult questions facing municipalities today in South Africa. However, it is still more important to note that territorial alignment brings opportunities for effective planning at local level.

6.2.2   Functional dimension

The functional dimension focuses on the dichotomous relationship between decentralisation and centralisation. South Africa's constitution and other legislation[104] do recognise a need for the transfer of functional responsibility, with regards to water, sanitation, health and transport, to local government. Since this study argues for a participatory approach towards sustainable development at government local level, the functional dimension does contribute towards the same goal.

Municipalities have a range of functions to perform. Their success as water services authorities depends very much on how they execute and perform those functions. The

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[104] Water Services Act (No 108 of 1997) and the Division of Revenue Act (No 1 of 2001).

functional responsibilities of municipalities can therefore be assessed on issues such as democratic governance, infrastructure development, social and human development at local level. Decentralised governance and administration are key functional responsibilities commonly recognised within developing countries (Garrity & Picard 1996: 8). However, it is also important to emphasise that these responsibilities are not a panacea for sustainable development; rather, there exists a balance of probabilities within various administrative levels which could be realised as providing sound democratic aspirations (Reddy 1999: 21; Pollit *et al* 1998). Research and various experiences on decentralisation models point out that there are advantages and disadvantages to such models (Crook & Manor 1998). The level of commitment shown by central government will determine the extent to which decentralisation will be implemented (Makara cited from Nsibambi 1998: 33). It should also be indicated that this could differ from country to country[105]. Instances where decentralisation was hailed as a success model, show that the following factors formed an integral component of the roll-out strategy.

(a)   resource allocations

(b)   efficiency gains

(c)   public participation

(d)   local economic development and sustainable livelihoods.

The above factors bring the discussion closer to the South African context of democratic local government, decentralisation and its prospects for sustainable development. The factors also provide a sufficient basis for developing a policy framework in South Africa. This is already evident from South Africa's White Paper on Local Government (South Africa 1998a). Amongst other key functional responsibilities, South Africa's policy on local government is based on the principles of efficacy and decentralisation which promote access

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[105] Different studies have researched the advantages and disadvantages of decentralisation. Wunch & Oluwu McCotter & Eddy, Sharma, Wallis, Kaunda, Weimer & Fandrych, Totemeyer, Sabela, Liviga, Maipose and Makumbe, all cited from Reddy (1999). Reddy (1996) and Nsibambi (1998) also provide an in-depth investigation of African experiences and explore the constraints African leaders had to face in finding solutions for consolidating and sustaining the democracies won after receiving independence.

to basic services. According to Mawhood (cited in Reddy 1999: 16) most individuals and governments favour the concept of decentralisation because it implies unblocking the inert central bureaucracy, giving direct access for the people to the government and for the government to the people. This is an important point of departure in understanding functional responsibilities within the context of decentralised local government.

There is broad consensus, in views expressed by many authors, that there is a correlation between the concepts of democratisation and decentralisation. This correlation is important in an attempt to illustrate the understanding of sustainable development and its complex structural and historical origins. Mawhood further outlines motivations for why the two concepts should be applied together as a way of unblocking what he calls "inert central bureaucracy, curing management constipation and giving more direct access to government by the people". Democratic decentralisation has become a common feature in the wave of democratic governance, especially in the 1990s. Experience elsewhere shows that democratically-elected governments embrace democratic decentralisation as an attempt to bring about local management of resources by the people. It is also a quest to promote sustainable service delivery and also to instil values of participatory democracy.

However, Burki *et al* (1999: 24) raise the concern that while transferring responsibility can be welcomed as a progressive step towards building sustainable livelihood and building the quality of democratic government, the overall management weakness of local government remains a cause for concern. The administrative and management capacity of any local authority will determine whether or not decentralisation is feasible. The political dimension of sustainable development relies on the strength of the administrative, technical and overall management expertise of local government. Hence it is clear that sustainable development comes with a heavy price tag. That is, without effective institutions of governance which advocate decentralisation, democracy, human rights issues and availability of skilled human resources, prospects for sustainable development become minimal.

6.2.3   Fiscal dimension

In South Africa, the relationship between central government and local government in terms of fiscal decentralisation (that is, budget allocations and devolution of decision-making powers) is regulated by the Division of Revenue Act No 1 of 2001 (South Africa 2001a). The point is not whether or not central government wants to decentralise, but whether local

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government has the sound technical ability to spend funds in the most cost-effective and sustainable manner. The current reality shows that in most cases, technically and organisationally, the majority of municipalities are not ready to assume this function, which follows the same path as the political dimension and functional responsibility in that it promotes the decentralisation of fiscal responsibilities to local government. As argued in this chapter, it is noted that decentralisation measures do demonstrate the potential to lead to more efficient use of resources and facilities at local government level. However, given the risk of loss of economies of scale, duplication and overlap, greater efficiency need not necessarily accompany decentralisation (Klugman 1994: 2). This implies that, in general, central governments are reluctant to decentralise because of a fear of failure of systems at local government level.

The fiscal dimension is characterised by fiscal efficiency and fiscal equity. This dimension is built on the premises of efficiency, allocation of resources, utilisation of local resources and technology prioritisation. Allocative efficiency is deemed an important aspect because it can contribute towards equitable distribution of resources. In South Africa, municipalities benefit from a number of grants from the central and provincial level. These grants[106] are used for infrastructure development and training. Experience elsewhere (Indonesia, Malaysia and Thailand) shows that this form of dependence on central transfers has weakened local government (Klugman 1994: 11). However, credit-worthy municipalities (especially urban metros) do borrow funds for capital expenditure and therefore carry a certain degree of financial autonomy and independence from central government. It still has to be seen how the new demarcation process in South Africa, of combining poor and rich municipalities, is going to function with regard to the financial viability of local governments.

The challenge for attaining fiscal efficiency is to ensure proper auditing systems, impact assessment, expenditure monitoring and the determination of cost-effectiveness.

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[106] These include the Equitable Share Grant, local government transition grant, municipal systems, improvement grant, local government support grant, Consolidated Municipal Infrastructure Programme and the Local Economic Development grant.

Administrative competence is therefore a prerequisite. The current reality shows that one third of municipalities in South Africa face serious financial difficulties and that on average, the debt collecting period is 199 days as opposed to the norm, which is 45 days. It is probably correct to assume that only a few municipalities in South Africa have reached this level of allocative efficiency.

As a result of the above situation, institutional, technical and project viability have become priority areas for the South African government. Project viability measures commenced during 1995 with the objective of monitoring the short-term liquidity of municipalities, including payment levels and credit control. However, in 1997 the Minister of Constitutional Development promulgated regulations concerning fiscal reporting by municipalities (South Africa 1998d: 1). This study points out that the redistributional value of decentralisation is determined by the capacity of local governments to develop, implement and measure the impact of their development programmes. In South Africa, municipalities are at different stages of capacity development, ranging from the weakest to the strongest. In most cases, the strongest are the metropolitan municipalities, those which were used to sustain social and economic development during the apartheid years. The weakest are those which predominantly served former homelands or bantustans. Problems associated with the weakest include lack of income earning opportunities, billing and cost recovery systems, financial management systems, procurement systems and credit rating systems.

Financial sustainability is a key performance indicator for every municipality in South Africa. The period between June 1997 to June 1998 saw a collective debt[107] increase amongst municipalities, rising from R7 billion to R9,3 billion (South Africa 1998d: 3). This rise could be attributed to two key factors. First, lack of proper administrative and management systems, also linked to overall lack of financial capacity. Second, lack of expertise and generally poor management. However, another reason could be the existing

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[107] This is a combination of service charges and actual monies owed to debtors.

poor culture of payment for services by consumers, which requires municipalities to work harder in implementing their cost recovery and credit control policies. Financing of services from internal and external sources, including budgeted income, grants and subsidies, is only sufficient to cover the costs of:

(a)   the initial capital expenditure required for the service

(b)   operating, and

(c)   maintaining, repairing and replacing the physical assets used in the provision of the service.

Various options for financing of services exist. These options include the development of standards for financial management and accounting, matching grants for revenues collected, matching grants with loans, community contributions, provision of incentives and other measures deemed appropriate. In a competitive environment, municipalities are required to compete for resources by demonstrating how they envisage leveraging existing capital grants with their own revenues. This can more easily prevent over and under-spending patterns and make municipalities more efficient and competitive.

Currently, central and local government spending is geared towards poverty alleviation. Local government programmes in particular are being designed to yield outcomes such as an improved quality of life. These programmes are designed around the presidential Integrated Sustainable Rural Development Programme[108], which is motivated by the fact that sustainable development cannot be achieved unless poverty[109] is alleviated. That is, poverty alleviation is a prerequisite for sustainable development (Duncan cited in Van Wyk 2000: 2). Other experiences in poverty-related studies often cite lack of income and high rate of unemployment as precipitating factors. Generally, there are internationally recognised

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[108] The South African President has declared 12 rural districts nodal or poverty-stricken areas.

[109] Poverty is measured in both relative and absolute terms. Absolute poverty is generally taken to mean a condition characterised by severe deprivation of essential needs such as health services, safe drinking water and sanitation, etc (Commission on Sustainable Development 1995: 3). It is reported that around 1,3 billion people – nearly a quarter of the world population – live in absolute poverty (Short 1997: 3). Since the factors which cause poverty are complex, the discussion will only focus on a few critical ones.

benchmarks to measure inadequate and low endowment of assets such as the physical and human aspects, which are often poverty-related (World Bank 1996: 1, Budlender 1999: 197-219). Furthermore, there is evidence to suggest that in South Africa, the legacy of apartheid is a major cause of poverty and that poverty stands in the way of sustainable development (Carter & May 1999: 1).

6.2.4   Electoral dimension

Indications are that South Africa's new democratic electoral system is working well. This is evident from the previous three elections (1994, 1999 and 2000), which have been declared fair and just. An effective electoral system promotes widespread participation and as such can promote a culture of participation. However, in the South African context, politically motivated participation does not necessarily imply good participation in civil society. Because of the political situation in South Africa in the 1980s and 1990s, civil society participation through the Mass Democratic Movement, used to be more popular. The situation has changed because the focus is now on delivery of services or the so-called election promises. More government effort is visible in promoting or re-generating the culture of public participation in civil society, with particular emphasis on the sustainability of public services.

Clearly, the electoral dimension serves the short-term goal of elections. The main challenge is the post-election phase in which government's ability to fulfil its election promises is tested. The argument is that government requires the participation of the electorate in addressing services delivery problems in the most effective, efficient and sustainable manner. The public needs to make choices about development goals. In any democratic system, it is the people who collectively use decentralised government systems as opportunities to address their own local livelihoods. It can be argued that for the electoral system to yield value and for decentralisation to enhance good governance, public participation is a pre-requisite (Tukahebwa cited in Nsibambi 1998: 26). Institutionalising such participation is even better because it could enhance the chances for policy dialogue and informed decision making processes. Furthermore, Atkinson & Reitzes (1998: 129-130) also see civil society as a vehicle appropriate for public participation, an attempt to guard against the abuse of power by the state, as happened during the apartheid past.

In the South African local government context, civil society participation is conceived within an institutional and structural framework. Public participation is legislated as community participation[110]. Legislation strongly emphasises that each municipality should:

> develop a culture of municipal governance that complements formal representative government with a system of participatory governance and must for this purpose:

> (a) encourage and create conditions for the local community to participate in the affairs of the municipality

> (b) contribute to building the capacity of the local community in order to enable it to participate in the affairs of the municipality

> (c) encourage councillors and staff to foster community participation.

> Members of the community have the right (South Africa 2000a):

> (a) through mechanisms and in accordance with processes and procedures provided for in terms of the Municipal Systems Act of 2000 or other applicable legislation, to

> (b) contribute to the decision making processes of the municipality.

Ward committees[111] are expected to play an effective facilitative role in this regard. The main objective of these structures is to promote participatory democracy in local government. Ward committees should ideally play an important role in municipal participatory planning processes[112]. As a systematic process, collective planning at municipal level could bring about co-ordination of activities and a continual identification of other potential problems, potential limitations, demands, analysis of alternatives and ongoing monitoring and evaluation.

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[110] Section 16 (1) (a) & (b) of the Municipal Systems Act of 2000 (No 32 p.30).

[111] These committees are established through Section 72 (1) & (3) of the Municipal Structures Act of 1998 (No 117 p.52).

[112] To be more specific, this refers to participation in the drafting of Water Services Development Plans and also the Integrated Development Plans.

Through the participation of ward committees in the municipal participatory planning processes, members of civil society could gain more access to their municipalities and thereby contribute towards effective governance. Depending on the level of effort and commitment, ward committees can contribute towards:

(a) effective participation, for better checks and balances on the management of local municipalities

(b) better management and accountability, to create opportunities for sustainable development of the local municipalities

(c) better planning and management, which could result in information sharing and a greater chance for permanent feedback between the state and civil society;

as a result, this could enhance the

(a) consolidation of democracy and governance at local level

(b) creation of greater efficiency, equity and sustainability within local municipalities and more possibilities for social investments.

The discussion thus far has indicated that modes of participation depend on the institutional arrangements. As noted from chapter four, South Africa's "own affairs" or separate development strategy gave autonomy to Black Local Authorities, but central government, however, still maintained control over the choice of mayors and policies for implementing social services. Black Local Authorities were accorded modes of participation and opportunities to govern, yet the existing institutional arrangements then were controlled elsewhere. While it can be argued that South Africa's new electoral dimension sets the scene for democratic governance through public participation, it is important to recognise that there are competing political interests and power structures which can affect the quality and the outcome of such participation.

6.2.5 Political dimension

South Africa's constitution guarantees certain imperatives such as access to free basic services. Constitutional rights are enshrined as an attempt to bring about a better quality of life. A decentralised political system in South Africa shows a great deal of political

commitment towards reshaping previously skewed patterns of governance. As mentioned by the United Nations Development Programme (1998: 12):

> considerable political will is needed to undertake major institutional reforms since this involves challenging vested interests with power bases derived from present arrangements.

The situation in South Africa shows the strong convergence of a political will and constitutional rights. However, there is also a clearer realisation that neither constitutional rights nor qualitative results are automatic. They both require practical implementation. They are both process-oriented and demand conscious effort to educate and raise awareness. That is, if the constitution is not enforced, either through individual or institutional means, ordinary people may not be aware of their constitutional rights regarding access to basic services. Likewise, if people are simply supplied with basic services, they may not see the urgency of being responsible for paying for those services or sustaining them over time.

Development planning for basic services is an important aspect of the political dimension. The political system of governance in South Africa recognises participatory democracy through the implementation of Integrated Development Plans. Since South Africa has long operated along spatial lines of governance which emphasise territorial separations, the Integrated Development Plans provide every municipality with the opportunity to align its municipal plans, taking into account various processes, needs and priorities. The challenge is for municipalities to adjust structurally and be able to respond positively and decisively to the post-apartheid problems. This would require governance systems such as proper administration.

Many government critics identify gaps in the political and policy systems. Some of these criticisms stem from rigid policies adopted by democratic governments. Often, rigid policies become government rhetoric. This is tantamount to government feeling threatened by constructive criticism. With regard to South Africa, the often slow service delivery which has occurred since the 1994 elections is attributed to the fact that development content and phraseology are embedded in many strategic policy documents which are difficult to operationalise. Often, slow pace of delivery makes politicians to become defensive when criticised. Like the electoral dimension, the political dimension is therefore caught up in what critics in South Africa would attribute to rigid policies which are not grounded from

available best practices. However, it must also be understood that policy implementation is an incremental process which cannot be achieved merely in the short term. Development is process-oriented and it is also dynamic. It cannot simply be attained through clear-cut means. Rather, in order to be realised, it requires a complex fusion of goods, services, information, symbol and meanings.

It is also important to know that South Africa's political system mirrors its governance system. That is, many policies and much legislation passed by parliament are a reflection of the political will and the systems of governance which the African National Congress, as the political party, would like to see implemented. The only challenge though is that governance is not only a political system but it can also become administrative and social.

Political governance involves a decision process towards policy formulation and setting of priorities as political imperatives. Administrative governance is a bureaucratic system of policy implementation and accountability. Social governance involves the creation of a vibrant, democratic civil society, through participatory means.

A combination of the above variables of governance shown above can arguably lead to good governance[113]. The latter has been on the agenda of most African countries and has also been one of the major development dimensions since the 1980s. From a political point of view, democratic governance is what governments do to satisfy their electorates. From a sustainable development point of view, it raises the possibility of governments being administratively effective and efficient. However, democratic governance does not imply good governance. The latter goes a long way in terms of government being accountable, not only to its political constituency, but also to the entire nation. Good governance is both a means and a desirable end in itself. On the one hand, it is a means to address critical issues such as poverty and unemployment. On the other hand, it is an end or value in itself because

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[113] The following concepts are used by Nsibambi (1998: 5) as definitions and benchmarks for good governance: accountability, transparency, efficiency, equity, human development, protection of basic human rights and political stability.

it represents the exercise of democratic rights and citizens' empowerment in the public realm (UNDP 1997: 68).

As a political system, democratic governance is an important foundation for public participation. Without it, chances for the successful implementation of participatory sustainable development are minimal. In terms of the above dimensions and the previous discussion, there is a close link between democratic governance and decentralisation. As mentioned by the UNDP (1997: 68):

> Decentralisation and democratisation are the key to good governance. Together they call for a new relationship between local and national government, as well as with civil society.

As South Africa embarks on processes of decentralisation and democratisation in order to become part of the competitive global politics and economy, new adaptive and creative policies, institutions and strategies are needed to keep abreast of and manage these changes (Heymans cited in Van Vuuren *et al* 1991: 259). As stated by Mbeki (1999a: 3):

> There is a renewed interest in local government sweeping across the continent. This is informed by a common recognition that the system of local democracy enriches the overall project of national liberation and democratisation, and that decentralisation of government power to the appropriate local level actually strengthens government through rendering it effective.

The renewed interest mentioned above is often informed by various factors which are either political, social or economic and this explains why most of the so-called democratic states embark on reform and governance processes. A reform process is fundamentally a capacity building process entailing the mobilisation of resources and competencies to solve local problems (Garrity & Picard 1996: 64). Latin American and African countries, for example, have different but complementary reform experiences such as decentralisation of responsibilities to local government. Reform processes are in line with the global trends in re-organising the state towards a more inclusive governance. As mentioned by Minogue *et al* (1997: summary) there has been a wave of public sector reforms in the developing and developed countries for the last thirty years. Notwithstanding the fact that some of these reforms have been labelled successful and others not, there is a growing concern across the

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globe that governments should improve the way they have operated in the past, to become efficient and accountable.

This discussion points out that through the exercise of a reform process, the political dimension has the potential to bring about good prospects for sustainable development. This is despite the fact that often reforms are influenced by political power relations which are inherent in most spheres of national government. As argued by Abubaker (1989: 66):

> The access to economic assets and political power poses a threat to entrenched local interests, both governmental and non-governmental. It requires great courage to sacrifice on the part of both the government and local elite to accede to sharing power, assets and the benefits of economic growth with the rural poor. And in fact this is the most difficult and delicate problem of rural development once a clear definition of rural development has been developed.

As argued by Deng (1998: 145-147), it is only when African governments have addressed the issues of broad based political reforms, together with a consensual democratic political system and an adequate institutional and human resources capacity, that we can talk about prospects for sustainable development in Africa and elsewhere. A combination of different factors and processes will therefore dictate whether or not any government in Africa is ready to embark on any realistic sustainable development implementation strategies. International trends and best practices show a number of important methods to consider when designing measures for reforms and better governance. Some of the methods discussed by Graham (1995: 10) are:

(a) decentralised government (from hierarchy to participation):
     government bureaucracy is often a stumbling block and decentralised functions cater more for participation

(b) results-orientated government (funding outcomes not inputs):
     governments, the world over, tend to focus on how much they spend on programmes, rather than on the products or impact of those programmes

(c) community-owned government (empowering rather than servicing):

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the most negative side-effect of continued service provision is that it creates dependency.

What has emerged as a common thread in the discussion about decentralisation and democratisation is the underlying capacity of the institution(s)[114] to undertake reforms processes. Sustainable development, through reforms, hinges a lot on the capacity of institutions to carry out their strategic goals and objectives. These goals and objectives are deeply imbedded within values of local government such as liberty, community participation, social responsiveness and equity. As argued by Cameron, Lungu, Schwella and Craythorne in Van Vuuren (1993: 15-49), democratic institutions must reflect a high degree of democratic accountability and good governance, and the latter must further demonstrate a pragmatic approach and set of attitudes rather than ideological rigidity. What this implies is that democratic practices need to be legitimised, managed and become institutionalised. In this way there will be good prospects for consolidating or sustaining democratic governance, which as a result, could bring about sustainable development.

However, it is also important to note that democratic government does not automatically bring about democratic governance and democratic accountability. Rather, governance and accountability are a set of actions which evolve through a lengthy process of maturity and should therefore be earned, not through a ballot box, but by satisfying the aspirations of those who are governed (i.e. civil society) through various service delivery mechanisms.

The issue facing democratically elected governments today is therefore *not* about whether or not they are legitimate, but whether they can perform and live up to meeting the development challenges they are faced with. It is about the endurance, leadership and the expertise they bring with them to govern. This is the challenge in creating sustainable institutions for sustainable governance (Cloete 1999: 9-15).

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[114] Brinkerhoff (1992: 369) defines institutions as (1) systems that function in relationship to their environments; (2) organised and managed entities whose organisational structures and procedures must match the tasks, products, people, resources and contexts they deal with.

Cloete also argues that good governance denotes efficiency, effectiveness and the overall improvement of service delivery. It falls short of rhetoric and has the potential to create good citizenship[115].

Often, transitional democratic political institutions and systems encounter difficulties[116] in the maintaining of the governance values mentioned above; however, this is a normal process of adjustment to a new order. What is becoming clearer is that democratisation should not be perceived as an end in itself, but as a means towards achieving good governance, sustainable governance, democratic accountability, sustainable governance institutions and ultimately, sustainable development. It should also be acknowledged that there are no simple, straightforward solutions. As argued by Welsh (cited in Van Vuuren 1993: 9), in deeply divided societies, democracy has never been easy to attain, let alone sustain. South Africa is no exception.

South Africa's democratic local government is backed by concrete measures for sustained growth and development and this can be deduced from the current constitution and legislation which emphasises the importance of devolving or decentralising certain responsibilities to local government level. However, in order to ensure effective decentralisation and strengthen water services authorities (in this case), there is a need for government to examine and adopt appropriate policies and legal frameworks, to review and revise appropriate legislation to increase local autonomy, but most importantly, to develop an institutional capacity building support strategy. The constitution alone cannot guarantee success. It has to be supported by concrete actions at local level. Legislation is there to offer a broader framework which outlines the roles and responsibilities, powers and functions of stakeholders.

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[115] Good citizenship is an indication that people are well informed about development issues, participate in decision making processes and know their rights.

[116] Asmeron, Hoppe & Jain (1992: 1-15) discuss other difficulties pertaining to bureaucracy and resistance to change. This is probably a civil service problem prevalent in most countries which have undergone a change in government.

In the South African situation, local government transition has meant that poor communities could begin to have access to basic services such as water supply and sanitation. The local government context in South Africa is now such that there will emerge a new developmental system of governance within rural and peri-urban areas, where these systems never existed under apartheid. This also implies that the national government and the public will now find sustainable ways of meeting the basic social, economic and material needs of people and of improving the quality of their lives (South Africa 1998a: 17). The new South African local government system is thus a symbol of a political will to transform racialised forms of governance towards a more humane system, which recognises the developmental needs of all South Africans.

6.3   THE NEW LOCAL GOVERNMENT LEGISLATIVE AND POLICY FRAMEWORK

There is no doubt that transition towards a new democracy has brought about hope for many South Africans. However, the irony is that democracy neither brings about equal opportunities nor poverty alleviation. The existing constitutional, legislative and policy imperatives only serve to create an enabling environment for equal opportunities and poverty alleviation. It is the responsibility of all the peoples of South Africa to make this happen. Furthermore, democratic local governments can only bring about prospects for sustainable development. Nothing more, nothing less. It is their participatory, creative spirits and innovative capacities which people and organisations at local government will have to employ collectively to bring about the betterment of the quality of lives.

The new local government system in South Africa faces various developmental challenges. As an institution of government, local government is mentioned here as one of the critical components for sustainable development because this is where development policies and programmes are conceived, funded, implemented and managed (Brown 1998: 50). According to the Local Government White Paper (South Africa 1998a), developmental local government entails maximising social development and economic growth, integrating and

consolidating planning and service delivery, empowering communities and redistributing resources. Sustainability of developments at local government level raises practical questions about the capacity of such governments to perform governance functions[117]. The fundamental governance challenge is to promote the right to basic human rights, and came at a time when South Africa was going through deep racial inequalities. Such a challenge has prompted the South African government to formulate a whole new set of policies underpinning the normative and value changes that went with the democratic transition which came into effect in 1994 (Public service report 1999/2000: 36).

According to Reddy (1999: 9) the necessity of good local government has been advocated throughout the democratic world in programmes aimed at achieving stable government. This has also been evident from different trends and patterns seen within transitional democracies, especially within Third World countries, which have experimented with decentralised forms of government. These countries include Nigeria, Botswana, Ghana, Tanzania and Zimbabwe (Reddy 1999, Mawhood 1983 and Alexander *et al* 1993). Nations world-wide have also come to terms with a need to implement development measures, whether politically motivated or otherwise, in order to sustain territorial claims which have undoubtedly been the key force behind nation building (Jerve & Crook 1991: 1).

From the discussion so far, it should be clear that there are prospects for sustainable development; however, there are conditions attached to these prospects. In the case of South Africa, the shift away from the apartheid mode of governance and discriminatory racial practices of local government towards democratic governance, signals an important turning point. Municipalities, which represent important building blocks of local government, were established in order to undertake transformation of governance at local level. A municipality[118] is therefore defined as:

> An organ of state within the local sphere of government exercising legislative and executive authority within the area determined in terms of the Municipal Demarcation Act of 1998.

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[117] Developing and passing by-laws, tariffs, regulations, raising capital and procuring services.

[118] Municipal Systems Act of 2000 (No 32 p16).

There are three important structural distinctions between municipalities in South Africa. First, local municipalities, which are predominantly small towns and cities. Second, district municipalities, which are predominantly a combination of small towns, cities and largely dispersed rural areas and third, metropolitan municipalities, which consist mainly of large cities.

Each of these municipalities is autonomous and they have similar responsibilities which include, amongst other things, the executive authority to:

    i. develop and adopt policies, plans, strategies and programmes, including setting targets for delivery

    ii. monitor the impact and effectiveness of any services, policies[119], programmes or plans.

Municipalities are required by the Municipal Structures Amendment Act, 2000 to perform and ensure an acceptable and reasonable quality of life which, if not provided, would endanger public health or society or the environment (South Africa 2000b: 14). It is also important that such services are provided in an integrated and coherent manner, thereby ensuring that cost effectiveness and sustainability measures are given the necessary consideration. Legislation therefore provides various mechanisms, processes and procedures[120] which are necessary in executing the above functions. Each municipality is required to prepare an Integrated Development Plan[121] which must illustrate developmentally-oriented planning so as to ensure that it:

> strives to achieve the objects of local government set out in section 152 of the constitution.

Furthermore, the constitution emphasises that communities must be involved in the planning processes within their areas of jurisdiction. The framework for this process is outlined in the

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[119] These policies are enforceable through regulations and by-laws, which municipalities are required to develop (See section 75 (1) & (2) of the Municipal Systems Act, 2000 (No 32).

[120] Section 17 (1) & (1) of the Municipal Systems Act of 2000 (No 32 p30-32).

[121] Section 23 (1) of the Municipal Systems Act of 2000 (No 32 p36-38).

Municipal Development Plan and lays the basis by applying core components[122] which ought to reflect:

> the municipal council's vision for the long term development of the municipality, with specific emphasis on the municipality's most critical development and internal transformation needs.

The vision for municipal services relies heavily on the councils' capacity to execute their powers and functions effectively. It is also important to note that, currently, division of powers and functions between district and local municipalities is a heavily contested political issue. However, the Municipal Structures Act clearly makes a distinction between authorisations of the powers and the functions of these municipalities. As noted from the Municipal Structures Act, the district municipalities have the following functions and powers[123]:

     i.   formulation of the Integrated Development Plans

     ii.   provision of potable water

     iii.   provision of electricity

     iv.   provision of sewage purification works and main sewage disposal.

6.3.1   Integrated Development Plan

The introduction of an Integrated Development Plan in South Africa is an attempt to streamline all development planning processes at municipal level. Legislation envisages that these processes should become participatory. The implementation of a plan which arises out of a broad consultative process requires each municipality to develop a performance management system[124]. The Integrated Development Plan is therefore a planning mechanism which allows municipalities to identify and align any development initiatives in the municipality, including infrastructure, physical, social, economic, environmental, financial

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[122] Section 26 (a) & 27 (1) of the Municipal Systems Act of 2000 (No 32).

[123] Section 84 (1) of the Municipal Structures Act of 1998 (No 117 p. 58) and Section 84 (b) of the Municipal Structures Amendment Act of 2000 (No 33 p. 6).

[124] Local government. Municipal planning and performance management regulations (DPLG 2001).

and institutional development (DPLG 2001: 2). An integrated participatory planning approach seeks to provide municipalities with maximum effectiveness to alleviate poverty at community level. High level public participation also enhances the chances for sustainable development.

Integrated Development Planning[125] is therefore a mechanism to ensure that municipal planning is developmentally oriented by striving for the achievement of the objects of the constitution as set out in sections 152 and 153. However, municipalities face the daunting task of meeting basic needs and improving the quality of lives at the local level. In order to succeed, municipalities will require a strategic framework and tools to operationalise this framework. In this case, the government has introduced the Integrated Development Plan also as a planning tool, which will assist municipalities to confront the challenges they face. The implication is that every planning process undertaken by municipalities must be aligned with other development strategies, plans and programmes so as to ensure co-operative governance. According to section 25 (1) of the Municipal Systems Act, 2000:

> Each municipality must within a prescribed period after the start of its elected term, adopt a single, inclusive and strategic plan for the development of the municipality which amongst other things;
>
> links, integrates and co-ordinates plans and takes into account proposals for the development of the municipality;
>
> aligns the resources and capacity of the municipality with the implementation of the plan.

Legislation is quite firm on the development of an Integrated Development Plan. The word "must" is used frequently to emphasise government's commitment towards addressing the short, medium and longer-term developmental problems. A developmentally-oriented local government will not come about through publication of more legislation and policy documents, it will only materialise when municipalities themselves take development planning seriously.

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[125] Chapter 5 part 1: General of the Municipal Systems Act of 2000 (No 32 p.36).

What emerges from the above discussion is that planning for services is an important phase in which municipalities should engage because it has implications for how resources will ultimately be allocated and for what purposes.

As mentioned by Mufamadi (cited in IDP guidelines report 2000: foreword):

> The Integrated Development Plan is one of the key tools for local government to tackle its new development role. In contrast to the role planning has played in the past, integrated development planning is now seen as a function of municipal management, as part of an integrated system of planning and delivery.

