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The Commodification of water in Soweto and its implications for social justice

Submitted for the Degree of Doctor of Philosophy,
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Abstract

This thesis combines studies in urban, environmental and public sociology and political science. Adequate and unimpeded access to water supply in poor black communities arguably lie at the heart of urban and environmental sociology, social policy and democratic local government.

It explores water as a basic and non-substitutable resource and a human right, the countervailing pressures to commercialise and commodify it and the evolving countermovement to these pressures. It also explores the sufficiency of the present water lifeline and the appropriateness or otherwise of prepaid water meters in poor communities and the disempowering and alienating social consequences they appear to have. The contending theses of commodification and decommodification and their underlying social relations is the theoretical framework within which we situate the study.

The first section deals with the aim of the study, its rationale, methodology and the theoretical considerations. The second part focuses on the historical and institutional dynamics which both inform and are consequential to water commercialisation and commodification in South Africa. It explores and analyses the technology, ideology and sociology of prepaid water meters in general terms and the specific impacts they have had in Soweto, where the case study is situated. It furthermore critically explores these impacts in relation to the notions of human rights and social justice in the South African context.

The epistemic heart of the thesis is the case study, based on a critical examination and analysis of the impacts the limited free water lifeline and the installation of prepaid water meters have had in Phiri, Soweto. It also critically analyses the problems and prospects for resistance to these meters and for developing an anti-commodification countermovement.

In conclusion this thesis explores an alternative political, policy and institutional framework which may become necessary in the future if the problems identified as a result of the case study are to be seriously addressed by the service provider, Johannesburg Water, and the City of Johannesburg.

Declaration

I declare that this dissertation is my own, unaided work. It is being submitted to the Sociology Department in the School of Social Sciences, University of the Witwatersrand, Johannesburg, for the degree of Doctor of Philosophy by Research and Dissertation. It has not been submitted for any degree or examination to any other university.

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Dedication

This work is dedicated to my dearest daughter, Zina, now just 14 years old, who I hope will be inspired by it. Inspired to know that at the age of 53 I completed this doctoral thesis and that therefore, with determination, it is never too late or hard to achieve academic or any other goal in one's life. Inspired also to know the great virtue of continuously striving to learn and the vital and indispensable importance of water for all life, but especially adequate access to it for human life, for which no justification must exist to deny those who cannot pay for it.

Abbreviations

ANC	African National Congress
APF	Anti-Privatisation Forum
CoJ	City of Johannesburg
COSATU	Congress of South African Trade Unions
DPLG	Department of Provincial and Local Government
DWAF	Department of Water Affairs and Forestry
FBW	Free basic water
GEAR	Growth, Employment and Redistribution
GJMC	Greater Johannesburg Metropolitan Council
JW	Johannesburg Water
JOWAM	Johannesburg Water Management Company
KL	Kilolitres
L	Litres
LOS	Levels of Service
MSA	Municipal Systems Act
MSP	Municipal Service Partnerships
NP	National Party
NNP	New National Party
OGM	Operation Gcin'amanzi
PPPD	Per person per day
PPWM	Prepaid water meters
RDP	Reconstruction and Development Programme
RSA	Republic of South Africa
SACP	South African Communist Party
SAMWU	South African Municipal Workers Union
SANCO	South African National Civic Organisation
SMI	Social Movement Indaba
WSA	Water Services Act
WRC	Water Research Commission

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CHAPTER ONE: THE SOCIOLOGY, POLITICS AND IDEOLOGY OF WATER COMMODIFICATION IN POST-APARTHEID SOUTH AFRICA

