THE STRUGGLE FOR WATER IN JOHANNESBURG

A case study of the socio-economic impacts of a corporatised water and sanitation service delivery regime in Phiri and Stretford Extension 4

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ABSTRACT

Johannesburg Water (Pty) Ltd is a publicly-owned but independent utility, operationally separate from the Johannesburg municipality. It provides water and sanitation services along business principles, aiming to ensure cost recovery. This water and sanitation service delivery framework has been termed ‘corporatisation’. It is a framework which is highly contested. It has led to the reactive rise of new social movements fundamentally opposed to Johannesburg Water and its policies. This thesis argues that this is for the reason that, through corporatisation, water ultimately becomes a market commodity – only available to those who are able to afford it. The analysis, then, aims to assess the socio-economic impacts of the commodification of water on two economically marginalised and vulnerable communities in Johannesburg – Phiri in Soweto and Stretford Extension 4 in Orange Farm. Research to evaluate socio-economic impacts arising was conducted primarily through a questionnaire-based survey. Longer in-depth interviews were carried out with activists, representatives of Johannesburg Water and City officials to supplement these findings, as well as to deconstruct the underlying causes of conflict over corporatisation. It is concluded that the corporatised water and sanitation service delivery regime in Johannesburg is ultimately socially unsustainable as it does not have the support of the local communities it aims to serve. Furthermore, the commodification of water is fundamentally harmful to the health and well-being of marginalised and vulnerable sectors of society. Ultimately this service delivery framework is in contradiction with the right to sufficient access to water enshrined in the Constitution.

Keywords: social sustainable development; corporatisation; neo-liberalism; water and sanitation service delivery; participatory-democracy.
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<td>ANC</td>
<td>African National Congress</td>
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<td>APF</td>
<td>Anti-Privatisation Forum</td>
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<td>CALS</td>
<td>Centre for Applied Legal Studies</td>
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<td>COSATU</td>
<td>Congress of South African Trade Unions</td>
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<td>CMU</td>
<td>Contract Management Unit</td>
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<tr>
<td>DWAF</td>
<td>Department of Water Affairs and Forestry</td>
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<td>GEAR</td>
<td>Growth, Employment and Redistribution macroeconomic strategy</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>IMF</td>
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<td>ISI</td>
<td>Import Substitution and Industrialisation Model</td>
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<td>JOWAM</td>
<td>Johannesburg Water Management Company</td>
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<td>kl</td>
<td>kilolitres</td>
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<tr>
<td>LHWP</td>
<td>Lesotho Highlands Water Project</td>
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<td>OFWCC</td>
<td>Orange Farm Water Crisis Committee</td>
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<td>PCR</td>
<td>Phiri Concerned Residents</td>
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<td>PWA</td>
<td>Person with AIDS</td>
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<td>RDP</td>
<td>Reconstruction and Development Programme</td>
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<td>SABS</td>
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<td>SACP</td>
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<td>SAMWU</td>
<td>South African Municipal Workers Union</td>
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<td>SDA</td>
<td>Service Delivery Agreement</td>
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<td>SECC</td>
<td>Soweto Electricity Crisis Committee</td>
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<tr>
<td>UAW</td>
<td>Unaccounted-for water</td>
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<td>VIP’s</td>
<td>Ventilated Improved Pit Latrines</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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<td>WSSSA</td>
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CHAPTER 1
INTRODUCTION

Water is one of South Africa’s most limiting natural resources. It is also a basic human need, fundamental for life and health and a prerequisite for the realisation of other human rights. Nevertheless, many South African citizens are still faced with a lack of access to safe and secure sources of water. Country-wide protests over service delivery (or lack thereof) on voter registration day in September 2005 highlight the critical importance of concerns over inadequate service delivery still prevalent in post-apartheid South Africa.

Nowhere are these problems more pertinent than in the City of Johannesburg, the economic powerhouse of the country. Johannesburg is characterised by huge levels of inequality, and a lack of access to even the most basic services in many informal settlements and townships. Ostensibly in order to address these problems, Johannesburg Water (Pty) Ltd was formed in January, 2001. This structure of water service delivery has been described as ‘corporatisation’, which is the creation of independent business units operationally separate from municipalities.

The corporatisation of water and sanitation services in Johannesburg is a highly politicised subject. Local government and the utility itself, Johannesburg Water, are adamant in their stance that the formation of Johannesburg Water is not an example of privatisation, as has so often been claimed. This is on the basis of the fact that the City of Johannesburg is the sole shareholder in Johannesburg Water, and thus in effect the utility remains a public entity. Critics of this view, however, argue that the establishment of Johannesburg Water as a private company results in a commercialised water service delivery framework – motivated primarily by an economic rather than a social agenda. In this context, factors such as cost recovery and economic accountability take precedence over ensuring universal access to water. Although not technically privatisation, the principles involved remain the same – water becomes a commodity to be bought and sold on the market. In their view, then, the formation of Johannesburg Water and its policies must be opposed as a basic and constitutionally mandated human right – sufficient access to water – has become a commodity only available to those who have the means to afford it. These critics include local communities, workers’ unions and activist organizations, such as the Anti-Privatisation Forum (APF).

The above critique is in essence an indictment on current neo-liberal economic policies prevalent in South Africa - based at the highest level upon the Growth, Employment and Redistribution macroeconomic strategy (GEAR), adopted in 1996 (discussed in section 2.2.4). At its heart, the debate revolves around the suitability of the neo-liberal economic doctrine in the pursuit of poverty alleviation. Advocates of neo-liberal policies, in this case the African National Congress (ANC) government, argue that economic development, ushered in through “good”1 economic policies, is a prerequisite for human development. Opponents argue that neo-liberal policies, when played out on the ground, are fundamentally harmful to poor people, diminishing human development and ultimately exacerbating poverty. This is certainly not a new debate, as will be discussed in more detail in the literature review. Indeed, it has been in circuit ever since Adam

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1 Those policies promoted by the World Bank and International Monetary Fund (IMF), characterised by the three pillars of neo-liberalism, fiscal austerity, market liberalisation and privatisation.
Smith proposed his thesis of the “Invisible Hand”\(^2\), and has come to the forefront of ideological disputes with the resurgence of liberal economics ushered in during the Reagan and Thatcher eras.

The debate plays itself out on the ground in Johannesburg in many ways, replacing the “struggle” against apartheid with an almost equally well-organised resistance against neo-liberalism – hence the title of this thesis. It is characterised by marches and protests, the rise of many community-based organisations and new social movements, and ultimately an entrance into the formal political arena with APF plans to run for local government elections next year. These organisations, movements and mass mobilisations are highly critical of the neo-liberal orientations of the ANC government, which ironically touts itself as a liberation movement with a largely socialist agenda.

In the context of Johannesburg Water, the challenge is to gain an understanding of what the experienced effects of the commercialisation of water and sanitation services are on the poor, in order to take the debate from ideology to practice. The research undertaken for the purposes of this thesis aims to answer this question. This is in part to make an informed contribution to the discussion around the pragmatism of a reliance on neo-liberal economics as the dominant force for development in South Africa. It is also an attempt to deconstruct some of the reasons for the struggles playing themselves out on the battlefields of Johannesburg.

It is important not only to analyse this question in the role of a second-hand observer, which is the predominant method of research adopted during the study. It is also necessary to peer through the respective lenses of the history, needs and objectives of those communities who are the focus of the study. Without this perspective it will never be possible to fully understand the complex situation under study, the socio-economic effects of a corporatised water service regime on the welfare of poor communities in Johannesburg. In fact, it is a fundamental critique, put forward in this thesis, that the decision to corporatise water services in Johannesburg was taken with very little legitimate reference to the perspectives of poor and marginalised communities.

The study focuses on Johannesburg Water projects in two poor communities in Johannesburg as loci of the argument raging in South Africa over neo-liberalism. The first case study area is the shallow sewer and pre-paid water meter\(^3\) project in Stretford Extension 4, an informal settlement in the south of Johannesburg. The second is Phiri, the site of the initial phase of Operation Gcin’amanzi (a Zulu word, meaning “to conserve water”), an upgrading and pre-paid water meter project in Soweto\(^4\). The spotlight on pre-paid water meters is not by chance, but is significant in that the pre-paid meter is the most obvious manifestation of the commodification of water in Johannesburg. In the words of Ahmed Veriava – researcher, activist and writer – and Trevor Ngwane – organiser of the APF (2004: pp 130):

“The meter is the most profound symbol of neo-liberalism. It brings together its two most important characteristics, the commodification of the basics for life and the development of new forms of control.”

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\(^2\) A metaphor proposed by the economist Adam Smith in his seminal work *The Wealth of Nations* (1776), where he hypothesises that, within a capitalist system, the sum total effect of individuals acting for their own good will be the good of all actors within that system.

\(^3\) Pre-paid water meters are specific technological solutions aiming to address non-payment for water services. They require activation before dispensing water. This is done by purchasing water “units” which are then applied to a plastic key holding a computer chip with the information needed to activate the water meter (Public Citizen, 2005).

\(^4\) An acronym for ‘south western townships’, the largest apartheid-era township complex in South Africa.
CHAPTER 2
ANALYTICAL BACKGROUND: GLOBAL AND LOCAL NEO-LIBERAL HEGEMONIES

This thesis takes as its starting point a brief review of the theoretical foundations of neo-liberalism. This is in order to contextualise its discussion, as well as to begin to understand some of the causal motives for the increased involvement of private sector principles in water service delivery in Johannesburg. The theoretical foundations of neo-liberalism are outlined below, followed by an assessment of the policy shift towards neo-liberalism – as well as an historical contextualisation of water and sanitation services – in South Africa.

2.1. The Global Forces of Neo-Liberalism: The rise of neo-liberalism as a hegemonic development paradigm

Since the 1980’s there has been a paradigmatic shift in development thinking towards neo-liberalism. This paradigm shift has obtained a good deal of its political momentum from the conservative regimes of Reagan and Thatcher (Stiglitz, 2002). It is based largely on the “Washington Consensus”, a consensus between the International Monetary Fund (IMF), the World Bank and the U.S. Treasury concerning strategies for development. This consensus is based on a fundamental belief in free-market principles (Martinussen, 1997). The three mainstays of the Washington Consensus are fiscal austerity, market liberalisation and privatisation (ibid.). Since the 1980’s, then, the basic policy positions of the IMF and the World Bank – the foremost institutions of international development – have been formulated through a neo-liberal orientation, giving the market primacy.

Neo-liberal ideology finds its philosophical basis in Adam Smith’s free-market school of economics. It is also a reaction to Keynesian economics, which dominated development thought after the Second World War up to the 1970’s (Narsiah, 2002). John Maynard Keynes – a key participant at Bretton Woods - put forward a simple hypothesis to explain the global depression of the 1930’s, and to amend the impacts of the Second World War (Stiglitz, 2002). In effect, a Keynesian approach to development thinking emphasises market failures (ibid.). Thus, as Stiglitz (ibid.) points out, the IMF was based on a recognition that markets often do not work well – with the mandate of providing liquidity in the form of loans to those countries facing an economic downturn and unable to stimulate aggregate demand with their own resources.

However, as we have seen, the present policy position of the IMF is the converse of its original mandate. The IMF, together with its partner forces of neo-liberalism, such as the World Bank and the World Trade Organisation (WTO), aim to bring about a global free-market system. These organisations together insist that developing countries seeking their assistance institute neo-liberal economic policies. During the ANC’s momentous and internationally celebrated rise to power in South Africa in the early 1990’s, the IMF and the World Bank put considerable pressure on the organisation to conform to their neo-liberal ideals.

5 Bretton Woods refers to the UN Monetary and Financial Conference convened at Bretton Woods, New Hampshire, in July 1944 (Stiglitz, 2002). The conference resulted in the creation of the World Bank and the IMF as part of an effort to “finance the rebuilding of Europe after the devastation of World War II and to save the world from future economic depressions” (ibid.: pp 12).
2.2. The Local Forces of Neo-Liberalism

2.2.1. Making history – the end of the apartheid model

The dismantling of Apartheid in South Africa began in earnest in the late 1980’s – and the ANC came into power in 1994. The most pressing problem they faced was that of transforming an economy in crisis, primarily designed to provide a high standard of living to a white minority, into a more stable economy providing an acceptable standard of living for the whole of South Africa (Catchpowle and Cooper, 1997). South Africa, although possessing one of the largest economies in Africa, also had one of the largest gaps between rich and poor (ANC, 1996). Furthermore, the ANC explains that South Africa had faced an economic crisis from 1970 onward, due to the breakdown of the Import Substitution and Industrialisation (ISI) model (ibid.). This model relied on three factors for success in its boom years – the 1950’s until the 1970’s: the fixed gold price, the cheap import of machinery and a cheap and stable workforce (ibid.). However, the gold price was no longer fixed from 1971; the international oil crisis hit the world economy in 1973 and there was increasing political unrest and the emergence of stronger union organisations in South Africa from 1973 (ibid.). These factors meant that the ISI model was ultimately unsustainable.

2.2.2. Apartheid and poverty – the implications for sustainable development

Moreover, the model had led to high levels of inequality, with an impoverished, mostly black, population contrasting with a more affluent, mainly white population. In 1998 South Africa’s Gini coefficient\(^6\) was measured at 0.58, second only to Brazil (May et al., 1998). As a result of these huge inequalities in the South African population, levels of social development for many South Africans were far below the norm for a middle-income country. A highly significant effect of apartheid was that the impoverished have not been targeted for public spending in the past. This has important implications for sustainable development - specifically the social dimension of sustainability – that forms the basis for the analytical framework of this thesis. This will be discussed in detail in section 4.1.