The Integrated Development Plan thus forms an important policy framework and a general basis within which allocation of resources, especially budgets, should be based[126]. The components and processes of an Integrated Development Plan may be summarised into the following as follows:

(a)   a prior understanding of municipal competencies, functions, roles and responsibilities is critical. The initial strategic planning exercise will assist a municipality in developing a common understanding amongst stakeholders regarding the business of a municipality, and in identifying key priority areas, based on its proposed vision and mission

(b)   the municipality must go further and demonstrate its reason for existence. This is important in the light that a clear distinction should be drawn between the political imperatives of government and the social delivery priorities of those who put the government into power, the consumers. A municipality's plan should therefore contain information on its intended strategic goals and objectives, targets, deliverables, resources, indicators/measures of success and proposed time-frames. The outcome of this process should yield an implementation programme/plan, which outlines an alignment of/with sectoral strategies of other national departments.

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[126] Section 25 (1) (c) of the Municipal Systems Act, 2000 (No 32 of 2000).

In an environment as fluid as that in a transitional society like South Africa, meeting the requirements of integrated planning would first require clarity of the regulatory and institutional framework. The roles and responsibilities of different organs such as state, private sector and non-governmental organisations, is critical. The playing field should be levelled to ensure that organizations are protected less and that consumers or the public is free to participate and critisise, without feeling threatened. Key performance indicators and performance benchmarks should be developed so as to test the viability of participating institutions. This will also assist in assessing their capacity development needs and further strengthens their capacities as and when required.

For purposes of formulating the Integrated Development Plan, it is important to clarify municipality capacity development. As noted from South Africa (1998c: 14), according to the Municipal Structures Act, 1998 (No 117 of 1998) municipal capacity is an:

> administrative and financial management capacity and infrastructure, which enables a municipality to collect revenue and to govern on its own initiatives.

The Municipal Systems Act, 2000 (No 32 of 2000) also outlines key elements of capacity building initiatives at local level, which include the development of a municipality's human resources capacity, which in turn enable it to perform its functions and exercise its powers in an economical, effective and efficient and accountable way (South Africa 2000a: 66). It must comply with associated Acts such as the Skills Development Act (No 81 of 1998) and the Skills Development Levies Act (No 81 of 1999) and may also apply for funds to the Local Government and Water Sector Education and Training Authority (LGWSETA).

Training is obviously a mechanism which enhances prospects for sustainable development at local government level. As argued by Munslow and Fitzgerald in (Munslow *et al* 1997: 278):

> The central challenge is one of human resource capacity building and institutional strengthening for the management of sustainable development.

In order for central or provincial governments to be satisfied with the level of capacity at local level, municipalities are required to establish a performance management system[127] that is:

> in line with the priorities, objectives, indicators and targets contained in its Integrated Development Plan.

Effective service delivery will be provided by local governments that strategically address the needs of their citizens and have efficient administrative and financial systems, as well as access to resources in order to ensure quality, accessibility and sustainability. Minimal and lack of capacity at municipal level is emerging as one major threat of sustainable development across South Africa's local government system. Whereas in South Africa many capacity problems could be attributed to historical and political factors, weak institutional and general capacity management, this is a common phenomena in most developing countries. Capacity constraints experienced by these countries can be traced back from the colonial era which left many countries, at the time of independence, with insufficient institutional and human capacity to cope with the transition from colony to independent sovereign state (Lisk 1996: 1). It should therefore not come as a surprise when certain municipalities in South Africa struggle to formulate and successfully implement the Integrated Development Plans, as the situation of capacity will take time to normalise.

The discussion points out some of the key challenges municipalities in South Africa will experience in rolloing out their plans. Municipal capacity emerges as an overall driver towards achieving the goal of a developmentally oriented local government, hence sustainable development.

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[127] Section 38 of the Municipal Systems Act, 2000 (No 32 of 2000).

As corroborated by the definition noted from chapter 37 of Agenda 21:

> Capacity building encompasses the country's human, scientific, technological, organisational, institutional and resource capabilities. A fundamental goal of capacity building is to enhance the ability to evaluate and address the crucial questions related to policy choices and models of implementation among development options, based on an understanding of environment potential and limits and of needs perceived by the people of the country concerned.

Whereas it can argued that there is considerable government effort to provide technical assistance and guide municipalities in executing their constitutional mandate, the capacity to make informed policy choices and select models for implementation is not something that can be achieved in the short term. However, this should not in anyway dispell the idea that local government can bring prospects for sustainable development.

6.3.2   Local government and prospects for sustainable development

With the advent of globalisation and a wave of transformations across the globe, democratic local governance is becoming a significant global trend which cannot be ignored. The world over, democratic governments are striving to find sustainable means of addressing the developmental needs of their citizens. For South Africa to seek solutions for local government, a rigorous process of addressing the existing rigid settlement patterns which were created by the apartheid system of governance becomes critical. As noted from South Africa (1998a: 15-16) some of the key immediate challenges which must be resolved are the:

(a)   skewed settlement patterns, which are functionally inefficient and costly

(b)   creation of viable municipal institutions for dense rural settlements

(c)   entrenched modes of decision making, administration and delivery

(d)   substantial variations in levels of capacity

(e)   inability to leverage private sector funding and resources.

Furthermore, South Africa will have to address the racial disparities which were created as a result of the separate development policies of the past. Most of South Africa's poor live in abject conditions and do not have access to fresh, safe water, and about 21 million are

without hygienic sanitation. The rural population constitutes about 72% of South Africa's total population and the poverty rate for the rural areas as a whole is 71% (Asmal 1999: 3).

The extent of poverty and its consequences for human development raises major questions about the level of effort government should put into sustainable social development programmes. A number of research findings have been documented by government, non-governmental organisations and other researchers. The Poverty and Inequality Report estimates that almost 65% of all South Africans live below the poverty datum line (South Africa 2001: 2). The report also highlights the fact that the distribution of income between Whites and Blacks is very much skewed towards Whites. Furthermore, according to Statistics South Africa (2000: 25), there are three broad categories of poverty. First, provinces with less than 20% poverty include Gauteng (12%) and the Western Cape (12%). Second, provinces with poverty levels between 20%-40% are Mpumalanga (25%), KwaZulu Natal (26%), Northern Cape (35%), North West (37%), Northern Province (38%) (now called the Limpopo Province). Third, provinces with poverty levels greater than 40% are Free State (48%), Eastern Cape (48%). The following provinces; Eastern Cape, Free State, KwaZulu Natal and Limpopo Province, according to the above figures, are the poorest. As affirmed by Mandaza (cited from Public service report 1999/2000: 36), it will take time for the current government to rectify the centuries of colonial and racial domination which have had an influence on patterns of poverty in South Africa.

The table below further provides a breakdown of the extent of poverty per racial group in the counrty as a whole.

TABLE 6.1:   POVERTY CLASSIFICATION BY RACE

RACE	CLASSIFIED AS POOR
Africans	61%
Coloureds	38%
Indians	5%
Whites	1%

Source: Progress report (cited in South Africa 2001b: 2)

The above table confirms the seriousness of the poverty situation in South Africa. As argued in chapter four, the basis of this situation is very much political and historical. The two are related in that Blacks were excluded deliberately from the social programmes of the

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previous government. As a result of this systematic and systemic racial exclusion, their general well-being deteriorated (see chapter four). Notwithstanding this situation, since the new government came into power in 1994, efforts in the form of poverty relief have been put in place to address issues (Shepherd 1998: 92). This is a point of departure in understanding the magnitude of the challenges facing South Africa today.

It is important to note that since the 1994 general elections in South Africa the new government has spelt out its developmental vision. The new South Africa saw South Africa spending a significantly higher proportion of total expenditure on social services than other developing countries, including East Asia. According to the Poverty and Inequality Report (South Africa 1998e: 14), an analysis of the sectoral composition of expenditure indicates that since 1994 there has been a gradual increase in the share of total expenditure going to social services, from 43% in 1995 to 57% in 1995/6 and 60% in 1997/8. This shift towards social services is evidence of a poverty-sensitive budget, but it also signifies good prospects for sustainable development.

At the core of South Africa's national developmental vision is the explicit commitment of the government to provide basic services, especially to the poor (Moosa 1999: 4). This commitment was supplemented by an investment of billions of rands in the national infrastructure programme[128], called the Municipal Infrastructure Investment Framework. This programme/framework was aimed at the provision of internal bulk and connector infrastructure, in support of household infrastructure, to the most needy South Africans in ways that enhance the integration of previously divided areas (South Africa 1998e: 1). The CMIP[129] programme offers support for basic infrastructure/services such as water, sanitation, electricity and roads. Statistics affirm the success of several government programmes since

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[128] According to the Medium Term Expenditure Framework (MTEF) sectoral review (Department of Finance 1998), South Africa's infrastructure investment peaked in 1981 to become R70 billion in 1990 prices. Although this investment was greater in the private sector, the public sector social infrastructure investment has varied between R1 billion and R3 billion between 1960 and 1990. Between 1960 and 1997, the public sector in South Africa invested as much as 7.8% of Gross Domestic Product (GDP) on average in all infrastructure (Department of Finance 1998: 4).

[129] As a result of the Division of Revenue Act (No 1 of 2001), the CMIP and CWSS programmes will be integrated into a Municipal Infrastructure Grant (MIG).

1994/95 to 1997/98. During this period, about 1 045 projects were completed and these made a significant impact on the lives of ordinary people (Moosa 1999: 4).

TABLE 6.2:   QUANTITY OF INFRASTRUCTURE PER CAPITA BY COUNTRY INCOME
             CATEGORIES, 1990

SECTOR	LOW INCOME	MIDDLE INCOME	HIGH INCOME	SOUTH AFRICA
Electric power (mw/100 people)	7	35	216	74
Paved roads (m/100 people)	44	118	1032	143
Railways (m/100 people)	11	27	75	65
Telephones (lines/100 people)	0,6	6,7	45,71	8,94
Irrigation (ha/person)	0,033	0,033	0,038	0,031
Sanitation (% households)	37	73	99	39
Water (% households)	56	72	100	59

Department of Finance (1998: 18)

Table 6.2 shows that local government in South Africa has major responsibilities in ensuring sustainable infrastructure in areas such as water and electricity. Most importantly, the table compares well with the average middle income countries as regards electricity, telephones and railways. Water related infrastructure (water-borne sewerage and sanitation) in South Africa is below the average levels of low-income economies. The table highlights a significant degree of infrastructure and continued emphasis on infrastructure development in South Africa. Furthermore, the province of Gauteng is currently conducting a feasibility study for a speed-train which will link two major cities in South Africa, Tshwane and Johannesburg. It is envisaged that this train would mitigate against traffic congestion, thereby minimise environmental problems such as pollution on the national road (N1).

TABLE 6.3:   PERFORMANCE INDICATORS FOR SOUTH AFRICAN INFRASTRUCTURE

SECTOR	PERFORMANCE INDICATORS	SOUTH AFRICA	BEST PRACTICE
Water	Unaccounted for water (as % of total)	> 30	15
Roads	Paved roads in less than good condition (%)	48	20
Rail	Diesel locomotives not available (as % diesel inventory)	12	10
Tele-coms	Faults per year per 1000 mainlines	80	20
Electricity	Technical and non-technical system (less % of net generation)	10-14	10

Department of Finance (1998: 19)

Table 6.3 compares the performance of the South African infrastructure with that of international best practice. Roads and tele-coms show very poor performance, as does water. Rail and electricity are close to the international best practice. The institutional capacity of these sectors demonstrates that due to increased efficiencies, services in future might become cheaper, and as parastatals, they will not rely on government subsidies any longer. For example Eskom, which is one of the largest providers of electricity in the world, is now gearing itself to supply and cover large parts of Africa in the next few years. The state is also considering the option of establishing regional providers of electricity (Regional Electricity Distribution System). These providers will have contractual relationships with municipalities. Overall, the above tables (6.2 and 6.3) demonstrate that infrastructure places South Africa in a favourable position and creates good propects for sustainable development. However, South Africa should also become cautious when undertaking infrastructural development projects.

6.3.3   The dangers of parochialism

The logic behind the application of tables 6.2 and 6.3 is to demonstrate that in general, South Africa has some characteristics of a developed country. These characteristics have an advantage and a disadvantage. On the one hand, well-developed infrastructure attracts investors and more infrastructure, therefore it is a key for service provision. On the other hand, infrastructure can create delusions of grandiose in that it distorts the complexity of problems a country has. Often, when considering how best to utilise investors in service delivery, contrasts in urban and rural infrastructure are underestimated. That is, by virtue of well-developed infrastructure and a potential for profit maximisation, investors are mainly interested in urban areas.

As mentioned by Shepherd (1998: 235):

> Rural local government faces enormous challenges in terms of proper infrastructure and lack of prospects for private capital investment.

A typical example is the rural water supply and sanitation infrastructure, which received little attention during the apartheid era. In general, rural areas do not have the same infrastructure as urban areas.

Also, because they often do not attract private capital investment, they seem to be the most neglected. As argued by Shepherd (1998: 235):

> Rural local government is set up as pale reflections of their urban counterparts. Fundamentally they are supposed to equalise rural-urban disparities in services and the provision of physical infrastructure, which they can rarely do, as they are not adequately researched.

The study points out that the existing situation in South Africa reflects the artificial barriers between rural and urban infrastructure. However, it is important to note that these barriers are also underpinned by gross disparities in terms of skills and expertise. Most rural areas, for example, lack technical and institutional capacity to plan, implement, manage and monitor expensive infrastructure development programmes, which poses a major challenge for sustainable development at local government level. Furthermore, most rural areas in South Africa are poverty-stricken. There is a high probability that the existing profound levels of poverty can put a strain on the infrastructure in terms of it being over-utilised or under-utilised. Rural areas therefore present enormous challenges to the local government's delivery programmes. Participatory planning is therefore critical in addressing issues of affordability and appropriate levels of supply.

Given the above discussion, it is appropriate to point out that the new South Africa shows characteristics of development similar to those of former communist countries, in that their transition from the old order towards the new order was undertaken through several initiatives such as those mentioned by Hague and Rose (1995: 143), that is:

(a)   moving away from one party rule towards a multi-party democracy

(b)   decentralisation of political power

(c)   economic liberalisation.

The above experiences of transitional democracies are also similar to those in Latin America. As pointed out in this study, governments in transition have a tendency to move towards common goals for a developmental approach such as (Hague & Rose cited in Jabes & Vintar 1995: 147):

(a)   transforming and redefining the new role of the public service

(b)   policy review and alignment processes

(c)   development of structures and processes to evaluate options and also to make strategic choices

(d)   the development of a regulatory framework and for monitoring, evaluating and assessing the impact of the delivery mechanisms.

The above goals indicate a desire by politicians to build a strong constituency confidence and also to ensure a political buy-in and legitimacy from the broad spectrum of civil society. South African is no exception. Since 1994, the new government has embarked on large infrastructure development programmes in sectors such as water. This was indicative of a democratically elected government seeking a political buy-in from its constituency. However, inherent in these actions are dangers of parochialism. That is, thinking locally and acting locally instead of thinking globally and acting locally.

As argued in chapter one (section 1.3.1) the general tendency of a government in transition is to embark on grand infrastructure projects, rightfully so, to address the backlogs created by unjust practices. This has been the situation in South Africa whereby since 1994, the national government invested billions of rands in infrastructure development projects. However, the shortcoming of such projects is that their success is measured mainly in quantitative terms. The gap associated with such measures is that quantitative results do not demonstrate any spin-offs for sustainable development.

First, despite the fact that there are well documented case studies of best practices in most developing countries, since 1994, the water services sector did not have a model for sustainable development (see chapter one section 1.3.1.1). Second, despite the fact that there are best practice experiences for a demand-driven approach, the water services sector emphasised supply-driven approaches and this did not augur well for sustaining water services schemes (see chapter one section 1.3.1.2, 1.4.2 and chapter five section 5.3.2).

The above discussion shows that as a democratic government since 1994, South Africa embarked on water infrastructure development in order to build a strong constituency confidence. What has been lacking was the sustainability of infrastructure and service delivery. The focus is now on local government to put the water services sector on the

sustainability path. This study argues that in general, local government is not ready to govern and to manage service delivery.

6.3.4   Readiness of local government

Judging beforehand whether or not an institution is ready to execute certain responsibilities or functions is controversial. However, making assumptions can assist in drawing conclusions regarding the state of its readiness or preparedness. It is a known fact that when the democratic government came into power in 1994, some of its governance and management actions were erratic. This could partly be attributed to lack of experience and also the complex problems South Africa faced then. What is particularly evident throughout the democratic transition is the fact that a prudent legislative and policy framework was formulated. The previous discussion indicates that since 1994, the South African government has introduced a number of key policies in the water services sector to counteract unjust practices of the past in service delivery.

However, as noted earlier, there are indications that there exists a gap between the well-articulated and highly regarded policies of government and their execution (Abrams *et al* 1998: 8). Now that there is a new legislative arrangement which requires local government to provide water services, there are concerns that the transfer of such a responsibility to local government may in fact be a repeat of what happened in 1994. Unless certain precautions are taken to avoid dangers of parochialism previously experienced in the water services sector, there is a high probability that in general, local government may experience difficulties in sustaining water services provision. Experience has shown that impressive policy and legislation alone is not sufficient to create effective participatory actions for sustainable development.

Recently, in 2000, a legislative framework focusing on Integrated Development Plans was introduced (see section 6.3.2) to address, amongst other things, issues of public participation in service delivery. This is an important milestone for sustainable development at local government level. However, there are key challenges facing local government in general. First, minimal, or no institutional, technical and management capacity to deliver services. As argued in the previous discussion, capacity constraints place a burden on efficient management of water supply and sanitation systems. Second, due to absence of the above expertise, experience shows that as the service level drops due to a lack of operation and

maintenance, the users withhold payment in particular (WHO & UNDP 2000: 1). Third, rural based municipalities still reflect gross inefficiencies resulting from the former homelands and discrepancies with regards to service delivery. Despite the fact that the Department of Water Affairs and Forestry has reduced the backlog by 7 million in 2001 (see chapter five table 5.2), issues of a backlog are still evident in most parts of the country. Local government is therefore faced with a daunting task, first, to address the backlog and second, to take the water services sector into a sustaining phase (see table 6.4). The author compiled the table below to show two phases of transition within the water services sector.

TABLE 6.4:   BETWEEN TWO PHASES OF TRANSITION

WATER SERVICES SECTOR	LOCAL GOVERNMENT SECTOR
EXPERIMENTING PHASE (1994 – 2003)	**SUSTAINING PHASE (2003 – 2010)**
- Developing an enabling legislative, institutional and policy framework	- Developing an enabling policy, regulatory and legislative framework
- Accelerating delivery of basic water supply and sanitation	- Rationalising and transforming local government structures
- Supporting local government and intervening when necessary	- Setting up management, administrative, performance and financial systems and procedures
- Setting up planning, management administrative and financial systems and procedures	- Territorial alignment
	- Clarifying roles and responsibilities, powers and functions
- Developing guidelines and tools	- Developing planning systems, methodologies and applications
- Refurbishing, operating and maintaining the former homeland infrastructure	
	- Accepting water services delivery responsibilities
- Transferring water services delivery responsibilities to local government	

The period between 1994 – 2001 was arguably the experimental phase in that some drastic action had to be taken by government to address past backlogs. This was the first time in South Africa that the Department of Water Affairs and Forestry had ever embarked on a major programme for providing domestic water supplies and sanitation. It was expected that government would accelerate delivery and minimise potential loss of lives through disease and poor health, as is still the case. Since the responsibility of water services lies at local government level, it can be argued this is the appropriate level for the sustaining phase. The Division of Revenue Bill, 2002 allows a grace period for the Department of Water Affairs and Forestry to transfer its current water services responsibilities in terms of capital grants, personnel and infrastructure, by 2003/4 (South Africa 2002).

The foundation for the sustaining phase was arguably brought about by the experimenting phase. The author compiled the table below to show how the water and local government sectors have forged synergies in order to create an enabling environment for sustainable development.

TABLE 6.5:   CREATING AN INTER-SECTORAL APPROACH

SECTOR	WATER	LOCAL GOVERNMENT
LEGISLATIVE FRAMEWORK	Water Services Act, 1997 (No 108 of 1997), National Water Act, 1998 (No 112 of 1998) and other pieces of legislation governing forests	Municipal Structures Act, 1998 (No 117 of 1998), Municipal Structures Amendment Act, 2000 (No 33 of 2000), Municipal Systems Act, 2000 (No 32 of 2000)
INSTITUTIONAL FRAMEWORK	Water boards, water committees, private and public providers, implementing agents, Catchment Management Agencies, water user associations, irrigation boards, proposed water utilities	Category A municipalities, Category B municipalities, metropolitan areas, traditional leadership and a number of committees such as ward, mayoral, executive committees
PLANNING FRAMEWORK	Water Services Development Plans (WSDP), Project Planning, water resources planning, forestry planning, water quality planning, area and provincial planning	Integrated Development Plan (IDP), Urban Renewal Strategies, Integrated Sustainable Rural Development Programme, Planning and Information Management Support System (PIMSS), Performance Management System
POLICY FRAMEWORK	White Paper on Water Supply and Sanitation and others	White Paper on Local Government and others

Table 6.5 shows that both the water and local government sectors are closely related. To a large extent, since 1994 the Department of Water Affairs and Forestry and the Department of Provincial and Local Government have collaborated on a number of strategic issues of institutional, regulations and policy development. Since then, the water services sector in particular has played an important role in water infrastructure development and provision. At that stage, local government structures were non-existent. The water sector therefore provided leadership and strength in addressing the backlog.

So far the discussion has pointed out that local government has a constitutional mandate to create and sustain human, equitable and viable human settlements (Moosa cited in Atkinson & Reitzes 1998: preface). This mandate has far reaching implications in that the government has to transform the current status of service delivery in a co-operative and developmental manner. In a way, this is a bold step towards redefining old-style apartheid values and norms into an anti-racist and sustained development. South Africa's constitution, therefore, plays a critical role in laying the basis for sustained democratic governance on the one hand and on

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the other hand in ensuring appropriate structures which will promote such a developmental vision. Service delivery is thus a core for the envisaged developmental nature of local government (Pottie cited in Atkinson & Reitzes 1998: 83).

There is a also greater realisation that careful consideration should be given to the range of available options for service delivery, such as different blends of partnership like public-public and public-private partnerships. That is, different situations should dictate the differing nature and form of partnership arrangements because sustainability of service delivery depends not so much on what can be provided, but on the interests of consumers, and their satisfaction counts more. As indicated previously, this study argues that in terms of the delivery of basic water services, over the past seven years, the Department of Water Affairs and Forestry has built a considerable level of capacity (technical, financial, planning and institutional and management), both internally and externally (see chapter five section 5.3.1 and table 5.2). Despite dam-building being its core business, prior to the 1994 democratic elections, this department received accolades for outstanding engineering work (see chapter five section 5.2.1). These skills can still be utilised in order to optimise delivery of basic services at local government level. This is despite the transfer of water services responsibilities to local government. The study therefore suggests that both the Departments of Water Affairs and Forestry and of Provincial and Local Government need to build a strong partnership towards the provision of sustainable water services, whilst municipalities are gearing up their capacities for this challenge.

The gearing up concept may sound patronising to most municipalities (water services authorities) because constitutionally, water services is their competency. However, it needs to be recognised that a developmental local government is something new in South Africa. That is, development did not have a good image in apartheid South Africa because it conjured up pictures of failed projects in the bantustans (Turok 1999: 7). It is not in the best interest of the country as a whole to experience similar problems in the new dispensation. Surely, the management, administration and implementation of the new Municipal Infrastructure

Grant[130]would require extensive technical, financial and administrative capacities at local government level. In general, less than half of municipalities possess these skills. A joint implementation strategy would see the Department of Water Affairs and Forestry offering technical assistance, whilst performing their constitutional mandate of ensuring access to basic water services and creating effective water services institutions. Local government would possibly learn from the current experiences of water delivery in the water sector in general. As a result, the sustaining phase also provides opportunities for looking elsewhere for best practice experiences (see chapter seven section 7.3).

6.4   CONCLUSION

This chapter made an attempt to contextualise sustainable development within South Africa's local government system. It became clear that South Africa has a well-developed infrastructure which is skewed towards urban areas. Realigning historically fragmented local government boundaries poses a big challenge for the current system. However, South Africa has thus far developed impressive legislative and policy instruments to address structural problems of the past.

Furthermore, there are better prospects for sustainable water services because the supply of water services is now a competency of local government. It would appear that through the implementation of the integrated development plans, municipalities will adopt a programmatic approach, unlike the past approach which treated water provision on a project by project basis. The challenge remains in that there are still capacity constraints at local government level.

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[130] This is a new blend of grants between the Community Water Supply and Sanitation Programme, currently being managed by the Department of Water Affairs and Forestry, and the consolidated Municipal Infrastructure Grant, currently being managed by the Department of Provincial and Local Government.

The author concludes that since 1994, the water services sector defaulted in that despite evidence of best practices in most developing countries, it continued to operate along supply-driven, large water infrastructure projects, without any sound basis for sustainable development. Local government is thus regarded as an appropriate institution to take the sector into a sustaining phase, however, in partnership with other role players such as the Department of Water Affairs and Forestry, the private sector and other organs of civil society.

CHAPTER 7

STRATEGIC CONSIDERATIONS FROM LATIN AMERICAN EXPERIENCES

7.1   INTRODUCTION

Chapter six outlined key development dimensions of local government in South Africa. It provided the context within which local government operates. The chapter also outlined South Africa's current local government system, water services transitional arrangements and prospects for sustainable development. Chapter seven explores various post-independence adjustment experiences of the three Latin American countries: Chile, Bolivia and Nicaragua. The chapter attempts to draw lessons from these Latin American countries and does not dwell on a comparative analysis with South Africa. Chapter seven also discusses patterns and trends of municipal development planning in the three Latin American countries, with particular reference to the Law of Public Participation in Bolivia.

7.2   POST-DEMOCRATISATION ADJUSTMENT EXPERIENCES

In the previous discussion, this study argued that most countries which had experienced democratic governance for the first time, seem to fall into the trap of reconstructing while applying grandiose, superfluous and unsustainable plans (or the so-called 'white elephants'). South Africa was noted as one of those countries, particularly with regards to the water services sector. The three Latin American countries under review: Chile, Nicaragua and Bolivia, have also been through a similar path of democratic governance after protracted political struggles. However, their post-democratisation experiences reflect progressive plans which demonstrate vision and vigour.

It is important to clarify the long descriptions in, and the rationale behind this chapter, in advance. This is particularly in relation to the value of the municipal development planning processes drawn from Bolivia and their appropriateness to South Africa. First, often, after achieving their independence or holding democratic elections, a number of developing countries embark on grand development programmes such as upgrading or implementing

new infrastructure. In situations like this, considerations for public participation are minimal because of pressure to deliver election promises. Second, the sustainability of infrastructure is compromised because the focus is more on the physical outputs and less on the outcomes. Unfortunately this factor also characterises South Africa's situation. In order to apply corrective measures, the chapter provides extensive coverage of planning processes, structures and methodologies for participatory development which, according to this study, are critical for sustainable development. This study warns that if South Africa does not incorporate best practice experiences in municipal development planning processes, it could lose opportunities for facilitating sustainable development.

In the 1980s, the majority of Latin American countries underwent a series of transitional political processes and some of them had to adjust structurally in order to meet the social and economic development challenges they faced. During this period, these countries developed constitutions which embrace a strong protection of human rights. This culminated in public participation becoming a vehicle through which government and civil society interacted in matters of policy development. However, there are also indications that development and environmental policies for sustainable development in Latin America and the Caribbean have long existed (Ocampo cited in Munasinghe *et al* 2001: 136).

The above experiences show that the general trend in sustainable development in Latin America has been the application of participatory planning methodologies within decentralisation processes. Decentralisation of responsibilities has emerged and been strengthened as various Latin American countries went seeking solutions to sustain fragile democracies. In most cases, these fragile democracies came about as a result of protracted political conflicts. Opposing groups had to learn to live together, adjusting their democracies so as to address critical issues of social development. The rise of democratic governance in Bolivia, Chile and Nicaragua in the 1990s is parallel with that of South Africa's first democratic government in 1994. This further confirms the rationale for drawing lessons from the Latin American experiences (DPLG 2000: 2). Table 7.1 below shows post-

democratisation adjustment experiences and the significant trends in the decentralisation of responsibilities in Latin America.

TABLE 7.1:   TRENDS OF DECENTRALISATION IN LATIN AMERICA

1st year of elections - By level of government[131]

COUNTRY	POPULATION (IN MILLIONS)	NATIONAL	PROVINCIAL	MUNICIPAL	DEV. FUNCTIONS	DEV. REVENUE
Brazil	164	1985	1982	1985	X	X
Mexico	95	1917	1917	1917	X	X
Colombia	38	1958	1992	1986	X	X
Argentina	36	1983	1983	1983	X	X
Peru	25	1980	-[133]	1981		
Venezuela	23	1961	1989	1989	X	X
Chile[132]	15	1990		1992	X	X
Ecuador	12	1978	1978	1978		
Guatemala	11	1985		1985		
Bolivia	8	1985		1987	X	X
Dominican Republic	8	1966	-	1966		
Honduras	6	1982	-	1982		
Nicaragua	5	1986-90	-	1990		
Paraguay	5	1991	1994	1991		

Willis *et al* (cited in Burki *et al* 1999: 2)

Table 7.1 shows that most Latin American countries have in fact embraced decentralisation processes many years ago. The most prominent feature of these processes is the initially military or undemocratic forms of governance and the shift towards civilian or democratic governance. This could be attributed, either to deepening democracy or political

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[131]Following military rule, where applicable.

[132]Although Chile, Nicaragua and Bolivia do not have elected governments at the regional level, these countries have assigned major planning and investment responsibilities to regional governments, according them significant revenues and expenditure autonomy.

[133]Indicates countries with no provincial level of government. Empty blocks show that there is no information available.

transformation, or to an unavoidable reversion from military to civilian rule. Chile in particular began the process only in 1990; however, it has made significant progress as compared to the other sample countries (Bolivia and Nicaragua). It is also evident that countries with larger populations (e.g. as federal states, Brazil and Mexico) were more likely to adopt decentralisation measures earlier than those with relatively smaller populations. This could be attributed to a strong need to give effect to the institutional changes essential for democratic local governance, which is essential for effective management of public services. Apart from the decentralisation of political power, there has been increasing levels or frequencies of decentralisation of functions and revenue to municipalities.