1. Aim

The aim of this study is to research the sociological implications of the commercialisation and commodification of water in Phiri, Soweto. This is the central research question. The question has three interrelated aspects. Firstly, at a policy level, it will seek to determine and analyse whether the installation of pre-paid water meters (PPWM) in Phiri – a black working class township in Johannesburg's South Western Townships (Soweto), with high rates of poverty and unemployment - was feasible, appropriate, necessary and consistent with the aims and objectives of the relevant provisions of the 1994 *Reconstruction and Development Programme* (RDP). The RDP was adopted by the African National Congress (ANC) in the run-up to the watershed 1994 elections. It will also analyse whether PPWM are consistent with the *Constitution of the Republic of South Africa* (1996), which guarantees access to "sufficient water" (s 27 (1), the relevant provisions of the *Water Services Act* (WSA) (1997) and the *Municipal Systems Act* (MSA) (2000). Secondly, the study will analyse the impacts of PPWM in Phiri since installation began in August 2003. Thirdly, the study will analyse the response of the community of Phiri and social movements to the installation and impacts of PPWM and explore the problems and prospects for resistance and the building of a Polanyian-type countermovement in both Soweto and South Africa.

This study hopes to contribute to the sociological research of social reproduction following the corporatisation, commercialisation and commodification of water, particularly the social impacts PPWM have had on a poor black community in an era of neo-liberalism in post-apartheid South Africa.

2. Rationale

Broader context

There is a global water crisis which has been described as "the greatest threat ever to the survival of our planet" (Barlow and Clarke 2002). South Africa is a microcosm of this crisis which global warming is aggravating. This thesis will argue that access to adequate water illustrates the growing gap between needs and rights in post-apartheid South Africa. This crucial need, which is framed as a right in the post-apartheid Constitution (RSA 1996), is being denied to many of our citizens by the transformation of water – beyond a tiny and woefully inadequate free lifeline - into a commodity, to be bought and sold on the market.

This appears to be anchored in a disregard for poor black working class households

The post-apartheid state inherited a pattern of extreme inequality in water utilisation. In 1994 12 million South Africans did not have access to clean drinking water (RSA 1994:1). But elsewhere DWAF said the figure was 14 million (DWAF 2005). By February 2002 the state claimed that an additional 7 million people more had access to water (DWAF 2002). This still left 5 million without access to piped water or 7 million if the 14 million figure was correct. For sanitation in 1994 the figure was 21 million (RSA 1994:1). However, lack of access to water illustrates the persistence of social inequality in post-apartheid South Africa.

In 2002 only half the population of 48 million had access to flush toilets and 10% had no access to any form of toilet (DWAF 2002). Since 1994 this pattern of inequality is deepening with the state's move to a neo-liberal policy of cost recovery. By September 2006, of a total population of 48,606,643, 36,646,124 (75.39%) were served with water supply, in one form or another, and in terms of RDP standards, to a greater or lesser degree (DWAF 2006:1). The RDP standard was "50 to 60 litres a day from a point no more than 200 meters from their dwelling" (ANC 1994:9). Of a total poor population of 22,645,790, there were differences between those served at below RDP levels (2,465,670), at RDP levels (3,069,719) and above RDP levels (10,112,981). The total served – at these different levels – was 15,672,540, which represented 69.21% of the total poor population (DWAF 2006).

Furthermore, households consume about 12% of South Africa's water, the rest being used in commercial agriculture, mining and industry (Hallowes 2002:36). Of that 12% more than half goes into gardens, golf courses and swimming pools (in mainly white suburbs). All black urban households together consume less than a tenth of household water use (ibid).

Water privatisation began in the early 1990's in the towns of Queenstown, Stutterheim and Fort Beaufort (Nkonkobe) in the Eastern Cape (Ruiters 2002). In Johannesburg, through the corporatised formation of Johannesburg water (JW) and the subsequent management contract between JW and the Johannesburg Water Management Company (JOWAM), it began in 2001. JOWAM, a consortium of multinational companies, mainly consisted of Suez, the biggest water company in the world which operates in 130 different countries and generates vast profits (Bond 2005:153).