2.2.3. Water supply and sanitation

When the ANC came into power in 1994, approximately 14 million South Africans had no access to safe drinking water (Postel and Vickers, 2004). South Africa has made great strides in providing water and sanitation services to its population - between 1994 and April 2003, access to 8 million people was provided (ibid.)\(^7\). However, cash-strapped municipalities and revenue deficits mean that innovative ways must be thought of to increase access to potable water and other services – although again it is vitally important that an increase in physical access must not be to the detriment of economic access. In the context of Johannesburg, at least 20% of the population still live in abject poverty, in informal settlements that lack proper roads, electricity or any kind of direct municipal services (City of Johannesburg (a), 2005). At least 16% of households lack municipal sanitation, and approximately 3.6% do not have water supplies (ibid.).

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\(^6\) A measurement of income inequality, where 0 is absolute equality and 1 is absolute inequality.

\(^7\) However, as this thesis will show, the use of the word “access” must be qualified, as increasing physical access may not be equal to increasing economic access, or may even have the corollary of decreasing economic access. These factors will be explained in more detail in chapters 6 and 7.
2.2.4. **GEAR and the macroeconomic policy response – the rise of neo-liberalism in South Africa**

“The present neo-liberal orientation is perhaps the biggest indictment of the South African government, given the specific history of South Africa and the context of the post-apartheid state.”

Due to the inequalities created by the apartheid model, the government realised that it has an important role to play in the economy (ANC, 1996). Nevertheless, in order to address the problems discussed above, the ANC adopted the Growth, Employment and Redistribution (GEAR) macroeconomic strategy, on June 14, 1996. Ostensibly, GEAR sets out the key economic plans for achieving the goals underlying the Reconstruction and Development Programme (RDP) (*ibid.*). The RDP was the election manifesto presented by the ANC in the run-up to the first democratic elections in 1994. The four primary objectives of the RDP are:

- meeting basic needs through the provision of housing, water and electricity;
- developing the country’s human resources;
- building the economy; and
- democratising state institutions and society (*ibid.*).

However, GEAR represents a fundamental shift away from the RDP, which was a state-driven redistribution programme of a social democratic orientation (Morgan, 2004). GEAR is a market-led strategy that prioritises economic growth and provides redistribution later and residually (*ibid.*).

The focus of GEAR is on, amongst other things, a reduction of the fiscal deficit; public service restructuring; the gradual relaxation of exchange controls; gradually removing the barriers that inhibit trade between South Africa and other countries; asset restructuring; and structured flexibility in the labour market (ANC, 1996) (emphasis added). Although GEAR is somewhat watered-down in comparison with IMF structural adjustment programs, as emphasis on the word “gradual” reveals, it is still strongly oriented towards neo-liberalism. Critiques of GEAR, similar to those used in global debates against neo-liberalism, include the following: -

- it relies on a trickle-down approach to the economy, which experience has shown to be ineffective;
- it focuses on market-oriented policies, assuming that everybody has equal access to the market (*ibid.*).

The adoption of GEAR had direct impacts of water services policy, as it constrained government borrowing and limited intergovernmental transfers, fundamental to local government delivery of water services. This is especially pertinent when considered together with a marked decentralisation to municipal governments – mostly stretched very tight for resources and expertise (Morgan, 2004). There was also a shift away from RDP’s preference for public sector provision (*ibid.*).

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*Ebrahim Harvey, informal discussion with the author; September 16, 2005*
2.2.5.  *iGoli 2002*\(^9\) – *Johannesburg’s neo-liberal development strategy*

As Harvey (2003) has asserted, the iGoli 2002 plan is the broader political, ideological and institutional framework within which any study of Johannesburg Water must take place. The model arose out of a financial crisis experienced by the ‘interim’ (post-apartheid) metropolitan local government system. This financial crisis led to the intervention of Provincial Government and a bail-out from National Treasury, precipitating dramatic budget cutbacks. These problems were exacerbated by inadequate service delivery; administrative inefficiency; and poor political systems. The need for a longer-term, more sustainable solution became apparent.

The iGoli 2002 model corresponds to a shift in City and State policy towards neo-liberalism. As Harvey (2003) points out, it represents a fundamental departure from direct service delivery. Instead, under iGoli 2002 service delivery is hinged upon the formation of corporatised utility companies operationally separate from the municipality – regulated by an internal monitoring agency (the Contract Management Unit – CMU). In order to achieve this framework, the model involved the sale of municipal assets and the conversion of municipal departments into separate ring-fenced companies. These companies have in turn outsourced a number of essential services and their management to private contractors and companies – Johannesburg Water being a case in point with its five-year management contract with the Johannesburg Water Management Company (JOWAM) – discussed in section 2.3.1.2.

The model itself involves the following:

<table>
<thead>
<tr>
<th>The <em>iGoli 2002 model</em>(^10)</th>
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<tr>
<td>A client / contractor split between…</td>
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<tr>
<td><strong>A small policy and planning core</strong></td>
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<tr>
<td>Giving strategic direction</td>
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<td>and…</td>
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<tr>
<td><strong>Contract Management Unit (CMU)</strong></td>
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<tr>
<td>Playing a regulatory function</td>
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<td>providing strong oversight over…</td>
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<td><strong>Specialised service entities</strong></td>
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<td>Operationally separate entities functioning as relatively independent companies</td>
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<td>as well as…</td>
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<td><strong>11 administrative regions</strong></td>
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<td>Fulfilling ‘human development’ functions</td>
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<td><strong>Key distribution departments</strong></td>
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<td>Emergency services, metro police services</td>
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<td><em>etc.</em></td>
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The adoption of the iGoli 2002 framework was highly contested by a broad range of stakeholders, including worker’s unions, NGO’s, activists, students and intellectuals. For example, the South African Municipal Workers Union (SAMWU) believed that the city council

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\(^9\) iGoli, meaning “City of Gold”, is the Zulu name for Johannesburg.

\(^{10}\) As described by a representative of the City; interview; November 7, 2005.
could be restructured without forming theses ring-fenced companies; and that there was enough experience internally to address the problems and not threaten basic services by commercialization (Harvey, 2003). The Anti-Privatisation Forum (APF) itself grew out of various campaigns to resist the City’s attempts to corporatise services through iGoli 2002 (Ngwane, 2005; In: McDonald and Ruiters (ed’s), 2005: pp 204).

2.3. Neither public nor private: Defining the water service regime in Johannesburg

As mentioned in the introduction, one of the most important debates regarding the water service regime in Johannesburg is its definition. The following section aims to describe the framework of the regime, and to situate this framework within the debate around privatisation and the involvement of the private sector in water services.

2.3.1. The water and sanitation service delivery framework in Johannesburg - current contractual arrangements

2.3.1.1. The service delivery agreement between the City of Johannesburg and Johannesburg Water

The City of Johannesburg has entered into a 30 year service delivery agreement (SDA) with Johannesburg Water. The formation of Johannesburg Water (Pty) Ltd is the outcome of the iGoli 2002 model, discussed in section 2.2.5 above. Thus Johannesburg Water is an independent business unit operationally separate from the municipality. Technically, it is a private company registered with the Companies Act (1973). Johannesburg Water is, however, fully owned by the City of Johannesburg. According to Johannesburg Water’s company profile, “[s]ervices will be provided along business principles, ensuring customer satisfaction and cost recovery” (Johannesburg Water (a), 2005).

2.3.1.2. Five-year management contract between Johannesburg Water and the Johannesburg Water Management Company (JOWAM)

The Johannesburg Water Management Company (JOWAM) is a joint venture formed by the Suez Group of France and their subsidiaries in the United Kingdom and South Africa – Ondeo Services UK and Water and Sanitation South Africa (WSSSA) respectively. Suez has a 66% stake in JOWAM, through direct and indirect interests. Johannesburg Water has entered into a five-year performance-based management contract with JOWAM. This contract came into effect on April 1, 2001 and expires in June, 2006. The contract came into being through a recognition of the need to bring in outside skills and expertise for the initial coordination of Johannesburg Water’s service delivery functions, in the transition to the iGoli 2002 model.

Information gained from a representative of the City was that the Suez Group entered into the contract through a loss-leader strategy. This means that, although initially expected to operate at or below cost, JOWAM would gain valuable experience of local conditions – thus being the group most likely to be chosen for a long-term extension of the contract, should the City decide to follow that route. Following its expiration, Johannesburg Water, under the approval of the City, may opt to extend the contract for another one-year period, after which a new arrangement may be formulated. However, information gained through a City representative indicated that Johannesburg Water had opted not to renew its contract with JOWAM – a decision which has been backed by the City.
2.4. Conclusions: neo-liberal hegemonies – privatisation, corporatisation and the commodification of water

The formation of Johannesburg Water as an independent business unit financially and managerially separate from all other sectors in a municipality has been termed ‘corporatisation’ (McDonald and Ruiters, 2005; In: McDonald and Ruiters (ed’s), 2005). Although not an example of privatisation in the sense of private ownership, the principles underlying corporatisation are alike. Theoretically, the ultimate aim of privatisation, together with market liberalisation, is to create a market economy where “real” prices for goods and services will lead to the efficient allocation of resources, thus precipitating economic growth to the benefit of all (Martinussen, 1997). Privatisation, i.e. private ownership, will contribute to a “real” price scheme by providing incentive for an organisation through motives such as profit seeking and increased competition (ibid.). Knock-off advantages of privatisation may include technological change and increased investment (ibid.).

Similarly corporatisation – the formation of independent business units, such as Johannesburg Water – aims to efficiently allocate resources by providing corporations with a profit motive through the allotment of “free-market” prices. In this scheme water and sanitation services become a commodity to be bought and sold on the market – only available to those who are able to pay for it. The commodification of water – a fundamental requirement for life and a basic human right – forms the foundation of this paper’s critique of Johannesburg Water and its policies. Pre-paid water meters, introduced in order to address the non-payment of water service in Johannesburg, are a technological means enabling the commodification of water. Hence this thesis focuses on the socio-economic impacts of pre-paid meters as a tool for criticising the commodification of a basic human right.

CHAPTER 3

LEGISLATION RELEVANT TO WATER AND WATER RIGHTS

3.1. National legislation on the right to water

South African official water policy, most significantly the Constitution (Act 108 of 1996), is remarkably progressive in that it ensures the right of access to water. It also links this right with other rights, including the rights to have access to sufficient food; to health; to an environment not harmful to health or well-being; and to equality and human dignity. The National Water Act (Act 36 of 1998) recognises the necessity of sufficient access to water in providing for the social component of sustainable development.

However, the Water Services Act (Act 108 of 1997); the National Water Act; and the Local Government: Municipal Systems Act (Act 32 of 2000) all allow for private sector involvement in water and sanitation service delivery. This has led some authors to point to a glaring contradiction between the progressive nature of policy which ensures the right of universal access to sufficient water, yet allows for private sector involvement in providing it – in effect sanctioning the commodification of this right (Morgan, 2004; Bond, 2004).
3.2. **International principles on the right to water – UN General Comment No. 15**

UN General Comment No. 15, adopted by the United Nations Committee on Economic, Social and Cultural Rights in 2002, provides guidelines for States Parties on the interpretation of the right to water. This is under two articles of the International Covenant on Economic, Social and Cultural Rights - Article 11 (the right to an adequate standard of living) and Article 12 (the right to health) (WaterAid and Rights and Humanity, 2003). The General Comment states that the human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements (ECOSOC, 2003).

3.3. **Opening up the playing-field for the struggle**

The above two sections clearly point to a consensus – both internationally and locally – on the fact that water, a prerequisite for life and health, is a basic human right which must be respected, protected and fulfilled. This accord in development thinking provides a substantial basis for a critique of the commodification of water (which results in water as a market good only available to those who are able to interact fully on the market) – articulated variously by marginalised communities, activists and new social movements in Johannesburg. The “struggle for water” is thus legitimated through acknowledgment of the universal right to water – concretised in international and local legislation and policy.

CHAPTER 4

**ANALYTICAL FRAMEWORK AND METHODOLOGY**

4.1. **Analytical framework**

4.1.1. **Poverty in the context of sustainable development**

Sustainable development may be divided into three dimensions – social, economic and environmental sustainability (WCED, 1987). It has been recognised that these three dimensions must be fully integrated if sustainability is to be achieved (ibid.). The social dimension of sustainable development may be further sub-divided into key themes – one of which is poverty. Recently there has been a move away from simple and one-dimensional income measures of poverty towards composite sets of indicators for welfare and quality of life. The World Bank’s seminal World Development Report 2000/2001 entitled “Attacking Poverty” defines poverty as encompassing material deprivation (i.e. measures of income poverty), as well as low levels of health and education, vulnerability and voicelessness and powerlessness. Services deprivation (for example access to clean drinking water and sanitation) form a component of more approaches to poverty analysis – such as the United Nations Human Development Index (HDI).

As we have seen, social dimensions of sustainable development have largely been ignored in the South African context during apartheid. The apartheid model gave rise to huge levels of inequality and poverty – neglecting measures to alleviate poverty through the provision of access to public services – such as health, education, and importantly for us, clean drinking water and sanitation. These problems remain pertinent in South Africa today. In Johannesburg, as we have
seen, at least 20% of the population still live in abject poverty, in informal settlements that lack proper roads, electricity or any kind of direct municipal service (City of Johannesburg (a), 2005). In this context, increasing access to services as a major element of poverty alleviation must form a vital component of the drive towards achieving social sustainability – and ultimately an integrated programme for sustainable development itself.