Furthermore, it is evident from the Latin American experiences that often decentralisation of responsibilities to local government level has occurred simulteneously with the introduction of the water sector regulatory regimes. These regimes saw the water sector being regulated through agencies which strive to level the playing field between the public and private sector (see section 7.4.4). Public participation was used as a vehicle which enabled consumers to monitor the quality of water supply and sanitation and consequently, consumer feedback motivated suppliers to provide high quality services and their input became critical for efficient and sustainable water services delivery (Yepes 1998: 11-12). Decentralisation of functions and revenue to municipalities are noted from table 7.2 which shows trends and patterns of the water sector in Latin America. As it appears, this situation is symptomatic of the overall quest to decentralise in order to ensure sustainability.

TABLE 7.2:   TRENDS AND PATTERNS IN THE WATER SECTOR

TREND	DESCRIPTION
(a) Decentralisation of water services provision, to the lowest government level	Localised management and participatory planning processes can bring about greater effectiveness, efficiency and sustainability of public services
(b) Water is an economic and social good and should be managed as such	Whilst there is recognition that water is both a commodity and a public service, there should be efforts to promote access and sustainable universal coverage
(c) Important reforms have taken place in the legal framework in many countries	New regulatory, policy and institutional frameworks are emerging world-wide in order to respond to the challenges and opportunities facing the water sector
(d) The concept of sustainability has gained more popularity	There is greater recognition that sustainable development is no longer merely an environmental issue, but embraces technical, social, economic and institutional issues as well
(e) The trend is to move away from a supply-driven approach towards a demand-driven approach	There is greater recognition that a supply-driven approach (top-down) does not stimulate consumer participation and ownership. As a result, this approach has the potential to hamper sustainable development

Source: Saade *et al* (2000: 3-5)

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The above trends demonstrate the importance of water as a public service in Latin America. The development of the idea or concept of water management in Latin America and the Caribbean has occurred within the context where the public sector monopolised water use, excluding the private sector from participating in its management (Lee, United Nations Commission for Latin America and the Caribbean (ECLAC) cited in Lee & Jouravlev 1997: 7). However, since the 1970s, the involvement of the private sector in water management has become common practice. By decentralising water responsibilities to local government level, governments have in fact laid the basis for sustainable development in the sector. But sustainable development had to be matched with other strong participatory planning methods. Various methods and approaches are also commonly applied to ensure the involvement of the public in decision-making processes. What is seen, for example, from table 7.2(e), is that the water sector is in favour of participatory, demand-responsive approaches rather than technocratic and top-down approaches (supply-driven), which militate against sustainable development.

Furthermore, the above trends reflect significant patterns of institutional reforms and policy development which are greatly needed to increase access to water and sanitation services (UNDP-World Bank Water and Sanitation Program 2000: 1). Efforts to increase water coverage, especially in the rural areas, are in line with the international development targets for water and sanitation called Vision 21[134]. The targets to be achieved are as follows:

(a)   by 2015 to reduce by one-half the proportion of people without access to hygienic sanitation facilities

(b)   by 2015 to reduce by one-half the proportion of people without sustainable access to adequate quantities of affordable and safe water, which was endorsed by the Second World Forum and in the United Nations Millennium Declaration

(c)   by 2025 to provide water, sanitation, and hygiene for all.

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[134] Vision 21 was developed by the Water Supply and Sanitation Collaboration Council (WSSCC) as part of the process leading up to the Second World Water Forum, at the Hague, 17-22 March 2000. Targets outlined by Vision 21 were a follow-up of the universal coverage established for the International Drinking Water Supply

The above targets have had an influence on the manner in which governments around the world structure and manage water supply and sanitation. The following section demonstrates the Bolivian experiences with municipal participatory planning processes. These processes show a bottom-up participation and the genuine involvement of the indigenous or grass roots people.

7.2.1 The traditional style of planning for development

Until the proclamation of the Law of Public Participation in 1994, development planning processes in Bolivia were characterised by technocratic and centralised planning approaches. Technocrats at the national and departmental levels were making all the decisions about development, and they did this from a top down perspective and with a logic in which the demands of civil society were excluded. In this context, the practice of planning was also markedly elitist, sectoral, and lacked integration. In a certain sense the systematic vision of development was owned by the selected few and as a result, any holistic view was dissipated, among other causes, by the absence of actors from civil society and of the synergistic perspective.

Major policy reforms, which culminated in the early 1990s, brought about a new wave of public participation which accorded the poor opportunities to participate fully in matters which affect their lives. Participatory methods became strategic considerations which inspired the paradigm of sustainable development. This paradigm became generally understood as a process which articulates the spheres of economic growth, social equity, the rational use of natural resources and co-operative governance. It was also a way of improving the living conditions of the marginalised groups by means of a productive transformation and the creation of sustainable livelihoods.

As indicated in chapters two and three, sustainable development came to be understood as the integral systemic complex process which has the objective of improving the quality of life of the whole population by means of integral productive development, a social

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and Sanitation Decade 1981-1990, which was readopted as the target for the 2000 at the World Summit for

development with equity and full citizen participation. The Bolivian model therefore articulates all the economic, social, technological, financial, institutional, political and environmental dimensions, since those impact on the decisions come as a result of the selection of public policies. By creating a culture of participation, the Bolivian government has adopted the concept of sustainable development as a vehicle to demonstrate its commitment to the principle of citizenship. This confirms the conclusion reached in chapter three, that sustainable development is a systemic and integral concept which articulates the objectives and the policies of participatory development in order to generate positive impacts on the lives of the poor.

7.2.2   Municipal participatory development planning

The majority of Bolivia's population is poor and rural. This population has had a long history of marginalisation and disenfranchisement. In 1994, the Bolivian government introduced the Law of Public Participation which requires municipalities, in accordance with their five year development plan, to promote Municipal Development Plans through inter-sectoral planning and regulations of spatial development planning. Municipal Development Plan is thus a strategic plan built on the premise that effective planning would enhance chances for sustainable development. Municipal development planning is an operational methodological instrument which is applied by the Bolivian government for purposes of the administration, planning, co-ordination and implementation of development programmes in a sustainable manner.

The Bolivian Public Participation Law, in particular, has contributed to bringing about a systematic, social and collective process, which regularly ensures co-ordination of municipal planning activities, constant identification of problems, demands, potentialities, limitations, adoption of strategies, formulation of plans, programmes, projects and budgets for their subsequent execution, evaluation of results and constant adjustment of their actions (La Paz 1996). Public participation as such, has become government development philosophy. The conceptual and methodological instruments for municipal development

Children in 1990 (WHO and UNDP 2000: 2).

planning constitute a mandate and a norm for participatory planning[135]. The development planning process moves away from notions of project sustainability towards an integrated service delivery. It can be concluded that integrated planning is indicative of the adoption of a programmatic approach to service delivery by the Bolivian government. Municipal development planning has the following key strategic objectives:

(a)   to make participation effective by controlling the destiny of the municipal resources, and their utilisation by the public and private sectors. In this regard, it is critical for all stakeholders to recognise the Law of Public Participation, and to exercise their jurisdiction, their rights and duties and decision making. It is thereby envisaged that participatory planning in all national territories will flow without major problems

(b)   to consolidate a new form of devolution of responsibilities, to the local sphere of government, and to establish a system which is co-ordinated with full public participation

(c)   as an integral and dynamic system to address development challenges, planning is meant to create instances of co-ordination, instruments of administration, options to identify and face the structural causes of poverty, mechanisms and procedures of citizen participation

(d)   to ensure permanent feedback between the state and civil society in relation to public policies

(e)   to bring about more efficiency, equity and sustainability in municipal activities and investments, optimising their social and economic impact on the basis of a strategy regarding their social and economic development

(f)   to support municipal institutional development and the social organisations in a process of progressive consolidation

(g)   to provide a clear framework for sustainable development.

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[135] Manuals and methodologies were approved through Article 8 of the Directorate: Participative Planning of the National Secretariat of Popular Participation (discussion with Mr Felipe Caballero Ordonas).

With the above objectives, central government has the major role of providing political leadership.

7.2.3 Adoption of a Municipal Development Plan (MDP)[136]

Municipalities are required to produce a five year municipal development plan which sets out the strategic goals and priorities of each municipality. Every municipality which operates within a territorial unit, has:

(a)   to participate in the definition of the strategic vision of development for the district

(b)   to evaluate and adjust the community aspirations which have been executed and which are in the process of being executed

(c)   to co-ordinate, with the totality of community organisation, the prioritising of their communal demands and to incorporate their demands into the districtal and the provincial levels

(d)   to actively participate in the monitoring of project implementation

(e)   to participate by using the persons responsible for the indigenous planning and administration in the technical planning team when required.

The above process is expressed in the document of the Municipal Development Plans, which constitutes the main reference to the process of participatory planning, and is also the instrument of management of municipal development. The introduction, in this manner, of methodological participatory planning became a turning point in public administration. This meant the creation and consolidation of new practices, values and principles for public participation. A new methodological framework for public participation was introduced for the first time in 1995. The motive was both political, in the sense that civil society insisted on having a greater say in the decision making processes, but also external, in the form of

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[136] Similar in content to South Africa's municipal Integrated Development Plan (IDP).

pressure from donor organisations, who required greater synergy in the implementation of donor programmes[137].

The methodology for the formulation of municipal participatory planning is embraced by and encapsulated in the spirit of the document guidelines and the regulatory framework for municipal participatory planning. This implies that the methodological approach municipal participatory planning is consistent and coherent (La Paz 1996). Municipal participatory planning is thus a planning and management tool required to assist municipalities in adjusting to the pressure of governance and delivery of services.

The above processes and guidelines are furthermore supported by the System of National Planning.

7.2.4   System of National Planning (SISPLAN)

System of National Planning[138] is a set of processes which are expressed in terms of norms and procedures for rationalising decision making and the assigning of national resources and the definition of development policies. This plan is politically driven and consists of technical and administrative orders which outline mechanisms for participation at the national, provincial and local (municipal) levels.

At national level, the SISPLAN (*Sistema de Planificación Nácional*) is monitored by a cabinet committee which recommends policies. The Ministry of Sustainable Development and Planning[139] is the organ which operationalises the plan and the Vice Ministry of

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[137] Discussions held with Ms Sonia Aranibar, Project Co-ordinator at the United States Agency for International Development (USAID) in La Paz (Bolivia) and Mr Felipe Caballero Ordonas, consultant in participative planning (Ministry of Sustainable Development and Planning) in La Paz (Bolivia).

[138] System of National Planning is a decision support system. It resembles South Africa's Planning and Implementation Management Support System (PIMSS) which is currently being implemented at the district level by the Department of Provincial and Local Government.

[139] By establishing this ministry, it can be argued that issues of sustainable development and development planning in Bolivia are backed by a strong political will.

Strategic Planning and Public Participation provides for the technical and consultation responsibility. At provincial level, the provincial council approves the plan of provincial development through the support of the technical unit of provincial planning. At municipal level, the municipal government defines policy, formulate plans and programmes through the municipal council. The vigilance committee[140] is responsible for the social control and the execution of tasks. The grassroots territorial organisations play a primary role during the planning stages and the mayor directs the execution of the municipal development plans.

The SISPLAN is underpinned by four key principles, namely: integration, subsidisation, social participation and equity, and efficiency.

Integration determines that the decisions adopted in the planning process are based on the integration and co-ordination of:

(a)   the economic dimension, the social dimension, the institutional dimensions and the rational use of natural resources

(b)   the policies and development programmes of all sectors which constitute the above dimensions

(c)   the plans of development are programmed within the short, medium and long term time-frames.

Subsidisation is an incentive for establishing a decentralised administrative arrangement at local municipal level. It comes in the form of loans and competition through efficiency. Funds to operate and maintain water schemes, for example, are paid out in the form of grant and loan finance[141].

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[140] In this sense a vigilance committee is not the same as South Africa's vigilante committees of the 1980s, which were involved in the acts of terror and violence in the townships.

[141] Loan financing represents the government's incentive programme in that municipalities which comply, by implementing efficient and effective administrative systems, can reclaim the funds. This is meant to stimulate competition and therefore promote efficiency.

Social participation determines the participative character of the planning process in all its phases, stages and levels, in particular in the establishment of priorities and social demands and by making all this compatible with government policies.

Equity assures a better correlation of needs and resource allocation. During the processes of decision making it ensures access to productive, financial and non-financial resources, opportunities and services.

Efficiency optimises plans, programmes and projects in the use of the resources. It also maximises further demands for services and therefore access to services is increased.

Bolivia is a Latin American country known for its municipal development planning. Since the 1990s, the Bolivian government has invested in developing tools and methodologies towards the implementation of processes for development planning. Vigilance committees were established to oversee the implementation of the municipal participatory planning processes at a district level. A vigilance committee reports to a consultative council[142]. The function of a council is to provide the technical and logistical support required by the vigilance committee. Municipal participatory planning processes are guided by the Public Participation Law[143] formulated through the Ministry of Housing and Basic Services.

7.2.5   Public Participation Law

The Law of Public or Popular Participation recognises grass roots representivity and existing traditional customs. The interests of grass roots people are represented at various levels such as at the district level in the form of vigilance committees (territorial units) and at the provincial level in the form of oversight committees. The Public Participation Law regards a municipality as a unit of administration which has a territorial basis or jurisdiction within a province. It is further converted into units of planning where different stakeholders interact and make decisions. The territorial unit is defined on the basis of the political,

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[142] This council comprises members of professional bodies.

[143] Enacted in Spanish as Ley De Participacion Popular Ley No 1551 (Ministerio de Vivienda Y Servicios Básicos).

administrative and historical criteria which exist at present. The Municipal Development Plan is therefore the result of a process of participative planning in the municipality and it constitutes the operational methodological instrument which allows an articulation between the state and civil society in the process of development.

7.2.6 Institutional framework for municipal participatory planning

Every unit consists of specific functions delegated by the law of participatory planning to various organisations at district and local level. These are:

(a)   municipal government

The municipal participatory planning functions under the political responsibility of the municipal government which has as its first mandate: to plan and to promote human sustainable development. The government ensures equitable and participatory methods in the municipality by means of the formulation and execution of policies, plans, programmes and projects which are in accordance with the development planning at provincial and national level.

(b)   the vigilance committee

This committee consists of members of the community and representatives from civil society. Its core function is to represent the interests of the community in different planning and decision making processes. These committees also have a responsibility to plan and administer sustainable municipal development. In the exercise of their duties and responsibilities, they prioritise and control the execution of actions which they have developed themselves, to the benefit of the whole of the community[144].

(c)   technical unit of indigenous territorial administration

This is an administrative component of the vigilance committee. It handles technical matters

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[144] Discussion held with Mr Felipe Caballero Ordonas, consultant in participative planning (Ministry of Sustainable Development and Planning) in La Paz (Bolivia).

and makes recommendations to the above committee.

(d)   Grassroots Territorial Organisations (GTO)

They constitute the main people who carry out the process of participatory planning. They ensure that the municipal development plan is in accordance with their own interests. The Grassroots Territorial Organisations comprise the people who carry out the processes of planning and execution of actions related to this plan. In the exercise of their duties and rights, they identify, prioritise, supervise, control and offer support to municipalities.

(e)   Provincial Councils of Popular Participation

These are the highest institutions of decision making and provincial planning, whose responsibility is to approve the provincial plan. In addition, they see to arbitration in the event of a dispute or conflict. Provincial councils also incorporate partners from the public and private sector in an effort to promote inter-sectoral collaboration.

(f)   other organisations of civil society

These organisations promote certain sectoral interests and include sector groups such as women's groups and church organisations. They do not have voting powers. Representatives of other public institutions who are involved in municipal activities participate in the planning process, by promoting and deepening the analysis of the problems and identification of possible solutions.

(g)   the municipal council

This is the entity which deliberates, approves or rejects and, as the case may be, takes the responsibility for the results of the process of municipal participatory planning by co-ordinating and making decisions.

(h)   municipal technical personnel

These are civil servants or officials whose technical responsibility is to implement plans and programmes.

(i)   the municipal executive mayors

Mayors are the highest executive municipal authority and they direct the process of municipal participatory planning. In addition they co-ordinate and execute the decisions contained in the Municipal Development Plans. The mayors play an executive role through operational support and co-ordination. Their roles extend beyond ceremonial duties.

(j)   the deputy mayors

Deputy mayors work with mayors and implement mayoral decisions. They also monitor and report on progress.

7.2.7   Territorial unity of planning

The Public Participation Law in Bolivia widens the jurisdiction of the municipality as far as the boundary of the province, by establishing municipal territories which are urban and rural. Territorial unity is applied to ensure effective development administration in planning, organisation/administration, execution of tasks, follow-up and evaluation by means of social participation and co-ordination. This type of planning is termed a Territorial Ordering Plan (TOP) and it allows the generation of suitable social, economic and institutional conditions for sustainable development and optimises the location of spatial elements (DPLG 2000: 18). The plan is monitored by the Vice-Ministry for Strategic Planning and Popular Participation in La Paz (Bolivia).

The figure below shows the methodology and its greater emphasis on public participation at municipal level, which becomes an opportunity to allow municipalities to consolidate development plans according to the area of jurisdiction. Figure 7.1 shows how plans are formulated.

FIGURE 7.1:   FORMULATION OF MUNICIPAL DEVELOPMENT PLANS

PREPARATION AND ORGANISATION	❑ Identification of actors ❑ Promotion of the process and formation of the technical team ❑ Organisation of the process ❑ Training of facilitators
DIAGNOSIS	❑ Realisation of self diagnosis ❑ Complementary information surveys ❑ Systematisation and technical analysis of the information ❑ Validation of the information ❑ Analysis of the municipal situation
DEVELOPMENT STRATEGY	❑ Definition of the strategic vision ❑ Definition of the municipal demand ❑ Five year programming and strategy for execution

Source: La Paz (1996)

The formulation of Municipal Development Plans is based on the three first stages of participatory planning: Preparation and organisation, diagnosis and development of the strategy.

7.2.7.1 Preparation and organisation

Preparation and organisation involve the diagnosis or assessment of the actual situation in a particular municipal district; consolidation and analysis of information; disaggregation of discounted rates (cost benefit analysis), which results in information and knowledge sharing amongst participants. The process allows for the contextualisation of problems, identification of problems, strengths and weaknesses, limitations and opportunities. The outcome of this process assists in the formulation of the strategy of development which guides the implementation plan.

Since the entire process is demand-driven, the definition of the municipal demand constitutes a process which seeks to co-ordinate and prioritise a social demand, and not a political demand as may be the case in other situations. This process is viable in that it generates a sense of awareness amongst consumers and also an ability to make informed choices. If consensus regarding priorities or demands is reached, this means that participants have a legitimate framework for the strategic vision of municipal development. The methodology includes community and municipal workshops. The process is conceptualised using what Dourojeanni (1997:19) calls "cycles of transactions or cycles of consensus-building". The process tests perceptions of stakeholders through regular engagement. Each one of the stages of the process contains a set of activities which are described as the matrix of activities of the process of formulating Municipal Development Plans. This process involves investigations and documentation of results which would serve as a basis for consensus seeking.

7.2.7.2 Diagnosis

Consolidation and concretisation of perceptions follows consensus seeking. This includes diagnosis of reality by stakeholders. The process involves the verification of opinions and attitudes in practice, through awareness raising and education of stakeholders. The diagnosis and verification processes also involve a critical analysis of the results in comparison with that which was planned, in order to implement corrective measures and to give feedback to

stakeholders. The analysis of the context and the advanced evaluation of the municipal plans allows for the identification of municipal needs. Furthermore, a rigorous analysis is meant to reconcile successive estimates using the principles of equity, sustainability, integrity and multi-objectivity (see chapter three section 3.3).

7.2.7.3 Strategy of municipal development

This stage defines the strategic vision of the municipal plans, which are prioritised into objectives and strategies, and the priorities of municipal development. The strategy is described through short and medium term co-ordination in a participatory manner. Its conceptual framework is based on the analysis of potentials, limitations, problems and community aspirations With the fulfilment of this stage, the process for the formulation of the municipal participative planning is concluded.

(a) annual programme of operations (APO)

This stage contemplates the participatory elaboration of the annual operational programmes, aimed at achieving the objectives of municipal development. Hence the annual programme of operations must include the actions planned, not only by the municipal government but also by the people involved in development who operate in the municipality.

(b) execution and administration

This comprises the practice of making Municipal Development Plans effective. Executing the plan is a means of ensuring the mobilisation of a process towards a progressive consolidation of the institutional and human capacity which is appropriate in the administration of municipal development. This occurs under the direct responsibility of the municipal mayor, taking into consideration the norms and procedures of the system of government administration and control and of public investment.

7.2.8 Follow up: evaluation and adjustment

This stage is oriented to accompany and verify the execution of the Municipal Development Plan, departing from a critical analysis of the context and the evaluation of the execution of the plans. It also involves corrective decision making under a flexible logic of planning, seeking to reconcile, by successive continuous estimations, the principles of equity and

sustainability of municipal development. This stage also focuses on the functioning of a stable and permanent institutional framework which allows for planning and procedures to be carried out clearly, in facilitating the annual evaluation, in executing and adjusting plans and probably, in informing policy reviews at national level.

The most effective way to assure the institutionalisation of participatory planning as a methodology of sustainable municipal development is to conduct evaluations and adjust the programme where necessary. The evaluation and adjustment process seeks to recapture, to aggregate, to qualify progressively the community and sectoral aspirations until it can translate the municipal plans into priorities and projects, as an expression of the interests and options of the population. The structuring of the community aspirations and the analysis of the viability of its needs and their projection must consider the problems, the constraints or the limitations and the strategic vision of the development of the municipality.

Evaluations must also recognise the spatial, socio-economic, ethnic and gender differences in the municipal situation. Careful evaluations could offer certain guarantees and a level of confidence to the stakeholders. The process to develop a Municipal Development Plan is therefore critical for confidence building between the politicians and organs of civil society. Such a process consists of carefully planned sequences and a series of activities. The figure below shows a flowchart, which indicates the participatory nature of the municipal development plan.

FIGURE 7.2: FLOWCHART OF THE PROCESS OF FORMULATION OF MUNICIPAL DEVELOPMENT PLANS
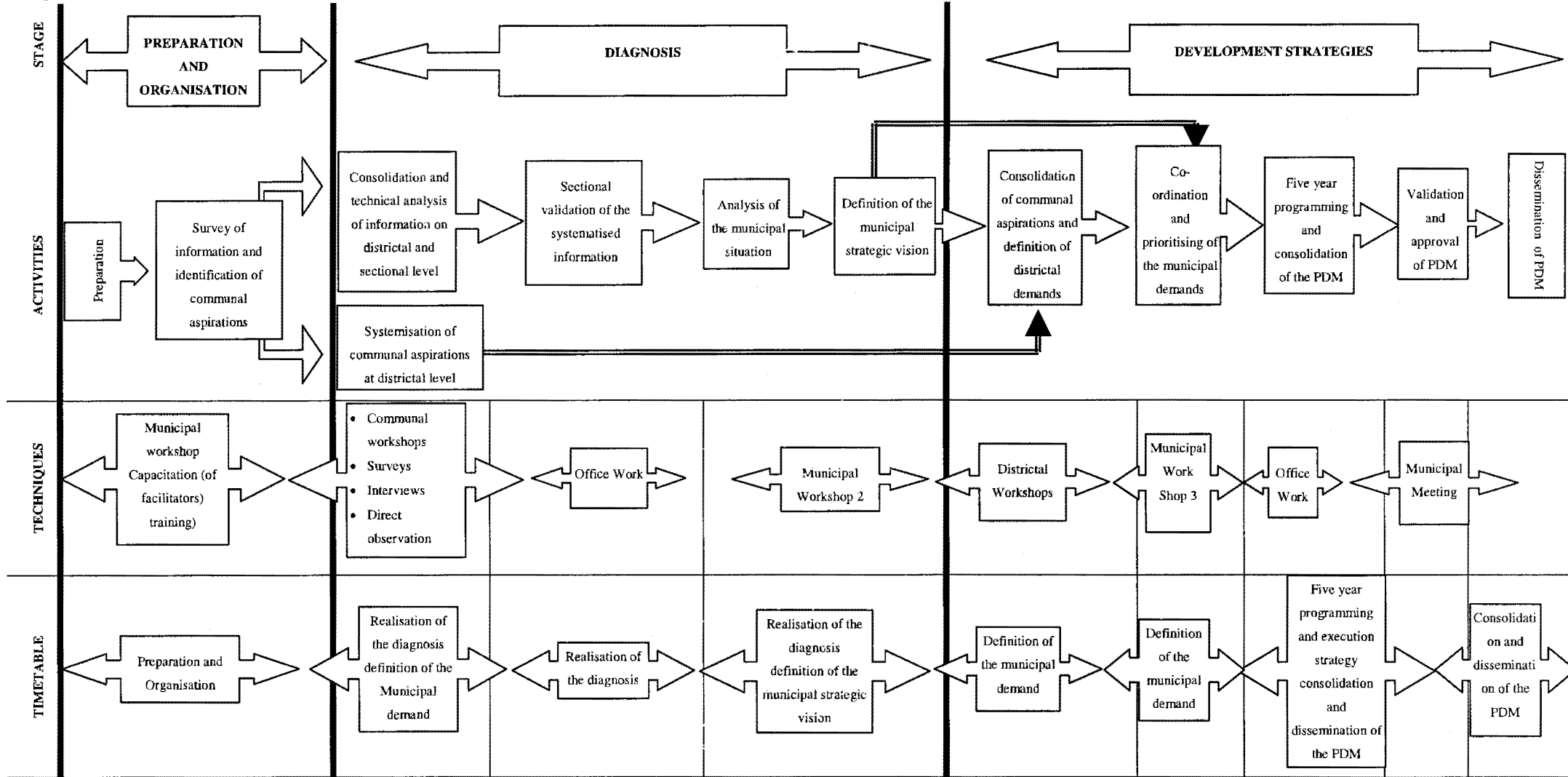
Source: La Paz (1996)

Figure 7.2 provides a detailed outline of the planning process, by describing the main methodological techniques to be used and the elaborate planning processes. The following processes are critical:

Workshops

These are participatory events which establish a space for collection of information from the community, followed by analysis and reflection. Information is coordinated by using instruments such as flyers, talking maps, leaflets, diagrams and other visual material. According to their coverage these events are classified into communal, districtal and municipal workshops. In the process one workshop per small area (territory) will take place, two workshops per district and three workshops at municipal level.

Communal workshop

The communal workshop is an event in which all the members within an area participate and community members act as facilitators, with the support from the district. The main objective is to raise awareness, based on information generated from the analysis of the communal aspirations.

Districtal workshop

The districtal workshop is an event in which the delegates of the small or communal areas of all municipal districts and municipal authorities participate. It is convened by the mayor and chaired by a technical planning team. Its central objective is to validate and co-ordinate information gathered from the municipal diagnosis and the communal aspirations put together at districtal level.

Municipal workshop

The municipal workshop represents an event in which representatives of all social and institutional players encompassed in the process take part. This event is convened by the mayor and it is directed by the technical planning team. It has as its main objectives the

definition of the strategic vision of municipal development and the prioritising of municipal demand.

Surveys

Surveys consist of a questionnaire of structured questions in a ballot format directed to families of different socio-economic strata, who are selected by a sample method. The objective of a survey is to raise statistical information about all the variables of a communal situation. The survey is carried out in each one of the area of the municipality and community facilitators are responsible for its execution.

Interviews

Interviews consist of the application of questionnaires with semi-structured questions directed to key informants in the municipal area, with the objective of raising information of a qualitative character about a set of variables which the technical team of planning is responsible for carrying out.

Direct observation

Direct observation consists of a field survey with the objective of recording technical measurements of certain variables and of reckoning the physical natural characteristics of the municipality in general, or of some district in particular, applying a field guide under the direct responsibility of the technical team of planning.

Compilation of information about secondary resources

This activity consists of the revision of documents from different sources with the objectives of obtaining and verifying statistical information and basic maps for the municipal diagnosis. The technical team will be responsible for its execution.

7.3 LESSONS LEARNT FROM THE ABOVE EXPERIENCES

After more than five years since the proclamation of the Public Participation Law and the beginnings of participatory planning, the Bolivian authorities have recorded the following concrete gains:

(a) they gained the necessary experience and now have a consistent methodology of municipal planning. Planning has also assisted in the further clarification of new institutional arrangements

(b) the methodology of municipal participatory planning offers the technical inputs essential for attracting private sector investments. It also seeks to orientate and channel technical and financial support from donor organisations

(c) consensus regarding the participatory planning process has been concretised

(d) there is a strong relationship between state and civil society in the definition and identification of priorities, objectives and strategies for development

(e) the participatory process has brought about major significant improvements in strengthening participatory democracy, which has meant a greater social mobilisation in the history of the country regarding policy development and planning processes

(f) the outcome of a participatory process has brought about effective institutions and a clearer developmental vision for local government. This has meant equitable distribution of resources and the enhancement of accountability amongst officials and politicians

(g) in 2000 a significant number of the 315 municipalities which exist in the country, had managed to complete and submitted their respective Municipal Development Plans. The rest were in the process of completing theirs by the time this thesis was in its final stages

(h) it was evident that the assigning of public municipal resources only to infrastructure and basic services, is insufficient to generate integral processes of development which are owned by civil society, the municipal governments and the Vice-Ministry of Strategic Planning and Public Participation

(i) the development of methodologies, tools and guidelines for participatory planning has enabled opportunities for all participants to find consensus regarding an integrated strategy, which is essential for sustainable development

(j) a significant amount of institutional capacity has been developed to assist municipalities in planning, administration, execution of plans and ongoing monitoring and evaluation

(k) the Municipal Institutional Strategy for Development has been structured in such a way that it could assist municipalities to address other macro-economic and social development plans, which are essential for their fight against poverty with sustainable and participative development

(l) the Bolivian public participation model and the methodology of municipal participatory planning are being requested ever more in other areas of Latin American countries which appreciate them as an important contribution, to the process of local and decentralised development[145]

(m) community-based management models have provided communities with opportunities to participate in decision making processes. This has resulted in community ownership and a strong culture of payment of services[146].

The most common thread which appears in the above lessons is that sustainable development is a participatory process. Furthermore, these lessons point out that these processes are not a single, narrow way to define sustainable development. As mentioned by Dourojeanni (1997: 11), to a large extent, sustainable development depends in essence on agreements between the participants and thus does not occur automatically but rather as the result of transactions[147].

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[145] Discussion held with Mr Felipe Caballero Ordonas, consultant in participative planning (Ministry of Sustainable Development and Planning) in La Paz (Bolivia).

[146] Discussions held with Mr Alcides Franco, water and sanitation specialist in Bolivia, Mr Humberto Cacere, Executive Director for Sumaj Huasi Foundation in Bolivia, Mr Victor Rico Arancibia, Manager for water and sanitation sector for CARE in Bolivia, Mr Frady Torrico & Mr Jorge Pedro, officials for the Social Investment Fund in Bolivia.

[147] Dourojeanni (1997: 19) writes about cycles of consensus-building as a way of consolidating consensus and a means to advance development. The author has also held a discussion with Dourojeanni.

The focal point is therefore to involve people in addressing problems which affect them and also to develop appropriate competencies and skills to govern, to build a broad consensus which specifies institutional reforms (Osborne & Gaebler, Metcalfe, Kooiman cited in White 1981: 69). Satisfying actors or addressing all of the problems and challenges is not an easy thing.