Following the formation of JW and the start of the management contract JW and the City of Johannesburg took the decision to launch 'Operation Gin'amanzi'(OGM) (A Zulu term for water conservation) in Soweto, the centrepiece of which was the installation of pre-paid water

meters (PPWM) in Phiri in 2003. This was done because of the need for 'water conservation' and cost recovery, without which JW said the supply of water in Soweto would be financially unsustainable (JW 2001). However, little or nothing has been done to address the notoriously high wastage of water by white-dominated agriculture and industry, by far the biggest consumers of water, and the astronomical levels of consumption by mainly white domestic households, with their big swimming pools and gardens. Instead, the focus of JW and the City of Johannesburg (CoJ) is on aggressive cost recovery efforts in poor black townships where comparatively much less water is consumed (Bond 2002a).

The apartheid-era discriminatory water utilisation patterns appear to have been exacerbated in post-apartheid South Africa through the increasing commercialisation and commodification of water supply in Soweto and the CoJ. In fact it is a cruel irony that under apartheid water distribution, consumption and utilisation patterns in black townships, like Soweto, were better than today for poor households. Under apartheid, for example, residents in Soweto did not have their water supply cut for non-payment (McDonald 2002).

Offering a small amount of free water – 25 litres (l) per person per day (PPPD) or 6kl per household per month in July 2001 – was a minor turn away from the demand driven, full-cost recovery approach. This free 'lifeline' supply has had only limited success in addressing the needs of black working class families. The amount of 6kl per month represents an average of 25l PPPD for an 8-member household. Besides many household tasks using water about 25l is used up by just two flushes of the toilet a day. In formerly white suburbia in Johannesburg average household consumption was between 45 000 – 60 000l per household (Personal interview, Prem Govendor, 2003, Johannesburg). In the UK estimated per capita domestic water consumption was 145.5 litres per day (McDonald and Ruiters 2005).

Decision to install prepaid water meters (PPWM).

The decision to install PPWM in Phiri comes against the background of the 1999 'iGoli 2002 Plan' of the CoJ, which corporatised and commercialised water supply. As a result Johannesburg Water (JW) was formed in January 2001 and registered as a private company, though wholly owned by the City (JW 2003). This decision led to a much greater emphasis on the need for users to pay for water beyond the 'lifeline' supply of 6000l (6kl) per household and consequently on cost recovery and commercial efficiency. Since then water supply in the city has been run along business lines, except for the small

lifeline (CoJ 1999).

There appears to be many serious problems, inconsistencies and contradictions between the installation of these meters in poor townships under the mantle of 'cost recovery' and the provisions of the Constitution and the RDP (1994) and the basic needs of poor people and their legitimate expectations and aspirations after the 1994 democratic elections (Ruiters 2002). There has been strong and ongoing community resistance to the installation of PPWM in Phiri and there appears to be much evidence to suggest that PPWM have had serious and many-sided problems in other poor communities, such as in Orange Farm, where they were earlier installed (Public Citizen 2003). Furthermore, despite community resistance in Phiri and the fact that the community has launched a legal challenge against the installation of PPWM to test their constitutionality (Coalition Against Water Privatisation 2004) JW has gone ahead to install PPWM in several other townships in Soweto, some of which sparked violence and mass protests (*The Star*, 2 May 2005).

Unlike the other most important basic service, electricity, water has no substitutes and almost always enjoys a 'natural monopoly' (Ruiters 2002; Bond 2002; Bakker 2002). The numerous positive public externalities of adequate and uninterrupted water supply, particularly in 'Third World' settings, are well documented (Lorraine 1991; Barlow and Clarke 2002; Bond 2002; Bakker 2002; Ruiters 2002). One would therefore reasonably assume that the one most critical area of social policy responsible and responsive democratic governments – even under pressure from external institutions bent on privatising domestic water supply (Bond 2002a) – would not want to 'mess with' is water.

Therefore, this study proceeds from the premise that regular supplies of clean and safe water is probably the most important and essential service in poor black communities. The centrality of regular and sufficient water access for development and poverty alleviation, let alone its eradication, is clear in the literature (Bond 2002; Drakeford 1998; APF 2004; Pape 2001; Bakker 2002; Ruiters 2002; McDonald 2002; Public Citizen 2004; McDonald and Ruiters 2005).