4.1.2. Research aims

Ostensibly, the formation of Johannesburg Water – a corporatised entity – through iGoli 2002 is an attempt to improve service delivery by increasing administrative and economic efficiency. It is envisioned that increasing cost recovery in service delivery will make possible the extension of services to previously underprivileged areas – in this way facilitating poverty alleviation and contributing to the social aspect of sustainable development. However, as mentioned in chapter one, it has variously been argued that, in reality, measures to facilitate cost recovery have the severest impacts for those who are most vulnerable – the poor and previously underprivileged. This is through the fact that a basic human right – access to water – becomes a commodity to be bought and sold on the market, in effect excluding those who are already on the margins of society, not acting within the formal economy. The research conducted here, then, is an attempt to analyse the basis for these claims – through a focus on the socio-economic impacts of a corporatised water service delivery framework – embodied in Johannesburg Water – on two low-income and highly vulnerable case study communities. These are Phiri in Soweto, and Stretford Extension 4 in Orange Farm.

4.1.3. Epistemology - the research approach

It is crucial to note that the research conducted here is inter-disciplinary, analysing the research question through various academic traditions. This is imperative due to the complex nature of the issue under study, which must be interpreted through the multifarious perspectives of the social, economic and environmental sciences. In this context, as we have seen in section 4.1.1, sustainability cannot be analysed merely by looking at the environmental impacts of the issue under study, but must also take stock of the social and economic impacts arising. Thus, although predominantly a study of the socio-economic impacts of the corporatisation of water services, environmental concerns are embedded within these issues, and are not ignored in the analysis – since the link between environmental degradation and poverty (and vice versa) has been well documented (WCED, 1987; World Bank, 2000).

Ultimately, the research undertaken is based in an interpretive/understanding epistemology, i.e. it is qualitative in nature. This means that, in opposition to the view that there are certain ‘truths’ that can be proven by a ‘distant, objective’ scientist or observer, research conducted rested on a logic that sees ‘truth’ and ‘objectivity’ as contested discourses that are produced through the interaction of individual subjects in society (Yin, 2003). This is exemplified, as stated in the introduction, through an analysis taking into account the respective history, needs, objectives and desires of the case study communities, in order to fully understand the complex situation under study. This is especially pertinent when analysing the socio-economic impacts of the issue, as any such question in South Africa is intimately related with the specific history of the country.
4.2. Materials and Methodology – the research process

4.2.1. Literature review

The literature review was conducted initially, in order to help clarify the research aims and questions, and to contextualise the research within the larger intellectual debates. Peer-reviewed literature was also referred to during the analysis of the research findings, as well as the final discussion.

4.2.2. Gathering of documentation and archival research

Information sourced through this method was used to contextualise issues, and to supplement data gathered through the use of the methods elaborated below. Documentation and archival information used were legislation and policy documents; administrative documents from Johannesburg Water and the city council; survey data from the South African statistical bureau; maps from the Johannesburg GIS centre; newspaper articles; and minutes of meetings and workshops of the Anti-Privatisation Forum (APF).

4.2.3. Questionnaire-based surveys

Questionnaire-based surveys were conducted in the two case study areas, Phiri and Stretford Extension 4. This method was chosen as the primary research approach, as it is used to survey a given population or group’s characteristics, general conditions, experiences of or attitudes to certain issues (Yin, 2003) – in this case the policies and practices of Johannesburg Water. The questionnaire consisted of 32 simple questions (Appendix I) such that they were easily understood in the same manner by respondents. In addition, questions were formulated so that the responses, experiences and conditions of the two groups were easily measurable, in order for the results to be compared and generalised. The surveys consisted of 30 respondents in each area, with 60 respondents questioned in total. Respondents were chosen randomly, although the greatest area logistically possible was covered in both Phiri and Stretford Extension 4.

4.2.4. In-depth interviews

This research method was used to source detailed and specific information from individuals directly relevant to the research questions, in order to supplement information collected from the questionnaire-based surveys. These were officials from Johannesburg Water and the Johannesburg City council, as well as members of activist organisations, including the Anti-Privatisation Forum (APF), the Orange Farm Water Crisis Committee (OFCWCC) and the Phiri Concerned Residents (PCR).

Interviews with officials from Johannesburg Water and the Johannesburg city council consisted of standardised open-ended questions. Here certain questions were planned to guide the interviews, which were nevertheless designed for flexibility according to the nature of the interviewee and the context of the interview.

Interviews with members of activist organisations were conducted through the informal interview guide approach, with the focus being on clusters of issues rather than set questions – and the interview being guided by the informant. According to Yin (2003: pp 90), a key respondent may
be considered an informant when the respondent proposes his or her own insights into certain occurrences, and where such propositions are used as the basis for further inquiry. The informant may also suggest other relevant persons to interview, as well as other sources of evidence. A key informant in this study was the organiser of the PCR – who proposed further research be conducted in Phiri, due to the problems he believed were so apparent in the area as a result of Johannesburg Water’s practices. Another key informant was Thulani Skhosana. Through many informal discussions with the author, Thulani proposed various avenues of research which he believed to be relevant to vulnerable and marginalised communities in Johannesburg, a population sub-group to which he belongs. In particular, due to insights gained as a result of his HIV positive status, Thulani suggested informal discussions be held where possible (due to the sensitive nature of the topic), with people with aids (PWA’s), in order to gain greater insight into some of the impacts that the commodification of water may have on these people.

4.3. Limits of study and possible biases

The study was limited through a tight timeframe, consequently leading to a contracted time in the field and a restricted amount of information being gathered. Another major obstacle experienced during the research process was through difficulties in gaining interviews with representatives of Johannesburg Water and the City council. In both instances the author managed to obtain interviews at a late stage of research, and then only one interview in each case.

4.3.1. Limits of case study research

The case studies under investigation were two impoverished communities that have been sites for the installation of pre-paid water meters. These case studies were chosen, as stated in the introduction, as the pre-paid meter is the most obvious manifestation of the commodification of water in Johannesburg. However, this also limits the study, in that pre-paid meters have not been installed in other parts of Orange Farm. Instead, water and sanitation service delivery follows a three tiered approach as a strategy to eradicate the services backlog, which will be outlined in more detail in section 5.2. The pre-paid meter then, is only one aspect of many other policy choices and management decisions made by Johannesburg Water. Arguments made in this thesis may nevertheless be extrapolated to those areas where the installation of pre-paid meters is being considered or implemented, such as White City Jabavu, Rockville and Molapo in Soweto – sites of the continuation of the Operation Gcin’amanzi upgrading and pre-paid project.

4.3.2. Limited number of respondents in the questionnaire-based survey

A large amount of empirical data in this thesis is based on the surveys conducted in the two case study areas. However, due primarily to logistical limitations, the surveys were carried out with a relatively small sample number of 30 in each area. This is especially so when population of the areas is taken into account – 16 472 in Phiri and 5 313 in Stretford Extension 4. Additionally, it would have been more accurate had a larger sample size been taken in Phiri, proportionate to the larger population size.

4.3.3. Language

Language was a fairly strong limiting factor during the questionnaire-based surveys in Phiri and Stretford Extension 4. The first language of the respondents was either isiZulu, Xhosa, Sotho or
another indigenous language in which the author is unable to communicate. Many of the respondents were nevertheless fluent in English, although some were only able to communicate on a basic level through the medium. This was ameliorated somewhat, however, as approximately half of the questionnaire-based surveys in both Phiri and Stretford Extension 4 were conducted by Thulani Skhosana, who is fluent in a variety of languages, including English, isiZulu, Xhosa and Sotho.

4.3.4. Bias due to respondents’ perception of the interviewer and the politically sensitive nature of the subject

The particular history of South Africa is such that inequalities on the basis of class are intertwined with inequalities on the basis of race. As such, the two case study areas were impoverished black communities. The appearance, then, of a white South African female in these areas is an incongruity. For this reason, the researcher was often met with uncertainty. In many instances during the course of the questionnaire-based surveys, especially in Phiri, it was discerned that respondents believed the interviewer to be an employee of Johannesburg Water, or a government official. Thus, due to the politicised nature of the research topic, some questions, especially those concerning attitudes to pre-paid meters, may not have been answered accurately.

In a similar vein, respondents in Stretford Extension 4, an ANC dominated area, may not have stated their true attitudes out of the fear of being targeted by the ANC as being “against the development of the area”, which was very often the case during initial community uprisings as a result of the first installations of pre-paid meters11.

CHAPTER 5

CONTEXTUALISATION OF CASES

5.1. Phiri and Operation Gcin’amani

Phiri is situated within Soweto. Soweto has a population of at least 1 million people and is the biggest township complex in South Africa (Harvey, 2005). It has chronic levels of unemployment. Phiri itself has a population of 16 472, with around 2 583 people in formal employment (census data obtained from the Johannesburg Corporate GIS Services).

Phiri is the initial prototype site of Operation Gcin’amanzi. This is a large-scale infrastructural renewal and upgrading project in Soweto, aiming to address unaccounted-for water (UAW) and to deal with non-payment and a perceived lack of consumer awareness of the economic value of water (Harvey, 2005). In the words of Johannesburg Water12 (pp 2), the programme aims to create “[...] an environment conducive for payment of water and sanitation services”.

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11 Information obtained through an informal discussion with Ebrahim Harvey, PhD researcher on the corporatisation of water services in Johannesburg; October 20, 2005.
A fundamental aspect of this project then, is the introduction of metered consumption to the area in the form of freepayment meters. Johannesburg Water “expects that the installation of freepayment meters will lead to a stronger sense of ownership of consumption amongst consumers and reduce the demand for water” (ibid.: pp 4).

The project also involves a comprehensive institutional and social development programme. This includes campaigns to address the political, social and consumer related issues that contribute to what is deemed “the runaway water supply and consumption problems in Soweto” (ibid.: pp 4).

Phiri was chosen for the first phase of the project because it has been the area where the water network was at its worst. It is expected that the prototype project in Phiri will define an approach to the implementation of Operation Gcin’amani in other parts of Soweto, in accordance with the technical and social challenges encountered by the team (ibid.).

Civil unrest was rife when the installation of pre-paid meters began in 2003, with cars being burned during community marches protesting against Johannesburg Water. A shooting incident was mentioned by Lesego Lebuso, Head of New Services Development at Johannesburg Water (interview; November 3, 2005). Johannesburg Water workers were eventually forced to install pre-paid meters under police supervision.

5.2. Stretford Extension 4 and Johannesburg Water’s approach to service delivery in informal settlements

Stretford Extension 4 is situated within Orange Farm. Orange Farm is a sprawling low income informal settlement, 20 km south of Johannesburg. It has significant levels of unemployment. Many people rely on sporadic employment, or are hawkers in the informal economy.

Orange Farm area has no waterborne sewage, except for extensions 9 and 10, where outside flush toilets were installed by the apartheid government, for which people were never expected to pay. Households in other areas utilise a bucket toilet system. Predominantly, access to water is through communal standpipes, which serve around 20 households each. People receive a flat fee for water, which many do not pay. A few households have illegally routed water from the nearest standpipe to an outlet on their property.

Johannesburg Water is implementing a programme of service delivery in Orange Farm, based on service level two of the utility’s three tiered approach to the eradication of the services backlog in informal settlements. This three tiered approach is outlined below: -

**Level 1:** Level of service adopted where informal settlements are planned for relocation or will be formalised and upgraded *in situ* in the future. This is a short-term solution and sustainability is not aimed for here. Water and sanitation services provided are communal standpipes and ventilated improved pit latrines (VIP’s), in line with the basic requirements stipulated by the Department of Water Affairs and Forestry (DWAF).

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13 An interesting divergence from the originally named “pre-paid meters”.
**Level 2:** This is an intermediate level of service, provided where informal settlements are recognised as permanent, or where new housing has been planned. Here there is water-borne sewage, with pour-to-flush toilets. Yard standpipes are also installed on individual properties and residents are not charged for water. Individual households may choose whether they will upgrade from this level to service level 3, for which they will be expected to pay R650 (US$98). Although the state considers most informal settlements as temporary, it has designated Orange Farm a permanent informal settlement. As a result, this level of service is being implemented in all areas of Orange Farm, except for Stretford Extension 4. The reasons for this will be discussed in more detail in section 6.2.1., below.

**Level 3:** Here households receive a connection that is metered, which may be conventional or pre-paid, as well as a conventional flush toilet. This level involves massive capital outlay and costs.

**5.2.1. Stretford Extension 4 and the pilot shallow sewer and pre-paid meter project**

In 2001, residents of Stretford Extension 4 marched to the local government offices protesting inadequate service delivery. As a solution, Johannesburg Water proposed a pilot project whereby they would initiate the use of shallow sewers and pre-paid water meters in the area. Thus Stretford Extension 4 became the original site for the installation of pre-paid water meters in Johannesburg – according to Harvey (2005) the first attempt at a technological solution for non-payment in low income areas.

The installation of pre-paid meters occurred between January 2002 and January 2003, at the cost of Johannesburg Water. Outside flush toilets were also erected. Households were expected to make a once-off payment of R100 (US$15) for this level of service.

Despite the formation of the Orange Farm Water Crisis Committee (OFWCC), Johannesburg Water publicizes the project in Stretford Extension 4 as a successful model for Operation Gcin’amanzi\(^\text{15}\), as the following excerpt illustrates:

> “A freepaid metering programme has already been installed in Stretford Extension 4, Orange Farm and based on these results it is predicted that such a system will also have successful results in Soweto.”\(^\text{16}\)

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\(^{15}\) Lesego Lebuso (interview; November 3, 2005) stated that Johannesburg Water had in fact experienced no problems with the implementation of the pilot project in Stretford. She felt that the opposition to the project instead came from other areas in Orange Farm, outside of the community itself.