7.4 CONSOLIDATION OF PARTICIPATORY METHODOLOGY AND LESSONS LEARNT

The facilitation of public participation as it has evolved from the Latin American developing countries shows that by applying principles of sustainable development, governments can improve, over time, the social well-being and the quality of lives of their people. The trend in Latin America has been to restructure institutional arrangements in the water sector, whilst meeting other challenges of service delivery. Latin American countries have consciously adopted a demand-driven approach with regard to service delivery in order to stimulate public participation. Lessons from these countries show that this practice has created better prospects for sustainable development. Water sector reform experiences and the municipal participatory planning processes have given more hope for sustained delivery of such services.

Although this study did not intend to provide a comparative analysis regarding governance arrangements between South Africa and Latin America, it was however imperative to contextualise the research by applying the same conceptual framework in both cases (see chapter six section 6.2). The rationale to consolidate the experiences of Latin America using the dimensions in section 6.2 was influenced by the transformation trends set by the Latin American countries under review.

As indicated in the beginning (see chapter one section 1.4.2), the author's choice of these countries was based on their reform processes, with particular reference to the water and local government sectors. The author compiled the following table to draw together significant characteristics of dimensions applied in the three countries.

TABLE 7.3:   CONSOLIDATION AND APPLICATION OF DIMENSIONS

DIMENSION	CHARACTERISTICS
1. territorial	(a) institutionalised and regulated public participation (b) sectoral integration (c) effective municipal development planning methodologies (d) territorial ordering system or spatial planning
2. political	(a) strong political will (b) universal access to services (c) private sector participation in service delivery (d) consumer satisfaction
3. fiscal	(a) co-financing (b) strong fiscal decentralisation (c) clear criteria on eligibility for subsidy (d) increasing cost-reductions through efficiency
4. functional	(a) strong regulatory framework in the water sector[148] (b) a viable institutional framework (c) a clear policy framework (d) high quality of service

7.4.1   Territorial dimension

This dimension is particularly applicable in Bolivia. The concept of territorialism demonstrates how public participation can become effective in a carefully demarcated municipal area. Coincidentally, this process is driven by the special Ministry for Sustainable Development and Planning. The enactment of Public Participation Law further gives legitimacy to the functions performed by this ministry. Public participation manifests itself into a strong sector alignment and planning. Although South Africa's experiences in territorial planning are limited, it should be pointed out that the legislative requirement to integrate and co-ordinate planning through the municipal Integrated Development Plans (see chapter six section 6.3.2) and to establish ward committees, is a step in the right direction.

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[148] Discussions held with Ms Carmen Ballivian, Administrative Manager *(Aguas de Illimani consortium – Lyonnaise des Eaux*: A French company which was awarded a 30 year concession contract in 1997 for the provision of water supply and sanitation services in the cities of La Paz and El Alto in Bolivia, Mr Franz Rojas, Consultant for the Inter-American Development Bank and Water Superintendent in Bolivia, Dr Guillermo Arroyo Rodriquez, General Manager of *SAMAPA*-public company in La Paz which owns all public assets in the water sector, Mr Alexander Schechilinski, President of the International Association of Water and Sanitation *(AIDIS)* in Bolivia, Ms Maria Peña, Director of *AIDIS* and lecturer at the University of Chile and Mr Jorge Hayn Vogel, President of the regulating body - *Instituto Nicaraguense de Acueductos Y Alcantarillados Ente Regulador (INAA)* in Nicaragua.

7.4.2 Political dimension

Although there are inherent weaknesses in some of the models investigated, the three Latin American countries display a great degree of political buy-in. That is, the success of the public sector in general is attributed to a political desire to promote universal access to services. The three countries display similar characteristics of leveraging public spending through private sector investment. Even though these countries are still undergoing major reconstruction and development, they have succeeded in developing a framework for sustainable development. Nicaragua for example, has had development efforts which were as a result of a number of natural disasters such as earthquakes which have affected Nicaragua in the past. The government of Nicaragua introduced a national sustainable development strategy[149] in 1990. This was an integrated strategy, which addressed multi-issues such as infrastructure development, institutional development, social and economic development. Since the policy of the Nicaraguan government is to decentralise responsibility to regional levels, their strategy was underpinned by regional development planning as a means to achieve sustainability. According to Ornat (1997: 48), the key objective of the regional strategy is to establish a:

> Sustainable development model which will promote economic growth and satisfy the basic needs of the population and of future generations, on the broadest possible democratic participation, social justice, conservation of the environment and the rational use of natural resources.

7.4.3 Fiscal dimension

In Bolivia, the budgeting processes are based on a co-financing system[150]. This system is a joint project financed between national and local government. The system is incentive-based and it promotes competition between municipalities. The incentive system favours good quality planning for municipal projects. The system also favours cost-reduction measures and economies of scale which come about through efficient use of resources and consumer participation in the choice of levels of services they can afford. As a result, fiscal

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[149] National Conservation Strategy for Sustainable Development.

[150] This is a highly commendable tool for combining a decentralised system, with a high degree of municipal planning autonomy, and strong national centrist approaches which are common in most emerging democracies (DPLG 2000).

decentralisation is strengthened because both national and local government realise the possible spin-offs for the sustainability of services. South Africa too is undergoing fiscal decentralisation in fields such as the water services sector, however, it is still to early to judge whether or not similar results will be achieved. This is why it is important for South Africa to learn lessons from other developing countries, such as Bolivia.

In Chile, achievements in the water services sector are partly influenced by the creation of self-financing institutions characterised by a single pricing system for water utilities and a subsidy scheme to cater for the poor. The pricing system and subsidies for the poor have prompted other Latin American countries such as Bolivia to design pro-poor concession agreements with the aim of securing the best deal, particularly for the poor people. However, although Chile's success stories seem to be derived from applying the economic dimensions of sustainable development, these cannot necessarily be replicated in any context because each country has a different environment, which leads to uniqueness. As mentioned by Ornat (1997: 25):

> There is no single recipe for sustainable development strategies, apart from adapting to local conditions.

7.4.4 Functional dimension

This dimension recognises several functions and competencies of national governments in areas of regulations for service delivery and development planning. Functions outlining the roles of national government, provincial and local government are outlined in key legislations such as the Decentralisation Law in Bolivia.

The rationale behind the existing regulatory arrangements, especially in the water sector stems from government's statutory responsibility to oversee the entire business of water supply, thereby ensuring equity and fairness, quality of service and the overall sustainable development of the sector. This overall function is in line with meeting the basic needs of consumers, which ultimately is a constitutional obligation for any democratic state. It is not suprising therefore that in their first years of democratic rule, the three Latin American

countries embarked on major economic and social reform projects stimulated by a number of factors such as economic transformation[151]. Like South Africa in the 1994 after the first democratic elections, as soon as their markets were opened up to the global competitive environment, they became vulnerable. As beginners in the economic global environment, these countries experienced pressures due to trade liberalisations and competitiveness. They had to strive to create a balance between macro-economic challenges and attempts to eradicate poverty[152]. Whereas programmes introduced by the World Bank and the International Monetary Fund were strongly criticised for being too restrictive, some successes were reported. Chile, for example, was one of the first countries to undergo institutional reform through the privatisation of some of its key public institutions. Since then these entities have had a firm base and a long history of experimenting with different models of delivery, both public sector and private sector[153]. To a large extent, adjustment experiences in Chile show a significant improvement in the economic sector. Through the privatisation programme, Chileans have created a conducive environment for attracting foreign capital. As stated by Glade (1991: 6), their actions were not motivated by ideological or debt servicing reasons, but by practical reasons. As a result, Chile is also regarded as the country with the most mature privatisation programme in Latin America and it has totally liberalised its economy, including water rights. Through the implementation of projects by water utilities[154], Chileans have also achieved a high coverage of basic water and sanitation programmes in the cities and rural areas. Project implementation is backed by the Chilean government's subsidy

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[151] Discussions held with Mr Michael Raczynski, Head of the Technical Unit for the World Bank Commission in Santiago (Chile), Mr Dave Ogden, Director of the Environmental Health Project in Nicaragua, Mr José Toruño, Co-ordinator of CARE in Nicaragua.

[152] In the 1980s, most Latin American countries committed themselves to implementing the structural adjustment programmes of the World Bank and the International Monetary Fund.

[153] Discussion held with Mr Humberta Peña, Director-General (Chilean Ministry of Public Works).

[154] In 1989, thirteen regional public water utilities, similar to water boards in South Africa, were established. Amongst the thirteen, the two largest utilities serving Santiago and Valparaiso (metropolitan municipalities), the *Empresa Metropolitan de Obras Sanitarias* (EMOS), were subsequently privatised. *Corporación de Formento* (CORFO) is the central government holding company.

scheme which was paid through municipalities, for families whom the social welfare administration determines as poor[155]. As mentioned by the ECLAC (1990: 31):

> The Chilean water sector in particular introduced many entrepreneurial activities such as meter reading, billing and collection and vehicle leasing

Furthermore, by regulating public participation, experiences of Latin America also show a growing pattern of regulating the water sector. Water sector regulatory arrangements are seen as a measure to sustain rural water supply and sanitation services. This is evident from efforts by most developing countries to promote and operationalise institutional and management approaches and techniques conducive for sustainable rural water supply and sanitation (WHO & UNDP 2000: 1). As mentioned by Briscoe (cited in the UNDP-World Bank water and sanitation program 1997: 5):

> the development community has moved away from the old-style planning project to a four-stage project cycle: listening, piloting, demonstrating and mainstreaming. Participatory planning processes in the water sector and municipal levels have changed the manner in which development programmes were implemented. This change is motivated by a need to sustain delivery of services.

Furthermore, lessons learnt from Bolivia's participatory planning processes have added value in some rural water supplies. This is evident from the *Yacupaj* project[156], a collaborative effort between the Bolivian government and the donor community, which implemented village water projects that were based on the needs of beneficiaries. For the first time, villagers were given opportunities to participate during project designs, the opportunity to make their own monetary contributions, the actual water systems and finally, ownership (UNDP-World Bank Water and Sanitation Program 2000: 5; Sara *et al* 1996: 1-3 and Yepes 1998: 41). Participatory planning processes have thus played a significant part in improving the demand-driven approach. While the Bolivian example is not a panacea, it does however provide clear

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[155] Discussions held with Mr Humberto Peña, Director-General of the Public Works Department and Ms Paulina Lobos, Assistant General Manager for *EMOS* in Santiago (Chile).

[156] The UNDP-World Bank funded rural water supply and sanitation projects. Discussions were held with Ms Betty Soto Terrazas, the National Social Advisor (Ministry of Housing and Basic Services) and Mr Marco Quiroga Ramos, Director of the Rural Basic Programme or (*Proyecto de Saneamiento Básico Rural - PROSABAR*) in La Paz (Bolivia) and Mr Waldo Valle, Vice Minister of Basic Services in Bolivia.

guidance as to how the designs, solutions and quality of the process can improve the status of public participation (Saade *et al* 2000: 8). Although, in some cases, efforts by the Bolivian government were hindered by capacity constraints at regional government level, a demand-driven approach has maximised chances for sustainable rural water services provision. The key initiative which has strengthened the above approach is public participation, which has become one of the institutional development drivers in Bolivia[157].

In Bolivia the notion of municipal participatory planning has created a viable institutional framework. As a result, several partnership arrangements are beginning to emerge, especially in the water sector. This notion covers a range of partnership arrangements, which includes public-public options[158] and public-private partnerships[159]. The El Alto project, La Paz, Bolivia, is one such example of bringing about private sector investment in the water services sector. This project was conceived along the same principles as the *Yacupaj* rural project[160], through participatory planning processes. However, in this instance, the government introduced the so-called pro-poor concession agreement[161], led by an incentive-based agreement between government and the concessionaire. This approach has brought about a balance between financial efficiency and social equity. As a result, the utility company can lower investment and operating costs, thereby making services affordable[162]. These are some of the indirect benefits the regulatory framework for public participation and water supply and sanitation has brought about.

That is, the clearer the institutional or regulatory framework, the better the chances for attracting private and public providers in offering sustainable service provision. It is

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[157] Discussion held with Mr Felipe Caballero Ordonas in La Paz.

[158] Direct arrangements between two public entities such as a water board and a municipality.

[159] Partnership arrangements in Bolivia are facilitated through the multi-regulatory agency called *Sistema de Regulación Sectoral* (SIRESE) in areas such as telecommunications, transport, hydrocarbons and water. A multi-regulatory agency approach reduces costs and promotes efficiency. South Africa too could learn from such experiences.

[160] Discussion held with Mr Quiroga and Ms Sara regarding the implementation and analysis of the project : *Proyecto Yacupaj. Analisis de Dos Anos de Experiencias De Los Proyectos Demonstrativos.*

[161] *Aguas de Illimani* is the concessionaire contracted for water and sanitation services.

[162] Discussions held with Mr Richard Noth, independent consultant and specialist in institutional development in La Paz (Bolivia) and Ms Carmen Ballivan, Administrative Manager for the *Aguas del Illimani (Suez Lyonnaise des Eaux)* in La Paz (Bolivia).

interesting to note that other Latin American countries are beginning to apply and adapt the Bolivian model to their own unique situations (UNDP-World Bank Water and Sanitation Program 2000: 3).

However, the above model does not offer absolute solutions for rural areas because these areas cannot attract private sector finance. As noted from Bolivian experiences, it would take considerable government commitment in providing incentives to the private sector for the government to be able to lessen risks associated with capital investments[163] in rural areas. Although experiences from the three countries differ substantially, what is common is that clearer institutional arrangements seem to pave the way towards a prudent regulatory framework. The rural poor continue to benefit from these arrangements.

The creation of a regulatory environment is a vehicle to improve water management, its operations and sustainability. As noted from table 7.2, water sector reform experiences in the three Latin American countries show similar patterns. It is interesting to note that since the early 1990s, as reform processes unfolded, there has also been a high degree of private sector involvement. Latin American countries such as Chile, with a stronger market or economic base, adopted First World regulatory regime practices. Chile, for example, introduced tradable water rights to the private sector. The rationale was to bring about an efficient and equitable use of water resources in Chile. Having adopted and adjusted their water regulatory experiences from those of the British, other countries such as Bolivia, followed suit[164]. The common trend was therefore first to privatise, and thereafter to introduce regulatory regimes for overseeing the concessionary contractual performance of the providers (public and private), competition for further concessions and the overall system of economic[165] and social

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[163] Discussions held with Mr Franz Rojas, Consultant for the Inter-American Development Bank and Superintendent for Water in La Paz (Bolivia), a representative of Mr Juan Eduardo Saldivia, Superintendent of Water in Santiago (Chile), Mr Frady Torrico and Mr Jorge Pedro of Social Investment Fund (SIF) in La Paz (Bolivia) and Mr Alexander Schechilinski, President of International Association of Water and Sanitation (*AIDIS*) in Santiago (Chile).
[164] Discussions held with Mr Terence Lee, an economist and also author of a book called: *Water management in the 21ˢᵗ century. The allocative imperative* and Mr Jorge Hayn Toruño, President of *INAA* in Managua (Nicaragua). *INAA* regulates service quality, concession tariffs, norms and standards and compliance with environmental regulations.
[165] Economic regulations include tariff setting and the promotion of economies of scale, efficiency and effectiveness.

regulations[166]. As mentioned by Lee (1999: 158, 162) a design for a regulatory regime becomes a vehicle to provide sufficient incentives to the private sector to invest and operate efficiently, whereby:

(a)   regulation is based on a sound control of prices rather than profits[167]

(b)   discrete periods between regulatory reviews are substituted for continuous intervention

(c)   regulatory contracts are established.

A regulatory planning design is process-oriented. It requires high level consultation with all stakeholders. It involves a consensus in areas which require conceptual clarification. The regulatory processes are meant to provide the public with the opportunity to understand how they will benefit and, as a result, how their interests will be protected. The three Latin American countries have undergone similar processes concerning a regulatory design and its conceptualisation. These processes were part of the broader vision of bringing about sustainable water services.

The decision to formulate a regulatory framework is preceded by an interactive participatory process. The author compiled a consolidated view of a regulatory framework[168] by using the following table.

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[166] Social regulations include the protection of consumers' rights, linked to the economic efficiency of regulations.

[167] This system is called the "price-cap system". The system was developed in England and Wales where the Office of Water Services (OFWAT) is responsible for the economic regulation of the privately operated water companies (Lee 1999: 162).

[168] This information was derived and adapted from documents supplied, meetings or discussions held in Chile, Bolivia and Nicaragua.

TABLE 7.3:   PARTICIPATIVE METHODOLOGY FOR DEVELOPING A REGULATORY FRAMEWORK

PHASE ONE PREPARATORY PHASE		
Development of a conceptual regulatory design	**Development of a regulatory process and design**	**Development of Regulations**
Review of all available international best practices and expertise	Define process and reach consensus with stakeholders	Develop or set norms and standards such as water quality and tariffs
Drafting of regulatory principles, rationale and objectives	Propose a management structure	Develop model contracts for providers (public and private)
Clarifying institutional arrangements, drafting a regulatory structure, key functions and competencies	Clarify roles and responsibilities	Develop regulations for service coverage and extension into rural areas, identifying certain incentives
Drafting of different areas of focus, with regards to water services and water resources	Clarify nature and location of regulators.	Develop a legal framework for dispute resolution, penalties, norms and standards
Ministerial approval	Identify start-up resources (financial, human and technical)	Develop support and intervention mechanisms
	Cabinet endorsement	Ensure compliance
		Clarify powers and functions
		Develop a performance management system

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PHASE TWO
CONSOLIDATION PHASE

Alignment of policy, process and regulatory designs	**Finalise and adopt rules**

Link regulations to the structural, functional and spatial designs	Adopt norms and standards

Develop a consumer charter	Adopt performance rules/standards and benchmarks

Conduct a capacity building and training programme	Adopt rules for the levels and structure of tariffs for bulk water services provision

Align relevant legislation and ensure consistency	Adopt procurement rules

Develop Benchmarks

Implement or Test regulations

Develop appeal Procedures

Monitor the Implementation

PHASE THREE
IMPLEMENTATION PHASE

Enactment of laws for the regulator	**Ongoing performance monitoring**

Establishment of an independent regulator in the water sector	Rewards or incentives for good performance

	Penalties for those who don't comply

	Measure level of customer satisfaction

Table 7.3 outlines a conceptual framework which most Latin American countries use when designing processes for the establishment of a regulator. Again, the framework indicates various planning and decision making stages. Such processes demonstrate a common culture and positive attitudes towards stakeholder participation. Since the water sector is so diverse and dynamic, participatory planning processes in establishing water regulators have brought about potential gains for sustainable development through the establishment of water regulators, which means that governments are in a position to monitor and to ensure oversight control over water management processes. In this manner, municipalities are able to plan effectively and to manage water services contracts, either with the public or pri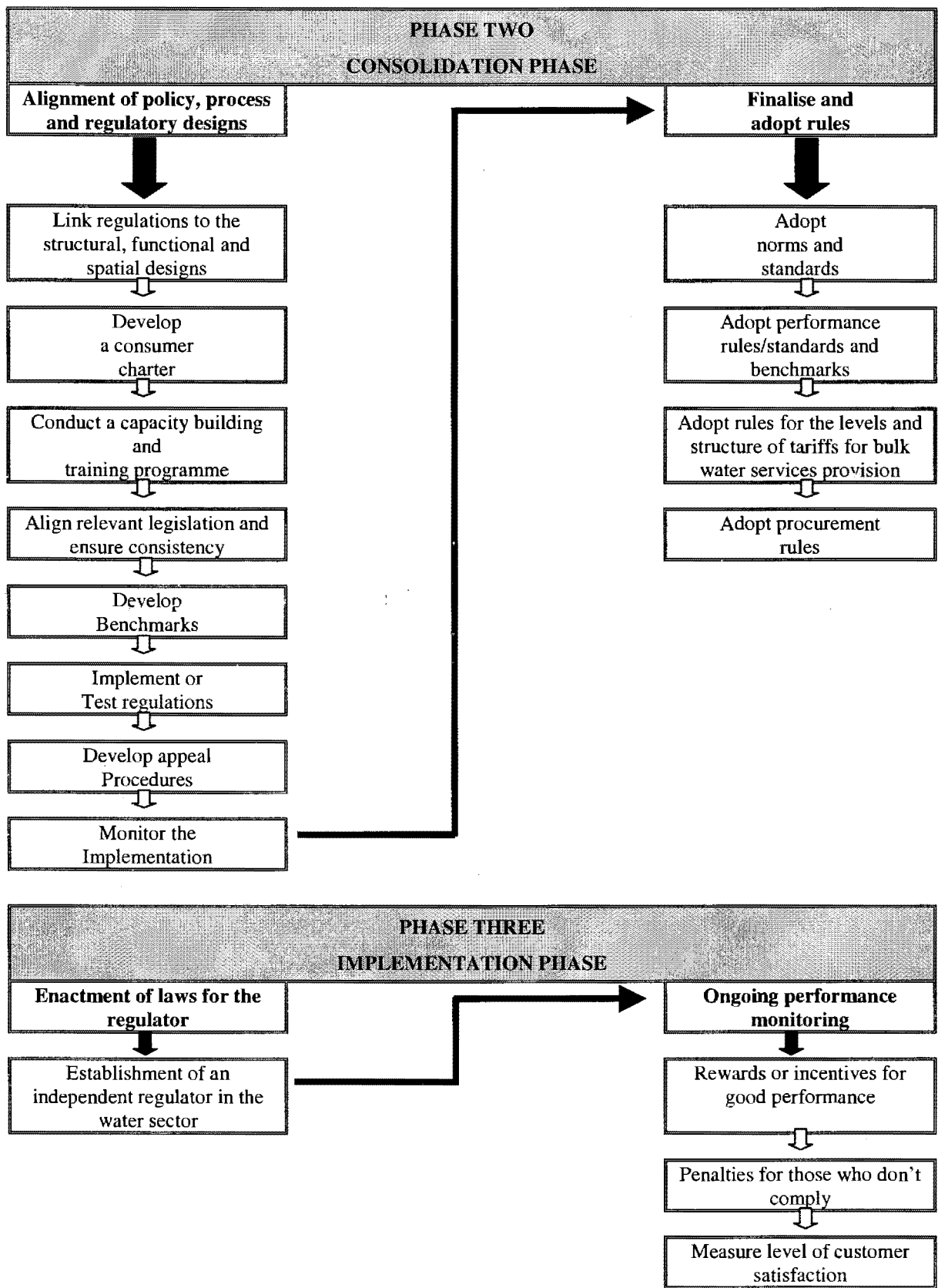vate sector. These contracts are subject to national regulations which eventually ensures that neither the municipalities nor the consumers/public receive a bad deal in terms of tariffs and quality of service.

The study is pointing out that since the South African government is following international trends of decentralising water services responsibilities to local government level, further complementary regulatory actions are critical. That is, decentralisation should not be seen in isolation from other broader developmental goals of democratic governance and sustainable development. This study argues that a clearer regulatory framework generates more confidence to and attracts major players in terms of investments and sustainable water services provision.

7.5   CONCLUSION

This chapter has demonstrated that public participation emerges as an important instrument which governments in Latin America are adopting to address the challenges of sustainable development. This is particularly evident from the Bolivian experiences which have become highly regarded across Latin America and the Caribbean. Drawing from these experiences, it is clear that South Africa is following a similar development path, especially with regards to municipal development planning. It can be deduced that the Bolivian Municipal Development Plans and South Africa's Integrated Development Plans at local government level share similar strategic goals and objectives.

The Bolivian experiences further point out towards government commitment in a regulated, participatory demand-driven approaches for the water services sector. This commitment has

laid a strong basis for sustainable development. Experiences of the regulatory arrangements in the water sector are particularly relevant in South Africa. Clearer regulatory and institutional arrangements are particularly noted as critical because they provide an enabling environment for sustainable development. The South African water services sector could learn from these experiences, especially now that there is too much attention on the sustainability of water services, at local government level.

CHAPTER 8

A PARTICIPATORY MODEL TOWARDS SUSTAINABLE DEVELOPMENT

8.1 INTRODUCTION

Chapter seven explored lessons learnt from three Latin American countries: Chile, Bolivia and Nicaragua. The chapter was dominated by experiences from Bolivia's municipal participatory development planning processes. Since South Africa, like Bolivia, is in the process of decentralising responsibilities to local government, Bolivia's experiences are critical for South Africa's integrated development planning processes. The chapter demonstrated in detail that public participation processes can add value to the sustaining of development, especially at local government level. Chapter eight draws specific lessons from the three Latin American countries, consolidating a participatory model within South Africa's local conditions. The model is divided into various phases and stages. These are further sequenced into a logical order.

8.2 AN INSTITUTIONAL FRAMEWORK

Experiences from the three Latin American countries show that public participation is better co-ordinated when an institutional and a regulatory framework are in place (see sections 7.2.6, 7.3a and table 7.3). Participatory planning processes, in particular, do assist one to clarify existing institutional arrangements. The framework is thus an important guideline for implementing a participatory sustainable development model. This model provides opportunities for unlocking public participation in service delivery planning and development processes. Public participation is a process which involves a variety of stakeholders. As implied by this statement, public participation requires a clear institutional framework which outlines roles and responsibilities[169].

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[169] See table 8.1 for South Africa's institutional framework in the water services and local government sectors.

Structures and institutions responsible for governance at local level have a critical role to play in enforcing a culture of participatory development planning. They are also charged with a key responsibility to oversee processes of service delivery and to ensure maximum impact at local government level. It can be argued that these structures and institutions are the facilitators of sustainable development. This study promotes interactive stakeholder participation in that stakeholders are like actors, they have different roles to play. In the South African situation, the majority of the stakeholders referred to here are the marginalised Blacks living in rural areas. Often, the role they play is characterised by silence. This silence stems from lack of a voice and powerlessness. There is a lack of self-esteem and a lack of knowledge. These are some of the attributes created by the system of apartheid, also a symptom of a process which never recognised people's basic human rights, especially from the point of view of government's mainstream development planning (see chapter four). However, this study argues that the new democratic dispensation in South Africa has created an enabling environment for corrective measures to be undertaken. According to the Municipal Systems Act, 2000 (No 23 of 2000)[170], it is the responsibility of all municipalities to ensure that all stakeholders participate in their own development. The Municipal Systems Act legislates community participation as integral to municipal development planning. Like the Participatory Action Development (PAD) model[171], the proposed model outlines key phases such as the diagnosing (design) phase, the experimenting (strategy development and implementation) phase and the sustaining (impact assessment) phase. The proposed participatory sustainable development model is therefore meant to complement what legislation already purports to achieve.

As indicated in this study, people and organisations play a critical role in participatory processes. Existing legislation in South Africa therefore makes proper provisions for an institutional framework. In order to ensure that service delivery occurs within the scope of public participation, the following table shows that an institutional framework, informed by South Africa's legislative framework, is essential for participatory planning.

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[170] Chapter four sections 16 – 21.
[171] See Lammerink (2001: 1).

TABLE 8.1: INSTITUTIONAL FRAMEWORK FOR MUNICIPAL PARTICIPATORY PLANNING

	STAKE HOLDERS	ROLES AND RESPONSIBILITIES
(a)	Municipality	It takes overall technical, political/governance, economic and social responsibility for the integrated development planning and has the obligation to direct/allocate resources in a sustainable manner
(b)	Municipal council	The council participates in decision making processes. It convenes, deliberates, co-ordinates, evaluates, approves or rejects, plans
(c)	Executive Committee	Identifies the needs of the municipality. Reviews and evaluates needs, identifies options and limitations and submits recommendations to the municipal council. Such recommendations can be in the form of programmes, policies and services
(d)	The mayor	Presides at meetings of the executive committee and performs other duties, including ceremonial duties
(e)	The deputy mayor	Performs mayoral duties in the absence of a mayor
(f)	Executive mayor	Receives reports from committees of the municipal council. Reviews and evaluates needs and presents recommendations. Makes policy, strategy and service delivery recommendations to the municipal council. Monitors and reviews the performance of the municipality. Ensures that the provision of service is conducted in the most efficient, effective and sustainable manner
(g)	Mayoral committee	This committee can only be established if the council has more than nine members. The executive mayor may delegate specific responsibilities to each member
(h)	Ward committee[172]	The committee may make recommendations on any matters affecting its ward
(i)	Municipal manager	The manager is the head of administration and also the chief accounting officer of a municipality
(j)	Water services manager	The manager is responsible for the management of water services within a municipality. Implements the water services development plans
(k)	Water services provider	Provides water services to consumers on behalf of a municipality
(l)	Water services committee[173]	Like a water services provider, a water services committee provides water services to consumers on behalf of a municipality
(m)	Other organs of civil society[174]	Participate in, contribute to and guide processes of the municipal integrated development planning
(n)	Provincial council	Facilitates and co-ordinates activities of the province. Ensures that provincial plans are compatible with the municipal development plans

Source: Adapted from the Municipal Structures Act, 1998 (No117 of 1998)[175]

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[172] According to section 72 (1) of the Local Government: Municipal Structures Act, 1998 (No 117 of 1998), only metropolitan and local municipalities of certain types may have ward committees.

[173] According to section 51 (1) of the Water Services Act, 1997 (No 108 of 1997) the Minister of Water Affairs and Forestry may establish a statutory water services committee.

[174] These include institutions such as non-governmental organisations, the private sector, other public institutions, professional bodies, church groups, unions, organised consumer groups, women's groups, traditional leadership and the civic sector.

[175] See South Africa (1998c).

Table 8.1 outlines key stakeholders in South Africa's local government system. Similar to those discussed in chapter seven in terms of the Bolivian municipal development planning processes, South Africa has well-developed institutional arrangements. Such arrangements are critical during the facilitation of the municipal planning processes (see section 7.2.6). However, for South Africa, such arrangements have not been fully tested because the legislative framework governing this arrangement is still fairly new. The author has compiled a table below to show mechanisms for participatory planning, which can be applied during public participation.

TABLE 8.2: MECHANISMS FOR PARTICIPATORY PLANNING

TASK	DESCRIPTION	RESPONSIBILITY
1.	Information dissemination regarding existing procedures, guidelines, processes and mechanisms for participation	Municipality
2.	Matters for discussion	Municipality and the public
3.	Rights and responsibilities	Public
4.	Language preferences	Municipality
5.	Special needs for the disabled, women and those who cannot read or write	Municipality
6.	Acknowledgement of petitions or lodged complaints	Municipality
7.	Recording of procedures and action plans	Municipality
8.	Report-backs on progress	Municipality and the public

The above table demonstrates how critical the process of community participation is. As argued in this study, often issues of community or public participation are embraced as principles within a programme. However, in most cases, such programmes do not provide mechanisms for implementation. As a result, participation becomes a mere ideal rather than something practical. Sustainable development becomes compromised because the public do not have the opportunity to participate in matters affecting their development. Furthermore, methodologies and tools for participatory sustainable development are rare, and even if available, they are neither understood nor implemented effectively.