This study will determine whether, why and how PPWM has posed serious social, developmental and health problems in poor black working class townships. The question is: are PPWM exacerbating an existing social crisis in Soweto and the bigger Johannesburg municipality? Quite clearly, PPWM are a very important issue facing local

communities and all levels of government, particularly local. Aside from the ongoing battles against PPWM in Phiri and Orange Farm new struggles against their installation have erupted in other townships in Soweto (APF 2006).

PPWM have had devastating social consequences in Britain, for example, where they were subsequently banned in 1998 (Drakeford 1998). This raises an important question: if these meters could be found to be harmful to public health in Britain, based upon concrete empirical evidence (ibid), where the poorest are better off than the poor in Soweto, is it not possible that they may pose a serious threat in the latter area, especially against the background of worsening socioeconomic conditions over the past decade (UNDP 2003; SSA 2002).Webster and von Holdt (2005) also conclude: "The erosion of core jobs, the growth of insecure and low-wage non-core jobs and the expansion of the peripheral zone have generated a widespread increase in poverty. This can be tracked through the impact on the most basic institution of social organisation, the household"(2005:23).

The thesis will provide empirical evidence of the impacts of the installation of PPWM on poor households in Phiri. It will show – among many other adversities - that the already relatively low consumption rates of poor families are declining to unhealthy and unsafe levels. The commodification of water and other basic services through pre-paid meters appear to be the instrumental-technological generator of worsening black material poverty in post-apartheid South Africa

No doctoral study of pre-paid water meters in Soweto or elsewhere in South Africa, has been done before, which is a serious gap in the relevant literature and scholarship, especially for a city as important as Johannesburg is for South Africa. For Beal et al. (2002), "Johannesburg is the test case for urban reconstruction. We would go further and argue that the Johannesburg case has wider significance for how we understand divided cities across the world. Johannesburg is axiomatic of a 21st century in many ways" (2002:7).

Social justice

The term social justice is taken to embrace both fairness and equity in the distribution of a wide range of attributes, which need not be confined to material things. Although the priority focus is on attributes which have an immediate bearing on people's well-being or the quality of their lives, our conception of social justice goes beyond patterns of distribution, general and spatial, to incorporate attributes relevant to how these come about. While fairness is sometimes applied to procedures justice is to outcomes (Smith 1994:26).

A theoretical and conceptual understanding of social justice frames the approach to

appropriate social policy for domestic water consumption and sanitation in places such as Soweto. Law and Gleeson (1998) provides an approach which integrates theoretical components they consider inseparably connected with the notion of social justice, such needs, rights (particularly human), ethics, ideology, politics and class interests. Following Miller (1976), Smith (1994; 1977), Young (1990), Doyal and Gough (1991) and Meg (1998) they assert:

> The principle of justice according to rights merges into the principle of justice according to needs. The right to be protected from fundamental harms is the same as the right to the satisfaction of basic needs. Indeed, this term 'the right to need-satisfaction' is used by Doyal and Gough (1991) in developing a conception of social justice based on needs. Or, as Galtung (1994:79) argues, "Rights are the means and the satisfaction of needs is the end"(Law and Gleeson 1998:57).

They also link ecological justice, environmental and social justice, which "must be addressed together within one problematic, whose solution lies in a political ethic of justice" (ibid: 21). Law and Gleeson (1998) place great emphasis on a "rights-based conception of social justice" (ibid: 56). However, it is surprising that they do not include a discussion of how race and racism can and has played a central role in producing various social injustices, as they have in South Africa and many other countries.

Otherwise their approach is similar to that of McDonald and Chirwa (1995), who in the South African context stress the right to water and social equity provisions in the Constitution, but this is framed against the backdrop of the multiple social and other injustices inherited from the apartheid past. It is this past that appears to place a "political ethic of justice" (Law and Gleeson 1998:21) at the centre of a conceptual approach to social justice in South Africa. In fact it is this past *and* the critical, indispensable and non-substitutable daily dependence on water – especially in poor communities - that appears to invest this needs-based social justice approach with both cogency and urgency.