\(^{16}\) Johannesburg Water, Public Education Manual – *Operation Gcin’amanzi: Everything you need to know about the upgrade and FreePay meters.*

\[\text{Picture 2: Self-made shack in Stretford Extension 4}\]
CHAPTER 6

RESULTS AND EMPIRICAL ANALYSIS

The following chapter outlines the results of the questionnaire-based surveys conducted in Phiri and Stretford Extension 4 (Appendix I). In some cases these results have been supplemented with information gained through the longer in-depth interviews. The chapter is divided into sub-themes in order to more easily disseminate the research findings. These are as follows:

6.1. Socio-economic standing of the case-study samples
6.2. Consultation concerning the installation of pre-paid water meters
6.3. The impacts of pre-paid water meters on economic and physical access to water
6.4. Social impacts arising through decreased access to water
6.5. Attitudes towards pre-paid water meters and water and sanitation services in Johannesburg
6.6. Responses to the installation of pre-paid water meters

6.1. Socio-economic standing of the case-study sample populations

The survey focused on impoverished, marginalised and highly vulnerable sectors of society in Johannesburg, as mentioned in chapter 5. Household incomes were found to be low – placing the sample populations within the poorest decile of South Africa – as well as unstable, giving an added dimension of vulnerability to the respondents. Most respondent households were found to be operating outside of the formal economy, reliant upon self-generated income or government grants rather than a salaried income. Additionally, household sizes were found to be large in comparison with a household size of eight, which is the basis of the six kilolitre (kl) per month free basic water clause allocation (discussed in section 6.3.1.1). This was especially so in Phiri where backyard shacks are common.

6.1.1. Income

Table 6.1.1 (next page) shows total monthly household incomes of respondents in Phiri and Stretford Extension 4. It should be noted that the figures given are approximate, as it was often very difficult for respondents to give exact amounts. This is because household incomes are unstable, varying from month to month. This instability in income gives many of the households an added dimension of vulnerability. This factor of vulnerability is especially predominant where respondents were unable to give even an approximate value for monthly household income, *i.e.* respondents falling under the “not sure” category.

The largest proportion of households had a monthly income of between R501 and R1000 – 40% in Phiri and 30% in Stretford Extension 4. All of the respondents reported that at least two people were dependent on the household income, while 26.6% of respondents in Phiri and 20% of respondents in Stretford Extension 4 reported a household size of greater than 10 people dependent on the monthly household income. This places the sample populations within an extremely poor and vulnerable sector of South African society (GDP per capita is R74 000 (US$11 000), which amounts to approximately R6000 per month (World Bank, 2000)).
Table 6.1.1: Total monthly household incomes of respondents in Phiri and Stretford Extension 4

<table>
<thead>
<tr>
<th>Total monthly household income, R (US$)</th>
<th>Percentage of households (%)</th>
<th>Phiri</th>
<th>Stretford Ext. 4</th>
<th>Phiri and Stretford Ext. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure</td>
<td></td>
<td>13.3</td>
<td>6.7</td>
<td>10</td>
</tr>
<tr>
<td>No income</td>
<td></td>
<td>-</td>
<td>3.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Below R200 (US$31)</td>
<td></td>
<td>23.3</td>
<td>20</td>
<td>21.7</td>
</tr>
<tr>
<td>R201 – R500 (US$31-77)</td>
<td></td>
<td>-</td>
<td>6.7</td>
<td>3.3</td>
</tr>
<tr>
<td>R501 – R1000 (US$77-153)</td>
<td></td>
<td>40</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>R1001 - R1500 (US$153-230)</td>
<td></td>
<td>13.3</td>
<td>13.3</td>
<td>13.3</td>
</tr>
<tr>
<td>R1501 - R2000 (US$230-306)</td>
<td></td>
<td>3.3</td>
<td>10</td>
<td>6.7</td>
</tr>
<tr>
<td>Above R2000 (US$306)</td>
<td></td>
<td>6.7</td>
<td>10</td>
<td>8.3</td>
</tr>
</tbody>
</table>

(n = 30) (n = 30) (n = 60)

6.1.2. Sources of income

Table 6.1.2 shows primary sources of household income of the survey samples in Phiri and Stretford Extension 4. In both case study areas, less than 50% of respondent households have a salaried income, *i.e.* unemployment is predominant in both Phiri and Stretford Extension 4. A significant amount of respondent households were found to be dependent on government grants, *i.e.* pensions, childcare or disability grants – 60% in Phiri and 51.7% in Stretford Extension 4. This means that the sample populations are predominantly operating on the margins of the market economy.

Table 6.1.2: Primary sources for income of respondents in Phiri and Stretford Extension 4

<table>
<thead>
<tr>
<th>Primary source of income</th>
<th>Percentage of households (%)</th>
<th>Phiri</th>
<th>Stretford Ext. 4</th>
<th>Phiri and Stretford Ext. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>6.7</td>
<td>46.7</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>10</td>
<td>-</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Self-generated income</td>
<td>23.3</td>
<td>10</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td>Pension</td>
<td>40</td>
<td>10</td>
<td>31.7</td>
<td></td>
</tr>
<tr>
<td>Childcare grant</td>
<td>16.7</td>
<td>16.7</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td>Foster care grant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Disability grant</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS grant</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Other source</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

(n = 30) (n = 30) (n = 60)

6.1.3. Household sizes

Table 6.1.3 shows household sizes of respondents in Phiri and Stretford Extension 4. A significant number of respondents indicated household sizes of eight or above, 40% in Phiri and 13.3% in Stretford Extension 4. This is noteworthy in that the free basic water clause is based on a standard household size of eight (discussed in more detail in section 6.3.1.1).

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17 Currency conversions in this thesis calculated at the time of writing (October, 2005); US Dollars ($) calculated to the nearest decimal place.
Table 6.1.3: Respondent household sizes in Phiri and Stretford Extension 4

<table>
<thead>
<tr>
<th>Household size (people)</th>
<th>Percentage of households (%)</th>
<th>Phiri</th>
<th>Stretford Ext. 4</th>
<th>Phiri and Stretford Ext. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 5</td>
<td>13.3</td>
<td>50</td>
<td>31.7</td>
<td></td>
</tr>
<tr>
<td>6 – 10</td>
<td>60</td>
<td>30</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>11 – 15</td>
<td>23.3</td>
<td>6.7</td>
<td>18.3</td>
<td></td>
</tr>
<tr>
<td>Over 15 (over 8)</td>
<td>3.3</td>
<td>13.3</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

(n = 30) (n = 30) (n = 60)

6.2. Consultation about the installation of pre-paid water meters

As mentioned in the contextualisation of cases, Johannesburg Water implemented the pilot shallow sewer and pre-paid meter project in Stretford Extension 4 as a result of a demand from the community for better services. Johannesburg Water signed a service agreement with the Stretford Extension 4 community in December 2001, called the ‘Social Compact’ (Harvey, 2005). Lesego Lebuso – Head of New Services Development, Johannesburg Water – and Jean-Pierre Mas – CEO JOWAM – maintain that the implementation of this pilot project occurred in partnership with the local community (interview; November 3, 2005).

Information given by Lesego Lebuso and Jean-Pierre Mas, at the above interview, concerning Johannesburg Water’s process of stakeholder dialogue with regard to Operation Gcin’amanzini in Phiri and the rest of Soweto is as follows: -

6.2.1. Johannesburg Water’s process of community consultation

The first point of entry for Johannesburg Water is through the ward councillors. There is a functioning ward committee system in South Africa, where ward deputies, under the councillor, are responsible for individual portfolios, such as sport; youth; and housing, etc. These deputies interact with the constituency on a regular basis, and are briefed by the councillor to inform the community about Johannesburg Water’s proposals. Monthly public meetings are also held with the constituency, where Operation Gcin’amanzini is a standing item.

At a more grassroots level, Johannesburg Water uses a door-to-door campaign to ensure community consultation. The utility, however, embarked on this campaign in Phiri only after they realised that there was a large amount of community resistance to the project. This process of door-to-door community consultation has now been adopted as standard procedure with the implementation of Operation Gcin’amanzini in other parts of Soweto. The campaign usually consists of two to three visits, the first of which is aimed at creating awareness about the project through oral dissemination, as well as through various information packages. If people are willing to sign a service agreement during the first visit they may do so. Alternatively, they may peruse the information given and if they so choose, sign a service agreement during a second visit. If they do not choose to sign a service agreement, they may opt for a service level similar to that of service level two used in the case of informal settlements, with no metered connection but a yard standpipe (people are not required to buy water here, as it is assumed that they will use six kl or use per month), and a pour-to-flush toilet in lieu of a conventional flush toilet. For the purposes of the door-to-door campaign members of the local community are contracted by
Johannesburg Water and trained over a three day periodic, supplemented through periodic refresher seminars.

These processes of community consultation are augmented by community workshops and various marketing campaigns. Post project assessments are also carried out, primarily to assist Johannesburg Water’s technical department with analysing quality of workmanship and other technical information. Johannesburg Water plans to begin a customer satisfaction survey in Phiri within the next two or three months, although the survey has not been finalised and Lesego Lebuso (interview; November 3, 2005) was unable to comment on possible questions which may be asked as part of the survey.

6.2.2. Research findings concerning community consultation

The survey results obtained suggest that, despite the indications concerning Johannesburg Water’s approach to stakeholder dialogue outlined by representatives of Johannesburg Water - Lesego Lebuso and Jean-Pierre Mas (interview; November 3, 2005), in reality communities have little say concerning the management decisions of Johannesburg Water. Information gained through a representative at the City (interview; November 7, 2005), indicated that door-to-door campaigners contracted by Johannesburg Water are paid on a commission basis – which is directly calculated according to the amount of people they sign on to the pre-paid meter system. This may have led to the conveyance of incorrect and even misleading information concerning the community’s options, thus precipitating a greater acceptance of pre-paid meters – ensuring a larger commission for the door-to-door campaigners. In any event, research findings outlined below are in contradiction to the information given through representatives of Johannesburg Water (interview; November 3, 2005) concerning stakeholder dialogue outlined in section 6.2.1.

Table 6.2 shows the number and percentage of respondent households consulted about the installation of pre-paid water meters, as well as the number and percentage that, if consulted, agreed. A surprisingly high percentage of respondent households said that they were not consulted about the installation of pre-paid meters – 40% in both Phiri and Stretford Extension 4. Furthermore, of those households that were consulted, a high percentage of households stated that they did not agree to the installation of pre-paid meters – 35% in Phiri and 37.5% in Stretford Extension 4. This contrasts with information given by Jean-Pierre Mas (CEO JOWAM; interview; November 3, 2005), who stated that in Phiri ultimately 99% of households opted for pre-paid meters.

Table 6.2.1: Households consulted about the installation of pre-paid water meters

<table>
<thead>
<tr>
<th>Households consulted about the installation of pre-paid water meters</th>
<th>Phiri (n = 30)</th>
<th>Stretford Ext. 4 (n = 30)</th>
<th>Phiri and Stretford Ext. 4 (n = 60)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consulted</strong></td>
<td><strong>Yes</strong></td>
<td><strong>No</strong></td>
<td><strong>Don't know</strong></td>
</tr>
<tr>
<td>number of respondents</td>
<td>17</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>percentage (%)</td>
<td>57</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td><strong>If consulted, agreed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of respondents</td>
<td>(n = 17)</td>
<td>(n = 16)</td>
<td>(n = 33)</td>
</tr>
<tr>
<td>percentage (%)</td>
<td>65</td>
<td>35</td>
<td>-</td>
</tr>
</tbody>
</table>

Of those that did agree, it was found that very often community members saw no alternative to accepting pre-paid meters – they informed the interviewers that they believed they had no choice in the matter because the project was going ahead anyway. Furthermore, many respondents in
Phiri claimed that they were told that if they did not agree to the installation of a pre-paid meter, they would not have access to any water at all, as the water pipes leading to their properties would be removed.

In Stretford Extension 4, respondents claimed that they were approached about getting a flush toilet, for which they were asked to pay R100. However, they said that they were not informed that this would come hand-in-hand with a pre-paid meter. Some respondents stated that they were led to believe that if they refused a pre-paid meter, they would not have a toilet built on their property.

6.3. The impact of pre-paid meters on access to water

6.3.1. Economic access

6.3.1.1. Free basic water clause

South Africa has instituted a free basic water clause, as part of its commitment to alleviating poverty. This was legislated as a minimum standard and published in a Government Gazette in 200118 (Pretorius et al., 2005). The minimum standard for basic water supply is set at 25 litres per person per day (six kilolitres per household per month, based on a standard household size of eight) within 200 meters of a household (Pretorius et al., 2005). It is based on World Health Organisation (WHO) recommendations for basic human water requirements (WHO (b), 2003). The standard is an important step in providing for the needs of the poor. However, critics have focused on two major flaws contained within these standards. These are: i. the calculation of basic water requirements; and ii. the distribution of water based on six kl per household per month, rather than 750 litres per person per month. These are discussed below.

i. Basic water requirements

The free basic water allocation has been criticized by the South African Civil Society Water Caucus (2003), as well as by other community organisations, trade unions, development workers and advocacy groups (Pretorius et al., 2005). In their view, the free basic water allotment of 25 litres per person per day is not adequate to satisfactorily fulfil one’s basic needs. Basic needs include maintaining a basic standard of personal and domestic hygiene. Thus basic water should not be seen as an amount required for survival, but an amount fulfilling the needs for health and well-being. This should be at least on a level where consumption is assured and hand washing and basic food hygiene is possible, but preferably where all consumption and hygiene needs are being met, and the level of health concern is very low. According to the WHO (a) (2003), these standards are between 50 and 100 litres per person per day, or above. The need to provide levels of water and sanitation service where all consumption and hygiene needs are being met, is an important human right consideration in South Africa, in light of the fact that the prevalence of HIV/AIDS in adults (ages 15–49) stands at 21.5 % (UNAIDS, 2004). The impact of pre-paid

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water services on people affected by HIV/AIDS will be discussed in more detail in section 6.4.1 below.

ii. Per household versus per capita

As aforementioned, the free basic water requirement of six kl per household per month is based on an average household size of eight. However, as we have seen in the survey samples, many households consist of more than eight people. This is especially so in Phiri (40% of respondent households). In Stretford Extension 4, 13.3% of respondent households were found to consist of more than eight people. These are significant statistics, and in these households the free basic water clause of 25 litres per person per day is not being fulfilled. It is also important because lower income communities very often tend to have larger household sizes, while middle to high income households typically consist of five people or less. This means that the free basic water clause is biased in favour of middle to high income houses, where individuals receive greater than 25 litres per day.