The author compiled a figure which outlines critical methodological steps and mechanisms for participatory sustainable development.

FIGURE 8.1:   PARTICIPATORY METHODOLOGY FOR SUSTAINABLE DEVELOPMENT

ON-GOING MONITORING AND EVALUATION

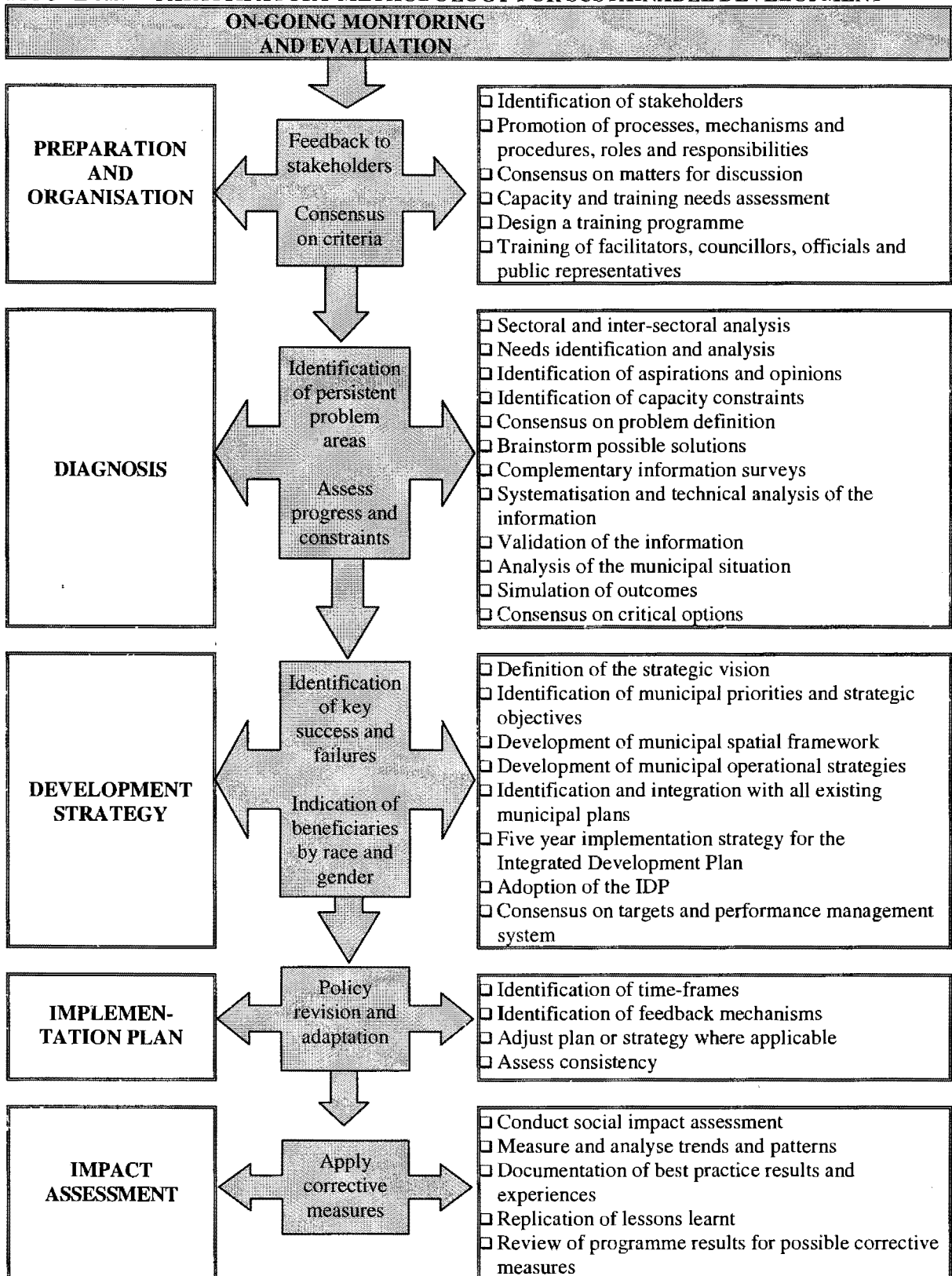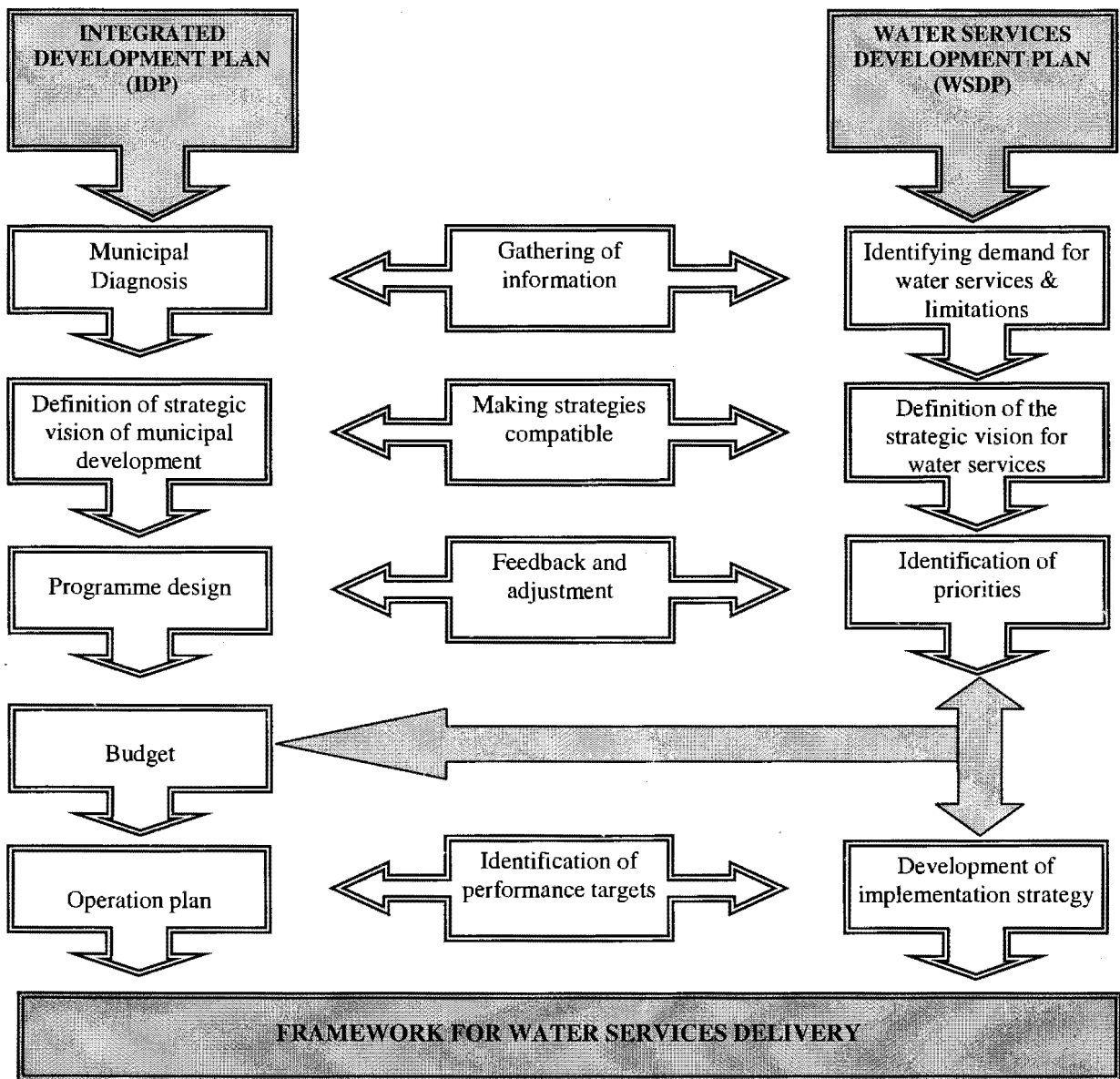|		
PREPARATION AND ORGANISATION	Feedback to stakeholders / Consensus on criteria	❑ Identification of stakeholders ❑ Promotion of processes, mechanisms and procedures, roles and responsibilities ❑ Consensus on matters for discussion ❑ Capacity and training needs assessment ❑ Design a training programme ❑ Training of facilitators, councillors, officials and public representatives
DIAGNOSIS	Identification of persistent problem areas / Assess progress and constraints	❑ Sectoral and inter-sectoral analysis ❑ Needs identification and analysis ❑ Identification of aspirations and opinions ❑ Identification of capacity constraints ❑ Consensus on problem definition ❑ Brainstorm possible solutions ❑ Complementary information surveys ❑ Systematisation and technical analysis of the information ❑ Validation of the information ❑ Analysis of the municipal situation ❑ Simulation of outcomes ❑ Consensus on critical options
DEVELOPMENT STRATEGY	Identification of key success and failures / Indication of beneficiaries by race and gender	❑ Definition of the strategic vision ❑ Identification of municipal priorities and strategic objectives ❑ Development of municipal spatial framework ❑ Development of municipal operational strategies ❑ Identification and integration with all existing municipal plans ❑ Five year implementation strategy for the Integrated Development Plan ❑ Adoption of the IDP ❑ Consensus on targets and performance management system
IMPLEMEN-TATION PLAN	Policy revision and adaptation	❑ Identification of time-frames ❑ Identification of feedback mechanisms ❑ Adjust plan or strategy where applicable ❑ Assess consistency
IMPACT ASSESSMENT	Apply corrective measures	❑ Conduct social impact assessment ❑ Measure and analyse trends and patterns ❑ Documentation of best practice results and experiences ❑ Replication of lessons learnt ❑ Review of programme results for possible corrective measures

Figure 8.1 provides a consolidation of steps and mechanisms which are underpinned by significant monitoring and evaluation processes, as drawn from Bolivia's participatory

municipal development planning (see fig. 7.1 and 7.2). First, **preparation and organisation** represent an important step, which is clearly driven by feedback to stakeholders and consensus on a number of issues such as the roles and responsibilities of each stakeholder. Second, **diagnosis** represents the identification of problems, constraints and different scenarios for solutions. Diagnosis offers facilitators the opportunity to simulate outcomes through the analysis, validation of perceived problems and future options for service delivery. Third, a **development strategy** confirms the level of consensus reached and goals identified. It focuses more on strategic vision and the adoption of a development plan. Fourth, the **implementation plan** represents the operationalisation of the above strategy. It contains targets and time-frames. Fifth, **impact assessment** is about measurement of success or the qualitative difference brought about by the strategy. This is a critical step because it emphasises outcomes. The nature of outcomes, successes or failures, can be used as feedback for policy review and adaptation. Equally, lessons learnt can be replicated elsewhere in other projects or programmes.

Time-frames associated with the implementation of this methodology could vary from situation to situation. Depending on the levels of stakeholders' education, their knowledge base or awareness and also the facilitators' style and approach, the overall implementation could stretch from between one to five years. As noted from the experiences of Bolivia, municipal development planning was conceptualised in the mid-1990s and the results were only gathered five years after the proclamation of the Public Participation Law (see section 7.3).

In the case of South Africa, the municipal development planning process incorporates key sector strategies. Water services development planning is therefore an important component of the municipal Integrated Development Plans. The author proposes a figure which outlines a possible methodological application for South Africa's municipal services planning.

FIGURE 8.2:   METHODOLOGY FOR MUNICIPAL SERVICES PLANNING

INTEGRATED DEVELOPMENT PLAN (IDP)		WATER SERVICES DEVELOPMENT PLAN (WSDP)
Municipal Diagnosis	Gathering of information	Identifying demand for water services & limitations
Definition of strategic vision of municipal development	Making strategies compatible	Definition of the strategic vision for water services
Programme design	Feedback and adjustment	Identification of priorities
Budget		
Operation plan	Identification of performance targets	Development of implementation strategy

FRAMEWORK FOR WATER SERVICES DELIVERY

The above figure illustrates the legislative requirements for municipal service planning in South Africa. On the one hand, the Water Services Act, 1997 (No 108 of 1997) requires every municipality to prepare a draft Water Services Development Plan for its area of jurisdiction[176]. On the other hand, the Municipal Systems Act, 2000 (No 32 of 2000) requires each municipality to adopt a single, inclusive strategic plan for its area of jurisdiction. Such a plan constitutes an Integrated Development Plan[177]. The above figure attempts to highlight the links between development planning (IDP process) and service planning (WSDP process). Development planning represents the overall strategic plan of a municipality, taking into account other sectoral plans such as transport, all dimensions of spatial planning such as land and economic objectives, the regulatory and the legislative framework. Service planning is more sector-oriented. It takes into consideration provision issues. Both development and service planning form an integral part of the municipal Integrated Development Plan. They are guided by a single operational plan and a budget. They both constitute a framework for service delivery at municipal level. This study obviously focuses on water services delivery as a critical sector in municipal service planning.

The most critical factor in figure 8.2 is that participatory planning processes at municipal level require a balance between development planning and service planning. That is, whilst pursuing participatory development planning over a five year term, service delivery should carry on. However, service delivery should occur within the constraints and framework of the municipal Integrated Development Plan. The service delivery framework constitutes the sustaining or continuation phase of a municipal plan.

Hence the argument that the local government sector has an important role to play in water services delivery. The tasks due to be executed during the local government sector planning for service delivery can be summarised using the following methodology.

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[176] Section 12 (1) and 13.
[177] Section 25 (1) and (2).

TABLE 8.3:   METHODOLOGY FOR TASK EXECUTION

TASK	ELEMENTS	DESCRIPTION
(a)	Stakeholders	Stakeholder analysis is critical because development is about the people. Identification of stakeholders, their roles and responsibilities is critical. Stakeholders in South African constitute the general public and all organs of civil society (public and private sector, non-governmental organisations, community based organisations and consumer groups.
(b)	Criteria	One of the key criteria must be representation of stakeholders. Representativity is about protecting the interests of the marginalised groups. It validates the position each stakeholder occupies in the social or political strata. It tests participants' hypotheses, theories, beliefs, premises, philosophies, ideologies, values and principles and the conclusions they reach.
(c)	Problems	Identification of existing problem areas, participants' fears, concerns and expectations. Analysis of causes and effects of problems is critical. Problems should be classified and categorised.
(d)	Objectives	Objectives should be well-defined, clarified and verified. There is a need to create common understanding of objectives. Target groups for objectives should be identified. These objectives should reflect the aspirations of the participants.
(e)	Common vision	Based on the above objectives and situation assessment, a common vision can be developed. Consensus is important in that it strengthens the commitment of participants to a common plan of action.
(f)	Constraints	Constraints should be identified and ranked. Identification of constraints such as the technical, political, economic, financial and structural should be systematised in order to allow for a clear plan of action. That is, each constraint should be matched with the required resources.
(g)	Solutions	Selection and generation of possible scenarios is critical. Various options should be explored. The required inputs and the desired outcomes should be measured.
(h)	Strategies	An integrated strategy should be developed in order to have a coherent plan of action. That is, inputs, outputs, time and resources should be harmonised. Value for money (cost-benefit analysis) should be calculated.
(i)	Programmes	In setting the programme, scheduling and clarification of roles and actions is critical. Duplication of effort should be avoided. Measuring economies of scale is therefore critical. Control, accountability and reporting mechanisms should be clarified.
(j)	Evaluation	Systematic follow-up and impact assessment is critical. Changes to policy or amendments to legislation are only meaningful if they are based on real problems.

Adapted from Dourojeanni (1997: 16)

The above table demonstrates that participatory processes for sustainable development are highly complex and demanding. A range of appropriate tools and methodologies are critical for a logical process. Such processes have to be carefully planned and sequenced in order to yield the desired results. The process of transactions between actors is designed to achieve social equity and it is normally performed in repetitive cycles; as such, it represents cycles of consensus-building. This process accords equal importance to all stakeholders or actors and therefore brings about compatibility of opinions, decisions and solutions. It generates comparison and reconciliation of various inputs and deliberations (Dourojeanni 1997: 19). When stakeholders have developed a basic level of understanding of the rationale for participation, they should be taken through the conceptualisation stages, which involve the multi-dimensional aspects of sustainable development. Table 8.4 outlines the "gallery" of dimensions of sustainable development.

TABLE 8.4: GALLERY OF DIMENSIONS

DIMENSION	CHECK-LIST OF ACTIONS
(a) Technological	Assess appropriateness of technology Assess planning tools for compatibility with current knowledge and data availability and available resources within the municipality Assess training needs and requirements as contained in the municipal skills development plans Assess compatibility of technological and available financial resources, government policies and legislative requirements Assess the appropriateness of available indigenous technologies and knowledge base Assess the potential for local suppliers and manufacturers to supply appropriate goods or services Ensure inclusivity regarding various technological options
(b) Institutional and management	Assess compatibility with national legislation, policies, norms and standards Define current institutional arrangements, weaknesses and strengths Identify appropriate stakeholders and define roles and responsibilities Identify existing inter-sectoral planning and co-ordination mechanisms Assess the appropriateness of existing structures and institutions, and any potential risks for duplication of effort Assess the appropriateness of management and development principles Assess levels of institutional and management capacity Identify appropriate support measures
(c) Social and cultural	Assess existing social and cultural development goals Identify consumers and assess levels of affordability, willingness and their ability to pay for water services Assess existing participatory methodologies, tools or guidelines Assess cultural and behavioural practices Assess potential social impact Assess levels of women's involvement in decision making (gender analysis)
(d) Economic	Assess the long-term economic benefits Assess the compatibility of economic benefits with the planning process Encourage willingness to pay for services Determine opportunity costs of the time taken by women, children and men in fetching water Conduct a cost-benefit analysis Assess levels of demand
(e) Financial	Determine current costs of operations and maintenance Determine requirements for capital investment Develop a financial model to ensure cost-effectiveness of service Assess current levels of tariffs and affordability Identify sources of income, assess levels of unemployment and under-employment Assess the possible impact of providing free basic water Assess ability and commitment of communities to make contributions Assess levels of financial capacity
(f) Environmental	Conduct environmental impact assessment Assess or validate existing environmental baseline data Assess the quality of water (both surface and ground) Assess the protection, management and development of water resources
(g) Political	Assess levels of political commitment and buy-in Assess structures of governance and compatibility with legislation, policies, systems and procedures Assess the levels and nature of existing resources and infrastructure Assess the nature and scope of support at different levels of government Assess the needs of politicians or councillors
(h) Human	Assess levels of poverty and human development (human capital) Assess the impact of national strategies and programmes on poverty alleviation Conduct an inventory of institutions and structures, budgets, target groups and objectives Assess levels of education, participation and the information people receive

Source: Adapted from the European Commission (1998)

The above table provides a comprehensive list of dimensions or 'a gallery' which could serve as a framework or check-list for the development planning processes in the water services sector. The table also demonstrates that unless sustainable development ceases to become a

concept driven solely by environmental or ecological concerns, it will not address the quality of people's lives. That is, environmental considerations cannot be used in isolation to address development problems as observed from a majority of developing countries. Furthermore, the 'gallery' represents an extension of the classical, theoretical dimensions discussed in chapter two (see chapter two section 2.2.2). This study argues that other dimensions of sustainable development such as the institutional and management, social and cultural, political and financial issues, are more appropriate for developing countries. These dimensions are particularly important because they can make a positive contribution or could bring about a qualitative difference in human lives within developing countries. Sustainable development has to be seen as a totally integrated process which recognises all dimensions associated with it. The author proposes a figure which integrates the above discussion into a participatory model towards sustainable development.

FIGURE 8.3:   A PARTICIPATORY SUSTAINABLE DEVELOPMENT MODEL

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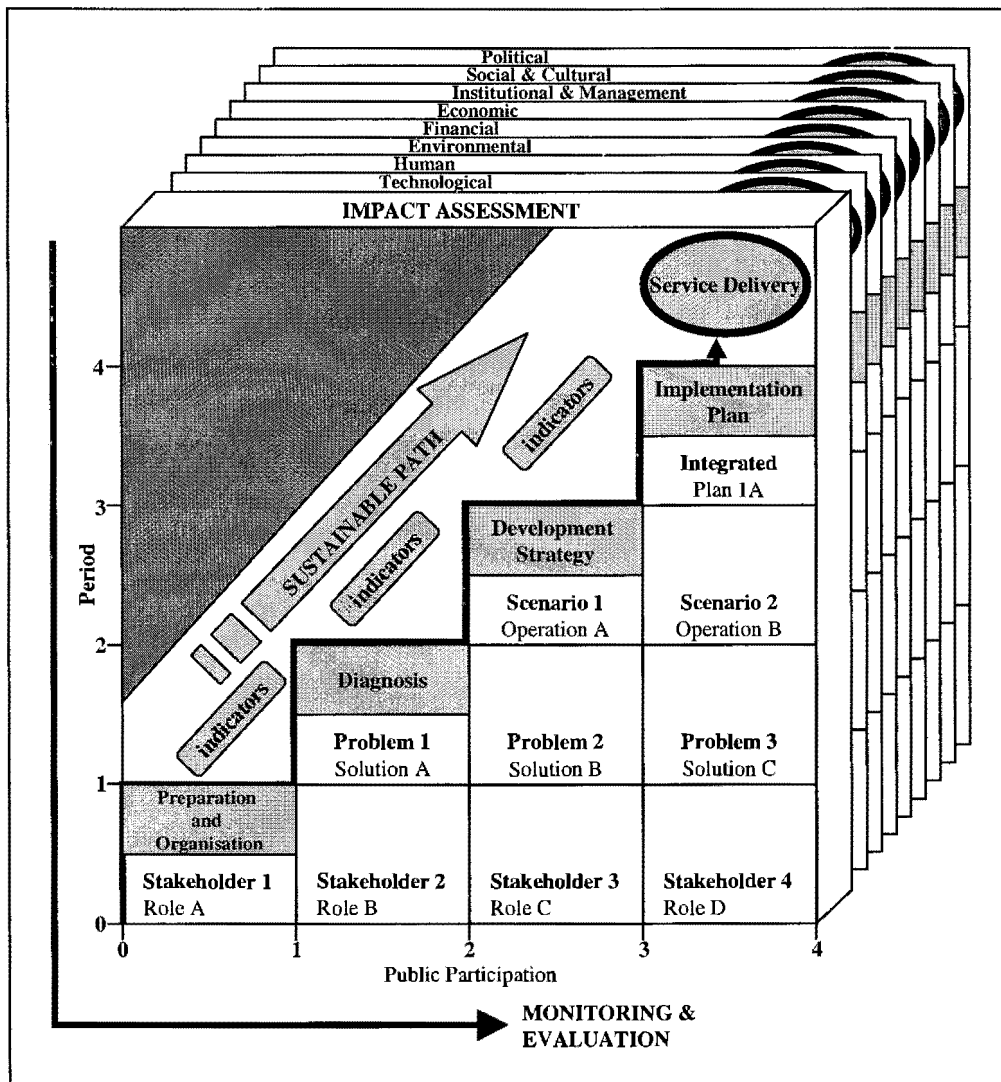
Figure 8.3 provides a participatory model which can be adjusted and applied for any purpose of sectoral planning and development of services. Drawing from the above methodologies, the figure shows five key phases which lay down a path for sustainability: preparation and organisation, diagnosis, development strategy, implementation plan and impact assessment.

Each of the above phases is located within a hierarchy ('zig-zag' or vertical), however, each has a distinct number of horizontal blocks which emphasise the extent of interactive participation between stakeholders. Vertical identifies key process milestones and their accomplishment during the participation stages. Horizontal representation locates the transaction between stakeholders. As noted by Dourojeanni (1997: 19), the process of transactions between stakeholders:

> Confers equal importance on all the stakeholders (sic) participating in management process for sustainable development in a particular sphere.

Figure 8.3 also indicates that as each hierarchical process advances to the next level, stakeholder transactions become minimal. The gap between the stakeholders' views becomes narrow, demonstrating that consensus is being reached on a number of issues. When consensus regarding implementation is reached, stakeholder participation is reduced drastically, leaving the process to a small core group of technocrats to finalise the plan. What is contained in the implementation plan has to reflect the aspirations, needs and priorities as identified during the entire process. As it appears on the model, service delivery is high on the hierarchy. This shows a strong effort to move towards service delivery. The dark triangular shade represents the unknown. That is, there is no guarantee that the proposed sequencing of transactions and the appropriate application of the 'gallery of dimensions' would bring about the desired level of sustainability. The balance of probability is such that the proposed model is purely based on a subjective idealisation by a decision maker or development planner (Gear 1974: 8). The author therefore suggests that when applying the model, there has to be consideration given to external factors which may undermine the process of implementation.

In terms of time, figure 8.3 also shows a frequency or period which stipulates how far public participation can last. Depending on the level of understanding and consensus reached by stakeholders, the period can represent anything from one week, one month to one year. This shows that the above model is not static, but dynamic. It caters for a variety of situations,

assessment and diagnosis of the actual situations at municipal level. In particular, it provides the opportunity for the consolidation and analysis of information; disaggregation of discounted rates (cost-benefit analysis), which results in information and knowledge sharing amongst stakeholders regarding future benefits. The underlying process allows for the analyses of stakeholders in terms of their roles and responsibilities, contextualisation of problems, identification of problems, strengths and weaknesses, limitations and opportunities (see figure 8.1). All these processes are assisted through the execution of tasks formulated during the strategy development phase (see table 8.3).

The above model is purely diagrammatic. It does not dwell into any complex mathematical configurations[178] which are often applied in many modelling processes. In other words, it could also be termed a decision support model because it assists stakeholders in seeking solutions. As indicated in the previous discussion, the model is conceptualised according to Dourojeanni's (1997:19) "cycles of transactions or cycles of consensus-building" which shows how stakeholders interact until consensus is reached. The author compiled a figure which shows how these transactions can be represented:

FIGURE 8.4:   CYCLES OF TRANSACTIONS
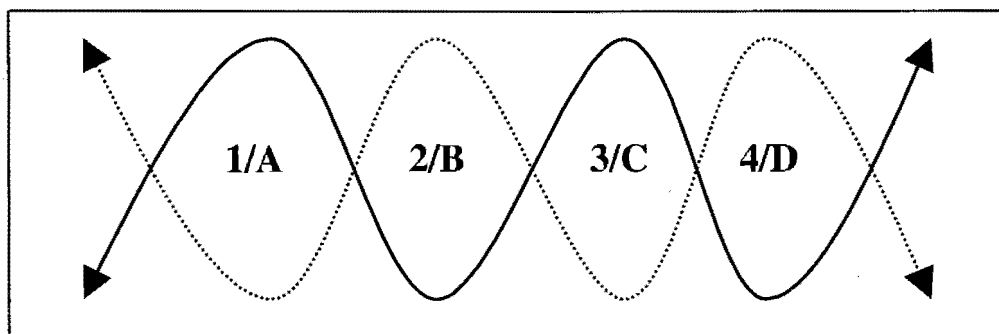
The above figure shows that stakeholder engagement is a continuous process. As noted earlier, each stage has certain activities, which according to progress reached, can be represented by a solid line (positive) or a broken line (negative). It is also important to indicate that elsewhere, a number of sophisticated mathematical sequencing models for

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[178] Mathematical modelling requires considerable amount of information about a great number of factors (Gear 1974: 8).

quantifying transactions and other factors in sustainable development do exist (see chapter one section 1.1). Econometrists for example, apply the economic dimension as a variable to solve economic sustainability questions, assigning values and computing them into a software in order to get quantitative results (see chapter two section 2.2.2.1). Quantitative results are then presented in the form of complex graphs which when interpreted, provide technical solutions. Unlike the above proposed model, technical solutions do not necessarily yield the desired qualitative results of human development which can mainly be accomplished through participatory methods.

The above diagrammatic or decision support model reflects a qualitatitive process of testing perceptions of stakeholders through regular engagement. As indicated in figure 8.1, the qualitative process involves the consolidation and concretisation of perceptions, which is then followed by consensus-seeking. Furthermore, the process involves the verification of opinions and attitudes in practice, through awareness raising or general assessment, and proposals to be implemented. The verification process demonstrates that public participation can become systematic and therefore bring about collective decision making. In this way, the proposed model can add value in the water services sector in South Africa because currently, such a model does not exist. A study by Benwell (1979) confirms that intensive public involvement is a useful planning approach in development, especially in situations when local government introduces 'statutory public participation' as a means to achieving sustainable development. As public participation in South Africa is now statutory and obligatory, this study sees participatory planning methods and models as critical for sustainable developmnent.

The above discussion points out that the above model (figure 8.3) can enhance chances for decision making in the water services sector. It can simplify what appears to be complex systems of development planning at national, provincial and local government levels. Modelling for the water services sector can also provide solutions for the proliferation of monitoring and evaluation systems which are not properly co-ordinated.

These systems require some form of integration in order to enable the technocrats to take corrective measures such as collecting, validating and reconciling data. A co-ordinated management of data could also assist in proper impact assessment through the reconciliation

of successive estimates using the principles such as equity, sustainability, integrity and multi-objectivity (see chapter three sections 3.3 and 3.4).

As pointed out in chapter one (section 1.4.3), a number of benefits can accrue from modelling (Gear 1974: 33-34), that is:

(a) modelling enables most important factors and processes to be treated in one analysis (see the "gallery" of sustainable development in table 8.4)

(b) modelling enables decision making to occur in a systematic way (see task execution in table 8.3)

(c) modelling can be used to simulate outcomes (see diagnosis in figure 8.1)

(d) modelling can be used in conjunction with a computer to search millions of alternatives (see chapter nine section 9.8)

(e) modelling simplifies situations.

The above benefits indicate that, depending on the nature of required solutions, modelling for participatory sustainable development can take different shapes and forms. Although modelling is seen in this study as a possible vehicle to address a myriad of unsustainable development practices in South Africa, it must be pointed out that in simplifying situations (e), modelling presents one dimensional figures which cannot possibly show the nature and extent of interaction of the different variables.

8.3   CONCLUSION

The proposed model is meant to bridge the gap between policy ideals on the one hand and the achievement of sustainable development on the other hand. As it stands, South Africa's water services sector places more emphasis on integrated planning and a co-ordinated approach towards sustainable water delivery, yet since 1994 there have not been signs of any

successes[179]. As argued in chapter one, this is because the water services sector lacks model(s) for participatory sustainable development. Therefore, the proposed model conceptualises processes, content and outcomes for sustainable development. It also provides a practical blueprint for steps and and easy to follow guidelines. The author presents the model as a significant step towards addressing key constraints within the water services sector (see chapter one section 1.3.1).

[179] This is despite reported quantitative successes brought about through the implementation of the capital programme within the Reconstruction and Development Programme (see chapter five table 5.2a and b).

CHAPTER 9

CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION

The primary objective of this study was to propose a participatory model for water services delivery in South Africa that could lead towards sustainable development. A number of secondary objectives were set, and these were achieved in chapters two to seven, which enabled the author to meet the primary objective in chapter eight. The model arrived at was specifically drawn from the experiences of Bolivia and the lessons learnt there. Since South Africa and Bolivia share similar experiences of having had marginalised communities throughout their histories, a participatory model is seen as a suitable vehicle to address sustainable development issues in South Africa. Chapter nine provides a summary and analysis and consolidates recommendations drawn from all chapters.