Therefore an emphasis on "needs" and "rights" inevitably give rise to normative and ethical questions, which would be especially applicable in countries with a history such as South Africa. "This is the kind of thing we mean by a "right", an obligation embedded in some social or institutional context where expectation has a moral force" (Smith 1994: 36). So broadly relevant is "social justice" that Smith places it "at the heart of human geography. The meaning of justice…concerns the distribution of society's benefits and burdens and how this comes about" (ibid: 1). He therefore importantly argues for a more expansive approach to social justice, as can be seen in his

opening citation above.

Law and Gleeson (1998) argue that “Where justice fades into the background, there is often the need to rediscover it. A world in which there is power and conflict must be a world in which there is a place for politics. Where there is politics, we must have conceptions of justice (ibid: 48). This conception seems to resonate with the history of South Africa and therefore the legitimate expectations of the black majority after 1994, especially since social justice issues have indeed tended to fade into the background over this period, even in relation to the most basic needs, such as water and sanitation (Ruiters, 2002; Bond et al. 2002).

Law and Gleeson (1998) concur with the emphasis Marshall (1950) placed on the right of citizens to have access to products and services they need and the obligation of a government they democratically elected to provide these without demanding monetary payments they may not be able to make. “For Marshall, the principle of citizenship based on the equality of persons opposed the fact of social class based on inequality” (ibid: 58). They also draw on Marx (1845) to assert that “The modern idea that the justice of a society depends on that society’s capacity to meet human needs begins with Marx. For Marx, needs are discovered by the processes of society, particularly the process of material production. Thus needs are inseparable from the means of satisfying them” (ibid: 63).

Social justice from this perspective has two bases. Firstly, inescapable human needs have to be satisfied in order to survive and live, such as adequate food and water. Secondly, the right to have these needs satisfied is derived from the obligations a democratically elected government has towards the citizenry electorate. That is why Smith (1995) states that “Democracy is central to social justice” (1995: 60). He further asserts that “A distribution not arrived at by a just process is unlikely to be just” (ibid: 149).

Smith (1995) also basis his approach to social justice on needs: “While social justice is a very broad concept, attention is usually focused on the unequal distribution of income and other sources of need satisfaction on which the material conditions of the population depend” (Smith 1995:46). Elsewhere he reinforces this approach: “The

emphasis is….on who gets what and where and how this might be changed for the better. This approach is encouraged by the conspicuous inequality in people's material living conditions" (ibid: 59).

Smith (1995) does not consider failure to meet needs and therefore social injustice as a disappointing subjective or sentimental matter but attributes it to structural problems:

"Basically, the forces which created the inequalities in the first place and which perpetuate them seem to be too strong to be resisted through indirect methods, such as public expenditure on social services. Rather, the strategy of equality must be aimed at tackling those forces directly" (ibid: 92). He furthermore makes an important point:

> The evaluation of spatial variations in human well-being is closely associated with social justice. While we have become accustomed to judging conspicuous inequality by race, colour, creed or class as unjust, it is only recently that the notion of spatial injustice has been aired (e.g. Harvey 1972a, 1973, ch 3; Buttimer 1972).

But he notes that Young (1990a) has a different approach. "She is…critical of what she sees as a preoccupation with distribution in conventional perspectives on justice. Her point of departure is that "instead of focussing on distribution, a concept of justice should begin with the concepts of domination and oppression" (cited in Smith 1994: 103). This is an important point because it begins to tackle the systemic roots of social injustices and related inequities, but important as this is from a discursive point of view in the immediate context - when needs and questions of unjust distribution emerge and erupt in actual struggles for social justice - it must be dealt with on its own terms but within a broader perspective which connects question of distribution with structural questions of production, exploitation and oppression.