Table 6.3.1 shows the length of time that the free basic water allocation lasts in respondent households. In Phiri, only 3.3% of respondents indicated that the free basic water lasted the entire month (20% in Stretford Extension 4). This clearly shows that the free basic water allocation is not sufficient to accommodate the needs of the majority of respondent households in both Phiri and Stretford Extension 4 (96.7% and 80% of respondent households respectively). It also shows that the free basic water lasts a lesser time for respondent households in Phiri – 46.7% of respondent households in Phiri claimed that the six kl only lasted between one and two weeks – than those in Stretford Extension 4. This is because, as mentioned above, backyard shacks are more common in Phiri, resulting in larger household sizes.

<table>
<thead>
<tr>
<th>How long does the free basic water last?</th>
<th>Percentage of households (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phiri</td>
</tr>
<tr>
<td>0 - 1 week</td>
<td>6.7</td>
</tr>
<tr>
<td>1 - 2 weeks</td>
<td>46.7</td>
</tr>
<tr>
<td>2 - 3 weeks</td>
<td>16.7</td>
</tr>
<tr>
<td>3 - 4 weeks</td>
<td>10</td>
</tr>
<tr>
<td>the whole month</td>
<td>3.3</td>
</tr>
<tr>
<td>not sure / it depends</td>
<td>16.7</td>
</tr>
</tbody>
</table>

(N = 30) (N = 30) (N = 60)

Naturally it would be difficult to provide free basic water on a calculation based on household size, as household sizes typically tend to vary, and the logistics involved in registering the amount of people living in each and every household would be near to impossible. However, it might be feasible to institute free basic water based on average household sizes in different areas. Thus, for example, more free basic water would be provided to households in Soweto if average household size was 10 people, than in a high-income suburb such as Sandton, where average household size might be, for example, four people. Nevertheless, a representative of the City (interview; November 7, 2005) mentioned that although this approach is being considered, it is difficult to institute at present. This is because accurate statistical data would be needed – statistical data which is lacking in Johannesburg at the moment. Another suggestion has been that, in areas where backyard shacks are common, such as Soweto, additional pre-paid meters should be installed for each additional backyard shack on a property (City representative;
interview; November 7, 2005). This would ensure that the free basic water allocation is more evenly distributed per individual in these areas.

### 6.3.1.2. Water rates

The schedule of water tariffs charged by Johannesburg Water is shown in Appendix II. This is a step-price tariff, meaning that the more water one uses, the more one pays per kl of water. This is effective in terms of managing demand and to ensure environmental sustainability, as it is expected that people will use less if higher tariffs are charged at the higher steps. However, it is significant that the greatest increase in price level occurs between the first and second tiers. This means that, although the first six kl of water per household per month is free, poor households using slightly more than six kl are charged a disproportionately greater amount per kl of water. Some activists and NGO’s have accused Johannesburg Water of attempting to recover the costs for providing free basic water through this means. As most households do need and use more than six kl every month, there have been calls for a “lifeline tariff” – an additional amount of water provided at an affordable, subsidised rate (Pretorius et al., 2005).

Charges for the supply of metered water in residential areas are higher than charges for the supply of metered water as per the Gcin’amanzi project. This is an important advantage for communities where the Gcin’amanzi project is going ahead, because, as mentioned in Chapter 6, these are predominantly low-income areas. Other residential areas are largely middle to high income areas. It is also important that people living in informal settlements are not charged for water, as average household consumption is estimated at six kl or under per household per month. However, this means that while community members in Stretford Extension 4 are being charged for water as per the Gcin’amanzi project, surrounding areas in Orange Farm are not being charged for water at all. This has prompted many respondents in Stretford Extension 4 to raise questions of social justice and equitability.

It is also significant that rates have been increasing steadily year by year since 2001, by 10% from 2001/2002 to 2002/2003; 9% from 2003/2004 to 2004/2005; and 7.7% from 2004/2005 to 2005/2006. However, government grants such as pensions, disability and childcare grants increase by only 2.8% each year (City of Johannesburg (b), 2005). As aforementioned, 60% of respondent households in Phiri, and 51.7% in Stretford Extension 4, are dependent on government grants as their primary source of income. As one respondent stated, “**[w]e are worried because the price of water will continue to rise, even though we do not get so much more money**”.

### 6.3.1.3. Cost and affordability of water

Where respondents previously paid for water, it was found that the cost of water following the installation of pre-paid meters has decreased. However, those that previously did pay are, of course, those that were able to pay. Those that did not pay are extremely poor households on the margins of the market economy – and consequently not able to pay. Thus, for this sector of the population, the installation of pre-paid meters means that they are forced to pay for water, and where they cannot do so, access to water is denied them.

46.7% of respondents in Phiri and 53.3% in Stretford Extension 4 stated that they did not pay for water before the installation of the pre-paid meter. These results may have been biased however, due to respondents’ unwillingness to admit that they did not previously pay for water. Those
respondents that did pay previously were charged a combined rate for rent and other municipal services, including water and sanitation. According to a representative of the City (interview; November 7, 2005), this combined flat rate was R112.00. However, values given by respondents themselves differed widely, from R5 to R200 per month. Of those respondents in Phiri that did pay previously, 37.5% (20% of the total sample) stated that the cost of water has decreased since the installation of pre-paid meters. In Stretford Extension 4, 35.7% (16.7% of the total sample) reported a decrease in the cost of water after the installation of pre-paid meters.

6.3.2. Physical Access

6.3.2.1. Trade-off between pre-paid water meters and improved access to water and sanitation facilities in Stretford Extension 4

Residents of Stretford Extension 4 have benefited in some ways from Johannesburg Water’s policies. This is because, whereas before they were reliant upon communal standpipes and the bucket system of sanitation, now they have access to piped water in their yards and water-borne sewerage. This represents a trade-off between improved access to water and sanitation, albeit through the pre-paid meter, and limited access to free water combined with no access to sanitation. However, although physical access to water has increased in Stretford Extension 4, a decrease in economic access through pre-paid meters – and the consequent elimination of any tolerance of non-payment – may ultimately negate this gain.

6.3.2.2. Problems with the delivery of water services

An important factor affecting access to water is the functional quality of the pre-paid meter. It was found that access to water in Phiri was severely decreased as a result of technical problems experienced with pre-paid meters. This was exacerbated by the complete elimination of a tolerance of non-payment through the installation of pre-paid meters.

Table 6.3.2 below shows the number and percentage of respondents who have previously or currently are experiencing technical difficulties with their pre-paid meters. Technical problems reported were: - leaking meters; “stuck” meters (i.e. meters with credit but not dispensing any water); meter screens (usually indicating available credit) not working; meters not registering credit which has been purchased; meters dispensing unequal amounts of water for the same amount of credit; flat meter batteries resulting in no water being dispensed; and the meter failing to dispense the six kl of free water in some months.

<table>
<thead>
<tr>
<th>Respondents experiencing technical problems with their pre-paid meter</th>
<th>Phiri</th>
<th>Stretford Ext. 4</th>
<th>Phiri and Stretford Ext. 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of respondents</td>
<td>17</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>percentage (%)</td>
<td>57</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>(n = 30)</td>
<td>(n = 30)</td>
<td>(n = 60)</td>
<td></td>
</tr>
</tbody>
</table>
A surprisingly high percentage (57%) of respondents in Phiri reported technical problems with their meters. A local government official confirmed these findings, by saying that complaints were often received at the government offices in Phiri.\footnote{Informal interview; September 27, 2005.}

Representatives of Johannesburg Water, Lesego Lebuso and Jean-Pierre Mas (interview; November 3, 2005) attribute these problems to the positioning of the meters in Phiri. Meters have been placed below-ground and are thus prone to submergence, a problem that is especially severe during the rainy season (i.e. the summer months). In other areas of Soweto where Operation Gcin’amamanzi is going ahead, meter boxes have since been raised. A representative of the City (interview; November 7, 2005) attributes the problem to faulty meters being mistakenly given conditional approval by the South African Bureau of Standards (SABS). Apparently, the seal around the glass protecting the meter computer is not tight enough, and thus the computer is prone to getting wet. According to Lesego Lebuso and Jean-Pierre Mas (interview; November 3, 2005), Johannesburg Water has plans to address these problems in Phiri within the next six months.

### 6.4. Social impacts arising through decreased access to water

#### 6.4.1. HIV/AIDS

An informal interview was held between the author and Jabu,\footnote{Name has been changed.} a 29 year old former Phiri resident and person living with aids (PWA), on September 27, 2005. At present, Jabu’s CD4 (white blood cell) count is approximately 344. This means that, although he is sick, he does not qualify to receive an HIV/AIDS grant from the government – a CD4 count of 200 or less is required before a person with HIV/AIDS qualifies for a government grant. These government grants amount to R780 (US$118.6) per month (City of Johannesburg (b), 2005). Previously, Jabu had been employed at the Star Newspaper, but was forced to stop working in 2003 because of his illness. As a result, while in Phiri Jabu was reliant on his mother’s income, a disability grant also amounting to R780 per month. This income, however, additionally supported another 10 family members (in addition to Jabu and his mother). Thus, as well as there being 12 people reliant on a small income of R780 per month, the basic water allocation – calculated for a household size of eight – was not sufficient to provide for even the basic consumption and hygiene requirements of Jabu and his family (who would each have been getting an average of 16.7 litres per day). Jabu stated that he and his family had spent on average around R50 (US$7.4) per month on water. However, they ran out of water around two times per month.

Jabu also reported that he and his family were previously partly reliant upon a food garden for subsistence. Following the installation of a pre-paid meter, his family was unable to sustain the food garden – due to the cost of water which they were now forced to take on. Recognising a lack of available resources to deal with the problem of HIV/AIDS, the importance of adequate nutrition for PWA’s has oft been touts by the South African President – Thabo Mbeki, as well as the Minister of Health – Manto Tshabalala.
Msimang. Food rights are also intimately connected with water rights – as protected by the Constitution. The link between water and health rights, as noted in section 3.1, also becomes apparent here. This is because Jabu requires supplementary amounts of water for personal and domestic hygiene purposes, in order to prevent opportunistic infections.

The installation of pre-paid water meters in Phiri and a resultant decrease in access to water, combined with his progressing illness, eventually led Jabu to leave Phiri in order to live with his sister in Snake Park (an area on the outskirts of Soweto where no pre-paid meters have been installed as yet).

6.4.2. Gardening and food security

Respondents were additionally affected by the installation of pre-paid water meters through the fact that, whereas before they had been partly reliant upon food gardens for subsistence, now they had to stop gardening as they could not afford to pay for the extra water necessary to sustain these gardens. This was found to be more predominantly the case in Phiri, where 26.7% of respondents said that they had stopped gardening as a result of the installation of pre-paid meters, than in Stretford Extension 4, where only 6.7% of respondents stated the same. This difference may be due to the fact that Orange Farm is an informal settlement on the semi-rural outskirts of Johannesburg, where cheaper produce is available.

6.4.3. Other impacts

Some respondents in Phiri reported that family strife had increased as a result of pre-paid meters – leading to disagreements over whose responsibility it was to buy water when it ran out. In the words of one interviewee: “As a family we fight each other over the usage of water”.

Respondents in both Phiri and Stretford Extension 4 stated that, whereas they had previously gained a small income from tenants staying in self-made backyard shacks on their properties, these tenants had left after the installation of pre-paid water meters, as they were not prepared, or were unable to pay an added fee for water.

Furthermore, many respondents stated that they were not able to wash and rinse their clothes adequately, and did not do so as often as before. Some stated that they did not wash clothes after they had been worn anymore, but wore them again before washing them. One respondent in Phiri stated that she did not have enough water to wash her children’s clothes after school.

6.4.4. The shallow sewer system in Stretford Extension 4

Respondents in Stretford Extension 4 stated that there were often sewage blockages. In the event of such a blockage, they are expected to fix the blockage themselves, with a long pole gained from the local Johannesburg Water offices. This clearly poses a health hazard, as people are
often not able to follow suitable hygiene requirements, such as wearing gloves or even washing adequately afterwards. These factors have led to continuous exposure to various preventable diseases in Stretford Extension 4. This risk is especially significant with regard to children and PWA’s or HIV+ people.

6.5. Attitudes towards pre-paid water meters and water and sanitation services in Johannesburg

63.3% of respondents in Phiri and 30% of respondents in Stretford Extension 4 said they were not happy with water and sanitation services in their communities. When asked to explain their answers, the majority of respondents said that it was because of pre-paid meters – and the fact that they now had to pay for water, whereas before they did not pay.

Those respondents that were happy with water and sanitation services in Stretford Extension 4 said this was due to the fact that they now had access to water in their yard, whereas before they had to carry water from communal standpipes. They were also happy because they now had a flush or pour-to-flush toilet in their yard, whereas before they were reliant on the bucket system. Those that were happy with water services in Phiri most often cited the increased conservation of water as a result of pre-paid meters. This, presumably, is the result of Johannesburg Water’s education campaign embarked upon as part of Operation Gcin’amanzi in order to highlight the “efficient use of our scarce water resource”\(^\text{21}\). Some respondents also said that they were happy because they would no longer have to be concerned about being in arrears with the municipality.