9.2 DECONSTRUCTING SUSTAINABLE DEVELOPMENT

In the introduction to this thesis (see chapter one section 1.1), this study pointed out that the world bodies and politicians gather to pontificate about unsustainable development during world summits and conferences. Often, such meetings are concerned about the symptoms and not causes of problems such as poverty, global economic disparities, disease, pollution and the damage to the environment. The outcomes of these meetings are noted in the form of pledges and signed agreements. The shortcomings of these texts are that they do not consider the context within which sustainable or unsustainable development takes place, let alone the causes thereof. Politicians get caught up in the application of the most commonly used notions and principles of sustainable development.

If the concept sustainable development is to become meaningful in the South African context, then the point of departure is to deconstruct its current global usage (theory), structure, content and form (practice).

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The concept deconstruction originates from the study of linguistics and discourse of power[180]. In other words, deconstruction is a process of re-formulating the phraseology and epistemology of sustainable development. As noted from Munck (1999: 196-208), the problem with the concept of sustainable development is that it is influenced by power relations between different nations and this fact requires a critical review. Power relations shape meanings and the language people use to describe things around them (see Robinson 1990). This situation calls for what Munck calls a "Foucaultian deconstruction of the development discourse" (see chapter two section 2.2.1).

Despite the fact that the 1992 Rio earth summit gave new meanings and interpretations to the concept of sustainable development, developing countries continue to battle to find sustainable solutions for sustainable development. To a large extent, these countries have become more assertive in influencing alternative meanings for sustainable development. This is in response to lack of practical solutions from the world summits and conferences held in the name of sustainable development. As a result, some developing countries have adopted a slightly different approach in that they locate sustainable development targets around their local context, using international best practices as guides. It is in this context that the author proposes the deconstruction or re-formulation of current meanings towards those which appreciate the local conditions and context. Moving away from theory and practice towards praxis.

The common meaning or definition of sustainable development was developed by the WCED (1987: 43) and it states that:

> Sustainable development is a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

As noted from the discussion in chapter two, the above definition has received considerable interpretation and criticism from a number of authors (Van den Bergh & Van der Straaten

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[180] Michel Foucault is one of the leading post-structuralists and has written extensively about the theory of discourse.

1994: 5; Rao 2000: 23-26; Fitzgerald *et al* 1997: 4; Lelè 1991: 618; Agarwal & Narain 1997: 4 and Redclift 1987). Drawing from the above discussion, it can be concluded that in the South African context, meeting the needs of the present generation implies adopting participatory models for sustainable development. Deconstruction would therefore refer to the mechanisms and measures South Africans take to redefine concepts and therefore to attach new meanings appropriate to their unique situation and history.

Earlier, it was pointed out that this study was conceptualised around the different contexts within which sustainable water services delivery in South Africa can be achieved. In order to formulate a logical conclusion concerning what is probably a new sustainable development paradigm for the water services sector, the study was divided into a primary objective and a number of secondary ones (see chapter one section 1.5.1). The study made an attempt to contextualise sustainable development and now concludes that context plays an important part in understanding and applying sustainable development. Context was therefore used as a key variable in understanding various dimensions of sustainable development.

This study addressed various levels of context. The first context described how meanings of sustainable development underpinned by environmental considerations have evolved over time, with strong influence from First World or developed countries (chapter two). Furthermore, the study made significant links by incorporating sustainable development with other principles which seek to promote interactive public participation in service delivery (chapter three).

The second context explored South Africa's water policy issues, with reference to the colonial and apartheid practices and future challenges. This context indicated that in the past, South Africa embraced First World tendencies and environmental considerations in the management of water resources. Although the water sector prides itself on a world class infrastructure, the study indicated that the planning of water management was non-participatory, centralised, fragmented, uncoordinated and thus unsustainable because it did not target needy areas. The institutional arrangements for local government were geographically and racially skewed in favour of the White population. The study concludes that South Africa's apartheid development paradigm militated against sustainable development (chapters four, five and six).

The third context was mainly focused around participatory methods of sustainable development, with particular reference to Latin American experiences (chapter seven). This context demonstrated that institutionalised public participation can have a positive impact on sustainability. The chapter highlighted lessons learnt from Bolivia's Public Participation Law and its five year participatory planning activities (see chapter seven section 7.3). Such experiences are analysed to assist South Africa in the development of a new development paradigm in water services delivery.

The study concludes that in order to achieve sustainable development, integrated development planning towards service delivery should remain the main concern for municipalities. Public participation in development planning is also critical in that if structured appropriately (see chapter eight figure 8.3), it could yield the required results of human development. Furthermore, effective public participation is influenced by prevailing institutional and regulatory arrangements (see chapter seven section 7.4.2 and table 7.3). Experiences from Latin America point to the fact that the private sector can play a meaningful role in service delivery, especially in rural and peri-urban areas. This occurs by designing financial incentives that are consistent with broad service coverage and by making contract objectives quite clear and easily measurable. As noted from the Bolivian water services sector regulatory arrangement, the government made it possible to attract the private sector to get involved in peri-urban (mostly low-income) areas. Low-income areas are well-known for their inability to attract private investment. How the contract is awarded, the process(es) followed, the nature and extent of sector regulations and stricter regulatory arrangements will determine the outcome of services in poor low-income areas.

In South Africa, sustainable water services provision is critical for the success of municipalities. The South African government has adopted the "free basic water policy" as an attempt to increase water coverage in poor areas. The notion of free basic water is formulated around a national tariff policy which allows municipalities access to funds to subsidise a "lifeline" amount of water and cross-subsidisation to the poor families. Since it is still too early to measure the financial impact of this policy, it is important to note that by introducing the above policy, the South African government has demonstrated a political will to address issues of equitable access of water supply and sanitation in South Africa. The political will therefore, should be complemented by strong public-private partnership models in water services provision.

Furthermore, the current local government transformation and fiscal decentralisation point towards opportunities for sustainable development at local level. For example, the Treasury Department is planning to merge grant funding to municipalities in terms of the Municipal Infrastructure Grant (MIG). The MIG would probably allow for consolidated planning processes, blending of resources or technical expertise in infrastructure development, therefore avoiding duplication of effort during the implementation processes. The author argues that this is a critical planning stage whereby municipalities should avoid falling into the dangers of parochialism (see chapter six section 6.4.1).

The above contexts demonstrate that understanding sustainable development in South Africa is particularly complex because this country reflects two worlds, developed and underdeveloped, urban and rural municipalities. As argued in this study, this dichotomy between municipalities is as a result of skewed settlement patterns and a history of racial territorial arrangements. South Africa's infrastructure was developed to meet the needs of the minority White population and has thus resulted in extreme variations in income and quality of life. Drawing from the historical descriptive analysis of the system of racial discrimination and the underpinning trends and patterns of development, it can be concluded that South Africa has more problems related to people development rather than to environmental-ecological problems. This study is therefore justified in advocating a human-centred participatory development model which seeks to address the quality of the lives of the marginalised peoples of South Africa (see chapter eight).

As a way forward, this study concludes that there is a need for the ideological development discourse of apartheid to be superseded by progressive norms and standards of public participation. Certainly, such experiences and lessons can be drawn from the three Latin American countries. If South Africa succeeds in achieving consensus on important issues of this nature, then it could build a new intellectual and research capacity for sustainable development (Turok 1999: 8). Although there were shortcomings with the approach, the pursuit of the Reconstruction and Development Programme in 1994, which saw the implementation of large infrastructure projects such as those in the water sector, signalled a positive attitude and a political will to re-introduce the above-mentioned ethical direction for sustainable development in South Africa. This is in the light of the fact that communities which were at the receiving end of apartheid policies, especially the poor communities which for survival reasons, destroyed the forests in search of energy, are now doing so to a lesser

extent because the new government has introduced alternative sources of energy such as electricity. It is only in the new dispensation that South Africa's new constitution provides for the right to basic services, access to information and the right to human development.

The new development paradigm being proposed in this study is one which advances human development, self-esteem and self-reliance. Unless there is concerted effort from government to raise self-esteem of the poor through public awareness, the freedom attained in 1994 cannot become real. However, this study notes the profound nature of South Africa's socio-economic and ideological problems, which still pose a challenge: for example, from whose perspective is development sustainable? The study therefore argues that although the proposed model provides an alternative approach towards participatory sustainable development, since South Africa is a divided society its inherent political and cultural differences will take long to resolve. In terms of racial groups, there probably exists a huge gap in differences of opinion regarding what is sustainable and what is developmental. As discussed in chapter four, the immoral dimensions of apartheid had a profound impact on the manner in which different South Africans perceive different things.

Turok (1999: 7) further argues in favour of a need to identify critical and thorny issues of race and of the apartheid system in general in order to confront issues which still continue to affect the South African society, such as racialised forms of poverty which threaten sustainable development. South Africa's development discourse is rife with such dynamic characteristics, which should be dealt with at the beginning of a participatory process. These include cultural, ideological and political differences which influence the policy planning processes, either positively or negatively. As can be seen from the model proposed in chapter eight, consensus building is therefore an essential tactic to be applied during the diagnostic stages. Approaches and methodologies to be applied should also become sensitive to the cultural and linguistic needs of participants. At municipal level, the use of representative structures such as the ward committees and water services committees is important for ensuring that the stakeholder group remains focused on its task. Information gathering and analysis is critical. Participants should be given the opportunity to decide on appropriate instruments for analysing the information. This could be based on their previous involvement as activists, community representatives and any other structures they belonged to, in the past. It is important that this information be recorded in such a way that it does not exclude key experiences and aspirations of stakeholders.

The key reason why the above discussion is so critical is that apartheid-style development practices did not take into consideration the aspirations of the majority of South Africans. It was not a generally recognised system because it was exclusive and racist. It could therefore not be sustained. What will make the above approaches and methodologies (see chapter eight) work is that gradually ordinary people are beginning to understand their rights, unlike in the past. It is therefore critical that a new developmental paradigm be introduced in South Africa. That is, there is a need to re-visit the unsustainable practices underpinning the old systems of racial development. It is important to de-racialise development and to promote progressive, sustainable forms of human development. Deconstructing sustainable development implies finding progressive ways and means of responding to the human plea for freedom and a good quality of life: to ensure that during the implementation of policy processes, either in the water services sector or the local government sector, the public is given space to raise their own unique concerns, fears, suspicions, feelings of mistrust, uncertainties and critical assumptions. However, it is also important to note that introducing new values and systems does not automatically mean that development becomes sustainable. This shows that people development is a complex subject which requires a complex set of solutions derived from the infusion of the institutional, economic, political and social dimensions of sustainable development. It is in this context that the proposed model needs to be considered.

The above discussion points out that South Africa's transitional political process and the pursuit of social development are incrementally bringing about good prospects for sustainability. Unlike in many developing countries which are still in a transitional stage, the situation in South Africa requires robust poverty alleviation programmes. Poverty retards human development and therefore works against freedom, self-esteem and empowerment. Sustainable human development should culminate in the emergence of a "national self-interest" (Gillis & Vincent cited in Schmandt & Ward 2000: 11). The above prospects for sustainable development require a pragmatic policy framework in the water services sector.

A pragmatic policy framework is usually founded on the appreciation of concerns for sustainability as well as for sustainable development (Rao 2000: 347). As seen in the previous chapters, this study puts more emphasis on the social and human elements of sustainability. However, this does not preclude the importance of environmental, economic and technological concerns for sustainability which, over the years, have filled the literature

on the subject of sustainable development. The challenge for this study is therefore to apply all possible dimensions, or the "gallery" of sustainable development in a model for participatory planning (see chapter eight figure 8.3).

The transition from apartheid to democratic South Africa shows key milestones and achievements in a short period. Major policy changes regarding water supply and sanitation and local governance have been noted both in the water and local government sectors. In general, South Africa already has a sound legislative basis for local governance and for effective public participation. However, the problem is that there are no appropriate procedures, tools and models to guide effective public participation. In the case where they exist, they are still theoretical rather than practical. It is therefore correct to argue that the water services sector in South Africa has not reached the same level of institutional maturity with regard to real public participatory approaches, as compared to other countries such as Bolivia. This could be attributed to the fact that South Africa's policy and legislative framework is undergoing incremental changes. Furthermore, it could be due to the fact that the South African government is under pressure to accelerate delivery. Acceleration makes it difficult for government to consolidate or evaluate shortcomings.

The challenge is that if South Africa is to achieve a smooth transition towards a developmental society, there is a need for government to recognise the core values, ethics and type of leadership needed for sustainable development to take place. Acceleration of service delivery alone is not sufficient. By simply embracing development principles, government cannot expect miracles to happen. Rather, there must be a strong need to move beyond the theoretical inclinations towards a genuine desire to implement values and principles of development. Schmandt and Ward (2000: 6) further indicate that there is a need to create a value system in society which recognises and shows a concrete appeal for human development. Without ethical direction in the pursuit for sustainable human development, particularly relevant for a transitional society such as South Africa, the transition to democracy might as well fail. Ethical direction for South Africa would imply the institutionalisation of sustainable development principles within government development programmes. It also means the implementation of the new constitution and the Bill of Rights by educating the public practically about their responsibilities, obligations and rights as individuals and as a collective.

South Africa's policy of Batho Pele in public service delivery signifies a move similar to the one in Bolivia, whereby public servants are required to put the interests of consumers first. The development of a stakeholder[181] framework for public participation is therefore an essential component of sustainable development. As argued in the study, it is people who can make development either sustainable or unsustainable. Reaching consensus on critical issues of process, development and outcome is critical. Participation can bring about mutual understanding and a broad knowledge base of opinion. Public participation therefore offers the best informed judgement on issues, provides the best possible trade-offs and options within the resources and time constraints available (Carew-Reid *et al* 1994: 55).

What emerges from lessons learnt in Latin America is that local government cannot succeed on its own. Public participation is heralded as the most important source of strength for municipalities. Strength is derived from integrated planning, co-ordination of development programmes, promotion of a demand driven approach and the ultimate stimulation of consumer ownership and responsibility. These programmes require political commitment because without it, they will all end up as failures.

9.2.1   A political will

Latin American experiences show that a political transition towards democracy is a viable option for major institutional reforms. Bolivia, for example, shows that reforms should be backed by a considerable political will and strong policy directives. On the one hand, Bolivians opted for their 1994 Public Participation and Decentralisation Laws. Chileans, on the other hand, chose to embark on water sector reform processes, culminating in a strong regulatory framework. The Chilean government took a stand in favour of private sector involvement. They regulate the private sector while at the same time promoting incentive-based competition. As a result of these arrangements, they seem to derive value and good prospects for sustainable development, by attracting capital and foreign investment. If it had not been for their political will, this could not have happened. Likewise, Nicaragua developed a national sustainable development strategy which is currently being implemented. It guides

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[181] Stakeholders refer to government (national, provincial, local), labour, NGOs, CBOs, consumer groups,

development agencies through the enforcement of public participation in development projects.

Furthermore, Latin America presents some of the best experiences with regards to setting clear regulatory principles, objectives, regulations, procedures, processes, structures, roles and responsibilities. Countries such as Bolivia have not waited for a complete reform of the water sector, but have adopted an incremental approach and also taken a bold step in investigating and sequencing policy and regulations within the public sector. Monopolies and tariffs are regulated, private sector participation is monitored and impact is assessed during certain intervals. Although there are still inherent problems within the regulatory systems of countries visited, governments have strict regulatory and monitoring oversight. In South Africa, the water services sector has huge delays regarding the formulation of appropriate service provision and regulatory arrangements. These delays can have a negative impact on attracting potential investors. Further delays imply that local government will not be in a position to deliver as promised to the constituency.

Overall, the experiences of the three countries reveal an interesting pattern of policy-making processes driven by their respective governments. These processes have resulted in public and private sector confidence building. It has also emerged from the field work that stakeholder engagement has in fact brought about realistic development strategies which incorporate the thinking of all those who are affected. In this way, this process has solidified better understanding and commitment from stakeholders. Consensus building has emerged as a solid basis for sustainable development.

Given the above situation, formulating a policy directive for sustainable development through public participation is an essential step for the South African government. Public policy, for example, does not only emerge as an obligation, as is the case with South Africa's Batho Pele policy. Rather, policy should also become an opportunity for laying the basis for sustainable development. It is the responsibility of government to introduce policy and legislative obligations, which must bring about the desired outcome of continued or uninterrupted

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donors, tertiary institutions and the private sector.

service delivery. The public is therefore an important stakeholder on which the government should rely, rather than on government policy documents. Lessons learnt so far point to a need for the South African government to institutionalise sustainable development through the application of participatory planning models.

The author regards the existing Batho Pele policy in South Africa as a sound basis for public participation (see chapter four table 4.1). However, in its current state, it makes service delivery mandatory and obligatory. Mandatory in that the policy is about the government asserting itself, using policy as an instrument for providing services to the public. Obligatory in that it is based on the premise that the public deserves good treatment, therefore they must be supplied with services. The policy is therefore supply-driven. It puts emphasis on the roles and responsibilities of public servants, without necessarily causing the public to demand services or making public participation explicitly mandatory and obligatory.

The Batho Pele policy is a useful policy directive for public servants. However, it needs to be strengthened further by promoting participation in government policy planning, design and implementation. Policy planning and design processes are derived from preparation and organisation, diagnosis and the sustaining phases of public participation. Policy planning and design represent probably the most important stages in the process of policy analysis. Policy analysis justifies costs and evaluates the desired opportunities and outcomes for public value. Public value is an important feature for sustainable development. If it emerges that there is no value in what the government does after spending substantial resources on programmes and projects, then the government should review its policies. The challenge therefore is to create a positive approach towards policy development and practices which promote the fundamental well-being of society as a whole.

9.2.2   Taking stock of the water services transition

This study concludes that the present government has sufficiently developed policy guidelines for the delivery of water services. However, what is lacking is the practical implementation. Previously, as the government was under pressure to deliver against election promises in 1994, there was no adequate opportunity to involve the public in extensive policy debates and the ultimate policy development. It can also be said that the method of participation was somewhere between passive and functional participation (see chapter three table 3.2). Since there were no mechanisms for community participation similar to those set

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up in the Municipal Systems Act, 2000 (No 32 of 2000)[182], it can be argued that the participatory methods applied in the water services sector for example, were not interactive. The author postulates that lack of interactive participation could have been attributed to a number of factors such as:

(a)   a desire to accelerate delivery, thereby neglecting joint planning, design and analysis

(b)   joint planning, design and analysis required some level of basic education on the part of communities and could have been time-consuming

(c)   water contracts were dominated by technically-oriented professionals, the majority coming from an urban background and only a few with rural experience

(d)   inadequate measures to monitor and manage contracts on the part of the Department of Water Affairs and Forestry

(e)   water services were not seen as an integral part of other development programmes

(f)   scarcity of participatory or institutional experts in the water sector

(g)   the complex nature of South Africa's social development problems.

The above factors are typical of a sector which, historically, was characterised by technocratic, centralised and top-down planning and management approaches. This situation shows that since 1994 the present government has faced a double bind. On the one hand, it had to address past backlogs and on the other hand, to find practical solutions for sustainable development. Ultimately, the former seem to have prevailed over the latter in that there are indications that the water services sector is succeeding in meeting the constitutional mandate of creating access to a basic water supply and sanitation (see chapter five table 5.2 a and b).

The study also argued that participatory measures through statutory water services committees, as prescribed by the Water Services Act No 108 of 1997, and existing water committees are not sufficiently placed to address public participation. Instead, the study

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[182] Chapter four sections 16 to 21.

concludes that the Local Government: Municipal Systems Act, 2000 (No 32 of 2000) does make provision for the development of a culture of community participation[183]. It is in this context that water services development planning and municipal development planning should become integrated. The Local Government: Municipal Structures Act, 1998 (No 117 of 1998) also makes provision for a range of structures such as ward committees[184], which are better located to facilitate public participation in the municipal development planning processes. The political will to deliver basic services is there; however, the capacity to deliver is a daunting task.

Drawing from the above discussion, the study shows that South Africa's past racial policies were based on what could be termed a weak paradigm of sustainable development. The weak paradigm was rooted in paternalistic, discriminatory and non-participatory methods which did not seem to promote sustainable development. Furthermore, the weak paradigm placed more emphasis on water resources management issues and less on water services. This paradigm was not based on a visionary approach of investing in people.

The present study could therefore be seen to follow a different paradigm, which could be termed a strong sustainable development paradigm. This paradigm locates people at the centre of development. Unlike the weak paradigm, the strong paradigm is outcomes-based as it focuses on the improvement of people's quality of life. What this study proposes is an alternative feedback model which encourages participatory planning in development: a human-centred approach which reinforces a high level of responsiveness amongst the public.

However, the pursuit of a human-centred approach requires fundamental changes or reforms in government policies. It requires a shift away from supply-driven towards demand-driven approaches. A human-centred development paradigm thus promotes the ultimate objective that every person must live in a healthy and a productive environment.

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[183] Chapter four section 16 and 17.
[184] Part four section 72.

9.3   CONCLUSION

In conclusion, it is important to note that this study attempted to provide an answer to a highly complex concept, sustainable development. Sustainable development is a multi-dimensional concept which has a long history in the development field. It also presents itself as a process which, depending on the particular context, can mean different things to different people. This study recognises the importance of sustainable development within the context of local government in South Africa. Local municipalities are the closest level of government to the general population and should exercise the functions and ability to mobilise support in pursuit of sustainable development (Agenda 21 cited in Agyeman & Evans 1994: 492). However, it is important to note that participatory methods are not a panacea for sustainable development. Neither a community nor the public has sole control in bringing about sustainable development. External agents such as donors, non-governmental organisations and the private sector do have a role to play in this complex process.

The study explored the theoretical perspectives and various paradigms of sustainable development. It became clear that sustainable development is context-bound and also process-oriented. It is demonstrated that the concept of sustainable development has emerged from different historical phases, theories, experiences and practices. Furthermore, it has also been largely influenced by different ideologies, myths, perceptions and power relations between developing and developed countries.

The study also argued that South Africa's apartheid policy had a negative impact on the lives of many people. Public education is therefore essential to instil a sense of self-worth, awareness, knowledge and responsibility. In this way communities can begin to appreciate water as having a catalytic role to play in improving their quality of lives, and not simply as a gift from God. Parallel to public education and awareness raising processes, it is equally important to address water services provision in conjunction with the modes of governance, systems and structures of governance which characterised South Africa in the past and present.

Sustainable development is about people, and their participation in planning and decision-making processes at local level is paramount. The study indicates that with the advent of democratic governance, the scenario of planning for development has changed quite

significantly. In the case of Latin America and South Africa, such a change was motivated by a need to include the poor or marginalised people of society in mainstream development planning and to mobilise civil society by giving people the opportunity to participate in their own destiny and development. Participation thus serves as a systematic, logical and sequenced process which draws together the collective wisdom and aspirations of civil society and the public at municipal level (see chapter eight figure 8.3).

Drawing from lessons learnt in Bolivia, this study concludes that there is a correlation between sustainable development and public participation (see chapter seven). Social participation in the management of local initiatives has been made effective and had its major significance in the process of participatory planning. Furthermore, greater social and institutional mobilisation has been generated for the first time in the history of development planning. This situation clearly shows better prospects for sustainability of services. Since South Africa's apartheid development policies were exclusive, racist and bureaucratic, the Bolivian experiences show that South Africa requires major policy reforms which are in favour of institutionalised forms of public participation. The study concludes that in order to minimise the dangers of parochialism, as seen in the implementation of the Community Water Supply and Sanitation Programme since 1994, South Africa should learn from the experiences of other developing countries such as Bolivia.

The study also concludes that there is a need to give attention to current social and political policy making structures which facilitate sustainable development as a process which will change values and alter priorities. This implies that current governance structures and institutional arrangements should become oriented towards participatory sustainable development. The problem here lies with local government structures or municipalities which are not as yet geared towards promoting models and methods for public participation.

South Africa is a country which has achieved many accolades for the legislative and policy framework it has developed during the democratic transitional process. The study has argued that in order to translate these policies and legislation into action, municipalities should adopt sound operational and management tools or methodologies. This study also recognises the capacity weaknesses of the current system of local government. However, as this study argues, it should be noted that the water services sector is now entering the sustaining phase. This phase should put more pressure on central government to invest in human, technical,

institutional and management capacities within municipalities which are struggling to cope with the pace of local government transformation. A new water services policy framework could facilitate processes to bring about competent municipalities (water services authorities).

This study shows that the reform of the water services sector and the desire to implement participatory sustainable development constitute a highly complex subject. It can also be concluded that there is no single focal point for drawing comparative analyses between countries because each country has unique experiences and resource bases. The causal factors which have led to such experiences, although there are certain parallels with South Africa, do not warrant a clear-cut argument for similarities. However, as noted from the Latin American experiences, public participation remains a major vehicle for achieving sustainable development. It is an appropriate method which could assist in building consensus, in strengthening social and institutional processes, in mobilising resources and ensuring co-ordination, thereby enhancing the chances of sustainable development. As in Bolivia, public servants in South Africa should play an important role in engaging the public. Engagement should include customer surveys, interviews with selected consumers, meetings with consumer representatives and other mechanisms (South Africa 1997d: 8). According to Tolentino (cited in Ginther *et al* 1995: 141) engagement has to do with involving, informing and consulting the public in planning, management and the other decision making activities which can be considered part of a political process.

By considering all dimensions of sustainable development, this study views the proposed model as a synthesis of inputs derived from the theoretical and operational perspectives of sustainable development. The proposed model (see chapter eight figure 8.3) therefore advocates consistency, uniformity and compliance within the water services sector, but also in the entire local government sector. It regards local government, irrespective of the artificial divisions created by the Water Services Act, 1997 (No 108 of 1997) which groups municipalities as water services authorities, as the appropriate structure which can facilitate the successful implementation of participatory development planning. Municipalities in South Africa are required to fulfil the constitutional mandate of promoting sustainable development through the development and implementation of their integrated development plans (IDPs). It is in this manner that all models of development can become legitimate and that local democracies can be sustained.

Practice and not theory, seems to be the emerging theme for the proposed model of sustainable development. It is clear from this study that South Africa is generally in need of practical measures to implement development programmes. The 'how to accomplish this' is the major critical gap. As mentioned by Stewart (1999: 5):

> the main difference, then, between the "what to do" policy part and the "how to do" strategic management and operations part of the strategic framework is the "judgement" and "action thinking" required by strategy/policy practitioners – not only about what is good to do (good policy), but also about risk, stakeholder management, evaluation and resource allocation.

The proposed model allows for dynamic processes which can provide local government with opportunities to implement programmes in a sustainable manner, and thereby improve the quality of people's lives. As seen from the experiences of public participation during the drafting of municipal development plans in Bolivia, a participatory model requires an ongoing process in which stakeholders investigate, discuss and reach consensus on relevant policy options and other priorities (see chapter seven). Participants in a strategic planning session should be in a position to formulate quantifiable objectives. They present different scenarios, by looking at advantages and disadvantages. Issues of analysis should challenge the interest groups by including forecasts of likely developments in the absence of policy (Carew-Reid 1994: 107).

In conclusion, this study has met the primary research objective and the following secondary objectives: First, the author has proposed a participatory model for the water services sector in South Africa (chapter eight). Second, the model is derived from lessons learnt from the three Latin American countries: Chile, Bolivia and Nicaragua, with particular reference to Bolivia's Public Participation Law of 1994 (chapter seven). Third, the study addressed the key structural and legislative components of South Africa's local government system, with particular reference to the transitional arrangements concerning water services (chapter six). Fourth, the author carried out an analysis of the water services sector and of how South Africa's water policy has evolved over time (chapter five). Fifth, historical trends and patterns of development during the apartheid era were used as a basis within which the above new paradigm can be formulated (chapter four). Sixth, a conceptual justification for a new sustainable human development was suggested (chapter three). Seventh, a detailed theoretical assessment of the concept of sustainable development was provided (chapter two).

This study concludes that South Africans need to take advantage of the existing political will to deliver basic services and of the underpinning prudent legislative and policy framework to guide the delivery processes. In order to institutionalise public participation as a vehicle to promote sustainable development, clear mechanisms must be formulated, closely regulated, monitored and their impact assessed. Otherwise, the existing impressive legal, legislative and policy instruments do not have meaning and credibility.

9.4 PREREQUISITES FOR SUSTAINABLE DEVELOPMENT

The water services sector is a fairly new sector which was formulated by the new government in 1994 in response to the past unjust practices in service delivery. Drawing from the history of the water sector and its apartheid context (chapter four), it can be concluded that the water services sector has emerged from three key historical phases. First, the **repressive phase** which was characterised by racial discrimination and unequal distribution of basic services to all South Africans. This phase was influenced by the old government's policy of separate development which was in favour of the development of the White population (1948 – 1990). This phase was operated under the guidance of the Department of Water Affairs, which historically suffered identity crises due to its constant name changes (see chapter five table 5.1). Second, the **experimenting phase** which was characterised by accelerated delivery of water services in the form of new water schemes. Since 1994 this phase was started by the Department of Water Affairs and Forestry, which implemented the new government's Community Water Supply and Sanitation programme. This department will continue with the water services function until 2003/4. Third, the **sustaining phase** which is characterised by new institutional arrangements in which local government (water services authorities) become responsible for water service provision (2003/4 – onwards). This implies that water services becomes a new competency of local government. It can be concluded that since 1994 there has been an adequate basis within which local government (water services authorities) can plan for demand-driven, participatory sustainable development in water services provision. However, the above phases suggest that sustainable development is a highly complex subject which requires critical analytical thinking and a strategic approach. The new water services policy review preceding the experimenting phase should ideally put the sector on the path to sustainability (see chapter eight figure 8.3). The following ten prerequisites attempt to consolidate important conditions for sustainable development in the water services sector.

9.4.1 Water services policy review

Indications are that the existing White Paper on Water Supply and Sanitation policy was best suited to address the legacy of apartheid during the experimenting phase. Now the situation has changed from the experimenting phase to the sustaining phase. The challenge is to consolidate the old by introducing the new water services policy. As outlined in the previous discussion (chapter three section 3.3), there are some key principles which can be applied during the policy review process. Important to note is the sustainability principle which covers issues which can have a positive contribution towards sustainability. According to the WHO and UNDP (2000: 1), these issues represent an African perspective on what constitutes sustainability. They are:

(a) community participation in all stages of project planning, design, implementation, management and operation, with consideration given to gender issues

(b) political commitment

(c) inter-sectoral co-ordination, collaboration and co-operation

(d) adequate institutional frameworks

(e) human resources development

(f) self-improvement of communities

(g) use of appropriate technology

(h) involvement of the private sector through sound regulatory and controlling measures.

Furthermore, the study highlighted some key constraints which have occurred during the experimenting phase in the water services since 1994 (see chapter one section 1.3.1). The author therefore concludes that through the Department of Water Affairs and Forestry, there is a need for a vehicle to compare policies and practices of water services with other countries. The policy review process therefore has an indirect bearing on whether or not sustainable development is feasible in the water services sector, even under during the sustaining phase.