This critique by Young (1990a) ties up with the points made by Law and Gleeson (1998) above, in which they show why and how Marx links questions of unequal or unjust distribution with production within a capitalist framework and why they believe that environmental justice, ecological justice and social justice are integrally connected. It appears that these authors are correct in arguing that the problems which give rise to the clamour for needs and rights and hence the struggles for "social justice" are in the first place derived from capitalist or neo-liberal structures within society and hence an analysis of social injustices must first be located within these. They suggest that without such an approach the systemic causes of social injustices will remain intact and be perpetuated. It is difficult to find fault with this approach, especially if the aim it to

permanently abolish social injustices, poverty and inequalities.

In relation to South Africa Lemon (1995) argues that "a form of egalitarianism provides a universal framework to guide thinking about social justice in South Africa but that its application requires attention to the particular inheritance of apartheid" (1995: xix). Therefore, profoundly important questions of social justice, social citizenship, democratic control and accountability and a 'developmental state' inevitably emerge in the discourse of neo-liberal water commodification . Ruiters (2002) makes the pertinent point:

> At a time when blacks seemed poised to take power in a deep way, paradoxically, the public sphere has been privatised and new forms of racialised space takes shape. Since water and sanitation are vital for health, self-image and serve as place-based consumption infrastructure, their monetisation will have major collective implications for justice and standards of living of the vast majority of South Africans (Ruiters 2002:10).

Social Policy

Social policy – like social justice - lies at the heart of this study. "Social policy needs to be in touch with the ordinary concerns of people as they live their everyday lives" (Cahill 1994:5). And it is water use, due to its vitally essential and non-substitutable characteristics, which lie at the heart of social policy concerns in this study. It also explores, by virtue of these same characteristics, the fact that "Broadly speaking, the study of social policy is the study of the role of the state in relation to its citizens" (Holden 2005: 174). Lavalette and Pratt (1997) assert:

> Social policy can be seen as an intensely political project and, as such, an immensely important area in which competing ideologies clash. Consequently, politics matter a great deal and political activity is afforded no little significance in the policy making process in particular and the shaping of social policy in general (Lavalette 1997:5).

The study will briefly analyse the various aspects of social policy pertaining to water services, such as the *Reconstruction and Development Programme* (RDP), the *Constitution* of the *Republic of South Africa* (RSA 1996), the *Water Services Act* (1997), the *White Paper on Water Policy* (1997), the *Municipal Systems Act* (2000) and experiences elsewhere to investigate what appears from the literature review to be the potentially dangerous social and health consequences of PPWM in poor communities. What has happened in Orange Farm and to some extent in Phiri itself (CAWP et al. 2004; McDonald and Ruiters 2005) does appear to indicate growing concern with the social impact of PPWM. The study will also question whether PPWM could seriously

undermine and negate the positive broader political transformation since 1994 and the significant increases in social welfare spending recently (Trevor Manuel, *Sunday Independent*, 25 March 2007)

It is an ironic fact that the apartheid regime also did not take steps to curtail supply and impose various potentially harmful and draconic cost-recovery measurers, as appears unfortunately to have happened in Phiri and elsewhere. Based on this study PPWM appears to be the starkest manifestation of harsh neo-liberal cost recovery in poor black townships. After over three centuries of systematic oppression and exploitation – when 'freedom' held the prospect of a changed and better life – PPWM have caused the poorest in many communities to literally 'beg, steal and borrow' for water that is inseparably connected to life itself (Barlow and Clarke 2000; Public Citizen 2004; APF 2004; Deedat 2001; Deedat and Cottle 2000).

PPWM are a very important social policy issue today in Johannesburg. In Phiri a great and dramatic struggle has been fought between an impoverished community fighting for access to water, against a municipality that appears preoccupied with forging a 'world-class status' (CoJ 2002), while determined that poor people must pay for water above a small and inadequate 'lifeline' supply. Are PPWM the most invasive, incisive and exploitative technological device capitalism has ever produced to exploit the most essential daily need for cost recovery and a profit? After witnessing the experience with PPWM in Hermanus this is how Deedat (2002) captures the problem:

> I would like to say how disillusioning it is to see local authorities perpetuating the inequalities of the apartheid regime against communities who over the past 40 years were already subjected to third-class services. The goal has become balanced budgets rather than improving the lives of citizens they serve. In their quest to recover costs councillors and officials go against the grain of the inequality and redress enshrined in the Constitution of South Africa. These are rights which are given to every South African irrespective of class, race or gender. But in communities like those researched here, these rights are being eroded with every tick of the pre-paid meter.
> (2002:154).