Significantly, 70% of respondents in Phiri and 46.7% of respondents in Stretford Extension 4 felt that they did not have enough water for the needs of their households.

Interestingly, 60% of respondents in Phiri stated that they believed current water and sanitation services to be worse than those supplied pre-1994, \(i.e.\) by the apartheid government. 36.7% stated the same in Stretford Extension 4. This was an open opinion question asked merely to gain a feeling for community member’s levels of satisfaction with water service delivery, and is relevant because of the particular historically disadvantaged contexts of the two case study areas. This question is additionally significant as the struggle against the apartheid government occurred in both areas under study. As Bricks Mokolo, the organiser of the OFWCC stated\(^\text{22}\): - “We were fighting for better development, not the vote, votes are not liberation. People need practical things – basic service. People are not eating vote, they are not sleeping vote.”

6.6. Responses to the installation of pre-paid meters

6.6.1. Household coping mechanisms

In an informal discussion between the author and Joyce\(^\text{23}\) (Phiri; September 29, 2005), Joyce stated that she had run out of water the day before, and would be unable to purchase additional credits for that week. As a coping mechanism, she had approached her neighbour in order to get


\(^{22}\) Informal interview conducted at Orange Farm; September 9, 2005.

\(^{23}\) Name has been changed.
a bucket of water. This, she said, would carry her and her family through until the following week, although they would have to ration the water, and use it only for drinking and cooking. Other respondents, upon running out of water and being unable to afford additional credits, stated variously that they had taken a bucket to the local school to get water; had borrowed money from neighbours to purchase water; or, as in the case of Joyce, had borrowed water from neighbours.

People often also recycle water in as many ways as possible by, for example, not flushing the toilet every time; using bath or washing water to flush the toilet; sharing bath water; not bathing as often as before; not washing clothes as often as before, etc.

6.6.2. Community campaigns and mobilization

In Phiri, as we have seen, there was a community outcry at the installation of pre-paid meters, leading to Johannesburg Water workers installing meters under the guard of the Metro Police. A March protesting pre-paid meters took place on November 10, 2005 (picture 6). Residents handed a memorandum to the ward councillor, Patrick Kunene, demanding an immediate end to pre-paid meters in all poor areas of Johannesburg.

Importantly, the Phiri Concerned Residents (PCR), represented by the Centre for Applied Legal Studies (CALS), have registered a case against Johannesburg Water regarding the installation of pre-paid water meters. This will be discussed in more detail in section 7.4.

Various community campaigns to protest against pre-paid meters have been organized in Stretford Extension 4. In 2002 the community mobilized to stop Ronnie Kasrils (the then Minister of Water Affairs and Forestry) addressing the community about the corporatisation of water. In 2004 members from the international company Suez were met by huge protests upon their visit to Orange Farm. Bricks Mokolo, Organiser of the Orange Farm Water Crisis Committee (OFWCC) stated that he has been threatened repeatedly by ANC officials for speaking out against water “privatisation”24. On February 8, 2003 Emily Lengolo, a founding member of the OFWCC, was shot and murdered in her home in Orange Farm. Many activists believe this was a direct consequence of her influence in mobilizing the community against Johannesburg Water and pre-paid water meters. Currently members of the OFWCC are encouraging residents of Stretford Extension 4 to bypass their pre-paid meters.

6.6.3. Organisational responses

The OFWCC and the PCR are organisations that have been formed in response to the installation of pre-paid water meters in their communities. These have both developed into full-fledged new social movements, and are currently involved in many other community advocacy and development projects. For example, the OFWCC, working together with the Itsoseng Women’s Project, have implemented HIV/AIDS, food security and childcare projects.

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24 Informal interview at Orange Farm; September 9, 2005.
The PCR have various projects with which they are currently concerned, predominantly community advocacy and mobilizations against evictions in Phiri, in addition to the pre-paid water meter project and court case.

Both movements are working hand in hand with the Anti-Privatisation Forum (APF), which classifies itself as a new social movement. The APF is a grassroots organisation, with active members coming from several affiliate organisations directly involved in various struggles on the ground. Ngwane (2005; In: McDonald and Ruiters (ed’s), 2005: pp 204), the Organiser of the APF (shown below at a march against pre-paid water meters in Phiri; November 10, 2005) informs us that the APF came together in July 2000. This was as a result of opposition to “privatisation” (broadly understood as intensified capitalism) on the part of many different organisations and individuals. These included the Anti-iGoli 2002 Committee, the South African Municipal Workers’ Union (SAMWU), education workers, NGO’s, students and the South African Communist Party. They held the unifying belief that the iGoli 2002 framework was creating intolerable conditions for the poor and working class.

The APF is predominantly engaged with struggles against pre-paid meters and aspects of water “privatisation”, as well as struggles against evictions and housing issues; HIV/AIDS; pre-paid electricity meters and solidarity with striking workers. It is funded through various donor organisations, including War on Want and Oxfam.

Through its affiliate organisations, the APF is able to mobilize mass meetings and pickets against various issues which affect any one of the affiliates. It is also able to provide local communities with political education and advocate on their behalf.

The APF is currently planning to run for local government elections next year, promoting itself as a party which represents the working class.

With the formation of the ‘Coalition against Water Privatisation’ in 2003, the disparate struggles against the commodification of water in Johannesburg and in other parts of the country have become more unified. The specific focus of the Coalition is to oppose pre-paid water meters.

![Picture 7: Trevor Ngwane (APF organiser) addressing the community at a march in Phiri, with a member of the Metro police looking on (to the right)](image)
CHAPTER 7
DISCUSSION

The results in chapter 6 reveal certain striking indictments on the practices of Johannesburg Water in the context of poor, vulnerable and marginalised sectors of society. This has been the focus of the research conducted, as discussed in Chapter 4. However, these indictments are not as clear-cut as has often been argued by activists in the field, as we shall see in the next section.

7.1. Positive impacts arising through the free basic water subsidy and Johannesburg Water’s policies

On the positive side, the free basic water subsidy is a vitally important step in increasing economic access to water for low-income communities, and indicates a certain level of government commitment in providing for the needs of the poor.

Furthermore, as shown in section 6.3.1.3 above, in some instances the cost of purchasing water has decreased, with 37.5% of those respondents in Phiri previously paying a flat rate stating that the cost of water has decreased since the installation of pre-paid meters (20% of the total sample). Similarly, in Stretford Extension 4, 35.7% of respondents previously paying a flat rate previously paying a flat rate reported a decrease in the cost of water after the installation of pre-paid meters (16.7% of the total sample). However, those people previously paying the flat rate were of course those who were able to pay (usually the employed earning a regular salary or wage), and thus not the poorest of the poor in the sample. Those who did not pay for services previously often did not do so because they were not able to, being on the extreme margins of the formal economy. It is these people who are most severely affected by the installation of pre-paid meters as a tool facilitating the commodification of water. Under the new service delivery framework, six kl per household becomes the sum total of their entitlement to water. As we have seen six kl is not enough to secure the health and well-being of households within the sample populations.

Significantly, though, is the finding that physical access to water and sanitation has increased in Stretford Extension 4. The bucket toilet system has been replaced by water-borne sewerage, and whereas before community standpipes provided water to around 20 households, each household now has an outlet on their property. Due to the prevalence of informal settlements in Johannesburg, and indeed in South Africa as a whole, increasing access to services in these areas is a vital endeavour, and arguably one of the most important criteria for the success of any water and sanitation service delivery regime in South Africa. However, as we have seen pre-paid meters can significantly decrease economic access to water where households are unable to afford credits, and ultimately this factor may prove harmful to the health and well-being of families in Stretford Extension 4.

7.2. Negative impacts arising through Johannesburg Water’s policies and the commodification of water

The study has found a clear lack of consultation regarding the installation of pre-paid water meters on the part of Johannesburg Water – in both Phiri and Stretford Extension 4. This contrasts starkly with indications given by Lesego Lebuso and Jean-Pierre Mas, representatives of Johannesburg Water (interview; November 3, 2005), concerning Johannesburg Water’s
process of community consultation. It has significant implications for community satisfaction with Johannesburg Water and their policies, and ultimately, as we shall see in section 7.5, for the social sustainability of the water service delivery regime itself.

It has further been observed that the free basic water allocation of six kl per household is insufficient to provide for the health and well-being of poor and economically marginalised communities. This is especially pertinent when the allocation is considered in terms of household size – particularly in Phiri, where the prevalence of backyard shack means that household sizes greater than eight, the basis for the subsidy allocation, are common.

An overall decrease in physical as well as economic access to water in one out of the two case study areas – Phiri – has also been found. This is as a result of the installation of technically faulty pre-paid meters, as well as the complete elimination of any previous tolerance of non-payment. This conforms with the findings of Bayliss (2003: pp 521), which indicates that the poorest are often adversely affected by cost recovery measures, as a tolerance of illegal connections, which could constitute a progressive subsidy, has been replaced by high levels of disconnection for non-payment – or as in the case of Johannesburg, “self-disconnection” through the pre-paid meter.

Unambiguous negative social impacts arising through the policies of Johannesburg Water have been found to include insufficient access to water for people with HIV/AIDS, as well as a decrease in household food gardens used for subsistence purposes. Other social impacts ascertained include increased family strife over responsibility for the purchase of pre-paid credits; decreased hygiene as a result of the necessity to use less water; and increased health hazards through the shallow sewer system in Stretford Extension 4.

Significantly, 63.3% of respondents in Phiri and 30% of respondents in Stretford Extension 4 said that they were not happy with water and sanitation services in their communities.

7.3. The reactive rise of new social movements as a result of the commodification of water

What may be seen as one of the most striking impacts of the formation of Johannesburg Water, is the reactive rise of new social movements in many disparate communities – the Phiri Concerned Residents (PCR), the Orange Farm Water Crisis Committee (OFWCC) and the Anti-Privatisation Forum (APF) being those most pertinent to this study. Due largely to historical causes, South Africa provides a remarkably powerful politically organised civil society (Bond, 2004). New social movements are able to mobilise mass support against any policy decision which they believe to have adverse effects on the welfare of their community. Many have done so against Johannesburg Water in Phiri and Stretford Extension 4. They pose what may be seen as the most severe implications for the sustainability of the corporatised water service regime in Johannesburg, and on a larger scale for the policies disseminated through the iGoli 2002 plan itself. No assessment of the success of any service delivery regime can be made without looking at the reasons for the rise of these new social movements, and without addressing them.

Two major themes arise out of an analysis of these new social movements and their stance towards the corporatisation of basic services in general and Johannesburg Water in particular. Firstly, these movements articulate a critique against corporatisation based on water as a human right and what is viewed as a fundamental conflict between economic and social agendas. The findings summarised above (section 7.2) are in line with the viewpoints of these movements –
that the commodification of water, a basic human right, is fundamentally harmful to poor, vulnerable and economically marginalised communities. Secondly, the very existence of these movements raises questions concerning the social sustainability of the service delivery model and its appropriateness in terms of South Africa’s wholly undemocratic apartheid history. These two hypotheses will be disseminated in more detail in the following sections.

7.4. Water as a human right versus a corporatised water and sanitation service delivery regime

“We agree that water is life. Without water, there is no life.”

Water is vital to human life. Kofi Annan – the United Nations Secretary General – has stated that “[a]ccess to safe water is a fundamental human need and, therefore, a basic human right” (In: WHO (b), 2003: pp 6). In 2002, the United Nations Committee on Economic, Social and Cultural Rights confirmed the right to water through their adoption of General Comment No. 15, outlined in section 3.2. Locally, the right to water is enshrined in the Constitution of South Africa, which guarantees the right of everyone to have access to sufficient food and water.

However, Morgan (2004: pp 17) points out that in reality South African water policy “seesaws” between the human rights dimension and the dictates of capital. Patrick Bond (2004) has asserted that there is an obvious discord between what he terms the ANC’s “leftist talk and neo-liberal water walk”. For example, although the Constitution is remarkably progressive in its provision of the right to water, the adoption of neo-liberal principles has meant that policies related to water and other basic rights are located within an economic framework. As we have seen in section 3.1, national legislation enables a municipality to provide a municipal service through a business unit devised by the municipality (such as Johannesburg Water) or any other institution, entity or person legally competent to operate a business activity. The increasing orientation of local government structures towards corporatisation has been further precipitated by a drastic decrease in national grants and subsidies to local municipalities in order to reduce budget deficits, at least in part as a response to neo-liberal economic pressure from the World Bank, the IMF and various Western governments. In the context of Johannesburg, the corporatisation of water and sanitation services through the formation of Johannesburg Water, as we have seen, has led to widespread protest over what appears to be principles of cost recovery taking precedence over the constitutionally mandated right to water.

The directives of cost recovery principles are epitomized by the installation of pre-paid water meters in low income areas of Johannesburg. This is predominantly through a mechanism of self-disconnection, where people who cannot afford to pay for water are immediately disconnected. Thus it is apparent that the advantages of pre-paid meters for Johannesburg Water are clear, and include the following: - the utility is paid before any water is consumed – the elimination of arrears thus becomes an easy task and problems with debt collection are avoided; the costs associated with sending out meter readers are avoided; and in townships and informal settlements, where a culture of non-payment has previously been fostered as a method of protest against the apartheid model – pre-paid meters function as a pedagogical tool, teaching the laws of economy – that the provision of water has a price (this justification of the pre-paid meter was put forward by a representative of the Johannesburg City council in an interview with the author; November 7, 2005).