During the above transitional phases, the Department of Water Affairs and Forestry has a responsibility to provide technical assistance to municipalities in the form of policy analysis,

lobbying and financing for pilot programmes which can promote innovative participatory planning methods. The current process to promote Integrated Development Plans needs to be fully tested against best practice experiences. This would ensure that local government avoids dangers of parochialism.

9.4.2 Decentralisation strategy

This study pointed out that decentralisation is triggered by various motivations, such as national government abdicating its responsibilities through the reduction and transfer of central government budget deficits to the lowest government level. Contrary to these arguments, the literature reviewed suggests that there is a relationship between decentralisation, democratisation and sustainable development (see chapter six section 6.2.4). This relationship is important for three reasons. First, it recognises that central government wields more governance power in decision making and it should therefore decentralise political power closer to the people. Second, decentralising administration could assist in simplifying the bureaucratic systems of policy formulation and implementation. Third, social governance could create a vibrant, democratic civil society.

A decentralisation strategy seeks to pave a way towards localised participatory planning and democratic governance. This study also points out that unless the water services sector formulates and adopts a decentralisation strategy to guide the transitional processes towards local government, the chances for achieving sustainable services delivery may be compromised. Decentralisation of responsibilities to local government provides better opportunities for the integration of the water services development planning and the municipal integrated development planning processes. As the Department of Water Affairs and Forestry makes its decentralisation strategy known within the water services and local government sectors, a need arises for it also to clarify its future regulatory and institutional arrangements.

Through South Africa's Batho Pele philosophy (see chapter four table 4.1), decentralisation should also be seen as a prospect for improving local government finance. Decentralisation of fiscal responsibilities should be driven by participatory policy imperatives, as outlined in different pieces of municipal legislation. The public should take part in project prioritisation and allocation of budgets. In this way, further improvement in efficiency and responsiveness towards service delivery can be achieved.

9.4.3 Clear regulatory and institutional framework

It is government's responsibility to perform quality control over various sectors at all times. Since the water sector in South Africa amounts to billions of Rands in investments and attracts a number of interest groups, it is critical for the Department of Water Affairs and Forestry to clarify future regulatory and institutional arrangements. Clear regulatory principles, objectives, regulations, procedures, processes, structures, roles and responsibilities should be defined. Extensive stakeholder consultation and the creation of a common regulatory vision within the water and sanitation sector and among the users are essential. There is also need for further technical investigations regarding the regulatory best practices, principles, structural design and management arrangements (see chapter seven table 7.3). As noted from Latin American experiences, clear regulatory and institutional arrangements create better prospects for sustainable development.

9.4.4 Support to local government (water services authorities)

In general, the Department of Water Affairs and Forestry has gained wide recognition in the delivery of large and small water schemes. This department therefore has a responsibility to provide technical, institutional, financial, administrative and management support to municipalities. This could take the form of secondments, councillor and official skills training, supervisory roles or any other methods deemed appropriate. The department should investigate different delivery mechanisms for benefiting the peri-urban and rural areas. Although the concession agreement in Bolivia (La Paz) is fairly new, it has shown some prospects for attracting the private sector through the application of incentives and cross-subsidisation (see chapter seven section 7.4.2). This could improve the circumstances of the poor communities living in South African rural and peri-urban areas.

9.4.5 Policy risk analysis

The introduction of free basic water is one of South Africa's success stories in the water services sector. It shows a high level of political commitment on the part of South Africa's government. However, a further risk analysis of policy at each stage of policy formulation or development is essential. That is, government should attempt to integrate policy issues vertically and horizontally. "Vertically" implies that the National Treasury needs to assess the impact of policy decisions and the ability of municipalities to meet policy expectations. "Horizontally" implies that the National Treasury needs to assess the impact on consumers by

applying sustainability principles such as access, equity, affordability and sustainability (see chapter three sections 3.3). A policy can have short term benefits (for consumers) and long-term constraints for those whose responsibility it is to deliver services (municipalities). Policy making processes go hand in hand with management training (see chapter three table 3.5). For example, there is a need for a model which measures the impact of the free basic water policy. That is, to conduct cost-benefit analysis and probably periodic impact assessments. In this way, the government will be able to measure whether or not the services rendered are efficient and sustainable. Undertaking policy risk is a demonstration of a political will on the part of any government, and political will can bring about prospects for sustainable development.

9.4.6 Pro-poor concession agreements

The majority of South Africa's consumers are poor Blacks who live predominantly in rural areas. Most of them can neither read nor write. As a result, the majority cannot articulate their rights. Often, the municipalities they fall under are equally under-resourced and under-capacitated, and are therefore unable to meet their constitutional obligations of service delivery. Situations such as these do not attract private sector funding. It is interesting to note that the Bolivian government was able to attract the private sector to become involved in peri-urban (low income) areas which, by virtue of being poor, are often not attractive to the private sector. By designing financial incentives that are consistent with broad service coverage and making contract objectives quite clear and easily measurable, the Bolivian government has been able to address problems in the water services sector. The way in which the contract is awarded, the process(es) followed, the nature and extent of sector regulations and stricter regulatory arrangements, will determine the outcome of services in poor low-income areas (see chapter seven section 7.3 b).

9.4.7 Consumer charter

This study argued that South Africa's legacies of colonialism and apartheid had a negative impact on people's ability to know and understand their rights (see chapter four). Whilst recognising that the rights of consumers are protected by the constitution, it is equally important to have a consumer charter which clearly outlines the responsibilities of those who interact with consumers and vice versa. There is a need to strengthen legislative requirements for public participation (social contract between state and organs of civil society) because, as

in the Bolivian experiences, such arrangements have merits (see chapter seven section 7.3d, e, f, h and i). One of the outputs of the regulatory arrangement is the formulation and adoption of the consumer charter (see chapter nine section 9.6.3).

9.4.8 Public Participation

This study argued in detail the relationship between public participation and sustainable development. Meaningful forms of participation (interactive) were emphasised (see chapter three table 3.2). The study drew on both the conceptual and the practical experiences of Bolivians in terms of their participatory methodologies for municipal development planning. What emerged is that their Public Participation Law has strengthened local autonomy by balancing the powers of elected municipalities with planning inputs and oversight by local indigenous organisations and vigilance committees. Consequently, this Law stimulated a demand-driven approach in terms of consumers' choices regarding services. South Africa lacks a culture of payment for services because there is little or no culture of community ownership. This study therefore argues that unless South Africa's water services sector ceases to be supply-driven and until public participation is adopted holistically as government policy concerning service delivery, prospects for sustainable development are minimal (see chapter seven section 7.3m).

9.4.9 Municipal integrated development planning

South Africa has a sound legislative and policy framework, but lacks mechanisms for its implementation (see chapter one section 1.3). Municipal integrated development planning is one of the fundamentals of good local government performance. Integrated and co-ordinated planning encourages opportunities for better management of services within local government. However, planning methods and processes do not provide a practical basis upon which progress can be measured. Best practice and lessons learnt elsewhere can provide valuable experiences for South Africa (see chapter seven section 7.3).

9.4.10 Thinking globally, acting locally

Whereas it is important to avoid the dangers of parochialism (see chapter one section 1.3.1.4), there should also be no "one size fits all" in development. The Latin American experiences do not represent a panacea for participatory sustainable development. Such experiences are

based on the unique conditions of these countries and of their people. South Africa is unique and therefore requires a different approach to development.

In order to complement the above prerequisites, the following recommendations are outlined:

9.5   RECOMMENDATIONS

9.5.1   A consistent methodology for participatory planning

Both the water services and local government sectors should strive for a single, consistent participatory planning methodology. This could enhance the opportunity to create a single reporting system, common indicators and a common approach towards impact assessment.

9.5.2   Generation of planning tools and guidelines

Most municipalities in South Africa do not have adequate technical and administrative capacity. They could benefit from a range of tools and guidelines for community-based management models which municipalities could apply during decision-making processes. Modelling is probably a useful tool which government officials and policy makers in general can apply in order to optimise the efficacy of service delivery, thereby promote sustainable development.

9.5.3   Equity through access

It is the responsibility of any government to ensure equity through access, in this case people's access to opportunities, resources and choices, and it is critical to emphasis the principle of equity through access and also a need for equitable distribution of resources. Both sectors, water and local government, have a direct role in creating equal opportunities for consumers of water services. Such opportunities do have indirect spin-offs for sustainable development.

9.5.4   Human and institutional capacity

Human and institutional capacity form an important dimension of sustainable development. The capacity of people plays an important role in self-empowerment, self-worth and self-reliance. Often, the rural poor are the ones who are in need of capacity because by virtue of being poor, they seldom possess knowledge and skills. They are therefore rated low in the

class strata and generally rely on the government to supply basic services. The water services sector needs to create opportunities for human development. This could come about through activities such as information dissemination at community level, skills training and knowledge development. Through the Department of Water Affairs and Forestry, a significant amount of institutional capacity has been developed to assist municipalities in planning, governance responsibilities, execution of water services development plans and systems development.

9.5.5 Synergy

The water services and local government sectors control large government budgets. They are also responsible for a myriad of development programmes, some sponsored by government and others by the donor community. It is therefore critical for both sectors to promote synergies. Integrated planning and co-ordination of programmes is paramount. The development of methodologies, tools and guidelines for participatory planning can enable both sectors to find consensus regarding integrated planning and development strategies, which are essential for sustainable development.

9.5.6 Trust, openness and integrity

Trust, openness and integrity reflect the level of confidence citizens have in public servants. In terms of the principles of the Batho Pele philosophy, public servants need to act as information givers, enablers, supporters and helpers.

9.5.7 Indigenous knowledge

Recognising the indigenous knowledge, culture and language of the people is a powerful way of advancing prospects for sustainability. During the preparation and organisation phase of the proposed model (see chapter eight figure 8.3), it is important for facilitators to recognise that stakeholders bring different solutions which are influenced by a number of imperatives such as indigenous knowledge.

9.5.8 A demand-driven approach

This study argued that South Africa's water policy is supply-driven and therefore militates against chances for sustainability. The water services sector needs to create an enabling

framework for community ownership and to encourage choices and levels of service through participatory planning processes.

9.5.9   Financing options

Central government (Treasury Department) needs to review grant funding to municipalities (Municipal Infrastructure Grant) by aligning project financing and operating subsidies with a "demand-driven approach" and policy which requires local contributions to projects and insists that users pay for all operations and maintenance. Also, it should use loans to municipalities to finance water services, and blend grants and loans for municipalities. This "co-financing system" creates competition for resources and therefore promotes efficiency (see chapter seven section 7.4.3). As observed from Bolivia's municipal participatory planning processes, it offers the technical inputs essential for attracting private sector investments. It also seeks to orientate and channel technical and financial support from donor organisations. However, there must be due consideration given to the stronger and weaker municipalities.

9.5.10   Communication and promotion of best practices

One of the challenges facing municipalities in South Africa is the lack of a strong information network which connects municipalities (cities, towns, metros and rural communities). The Department of Provincial and Local Government needs to lobby the private sector and other government departments such as Communications to assist in bridging the digital divide.

9.5.11   Gender mainstreaming

Linked to public participation, consideration of gender issues is critical. The water services sector is well-known for its gender issues, in that women are more involved in water related matters than their male counterparts. Often, women take the brunt of unsustainable development in that if water projects fail, they are the ones who travel long distances fetching water.

9.5.12   Institutionalisation of public participation

The water services sector should strive for a strong relationship between state and civil society in the definition and identification of priorities, objectives and strategies for

development. As noted from the Bolivian experiences, the participatory process has brought about major significant improvements in strengthening participatory democracy, which has meant a greater social mobilisation. The outcome of a participatory process has brought about effective institutions and a clearer developmental vision for local government. This has meant equitable distribution of resources and the enhancement of accountability amongst officials and politicians.

It is therefore important that the water services and local government sectors should create a culture of public participation so that participation can become integral to the planning process. It is also critical that when pontificating about the disastrous effects of unsustainable development during world summits and conferences (as noted in chapter one section 1.1), politicians should recognise the importance of public participation. Politicians should strive to bridge the gap between theory and practice. This is critical for sustainable development.

By drawing from the above recommendations, it is clear that implementing sustainable development programmes presents a greater challenge for government. However, the proposed participatory model towards sustainable development is a step towards attaining practical solutions for complex development problems. The author proposes further research in the following areas listed below.

9.6   AREAS FOR FURTHER RESEARCH

9.6.1   Modelling

This study conceptualises a participatory model towards sustainable development. However, it also provides opportunities for further research into the measurement and reconciliation of the successive estimates of principles and the gallery of sustainability, in the form of a computerised software, to serve other purposes in the development field.

9.6.2   A technical evaluation

The prevailing global macro-economic policies are arguably traceable from the development discourse of the dependency and modernisation theories which for many years influenced the patterns and trends of development in Latin America, most particularly, the privatisation of water services and the water sector regulatory arrangements. Since South Africa's water policy advocates private sector involvement in the provision of sustainable water services, further research can be done in the technical evaluation of such experiences, especially in the context of public participation which has become a measure of success for sustainability in the water sector.

BIBLIOGRAPHY

Abrams, L 1996. Policy development in the water sector. The South Africa experience. Paper written for the Cranefield International Water Policy Conference, Cranefield University, Bedford. *http://www.thewaterpage.com/sapolicy.htm* (downloaded between 8 - 11 January 2002)

Abrams, L, Palmer, I & Hart, T 1998. *Sustainability management guidelines for water in developing communities.* Pretoria: Department of Water Affairs and Forestry

Abrams, L 1998. Understanding sustainability of local water services. The African Water Page. *http://www.thewaterpage.com/sustainability.htm* (downloaded between 8 - 11 January 2002)

Abubaker, A 1989. *Africa and the challenge of development. Acquiescence and dependency vs freedom and development.* New York: Praeger Publications

Adams, W.M & Thomas, D.H.L 1993. Mainstream sustainable development. The challenge of putting theory into practice. *Journal of International Development 5 (6)*

Adelzadeh, A, Alvillar, C & Mather, C 1998. *Poverty elimination, employment creation and sustainable livelihoods in South Africa.* A report of the United Nations Development Programme. Johannesburg: National Institute for Economic Policy (NIEP)

Agarwal, A & Narain, S 1997. *Putting a floor to rural poverty through labour investments in managing the natural capital. Creating sustainable livelihoods.* Presented at the executive board. Special event on poverty eradication held in New York: Centre for Science Development

Agyeman, J & Evans, B 1994. *Local environmental policies and strategies.* London: Harlow Longman Publishing Co.

Ahmed, I & Doeleman, J 1995. *Beyond Rio: The environmental crisis and sustainable livelihoods in the Third World.* A study prepared for the International Labour Office. London: St Martin's Press

Alcock, P & Craig, G 2001. *International social policy. Welfare regimes in the developed world.* New York: Palgrave Publications

Alexander, E, Heilemann, A & Karlsson, A 1993. *Shifting the balance. Towards sustainable local government, decentralisation and district development in Botswana.* Stockholm: Vastergotlands Tryckeri

Alfaro, R 1997. *Institutional development of the urban water and sanitation in Chile.* Santiago: Working paper produced for the UNDP-World Bank Water and Sanitation Program

Amoako, K.Y 1999. Economic report on Africa: *The challenges of poverty reduction and sustainability.* Paper presented at the second conference on African development. Tokyo

Angell, J.R, Comer, J.D & Wilkenson, L.M 1990. *Sustaining earth: Response to the environmental threats.* London: Macmillan

Asmal, K 1999. *Briefing by the Minister to the press.* Office of the President. Pretoria

Asmeron, H.K, Hoppe, R & Jain, R.B 1992. *Bureaucracy and developmental policies in the Third World.* Amsterdam: VU University Press

Aspegren, H, Hellstrom, B.G & Olsson, G 1997: The urban water system. A future Swedish perspective, in Henze, M, Somlyody, L, Schilling, W & Tyson, J 1997: Sustainable sanitation. *Water Science and Technology 35 (9)*

Atkinson, D 1989. *Local government restructuring. White municipalities initiatives 1985-1988.* Institute of Social and Economic Research. Grahamstown: Rhodes University

Atkinson, D & Reitzes, M 1998. *From a tier to a sphere. Local government in the new South African constitutional order.* Sandton: Heinemann Publishers

Auty, R.M & Brown, K 1992. Approaches to sustainable development, in Morrison, C 1992. *Adjustment and equity in developing countries*. Paris: Organisation for Economic Co-operation and Development

Azzi, A 1985. *French structuralism and its contribution to sociological theory*. Ann Arbor, Michigan: University Microfilms International

Baker, S, Kousis, M, Richardson, D & Young, S 1997. *The politics of sustainable development. Theory, policy and practice within the European Union*. London: Routledge

Ballard, H & Schwella, E 2000. The impact of globalisation on local government in South Africa. *Development Southern Africa 17 (5)*

Bartelmus, P 1986. *Environment and development*. Boston: Allen and Unwin Publishers

Bauzon, K.E & Russack, C 1992. *Development and democratisation in the Third World. Myths, hopes & realities*. New York: Crane Russack

Bender, M & Simonovic, S 1997: Consensus as the measure of sustainability, in Zbigniew, W & Kundzewicz, W 1997: Special issue. Sustainable development of water resources. *Journal of Hydrological Sciences 42 (4)*

Benwell, M 1979. *Four models of public participation*. A report of the findings of an SSRC-funded research project entitled "Dimensioning the Participation Process". Bedford: Cranefield Institute of Technology

Blanco, C 1998. *Decentralisation. The process of internal transformation*. Governance and democratic development in Latin America and the Caribbean. Santiago (Chile): United Nations Development Publications

Bebbington, A, Kopp, A & Rubinoff, D 1997. From chaos to strength. Social capital, rural people's organisations and sustainable rural development. *The Geographical Journal 163 (2)*

Bratton, M & Van de Walle, N 1997. *Democratic experiments in Africa. Regime transitions in comparative perspectives*. Cambridge: Cambridge University Press

266

Brehemy, M 1992. *Sustainable development and urban form.* European Research in Regional Science. London: Pion Limited

Briassoulis, H 1999. Sustainable development and the informal sector. An uneasy relationship. *Journal of Environment and Development 8 (3)*

Brinkerhoff, D.W and Goldsmith, A.A 1990. *Institutional sustainability in agriculture and rural development. A global perspective.* New York: Praeger Publishers

Brinkerhoff, D.W and Goldsmith, A.A 1992. Promoting the sustainability of development institutions. A framework for strategy. *World Development 20 (3)*

Brohman, J 1996. *Popular development: Rethinking the theory of practice of development.* Washington: Blackwell Publishers

Brown, D 1991. Bridging organisations for sustainable development. *Human Relations 44 (8)*

Brown, D.A & Lemons, J 1995. *Sustainable development: Science, ethics & public policy.* London: Kluwer Academic Publishers

Brown, D.E 1998: Evaluating institutional sustainability in development programmes: Beyond dollars and cents. *Journal of International Development 10 (1)*

Bryceson, D.F & Bank, L 2001. End of an era. Africa's policy parallax. *Journal of Contemporary African Studies 19 (1)*

Budlender, D 1999. Patterns of poverty in South Africa. *Development Southern Africa 16 (2)*

Burki, S.J, Perry, G.E & Dillinger, W.R 1999. *Beyond the centre. Decentralising the state.* Pre-publication conference edition. Santiago (Chile): The World Bank Publication for Latin American and Caribbean Studies

Campos, N.F & Nugent, J.B 1999. Development performance and the institutions of governance. Evidence from East Asia and Latin America. *World Development 27 (3)*

267

Carew-Reid, J, Allen-Prescott, R, Bass, S & Dalal-Clayton, B 1994. *Strategies for national sustainable development. A handbook for their planning and implementation*. London: Earthscan Publications Limited

Carew-Reid, J 1997. *Strategies for sustainability (Asia)*. London: Earthscan Publications Limited

Carson, R 1965. *Silent spring*. Nairobi: East African Educational Publishers

Carter, M.R & May, J 1999. Poverty, livelihood and class. *World Development 27 (1)*

Cartey, W & Kilson, M 1970. *African reaction and adaptation, emergence and masses, formation of national institutions*. New York. Vintage Book Publishers

Catala, J.B 1998. *Democratic governability in Latin America*. Governance & democratic development in Latin America and the Caribbean. Santiago (Chile): United Nations Development Publications

Cavalcanti, C 2000. *The environment, sustainable development and public policies. Building sustainability in Brazil*. Northampton: Edgar Elgar Publishers

Cernea, M 1993. The sociologist's approach to sustainable development. *Finance and Management 30 (4)*

Chouri, N 1998. *Beyond the post-Rio outcomes*. Paper presented during session 1 of the innovative mechanisms and enabling technologies symposium. Massachusetts: Massachusetts Institute of Technology

Cloete, J.J 1982. *Central, provincial and municipal institutions in South Africa*. Pretoria: JL Van Schaik

Cloete, F 1999. Conceptualising capacity for sustainable governance. *Africanus 29 (2)*

Cloete, F & Wissink, H 2000. *Improving public policy*. Hatfield: Van Schaik Publishers

Cole, K 1994. *Sustainable development for a democratic South Africa*. London: Earthscan Publication Ltd

Cole, J & Parnell, S 2000. *A report on poverty, gender and integrated development planning in South African municipal practice*. Pretoria. Department of Provincial and Local Government: Government Printers

Commission on Sustainable Development 1995. *Poverty eradication and sustainable development*. Geneva. Published by the Secretary General: United Nations

Conroy, C & Litviniff, M 1998: *The greening of aid: Sustainable livelihoods in practice*. London: Earthscan Publications in association with the Institute for Environment and Development

Cornwell, L & Modiga, J 1998. Study guide 2 for OAD 304-5. Projects and programmes as instruments of development. Functions and management. Department of Development Administration. University of South Africa. Pretoria

Crook, R & Manor, J 1998. *Democracy and decentralisation in South Asia and West Africa. Participation, accountability and performance.*Cambridge: Cambridge University Press

Crush, J 1995. *Power of development*. London: Routledge Publishers

DBSA *vide* Development Bank of Southern Africa

De Beer, E 2000. People participation. A challenge to protected area management. The Peru experience. *UNISA Latin American Report 16 (1)*

Debroey, S 1990. *South Africa under the curse of apartheid*. Johannesburg: Open University Press

De la Court, T 1992. *Different worlds. Environment and development beyond the 90s*. Amsterdam: International Books

Deng, L.A 1998. *Rethinking African development: Towards a framework for social integration and ecological harmony*. Asmara: Africa World Press Inc.

Deng, L, Kostner, M & Young, L 1991. *Democratisation and structural adjustment in Africa in the 1990s*. Madison: African Studies Program: University of Wisconsin

Department of Finance 1997. MTEF sectoral review for the year 1998/9. Infrastructure investment report. Pretoria: Government Printers

Department of Finance 1999. *Budget review*. Pretoria: Government Printers

Department of Provincial and Local Government (DPLG) 2000. *A report on the study tour to South America on the development planning system in Bolivia and Colombia. The decentralised development planning programme*. Pretoria: Government Printers

Department of Provincial and Local Government (DPLG) 2001. *Local government municipal planning and performance management regulations*. Pretoria: Government Printers

Department of Water Affairs (DWA). *Annual reports* 1976/7, 1982/83, 1984/5, 1985/86, 1986/87, 1988/89, 1989/90,1990/1, 1991/2, 1996/7, 1998/99. Pretoria: Government Printers

Department of Water Affairs (DWA) 1986. *Management of the water resources of the Republic of South Africa*. Pretoria: Government Printers

Department of Water Affairs and Forestry (DWAF) 2000. Water services strategic business plan. Chief Directorate: Water Services. Pretoria: Government Printers

Department of Water Affairs and Forestry (DWAF) 2000. *The Community Water Supply and Sanitation* (CWSS). Pretoria: Government Printers

Department of Water Affairs and Forestry (DWAF) 2001. Progress report of the capital programme. Pretoria: Government Printers

De Santa Ana, J 1998. *Sustainability and globalisation*. Geneva: World Council of Churches Publications

Development Bank of Southern Africa (DBSA) 2000. Building developmental local government. Halfway House (Midrand): *Development Report*

Dietz, J & Street, J 1987. *Latin America's economic development and structural perspectives.* London: Lynne Rienner Publishers

Dobson, A 1996. Environmental sustainabilities. An analysis and typology. *Environmental politics 5 (3)*

Dodds, F 1997. *The way forward. Beyond Agenda 21.* London: Earthscan Publications

Dollar, D & Collier, P 2001. Globalisation, growth, poverty. Building an inclusive world economy. World Bank Homepage: *http://www.worldbank.org* (downloaded on 08 August 2002)

Donnelly, A, Dalal-Clayton, B & Hughes, R 1998. *A directory of impact assessment guidelines.* International Institute for Environment and Development. Nottingham: Russel Press

Dourojeanni, A 1997. *Management procedures for sustainable development. Applicable to municipalities, micro-regions and river basins.* Santiago: United Nations Economic Commission for Latin America and the Caribbean

DPLG *vide* Department of Provincial and Local Government

Duncker, L 1999. *Strategies for empowerment of women in water supply and sanitation projects.* Pretoria: Water Research Commission. Division of Water, Environment and Forestry Technology

DWA *vide* Department of Water Affairs

DWAF *vide* Department of Water Affairs and Forestry

Dwight, T.S 1992. A new South African social contract. Institutional choice in a divided society. Unpublished dissertation for the degree of Doctor of Philosophy. Graduate School of Arts. Michigan: UMI Dissertation Service

ECLAC 1990. *Changing production patterns with social equity.* Santiago (Chile): United Nations Publications

ECLAC 1995. *Proceedings of the workshop on issues in the privatisation of water utilities in the Americas.* Privatisation Task Team Committee of the American Society of Civil Engineers (ASCE), International Water Resources Activities Committee, Water Resources Planning and Management Division. Santiago (Chile): United Nations Publications

Estache, A, Wodon, Q & Foster, V 2002. Accounting for poverty in infrastructure reform. Learning from Latin American experiences. World Bank Homepage: *http://www.worldbank.org* (downloaded on 08 August 2002)

Estes, R.J 1993. Toward sustainable development: from theory to praxis. *Social Development Issues 15 (3)*

European Commission 1998. *Towards sustainable water resources management. A strategic approach.* Guidelines for water resources development co-operation. Brussels: European Commission. Directorate-General for Development

Evans, A 2000. *Poverty reduction in the 1990s. An evaluation of strategy and performance* Washington: The World Bank Operations Department

Farrel, A & Hart, M 1998. What does sustainability really mean? The search for useful indicators. *Environment 40 (9)*

Farrington, J, Carney, D Ashley, C & Turton, C 1999. *Sustainable livelihoods in practice: Early applications and concepts.* Natural Resource Perspectives No. 42: Overseas Development Institute

Faucheux, S & O'Connor, M 1998. *Valuation methods of sustainable development. Methods and policy indicators.* Cheltenham: Elgar Publishing Limited

Fenwick, J 1995. *Managing local government.* London: Chapman & Hall

Fisher, T, Mahajan, V & Topgyal, T 1996. Institutional development in practice. A case study from the Tibetan refugee community. *Development in practice 6 (3)*

Fitzgerald, P, Lemon, A & Munslow, B 1997. *Managing sustainable development in South Africa.* Cape Town: Oxford University Press

Foucault, M 1980. *Power/knowledge. Selected interviews and other writings 1972-1977.* London: The Harvester Press

Friedman, S 1997. Delivery and its discontents, delivery targets and the development challenge. *Development Southern Africa 14 (1)*

Gallopin, G & Raskin, P 1998. Local paths to sustainability. *Environment 40 (3)*

Garrity, M & Picard L.A 1996. *Policy reform for sustainable development in the Caribbean.* International Institute of Administrative Sciences. Brussels: IOS Press

Gear, T 1974. *Introduction to planning and decision models.* A second level course. Milton Keyes: The Open University Press

Geldenhuys, D 1990. A comparative analysis of the international isolation of Pinochet's Chile and South Africa under Nationalist rule. *UNISA Latin American Report 6 (1)*

Giliomee, H & Schlemmer, L 1989. *From apartheid to nation-building.* Cape Town: Oxford University Press

Ginther, K, Denters, E & de Waart, P.J.I.M 1995. *Sustainable development and good governance.* Dordrecht: Martinus Nijhoff Publishers

Glade, W.P 1991. *Privatisation of public enterprises in Latin America.* California: ICS Press

Graaf, J.F 1990. *Dependency theory and urbanisation in Southern Africa. A conceptual critique*. Dissertation presented in fulfilment of the requirements for the D.Phil degree in Sociology. Stellenbosch: University of Stellenbosch

Graham, P 1995. *Governing at local level. A resource for community leaders*. Rondebosch: IDASA Media Department

Haimes, Y 1992: Sustainable development. A holistic approach to national resource management. *Journal of International Water Resource Management 17 (4)*

Hague, J, Rose, A and Bojcun, M 1995. Rebuilding Ukraine's hollow state. Developing a democratic public service in Ukraine. *Public Administration 15 (4)*

Hall, D 2001. Global problems. International water privatisation. *South African Labour Bulletin 25 (4)*

Hallowes, D 1993. *Hidden facts. Environment, development and the global context*. Scottsville: Earthlife Africa

Hamann, R & O'Riordan, T 2000. South Africa's policy transition to sustainability. Environmental and water law. University of Cape Town: Department of Environmental and Geographical Sciences.The African Water Page. *http://www.thewaterpage.com/SAPolicyEnv-and-water.htm* (downloaded on 30 November 2001)

Hanke, S.H 1987. *Privatisation and development*. International Centre for Economic Growth. San Francisco: ICS Press

Haq, M 1995. *Reflections on human development*. Oxford: Oxford University Press

Hediger, W 1999. Sustainable development and social welfare. *Ecological economics 32*

Henze, M, Somlyody, L, Schilling, W & Tyson, J 1997: Sustainable sanitation. *Water Science and Technology 35 (9)*

Hettne, B 1990. *Development theory and the three worlds*. London: Longman Group

Heyman, C & Schur, M 1999. National and provincial PPPs. Issues of supervision and accountability. *Development Southern Africa 16 (4)*

Hlahla, M 1999. The Municipal Infrastructure Investment Unit. The government's PPP-enabling strategy. *Development Southern Africa 16 (4)*

Hoff, M.D 1998. *Sustainable community development. Studies in economic, environmental and cultural revitilisation.* Florida: CRC Lewis Publishers

Hukka, J.J & Katko, T.S 1997. Towards viable drinking water services. *Natural resources forum 21 (3)*

Human Development Report 1999/2000. *Trends in human development.* Geneva: United Nations Development Programme

Hunter, R 1997. Managing sustainable economic development, in Fitzgerald, P, Lemon, A & Munslow, B 1997. *Managing sustainable development in South Africa.* Cape Town: Oxford University Press