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25 Quote taken from Bricks Mokolo – Organiser of the Orange Farm Water Crisis Committee (OFWCC). Interview; September 9, 2005.
As such, the pre-paid meter defines the new status of the citizen – that of a consumer (McDonald and Ruiters, 2005; In: McDonald and Ruiters (ed’s), 2005). Water, rather than a basic human right fundamental for life, becomes a commodity to be bought and sold on the market. It is this significant critique which is eloquently voiced through new social movements, such as the APF, in Johannesburg. As the Coalition against Water Privatisation has stated in their Declaration: - “[t]he human dignity of entire communities has been ripped apart as the right to the most basic of human needs, water, has been turned into a restricted privilege available only to those who can afford it”.

The pre-paid meter, as has been shown in Chapter 6, very often proves fundamentally harmful to the health and well-being of economically marginalised communities – as it is a mechanism which forces a cut in consumption with an inability to pay. Harmful impacts may be through a scarcity of water for food production; a limitation on the amount of water available for children, the elderly and the sick; increased family strife over responsibility to buy credits; decreased hygiene and availability of water for washing clothes; and a decrease in income from backyard shack dwellers, who have moved away as a result of the installation of pre-paid water meters. As the PCR stated in their Memorandum to the Johannesburg Metropolitan Council handed over on November 10, 2005 (in which they demanded the complete removal of all pre-paid meters from Phiri, Orange Farm and all poor communities): - “Since [pre-paid meters] were forced on us without consultation our lives have been harmed by them as we have to pay for water before we can use it. The six kilolitres is not sufficient to live on and often our children, old people and the sick in our community cannot access water when they need it”.

Nevertheless, one cannot assess the true value of the pre-paid meter without looking at the other side of the coin, as argued by pragmatists at the Johannesburg City council. Water is probably South Africa’s most limiting natural resource. Johannesburg Water buys water from Rand Water, which ultimately is sourced from the Lesotho Highlands Water Project (LHWP). The LHWP, implemented by the governments of South Africa and Lesotho, is a multi-billion water transfer project, an ambitious and controversial feat of engineering. The project has been accused of being inordinately expensive, ecologically unsound, corrupt, and socially damaging through the relocation of local communities (Letsie and Bond, 2005). Without addressing levels of demand from the city of Johannesburg, it has been asserted that a second LHWP will be required sometime after 2015 (interview with a City official; November 7, 2005). This fact brings home the point that the provision of water is expensive, an especially pertinent fact in the context of Johannesburg. The need for financial sustainability cannot be overestimated. Further, reducing the demand for water is a fundamental priority. This is the city’s rationale behind the installation of pre-paid meters in poor communities – where households are involved in planning their levels of usage according to what they can afford first-hand, a very practical technique for reducing demand. Accordingly, savings accrued from a decrease in costs associated with meter reading and debt collection is passed on to the consumer who opts for a pre-paid meter.

However, where a service is a basic human right fundamental to life – sustainable resource management cannot be an overriding factor. A water and sanitation service regime where the necessity for sustainable resource management takes precedence over the health and well-being of poor communities may be argued to be in itself fundamentally unsustainable, not least through voices of dissent, which will be discussed in more detail in section 7.5. The ultimate measure of a sustainable water and sanitation service regime is one that incorporates environmental, economic and social aspects of sustainability together.
The Centre for Applied Legal Studies (CALS) is providing legal assistance to the PCR on the basis of the fact that the Water Services Act (1997) requires a utility to provide reasonable notice if it intends to limit or discontinue services. It also requires a customer's ability to pay for services to be taken into account. These procedural requirements are negated through the use of pre-paid meters. Instead, with pre-paid meters inability to pay results in immediate disconnection without any notice or a hearing.

More importantly though, CALS plans to take up the issue of pre-paid meters with the Constitutional Court under the argument that the installation of pre-paid meters – only in low-income communities in Johannesburg – is a form of administrative inequality. This is contradiction with the right to equality stipulated by the Constitution. Their primary disputation, however, is that the installation of pre-paid meters is against the right of universal access to water enshrined in the Constitution.

Internationally, the most significant act of legislation against pre-paid meters occurred in the United Kingdom in the late nineties. Pre-paid meters, known as “budget payment units” or “trickle valves”, were declared illegal under the U.K. Water Act of 1998 (Harvey, 2003). Through this Act, the use of any device that cut off customers’ water supply due to insufficient credit on their prepayment cards (often referred to as “self-disconnection”) was prohibited. The ruling was based on the premise that the provision of water is vital to public health (ibid.).

7.5. Opposition, consultation and sustainability

As has been seen, the adoption of a corporatised water and sanitation service delivery regime, precipitated through the adoption of the iGoli 2002 model, has become a topic of heated political debate in Johannesburg. iGoli 2002 was adopted as a reaction to a crisis-torn metropolitan system, with the aims of increasing financial sustainability and administrative efficiency. Yet the adoption of this municipal framework has in its turn facilitated the reactive rise of a variety of new social movements, such as the APF, the PCR and the OFWCC. These movements are not alone in their opposition to Johannesburg’s service delivery framework, but are joined by other stakeholders, the most significant of which are local communities and workers unions.

The following section is a discussion of the primary forces of opposition against Johannesburg Water – as well as their reasons for opposing the utility and its service delivery framework. An analysis of the implications for the sustainability of the regime follows in section 7.6.

7.5.1. Voices of dissent: primary forces of opposition against the water delivery framework in Johannesburg

7.5.1.1. Workers Unions

Unions such as the South African Municipal Workers Union (SAMWU) and the Congress of South African Trade Unions (COSATU) form an important voice of dissent against Johannesburg Water. In its “Statement on the Anti-Privatisation Campaign - September 9, 1998” (COSATU, 1998), COSATU contend that: “Essential services, such as water delivery, should not be left in the hands of those whose only interest is profit making. We believe the government is obliged

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26 Information gained through a telephone interview with a representative of CALS; November 16, 2005.
to take responsibility for quality, affordable delivery to all South Africans”. They did
nevertheless add that they are “not opposed to exploring an appropriate role for the private sector
to play as long as the state does not relinquish ultimate responsibility for delivery” (ibid.).

A critique formulated against iGoli 2002 from COSATU is somewhat significant because
COSATU, along with the South African Communist Party (SACP) and the ruling ANC, form
what is known as the ‘tripartite alliance’. The ANC may be described as the parliamentary arm
of this alliance, and memberships in the three factions overlap. Following the adoption of GEAR
in 1996, elements in COSATU and in the SACP soon launched “stinging critiques”, arguing that
“the policy would be incapable of redressing both the legacy of apartheid and the new hegemony
of global capital”, leading to a spate of expulsions (McKinley and Veriava, 2004: pp 5).

SAMWU campaigns for the “immediate outlawing of prepayment meters because of their danger
to the health and life of poor communities” – in its Resolution on Prepaid Meters (2003; In:
McDonald and Ruiters, 2005: pp 128 - 129).

7.5.1.2. Consumer-based resistance

Mass non-payment for services, the result of collective political action taken by township
residents against apartheid, has been an issue in South Africa since the 1980’s. This was
something which was at least partly tolerated under the apartheid government. However, poverty
very often means that – as well as being unwilling – these people are also unable to pay for
services. Apartheid has ended, but cost-recovery principles applied to previously badly under-
serviced areas have severe impacts for consumers in those areas (Morgan, 2004).

These negative social impacts, discussed in Chapter 6 and section 7.2, have led to various forms
of protest against Johannesburg Water and the installation of pre-paid water meters. As Bond
(2004) points out, the issue of access to services (such as water and sanitation) has become an
explosive new cause in the same urban townships and informal settlements that were principal
battlegrounds in the fight against apartheid. Consumer-based resistance against the current water
service delivery framework is considerable. It is characterised by protest marches – demanding
an end to the installation of pre-paid meters – in areas of Soweto such as White City Jabavu,
Rockville and Molapo (Daily Sun, Wednesday August 10, 2005). Marches also continue in other
areas where pre-paid meters have previously been installed, such as Phiri and Stretford Extension
4. In one such march (Jabavu Municipality; August 9, 2005), residents removed newly installed
pre-paid meters and discarded them in front of the councillors’ office. At a community meeting
in Phiri (October 6, 2005), members of the PCR encouraged residents who were unhappy with
their pre-paid meter, to sign an affidavit stating that Johannesburg Water, forcefully and without
consent, installed it. Members of the OFWCC (interview; September 9, 2005) informed the
author that they encourage residents of Stretford Extension 4 to bypass their meter – providing
the necessary technical expertise to do so, as we have seen in section 6.6.2.

Consumer-based resistance is strengthened through significant allies, such as CALS – and
organised through new social movements such as the APF, the PCR and OFWCC. In fact
consumer-based resistance is often the precipitating factor leading to the formation of these
movements, as in the case of the PCR and the OFWCC. Thus consumer-based resistance in the
townships and peri-urban areas of Johannesburg has important implications for the
implementation of policy shift towards cost-recovery and marketisation in the delivery of water,
as Morgan (2004) affirms. This is through direct action, the formation of new social movements
and the forging of connections to other movements under a more general critique of neo-liberalism. The latter two will be discussed in the next section.

7.5.1.3. Activist Organisations and New Social Movements – From Swart Gevaar to Rooi Gevaar

“...The meter is the most profound symbol of neo-liberalism. It brings together its two most important characteristics, the commodification of the basics for life and the development of new forms of control.”

Activist organisations unite many disparate struggles in Johannesburg under an overarching critique of the neo-liberal agenda. This is something which has prompted various City officials, representatives of Johannesburg Water and the press to dismiss the struggle as one which is purely ideological. Yet quite to the contrary, we have seen that these movements are very often formed out of grassroots attempts to resist the very real impacts of neo-liberal policies, such as the formation of Johannesburg Water and the consequent commodification of water, ultimately manifested in poor and vulnerable communities through the pre-the paid meter. The APF itself, representing what is probably the most outspoken critique of a local manifestation of neo-liberalism – corporatisation – is comprised of 21 community-based affiliate organisations (Appendix III). These organisations are variously involved in community struggles against evictions; water and electricity cut-offs; environmental pollution; HIV/AIDS; and pre-paid water meters. They are encouraged to remain active on the ground focusing on day-to-day issues that affect the community. Yet they are united under one belief – that neo-liberal policies have detrimental effects on vulnerable and marginalised local communities. The APF itself provides organisational support – connecting these disparate struggles through various sub-committees, with one member from an affiliate on each committee.

McKinley and Veriava (2004: pp 5) describe how these new social movements, according to their disparate struggles, use “the tactics of resistance cooked up in the township laboratories of the 1980’s” to forcefully undermine the ANC government’s efforts to practically implement the neo-liberal agenda at a local level. These include the destruction of pre-paid water meters and protest marches. During the initial implementation of Operation Gcin’amanzi in Phiri members of the community, together with the Soweto Electricity Crisis Committee (SECC), approached Johannesburg Water workers asking them to suspend the work on the project until an agreement was reached between the community and the council. Johannesburg Water’s response was to call in the Metro police, the South African Police Service and private security to ensure the installation of meters and disperse toyi-toying protesters (Veriava and Ngwane, 2004). Later many residents returned to dig up pipes laid by the Johannesburg Water workers, even though five residents had been arrested on that day. As a final response, Johannesburg Water applied for

27 Die ’swart gevaar’ is an Afrikaans phrase, popular in the 1980’s, meaning the ‘black danger’. It has often been used to characterise the struggle against apartheid. In an article for the Sunday Independent (May 16, 2004), Dale McKinley and Ahmed Veriava refer to the present-day rise of new social movements as the ‘red danger’ of a capital-friendly ANC government.

28 Veriava and Ngwane, 2004: pp 130.

29 Lesego Lebuso (interview; November 3, 2005) stated that the campaign against Johannesburg Water would never go away because it is an ideological debate, and stated that the campaign is based on twisted and distorted misinformation. In an article in the Mail and Guardian (June 14, 2004) entitled Fact, fiction and the new left, the paper’s editor, Ferial Haffajee dismisses what she terms the ‘new left’, accusing them of posing arguments that lacked intellectual rigour and underestimating the complexity and achievements of South African policy.

30 Toyi-toyi – a type of dance – is a form of traditional protest in South Africa.
an interdict against the APF, the SECC and anyone interfering with the Gcin’amanzi project (ibid.).

Veriava and Ngwane (2004) reveal that through the APF, the PCR and SECC were able to communicate with other community organisations also resisting the commodification of basic services – and the Coalition against Water Privatisation was formed. The Coalition included many NGO’s, such as Jubilee South Africa, the Freedom of Expression Institute, Ceasefire and the South African History Archives, as well as independent academics, students and activists. Through this ability to organise, connect and mobilise disparate struggles, these new social movements are both powerful and capable. The pose a critique against iGoli 2002 and the neoliberal paradigm, based on real-life experience, which cannot and should not be ignored.

7.6. Participatory democracy, iGoli 2002 and Johannesburg Water: Implications for the sustainability of the water service delivery framework

Over the past thirty years of reflection on the topic of sustainable development, participation in decision-making has become a major theme – one which is considered vitally important. This principle has been embodied in South African water legislation through, for example, the Local Government: Municipal Systems Act (2000), which defines the legal nature of a municipality as including the local community within the municipal area, working in partnership with the municipality’s political and administrative structures. Here community participation is seen as essential to the functional structures of a municipality.

Nevertheless, Harvey (2003) criticises the adoption of the iGoli 2002 plan as being in violation of the ideals of democracy, participation and transparency, against the backdrop of the wholly undemocratic and racist history of Johannesburg. In an article entitled World Class Evidence Against iGoli 2002, David Hall, director of Public Services International (In: Harvey, 2003: pp 28), pointed out that there are numerous examples of alternative ways of restructuring local government in much more democratic, participatory and transparent ways. To illustrate his argument, Hall (ibid.) puts forward the example of Kerala in India, where various democratic principles underpinned the decentralisation of power to the local level. In this instance there is maximum direct participation. According to Hall (ibid.), this is in contrast with iGoli 2002, where there is no such promise of the maximisation of public participation as an end in itself.