Ibrahim, J & Chole, E 1995. *Democratisation processes in Africa. Problems and prospects.* Senegal: Codesria Book Series

IIED *vide* International Institute for Environment and Development

IDP guidelines report 2000. *Preparation of an IDP.* Department of Provincial and Local Government. Pretoria: Government Printers

Institute of Social Studies 2000. *Accounting for sustainable economic and social development. Methods and applications for policy analysis with special reference to Latin America.* A training course for researchers and practitioners. The Hague: Institute of Social Studies (ISS)

International Institute for Environment and Development (IIED) 1996. *Capacity development in the environment. A practical aid to sustainable development.* Sustainable development briefing paper no 12. European Programme City Publisher

275

Jabes, J & Vintar, M 1995. *Public administration in transition.* Paper presented at the third annual conference. Slovinia. Slovakia: NISPAcee

Jackson, B.M & Hlahla, M 1999. South Africa's infrastructure delivery needs. The role and challenge for public private partnerships. *Development Southern Africa 16 (4)*

Jackson, B 2000. Privatisation of water services - do consumers benefit? Paper presented at the Consumers International Congress. Durban. MIIU Homepage at *http://www.miiu.org.za/mission/html* (downloaded on 07 August 2002)

James, V.U 1996. *Sustainable development in third world countries. Applied and theoretical perspectives.* Washington: Praeger Publishers

Jerve, A.M & Crook, R.C 1991. *Government and participation. Institutional development, decentralisation and democracy in the Third World.* Bergen: Michelsen Institute. Department of Social Science and Development

Jones, M.L & Peter, B 1999. 'Twinning' as a method of sustainable institutional capacity building. *Public Administration and Development No 19*

Kersten, G, Mikolajuk, Z & Gar-on Yeh, A 2000. *Decision support systems for sustainable development. A resource book of methods and application.* London: Kluwer Academic Publishers

Khan, F 1990. Contemporary South African environmental response. An historical and socio-political evaluation, with particular reference to Blacks. Unpublished dissertation submitted in partial fulfilment of the requirements for a Masters Degree in Environmental Sciences. Rondebosch: University of Cape Town

Kim, K.H 1997. Improving local government finance in a changing environment. *Habitat 21 (1)*

Kirsten, J.F 2000. *Reflections on sustainable development in Southern Africa.* A paper presented at the international symposium on sustainable social development. Potchefstroom: University of Potchefstroom

Klugman, J 1994. *Decentralisation: A survey of literature from a human development perspective.* Occasional paper 13. Global Development Network

Komives, K 1998. *Designing pro-poor water and sewer concessions: Early lessons from Bolivia.* Washington: Private Sector Development Division. World Bank

Kotze, R, Ferguson, A & Leigland, J 1999. Nelspruit and Dolphin Coast. Lessons from final concession contracts. *Development Southern Africa 16 (4)*

K'Omudho, B 1998. *Status of indicator initiative and testing in Kenya.* Prague: A report submitted by Kenya to the 4th international workshop on the Commission for Sustainable Development (CSD)

Krishnan, P 1998. *Changes in poverty in rural Ethiopia between 1989 and 1995. Measurement and robustness tests.* Working papers. Oxford: Oxford University

Kruijer, G. J 1987. *Development through liberation. Third World problems and solutions.* London: Macmillan Education

Kullenberg, L, Shotton, R & Romeo, L 1997. *Supporting rural local governments in practice. Issues for consideration.* Technical consultation on decentralisation. Rome: United Nations Capital Fund

Lafferty, W.M & Meadowcroft, J 1996. *Democracy and the environment. Problems and propects.* Cheltenham: Edward Elgar Publishing

Lammerick, M.P 2001. A detailed look at the PAD approach. IRC. International Water and Sanitation Centre. *http://www.irc/nl/products/planotes35/pnts7.htm* (downloaded on 24 January 2002)

La Paz 1996. *Direccion de Planificacion Participativa de la Secretaria Naticional de participacion Popular.* Document on basic guidelines: La Paz (Bolivia): Consejo de Desarrolo Nacional (CODEMA)

Lawn, P.A 2001. *Toward sustainable development. An ecological economics approach.* Washington: Lewis Publishers

Lawrence, R 1990. Comparing patterns of governance in Argentina, Brazil and South Africa. *UNISA Latin American Report 6 (1)*

Lee, R.T 1999. *Water management in the 21st century. The allocation imperative.* Cheltenham: Edward Elgar Publishing

Lee, R.T & Jouravlev, A.S 1998. *Prices, property and markets in water allocation.* Economic Commission for Latin America and the Caribbean. Santiago (Chile): United Nations Publications

Leftwich, A 1994. Governance, the state and the politics of development. *Development and Change 25 (20)*

Leipziger, D.M & Streeten, P.P 1981. *Basic needs and development.* Cambridge: Oelgeschlager, Gunn & Hain Publishers

Lelè, S M 1991: Sustainable development. A critical review. *World Development Journal 19 (16)*

Lemons, J & Brown, D.A 1995. *Sustainable development. Science, ethics and public policy.* Kuala Lampur: Oxford University Press

Leys, C & Mamdani, M 1997. *Crises and reconstruction – African perspectives. Discussion paper 8.* Uppsala: Nordiska Afrikainstitutet

Lipton, M 1985. *Capitalism and apartheid. South Africa (1910-1986).* Cape Town: David Philip Publishers

Lisk, F 1996. Capacity building for management and development. International Water and Sanitation Centre. *Euforic Home Page address http://www.irc/nl/products/planotes35/pnts7.htm* (downloaded on 24 January 2002)

Local agenda 21 2001. Training course offered by the United States Agency for International Development. Potgietersrus (Limpopo Province)

Lockwood, H 1998. *Municipal promoter program in Nicaragua*. Washington DC: Environmental Health Project

Maylam, P 1995. Explaining the apartheid city. 20 years of South African urban histography. *Journal of Southern African Studies 21 (1)*

Martinez, J & Diaz, J 1996. *Chile. The great transformation*. Geneva: The United Nations Research Institute for Social Development

Mawhood, P 1983. *Local government in the Third World. The experiences of tropical Africa*. Avon: John Wiley & Sons

Mbaka, J.M 1998. Constitutional discourse and the development of structures for sustainable development in Africa. *Journal of Econometrix 22 (1)*

Mbeki, T 1999a. *Address by the President to the SADC local government conference in July*. Pretoria: Office of the President

Mbeki, T 1999b. *Address by the President at the launch of the African Renaissance Institute in October*. Pretoria: Office of the President

Mckendrick, B.W 1990. *Introduction to social work in South Africa*. Pretoria: Owen Burgess Publishers

McMahon, G, George, F & Mrozek, J 1997. Economics, entropy and sustainability, in Zbigniew, W & Kundzewicz, W 1997. Special issue: sustainable development of water resources. *Journal of Hydrological Sciences 42 (4)*

Meadows, D.H, Meadows, D.L, Randers, J & Behren, W.W 1972. *The limits of growth*. New York: Universe Books

Melchior, A, Tell, K & Wiig, H 2000. *Globalisation and inequality. World income distribution and living standards*. Norwegian Institute of International Affairs. Norway: Royal Norwegian Foreign Policy Issues

Miller, M.A 1995: *The Third World in global environmental politics*. Washington: Open University Press

Minogue, M, Polidano, C & Hulme, D 1997. *Re-organising the state towards more inclusive governance*. Insights. Institute of Development Policy and Management. Manchester: University of Manchester

Moosa, V 1999. *Budget speech to parliament*. Cape Town

Mongia, P 1996. *Contemporary postcolonial theory. A reader*. London: Arnold

Moore, B.D & Schmitz, G.J 1995. *Debating development discourse. Institutional and popular perspectives*. London: Macmillan Press Ltd

Morgan, K 2002. A framework for community participation in the planning, implementation, monitoring and evaluation of the development programmes at local level. Thesis submitted in fulfilment of the requirements for the degree of Master of Arts in Development Administration. Pretoria: University of South Africa

Morrison, C 1992. *Adjustment and equity in developing countries*. France: Organisation for Economic Co-operation and Development

Muller, H 1998. *Policies for sustainable operations of water services in rural areas*. A paper presented at the Water Institute of South Africa. Biennial conference & exhibition. Cape Town: Baxter Theatre

Munasinge, M 1994. The economist's approach to sustainable development, in Steer, A & O'Hearn, D & Munck, R 1999. *Critical development theory. Contributions to a new paradigm*. London & New York: Zed Books

Munasinghe, M, Sunkel, O & De Miguel, C 2001. *The sustainability of long-term growth. Socio-economic and ecological perspectives*. Cheltenham: Edward Elgar Publishing

Munck, R and Hearn, D.O 1999. *Critical development theory. Contributions to a new paradigm*. London: Zed Books

Munslow, B, McLennan & Fitzgerald, P 1997. *Managing sustainable development in South Africa*. Cape Town: Oxford University Press

Nattrass, N 1990. Wages, profits and apartheid. An unpublished extract from the history workshop. Johannesburg: University of the Witwatersrand

Ndengwa, P, Mureithi, L.P & Green, R.H 1985. *Development options for Africa in the 1980s and beyond*. Nairobi: Oxford University Press

Nickson, A 1997. The public-private mix in urban water supply. *International Review of Administrative Sciences 63 (2)*

Nickson, A 2001a. *Establishing and implementing a joint venture. Water and sanitation services in Cartagena, Colombia*. Working paper number 442 03. London: The University of Birmingham. GHK International

Nickson, A 2001b. *The Córdoba water concession in Argentina*. Working paper number 442 05. London: The University of Birmingham. GHK International

Nsibambi, A. 1998. *Decentralisation and civil society in Uganda. The quest for good governance*. Kampala: Fountain Publishers

O'Riordan, T & Voisey, H 1997. The political economy of sustainable development. *Environmental Politics 6 (1)*

Ornat, A.L 1997. *Strategies for sustainability. Latin America*. The World Conservation Union. London: Earthscan Publications

Ostrom, E, Schroeder, L & Wynne. S 1993. *Institutional incentives and sustainable development. Infrastructure policies in perspective*. Boulder: Westview Press

Parnell, S, Crankshaw, O & Beall, J 2000. Local government, poverty reduction and inequality in Johannesburg. *Environmental Urbanisation 12 (1)*

Parnell, S & Pieterse, E 1999. Developmental local government. The second wave of post-apartheid urban reconstruction. *Africanus 29 (2)*

Plummer, J 2000. *Favourable policy and forgotten contracts. Building municipal capacity for private sector participation series*. Working paper number 442 01. London: The University of Birmingham. GHK International

Plummer, J & Nhemachema, G 2001. *Preparing a concession. Working towards private sector participation in water and sanitation services in Gweru, Zimbabwe*. Working paper number 442 04. London: The University of Birmingham. GHK International

Plummer, J & Slater, R 2001. *Just managing the solid waste management partnership in Biratnagar, Nepal*. Working paper number 442 02. London: The University of Birmingham. GHK International

Pollit, C, Birchall, J & Putman, K 1998. *Decentralising public service management*. London: Macmillan Press Ltd

Preston, P.W 1996. *Development theory. An introduction*. Oxford: Blackwell Publishers

Price, R & Rosberg, C 1980. *The apartheid regime. Political power and racial domination*. Berkeley: University of California Press

Public service report 1999/2000. *Survey on opinions and priority areas by the South African public*. Department of Public Service and Administration. Pretoria: Government Printers

Puttergill, C.H 1990. Regional Services Councils during the 1980s. Councillor attitudes in the Pretoria region. Unpublished thesis submitted in fulfilment of the requirements for the degree of Master of Arts in the subject Sociology. Pretoria: University of South Africa

Pycroft, C 1999. Restructuring non-metropolitan local government in South Africa. *Public Administration and Development No 19*

Pycroft, J 1998. IDP or strategic paralysis? Municipal development during the local government transition and beyond. *Development Southern Africa 15 (2)*

Rall, M 2001. The demand responsive approach to community water supply and sanitation as interpreted and applied by the Mvula Trust. Johannesburg: Unpublished report by the Mvula Trust's policy unit

Rao, P.K 2000. *Sustainable development. Economics and policy*. Northampton: Blackwell Publishers

Razin, E 2000. The impact of local government organisations on development and disparities. A comparative perspective. *Environment and Planning No 18*

Redclift, M 1987. *Sustainable development. Exploring the contradictions*. Washington: Methuen & Company

Reddy, P.S 1996. *Readings in local government management and development. A Southern African perspective*. Kenwyn: Juta & Co. Ltd

Reddy, P.S 1999. *Local government. Democratisation and decentralisation. A review of the Southern African region*. Kenwyn: Juta and Co. Ltd

Robinson, J 1990. The power of apartheid. Territoriality and state power in South African cities (Port Elizabeth 1923-1972). Unpublished dissertation submitted for the PhD Degree. Department of Geography: College University of Cambridge

Rosensweig, F & Perez 1999. *Decentralisation of water supply and sanitation systems in Central America and the Dominican Republic*. Paper prepared for the USAID Bureau for Latin America and the Caribbean and the Water Team under EHP Activity Number 517-CC.Washington DC: U.S Agency for International Development

Saade, L, Blokland, M & Brikke, F 2000. *Institutional needs. Critical aspects and opportunities in the water supply and sanitation sector for the next decades.* Netherlands: Water Supply and Sanitation Collaboration Council

Saleth, R.M & Dinar, A 1999. *Water challenges and institutional response. A cross-country perspective.* Washington: Institute of economic growth in collaboration with the World Bank

Sara, J, Cross, A & Van der Berg, C 1996. *Rural water supply and sanitation in Bolivia. From pilot project to national programme.* La Paz (Bolivia): UNDP-World Bank Water and Sanitation Program

Savage, M 1986. *The cost of apartheid.* Inaugural lecture. Cape Town: University of Cape Town

Savio, R 1995. *Sustainable livelihoods and people's everyday economics.* Amsterdam: Society for International Development

Schalock, R.L 2001. *Outcome-based evaluation.* New York: Kluwer Academic Publishers

Scheepers, T 2000. *Managing development towards sustainability, juggling dilemmas and balancing values.* An international conference on sustainable social development held at the University of Potchefstroom. Potchefstroom: Centre for Community Law and Development

Schmandt, J & Ward, C.H 2000. *Sustainable development. The challenge of transition.* Texas: Cambridge University Press

Schrire, R 1992. *Wealth or poverty. Critical choices for South Africa.* Cape Town: Oxford University Press

Schuurman, F.J 1993. *Beyond the impasse. New directions in development theory.* London: Zed Books Publishers

Seepe, S 2001. Apartheid's knowledge production and value system. Johannesburg: *Mail & Guardian*

Shaw, T 1990. Popular participation in non-governmental structures in Angola. Implications for democratic development. *Africa Today No 23*

Shepherd, A 1998. *Sustainable rural development*. London: Macmillan Press Ltd

Short, C 1997. *White Paper on eliminating world poverty: A challenge for the 21st century*. London: Department for International Development (DFID)

Shotter, M & Vorster, Q 1996: A comparison of South African and international viewpoints on sustainable development. *Meditari. Research Journal of the School of Accounting Sciences 1996: 180-199*

Siebrits, L.L 1998. The politics of rent and services boycotts in the ninetees. A case study of the Pretoria municipal area. A thesis submitted in fulfilment of the Masters Degree in Arts. Pretoria: University of South Africa

Simon, D 1993. Sustainable development: Theoretical construct, in Ostron, E, Schroeder, L & Wynne, S 1993. *Institutional incentives and sustainable development. Infrastructure policies in perspective*. Washington: Westview Press

Simonovic, S 1996: Support systems for sustainable management of water resources. *Journal of the International Water Resources 21 (4)*

Simonovic, S 1997: Sustainable development of water resources: introduction, in Zbigniew, W & Kundzewicz, W 1997: Special issue. Sustainable development of water resources. *Journal of Hydrological Sciences 42 (4)*

Sinclair, M.D 1999. Regulation and facilitation of public-private partnerships. *Development Southern Africa 16 (4)*

Sitartz, D 1994. *The earth summit. Strategy to save our planet*. Colorado: Earth Press

South Africa 1956. *Water Act of 1956 (No 54 of 1956)* Pretoria: Government Printers

South Africa 1994. *White Paper on the Reconstruction and Development Programme.* Pretoria. Government Printers

South Africa 1997a. *White Paper on water supply and sanitation.* Pretoria: Government Printers

South Africa 1997b. *Water Services Act of 1997 (No 108 of 1997).* Pretoria: Government Printers

South Africa 1997c. *White paper on transforming public service delivery.* Pretoria: Government Printers

South Africa 1997d. *Communications Services.* Pretoria. Government Printers

South Africa 1998a. *Local Government White Paper.* Pretoria: Government Printers

South Africa 1998b. *National Water Act of 1998 (No 112 of 1998).* Pretoria: Government Printers

South Africa 1998c. *Local Government: Municipal Structures Act of 1998 (No 117 of 1998).* Pretoria: Government Printers

South Africa 1998d: *Project viability report.* Department of Constitutional Development. Pretoria: Government Printers

South Africa 1998e. *The Consolidated Municipal Infrastructure Programme* (CMIP). Department of Constitutional Development. Pretoria: Government Printers

South Africa 1998f. *Poverty and inequality in South Africa.* Report prepared for the office of the Executive Deputy President and the inter-ministerial committee for poverty and inequality. Pretoria: Office of the Deputy President

South Africa 2000a. *Local Government: Municipal Systems Act of 2000 (No 32 of 2000).* Pretoria: Government Printers

South Africa 2000b. *Local Government: Municipal Structures Amendment Act of 2000 (No 33 of 2000)*. Pretoria: Government Printers

South Africa 2001a. *Division of Revenue Act of 2001 (No 1 of 2001)*. Pretoria: Government Printers

South Africa 2001b. *National report on social development (1995-2000)*. Pretoria: Government Printers

South Africa 2002. *Division of Revenue Bill of 2002*. Pretoria: Government Printers

South African Official Year Book 1975, 1978. Department of Water Affairs and Forestry. Pretoria: Government Printers

South African Official Year Book 1988/89, 1993, 1994, 1995. Department of Water Affairs and Forestry. Pretoria: Government Printers

South African Water Bulletin December 2000. *Understanding the increasing financial risks of regional water supply service providers*. Pretoria: Government Printers

South Commission 1990. *The challenge to the South*. New York: Oxford University Press

Statistics South Africa 2000. *Measuring poverty in South Africa*. Pretoria: Stats South Africa Publications

Stewart, J & Clarke, M 1988: *Understanding the management of local government*. London: Pitman Publishing

Stewart, F & Ranis, G 1994: *Decentralisation in Chile*. Occasional paper 14. Global Development Network. Santiago: UNDP Publication

Stewart, P 1997. *Theories of development administration*. Study guide for second year course. Pretoria: UNISA

Stewart, R.G 1999. *Public policy. Strategy and accountability*. South Yarra: Macmillan Publishers

Suzman, A 1960. *Race classification and definition in the legislation of the Union of South Africa (1910-1960). An analysis and survey*. Johannesburg: South African Institute of Race Relations (SAIRR)

Swartz, D 1999. South Africa in Southern Africa. Governance and development challenges. *Africanus 29 (2)*

The Habitat agenda 2001. Decentralisation and strengthening local authorities and their associations/networks. *Section IV D*

Theron, F, Van Rooyen, A & Van Baalen 2000. *Good governance for people. Policy and management*. Stellenbosch: University of Stellenbsch. School of Public Management and Planning

Thomas, J & Grindle, M.S 1990. After the decisions. Implementing reforms in developing countries. *World Development 18 (8)*

Todaro, M 1994. *Economic development*. New York: Longman Group Ltd

Tordoff, W 1984. *Government and politics in Africa*. Basingstoke: Macmillan Education

Tordoff, W 1994. Political liberalisation and economic reforms in Africa. *Democratisation 1 (1)*

Tsikata, Y.W 2000. *Globalisation, poverty and inequality in Sub-Saharan Africa. A political economy appraisal*. Tanzania: Economic and Social Research Foundation (ESRF)

Turaki, Y 1992. *An African response to the question of apartheid*. Lagos: Institute for Reformational Studies

Turok, B 1999. *Beyond the miracle. Development and economy in South Africa*. Observatory, South Africa: School of Government. University of the Western Cape

Turner, R.K 1993. *Sustainable environmental economics and management. Principles and practice.* London & New York: Belhaven Press

UN *vide* United Nations

UNCED *vide* United Nations Conference on Environment and Development

UNDP *vide* United Nations Development Programme

UNEP 1978. *United Nations Environmental Programmes.* Geneva: United Nations Publications

United Nations 1997. *Assault on poverty. Basic human needs, science and technology.* Geneva: International Development Research Centre and the United Nations Conference on Science and Technology

United Nations 2000. *An assault on poverty. Basic human needs, science and technology.* Geneva: International Development Research Centre

United Nations Conference on Environment and Development 1992. *Agenda 21. An agenda for sustainable development into the 21st century. Rio de Janeiro. Brazil.* Department of Environmental Affairs and Tourism. Directorate of Sustainable Development. Pretoria: Government Printers

United Nations Development Programme (UNDP) 1997. *Governance for sustainable growth and equity.* Report of the international conference. New York: United Nations Publications

United Nations Development Programme (UNDP) 1998. *Capacity development. Lessons of experiences and guiding principles.* Geneva: United Nations Publications

United Nations Development Programme-World Bank water and sanitation program 2000a. *Bolivia's Yacupaj water projects puts villagers first.* La Paz (Bolivia): United Nations Publications

United Nations Development Programme-World Bank water and sanitation program 2000b. *Increasing access to water and sanitation services.* The El Alto project in LaPaz (Bolivia): United Nations Publications

United Nations report 1992. *Conference on Environment and Development. Resolutions adopted.* Rio de Janeiro: United Nations Publications

United Nations 1997. *Governance for sustainable growth and equity.* Report on the international conference. New York: United Nations Publications

Van den Bergh, J.C.J.M 1991. *Dynamic models for sustainable development.* Amsterdam: Tinbergen Institute Research Series

Van den Bergh, J.C.J.M & Van der Straaten, J 1994. *Toward sustainable development. concepts, methods and policy.* Washington: Island Press

Van den Bergh, J.C.J.M & Van der Straaten, J 1996. *Ecological economics and sustainable development. Theories, methods and applications.* Washington: Edward Elgar Publishing Co.

Van Niekerk, S 2001. Not for profit service delivery. *South African Labour Bulletin 25 (4)*

Van Vuuren, D.J, Wiehahn, N.E, Rhoodie, N.J & Wiechers, M 1991. *South Africa in the 90s.* Pretoria: Human Sciences Research Council Publication

Van Wyk, W.J 2000. *Managing for social development at local level. A structural approach.* School of Social studies. An international conference on sustainable social development. Potchefstroom: University of Potchefstroom

Van Zyl, G 1998: *Community involvement in sustainable development.* Paper presented at the Water Institute of South Africa conference (WISA). Cape Town: Baxter Theatre

Varis, O & Somlyody, L 1997: Global urbanisation and urban water. Can sustainability be afforded? cited in Henze, M, Somlyody, L, Schilling, W & Tyson, J 1997: Sustainable sanitation. *Water Science and Technology 35 (9)*

Veltrop, J 1996: Future challenges in the sustainable use of water resources. *The International Journal on Hydropower and Dams 3 (1)*

Ventura, M & Olcese, O 1996. Capacity building for sustainable water sector development in Peru. *Water resources development 12 (4)*

WCED *vide* World Commission on Environment and Development

WCN/IUCN 1980. *World Conservation Strategy.* Living resource conservation for sustainable development. Switzerland: World Conservation Strategy

Wellings, P and Black, A 1984. *Industrial decentralisation under apartheid. An empirical assessment of industrial decentralisation in South Africa.* Durban: Development Studies Unit, University of Natal

Wellman, P 1999. Sustainability of South Africa's 'water miracle' questioned. The water page. African Eye News Service. *http://www.thewaterpage.com/SAWSPProblems.html* (downloaded on 24 January 2002)

White, A 1981. *Community participation in water and sanitation. Concepts, strategies and methods.* London: World Health Organisation

Wienecke, M 1995. Rural housing and rural development in Northern Namibia. Unpublished dissertation submitted in fulfilment of the requirements for the Degree of Master of Arts in Development Administration. Pretoria: University of South Africa

WHO and UNDP *vide* World Health Organisation and the United Nations Development Programme

Wiggering, H & Rennings, K 1997: Sustainable indicators. Geology meets economy. *International Journal of Geosciences: Environmental Geology 32 (1)*

Wohlgemuth, L, Carlsson, J & Kifle, H 1998. *Institution building in Africa.* Uppsala: Nordiska Afrikainstitutet

Wolhuter, C 1995. Education in Latin America. Lessons for South Africa from a sister continent. *UNISA Latin American Report 11 (1)*

Working group 1997a. *Guidelines for the development and operation of community water supply schemes.* Mechanical and electrical engineering directorate. Department of Water Affairs and Forestry. Pretoria: Government Printers

Working group 1997b. *Community management and partnerships with civil society.* Paper presented to the Fourth Global Forum: Manila

World Bank 1996. Poverty in Sub-Saharan Africa. Issues and recommendations. *Findings No 73*

World Bank 1998. Latin America and the Caribbean. *Annual report*

World Bank 2002. Chile – high growth economy. Poverty and income distribution between 1987 and 1998. World Bank Homepage: *http://www.worldbank.org* (downloaded on 08 August 2002)

World Commission on Environment and Development (WCED) 1987. *Our common future.* Oxford/New York: Oxford University Press

World Health Organisation and the United Nations Development Programme 2000. Global water supply and sanitation assessment report. Washington: Protection of the human environment. *http:www.who.int/water-sanitation-health/Globassessment/Global1.htm* (downloaded on 03 September 2001)

World resources report 1992-3. *A guide to the global environment.* A report by the World Resources Institute with UNEP & UNDP. New York: Oxford University Press

Yepes, G 1998. *Regulation of water supply and sanitation services. A review of experience in selected countries in Latin America.* Washington: World Bank Publication

Zbigniew, W & Kundzewicz, W 1997: Special issue. Sustainable development of water resources. *Journal of Hydrological Sciences 42 (4)*

Zhenghua, H.E.J 1998. *Managing barriers to sustainable development*. Paper presented during session 1 of the innovative mechanisms and enabling technologies symposium held at Massachusetts Institute of Technology. Massachusetts

APPENDIX

Latin American Contacts

Alvaro Camacho Garnica, Director-General, Basic Sanitation: Vice Ministry of Basic Services Structure and Evolution of the Water and Sanitation Sector: Ministry of Housing and Basic Services in La Paz (Bolivia)

Dr Francisco Javier Cuba Terán, Chief, Basic Urban Services: Vice Ministry of Basic Services Regulation. Training in La Paz (Bolivia)

Mr Waldo Vargas Sector Co-ordinator: Municipality Perspective of Privatization. La Paz Municipality (Bolivia)

Mr Waldo Valle, Vice Minister of Basic Services: Ministry of Housing and Basic Services Protocol Introduction in La Paz (Bolivia)

Mr Rene Torrico, Chief, Rural Water and Sanitation Latrines: Vice Ministry of Basic Services

Mr Alcides Franco, Water & Sanitation Sector Specialist. National Regional Development Fund. Financing for Urban Water and Sanitation in La Paz (Bolivia)

Mr Marco Quiroga Ramos Ing. and Mr Marco Quiroga Ramos, Director: Rural Basic Services Program (PROSABAR – World Bank). Rural water and sanitation in La Paz (Bolivia)

Ms Betty Soto Terrazas, National Social Advisor: Social organization – Rural Water & Sanitation. PROSABAR in La Paz (Bolivia)

Ms Carmen Ballivian, Social organization – Rural Water & Sanitation Administrative Manager: *Aguas del Illimani*. Suez Lyonnaise des Eaux Regulation. Peri-Urban Services in La Paz (Bolivia)

Mr Felipe Caballero Ordóñas, Consultant in Participative Planning: Ministry of Sustainable Development and Planning.Vice Minister of Strategic Planning and Popular Participation, Decentralization and the Popular Participation Law in La Paz (Bolivia)

Mr Humberto Caceres M. and Mr Oscar Suntura, Executive Director: "Sumaj Huasi" Foundation Low-Cost Technology for Rural Water & Sanitation in La Paz (Bolivia)

Mr Victor Rico Arancibia, Manager Water and Sanitation Sector Rural Water and Sanitation, Popular Participation. CARE in La Paz (Bolivia)

Ms Sonia Aranibar, Project Manager: USAID experiences in water and sanitation in La Paz (Bolivia)

Mr Frady Torrico and Mr Jorge Pedro, Basic Sanitation Specialists. Social Investment Fund. Financing rural water & sanitation in La Paz (Bolivia)

Mr Omar Villaroell, Assistant Training Coordinator for GTZ: National Training System for Basic Sanitation Training in La Paz (Bolivia)

Franz Rojas, Consultant Inter-American Development Bank. Superintendent of Water Regulation (Regulator) in La Paz (Bolivia)

Dr Guillermo Arroyo Ródriquez, General Manager, *SAMAPA*: The public water company in La Paz (Bolivia)

Mr Luis Lobo, El Alto Project Coordinator: World Bank Water and Sanitation Program. The project applies condominium sanitation systems of Brazil for peri-urban areas, associated with the La Paz water company *Aguas del Illimani*. Visit to El Alto and Barrio Ferroviario in La Paz (Bolivia)

Mr Richard Noth, regulatory and institutional development specialist in La Paz (Bolivia)

Mr Humberto Peña, Director-General: Perspectives on the regulatory process and establishment of an independent regulator. Ministry of Public Works in Santiago (Chile)

Mr Michael Raczynski, Head of the Technical Unit: World Bank Commission on Water Resources, Handling Program in Santiago (Chile)

Mr Juan Eduardo Saldivia, Superintendent (Regulator): Roles, Functions, Relationships, Challenges in Santiago (Chile)

Ms Paulina Lobos, Assistant General Manager, Mayor and General Managers: *EMOS* (Public Water Utility) Visit to two plants and a discussion held on successes and challenges in Santiago (Chile)

Ms Maria Pia Meña and colleagues, Director of *AIDIS* and lecturer at the University of Chile: Perspectives on the reform experiences in Santiago (Chile)

Mr Axel Duorojeanne, Director of Natural Resources Division. UNDP: Perspectives, challenges and lessons learnt in Santiago (Chile)

Mr Terence Lee, an economist and author based in Santiago (Chile)

Mr Gillermo LeClair, Director of *ENACAL*: Restructuring of the water sector in Managua (Nicaragua)

Mr Dave Ogden, Director of the Environment Health Project in Nicaragua: Water and sanitation projects in Managua (Nicaragua)

Ms Eida Oliver, Co-ordinator for UNICEF: The role of donor organisations in Managua (Nicaragua)

Mr Jose Toruño, Co-ordinator of CARE Water and sanitation projects in Managua (Nicaragua)

Mr Jorge Hayn Vogel, President of *INAA*: Municipality functions, roles and responsibilities in Managua (Nicaragua)

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