In the specific context of Johannesburg Water, these criticisms have been found to be relevant during the course of this study. A crucial lack of community consultation and participation in decision-making has been found – 40% of respondents in both Phiri and Stretford Extension 4 claimed that Johannesburg Water did not consult them concerning the installation of pre-paid meters. Of those respondents that were consulted, 35% in Phiri and 37.5% in Stretford Extension 4 did not agree to a pre-paid meter. These results suggest a void in the space where democratic principles usually apply. This, it is argued, has been a catalyst stimulating the emergence of struggles against Johannesburg Water. In the words of a respondent in Phiri: - “The councillor was informed of the installation of pre-paid water meters without reference to the concerns of the people. That is why there was resistance.”

Furthermore, the main impetus for the corporatisation of water and sanitation services, and indeed other services under the iGoli 2002 framework, is to deliver services that are “effective, efficient and cost-effective”. However, Batley (1992; In: Harvey, 2003) points out that the values of efficiency and effectiveness are limited for judging systems of local governance. This is
because communities may legitimately give alternative values, such as democratic control, local responsibility or the development of civil society, higher precedence even at the cost of relative efficiency and effectiveness. Harvey (ibid.) argues that terms such as “cost-effectiveness and efficiency” must be divested of their traditionally understood meanings – referring to capitalist economic efficiency (“and therefore profitability” (ibid.: pp 25)), and instead be invested with an interpretation on the basis of basic needs, human rights and the democratic control of resources. The best possible meaning of “efficiency”, then, is the ability of the service provider, be it local government or a private corporation, to adequately meet these requirements.

There is a well-known South African philosophy called ‘ubuntu’. Politically, the concept of ubuntu emphasises the need for consensus in decision making and the need to inform those decisions by a humanitarian ethic – or in other words, participatory democracy. This concept is often touted as one of the founding principles of the “New South Africa”. However, it has been shown that true consensus is lacking in the decision to corporatise water and wastewater services, and in the management decisions taken by Johannesburg Water. We have seen evidence of this assertion in various ways: - through grassroots struggles against the manifestations of cost-recovery principles, most significantly pre-paid water meters; the rise of new social movements opposed to the ANC’s neo-liberal orientation – and more specifically the local effects of this; as well as outspoken critiques voiced by workers unions, NGO’s, intellectuals and students. These voices of dissent are a critical factor undermining the social sustainability of Johannesburg Water.

It remains to be seen how long the iGoli 2002 model, with its corporatised service entities, will continue to be Johannesburg’s municipal service structure. However, due to its international status as a basic human right; its protection in the Constitution; and its links with health, environmental, equality and human dignity rights, the right of access to sufficient water provides an ample playing field for the struggle against a corporatised water service delivery framework and its manifestations, most significantly the pre-paid water meter.

CHAPTER 8
CONCLUSIONS AND RECOMMENDATIONS

8.1. Conclusions

Johannesburg Water markets the pre-paid water meter as an important contribution to the sustainable utilisation of water resources. According to this logic, pre-payment is an effective tool for demand management. On the other side of the fence, the pre-paid meter is the manifestation of an oppressing neo-liberal regime, embodied in the iGoli 2002 model. Significantly, pre-paid meters are often fundamentally harmful to the health and well-being of poor communities. It is a fundamental critique, argued through this thesis, that although not technically privatisation, the principles involved in commercialising water and sanitation service delivery remain the same – water becomes a commodity to be bought and sold on the market. This has the function of excluding the poor and vulnerable sectors of society, who operate on the margins of the market. It has thus been argued that a corporate water service delivery regime eliminates the right of access to sufficient water – an internationally recognised and constitutionally mandated basic human right. It is on this basis that Johannesburg Water and its policies must be opposed.
These factors have led to various mobilisations against Johannesburg Water. These include direct action at a grassroots level; the formation of community-based new social movements such as the Orange Farm Water Crisis Committee (OFWCC) and the Phiri Concerned Residents (PCR); and the forging of new links between disparate movements – under a more general critique of neo-liberalism. The very existence of these groups, as well as their formation out of directly-experienced everyday struggles, points to a deficiency in neo-liberal policies. Most significantly these are that neo-liberalism is often manifested in tools that are harmful to the health and well-being of poor communities, such as the pre-paid water meter. Also that corporatised entities place greater emphasis on the principles of ‘cost recovery’ and ‘economic efficiency’, than they do on those based on the ‘fulfilment of basic needs’, ‘human rights’ and the ‘democratic control of resources’. Ultimately, the social sustainability of a corporatised water and sanitation service delivery framework – embodied in Johannesburg Water – is challenged because the commodification of water is fundamentally harmful to the health and well-being of the impoverished, poor and marginalised sectors of society in Johannesburg.

8.2. Recommendations

In light of the above conclusions, then, it is imperative that fundamental revisions to the water and sanitation service delivery framework in Johannesburg be made. Some recommendations which come to light through this thesis are as follows:

• An immediate and independent research study into the impacts of pre-paid meters on the health and well-being of poor communities in Johannesburg must be commissioned. The results of this study must be widely publicised and acted upon.

• As most vulnerable and economically marginalised households do need and use more than the six kl of free basic water provided every month, an additional ‘lifeline tariff’ – a supplementary amount of water provided at an additionally subsidised rate – should be provided.

• The free basic water clause is a fundamental and important step in providing for the needs of the poor. However, at present the free basic water is allocated according to a household size of eight. This means that the subsidy is biased in favour of middle-upper income households where household sizes are typically smaller than eight – and against household sizes larger than eight, predominant in low-income areas such as Soweto and Orange Farm. The State must take reasonable legislative and other measures, within its available resources, to address this problem.

• As a preliminary measure, the City of Johannesburg should immediately formulate a strategy for implementing demands for an additional outlay of meters – dispensing the free basic water allocation to individual backyard shacks, in addition to primary households.

• Community consultation is an important aspect of sustainability, which as we have seen, has been essentially lacking in the case of water service delivery arrangements in Johannesburg. It has been argued that this has been a fundamental element leading to community dissatisfaction and precipitating more organised opposition to Johannesburg Water. As such it is imperative that an improved framework of operation for Johannesburg
Water be developed whereby increased community participation in decision-making is facilitated.

- During community participation, the principles of democracy must be adhered to. This means that Johannesburg Water and the City of Johannesburg itself must take reasonable legislative and other measures, within their available resources, to achieve the progressive realisation of the demands of the community, and the rights enshrined in the Constitution. They should do this even if it requires re-exploring the iGoli 2002 framework.

Acting upon these recommendations will immediately improve the social sustainability of the City’s administrative structures and decision-making procedures. Moreover, these proposals will facilitate an improved approach to addressing poverty on the part of the City. Poverty alleviation is an integral component of ensuring social sustainability. Ultimately, the eradication of poverty must form part of any comprehensive strategy which aims to achieve sustainable development.

**Picture 8:** Children in Stretford Extension 4


APPENDIX I: Summary of the questionnaire-based survey conducted in Phiri and Stretford Extension 4

1. Income and cost of water
   1. What is the monthly income of your household?
   2. What is the primary source of income in your household?
   3. How many people live in your household (including outside dwellings)?
   4. How many dependants are there in your household?
   5. How much do you spend on water per month?
   6. Has this changed since the installation of your pre-paid meter?
   7. If so, how?
   8. Were you paying for water and sanitation services before the installation of your pre-paid meter?

2. Access
   9. Were you informed of the installation of pre-paid meters in this area?
   10. Did you have any objections to the installation of pre-paid meters?
   11. Have you bypassed the pre-paid meter?
   12. What ablution facilities do you have access to?
   13. Where are they?
   14. In your opinion, are these facilities adequate for your basic needs?
   15. Have you had any problems with the delivery of water services since the installation of the pre-paid meter?
   16. If yes, explain
   17. Are these problems worse than any you might have experienced before the installation of the pre-paid meter?
   18. On average, how long does it take for Johannesburg Water to fix any problems that you have reported?
   19. How do current water and sanitation services compare with that pre-1994?
   20. Please explain your answer.
   21. Have you ever run out of water and not been able to afford more for a time?
   22. If so, how did you obtain water?
   23. How often does this happen?
   24. Are you happy with water and sanitation services in your community?
   25. Please explain your answer.

3. Consumption
   26. Do you get the 6kl free water, per household per month, legislated by the government?
   27. If yes, when did you start receiving your free allocation of water?
   28. How long does this free water last in your household?
   29. Water use: -
<table>
<thead>
<tr>
<th>What do you use water the most for? (on a scale of 1 – 7)</th>
<th>Has this changed since the installation of your pre-paid meter? (Comments)</th>
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<tbody>
<tr>
<td>Bathing</td>
<td></td>
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<tr>
<td>Cooking and drinking</td>
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<tr>
<td>Toilet flushing</td>
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<td>Washing dishes and clothes</td>
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<tr>
<td>Washing nappies</td>
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<tr>
<td>Caring for sick people</td>
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<td>Food Gardens</td>
<td></td>
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</tbody>
</table>

30. Has your total household water consumption increased, decreased or remained constant since 2001?
31. What are the reasons for these changes, if any?
32. Do you feel you have enough water for the needs of your household?

8. Notes and Comments
### APPENDIX II: Schedule of water tariffs charged by Johannesburg Water (Johannesburg Water (b), 2005)

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<tr>
<td><strong>Blocked</strong></td>
<td><strong>tariff scale</strong></td>
<td><strong>before Jul 01</strong></td>
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<td><strong>before Jul 01</strong></td>
<td><strong>after Jul 01</strong></td>
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<tr>
<td><strong>tariff scale</strong></td>
<td><strong>(per kl)</strong></td>
<td><strong>(per kl)</strong></td>
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<tr>
<td>1. Charges for the supply of metered water</td>
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<td>(1) Residential</td>
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<tr>
<td>-</td>
<td>1 - 6 kl</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
<td>Free</td>
</tr>
<tr>
<td>1 - 10 kl</td>
<td>7&gt; - 10 kl</td>
<td>3.90</td>
<td>3.60</td>
<td>3.30</td>
<td>2.49</td>
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<tr>
<td>-</td>
<td>11&gt; - 15 kl</td>
<td>5.15</td>
<td>4.80</td>
<td>4.40</td>
<td>4.48</td>
</tr>
<tr>
<td>11 - 20 kl</td>
<td>16&gt; - 20 kl</td>
<td>6.45</td>
<td>6.00</td>
<td>5.50</td>
<td>5.00</td>
</tr>
<tr>
<td>21 - 40 kl</td>
<td>21&gt; - 40 kl</td>
<td>7.75</td>
<td>7.19</td>
<td>6.60</td>
<td>5.81</td>
</tr>
<tr>
<td>40 kl&gt;</td>
<td>41+ kl</td>
<td>9.15</td>
<td>8.50</td>
<td>7.80</td>
<td>7.09</td>
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<tr>
<td>(2) Deemed consumption areas fitted with metered connections as per Gcin’amanzi project</td>
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<tr>
<td>1 - 6 kl</td>
<td>Free</td>
<td>Free</td>
<td></td>
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<tr>
<td>7&gt; - 10 kl</td>
<td>2.95</td>
<td>2.73</td>
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<td>11&gt; - 15 kl</td>
<td>3.50</td>
<td>3.27</td>
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<tr>
<td>16&gt; - 20 kl</td>
<td>5.45</td>
<td>5.05</td>
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<tr>
<td>21&gt; - 40 kl</td>
<td>7.50</td>
<td>6.98</td>
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<td></td>
<td></td>
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<tr>
<td>41+ kl</td>
<td>9.15</td>
<td>8.50</td>
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</table>

2. Charges for the supply of unmetered water

**Informal settlements**

Structures used for human habitation in respect of which no building plan has been lawfully approved by any competent authority and the dwelling on the erf is not individually connected to Johannesburg Water's water reticulation system: at an assessed consumption of 6kl per dwelling unit per calendar month: Free of charge
APPENDIX III: Anti-Privatisation Forum (APF) Affiliates (as at the time of writing)

<table>
<thead>
<tr>
<th>Name of Affiliate</th>
<th>Acronym</th>
<th>Name of Affiliate</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motsoaledi Concerned Residents</td>
<td></td>
<td>Evaton Working Class Crisis Committee</td>
<td></td>
</tr>
<tr>
<td>Thembalihle Crisis Committee</td>
<td></td>
<td>Wynberg Concerned Residents</td>
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<tr>
<td>Soweto Electricity Crisis Committee</td>
<td>SECC</td>
<td>Keep Left</td>
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<tr>
<td>Tembisa Concerned Residents Association</td>
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<td>Tsakane Crisis Committee</td>
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<tr>
<td>Kathoorus Concerned Residents</td>
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<td>Bophelong Community Service Forum</td>
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<td>Mandelaville Crisis Committee (DRD)</td>
<td>MCC</td>
<td>Marlborough Crisis Committee</td>
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<td>Kliptown Concerned Residents</td>
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<td>Orange Farm Water Crisis Committee</td>
<td>OFWCC</td>
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<td>Small Farm Residents Forum</td>
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<td>Alexandra - Vukuzenzele</td>
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<td>Kanana Community Development Forum</td>
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<td>Vaal Crisis Committee</td>
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<tr>
<td>Working Class Crisis Committee</td>
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<td>Phiri Concerned Residents</td>
<td>PCR</td>
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<td>Learners Representative Forum</td>
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