Hence, McDonald and Pape (2002) argued that "in the current context South African context public sector managers are more aggressive than their private sector counterparts when it comes to cost recovery" (2002:26). At the international level, the United Nations Commission on Economic, Social and Cultural Rights considers water to be indispensable for leading a life of human dignity and a prerequisite for the realisation of other human rights' (United Nations Committee on Economic, Social and Cultural Rights (2002). At the national level, the RDP pledged to provide each household with 'an on-site supply of 50-60 litres *per capita* per day of clean water' (added emphasis) (ANC 1994:9).

Not only did the ANC-led government not implement the water lifeline in 1994 but it took over 7 years for it to provide less than half the 50-60l PPPD, stipulated in the RDP over the medium term of 2-5 years (ANC 1994). For families larger than 8, it meant that each member - depending on the household size - would receive even less than 25l per day, which is recognised by the World Health Organisation (WHO) as the barest minimum. "The World Health Organisation estimates that access to 25l PPPD is a minimum to maintain life, but that enjoyment of a healthy life requires much more" (McDonald and Ruiters 2005: 73). The WHO further found that 50l PPPD is needed to reach a 'low' level of concern over health impacts and "that 100l PPPD is the *minimum* needed for 'all basic personal and food and health hygiene', including laundry and bathing, but not for growing food (Bertram and Howard 2003) (ibid).

In other countries water consumption was much higher. In Australia 162; Sweden 191; the Netherlands 175; and Switzerland 237 (National Consumers Council 1998) (ibid). Instead of increasing the 'lifeline' to 50-60l PPPD - at least in line with the medium term RDP promise - the Johannesburg municipality and JW appears to have enforced PPPD in Orange Farm and Phiri, which restricts consumption to 6kl, beyond which cash payments are immediately required. If just two flushes of the toilet consumes 25l (Bond 2002; Ronnie 2004) what about drinking, cooking, cleaning, bathing, washing and so many other water uses? In fact research done by JW itself concluded that "An acceptable monthly household consumption for a working class region similar to Soweto with similar socio-economic conditions is given as 20 000l" (2002:7). The current 'lifeline' is much lower, at 6000l per household.

The *South African Constitut*ion of 1996 (s27 (1), provides for the right to have access to "sufficient water". Furthermore, section 27(2) compels the state to take 'reasonable legislative and other measures, within its available resources, to achiever the progressive realisation' of this right. Furthermore, section 4(3) of the *Water Services Act* (1997) requires that procedures for the limitation or discontinuation of water supply must be 'fair and equitable' and "provide for reasonable notice of intention to limit or discontinue water services and for an opportunity to make representation". Therefore, the Centre for Applied Legal Studies (2004) could state that: "The Water Services Act requires Johannesburg Water to provide a reasonable notice that it intends to limit or discontinue services. It also requires a customer's ability to pay to be taken into account. It is impossible to satisfy these requirements through the use of the pre-paid water meters. Using the meter system means that the inability to pay results in immediate disconnection, without any space for

notice or a hearing."(*Mail & Guardian* August 31- September 5, 2004).

Impacts of water commodification on poor black women.

Perhaps the biggest motivation for this study is to analyse the effects a lack of water supply have on poor black women, who traditionally are responsible for a range of domestic activities in households for which water is essential (Mehta 2000; Connell 1987). Whether it has to do with washing, cooking, cleaning, taking care of the sick and elderly or having to fetch water from other sources when there is no money to recharge meters, it is largely black women who perform these tasks. It is probably why the majority of the membership of the Anti-Privatisation Forum (APF) are poor black women (APF 2004). And it is poor black women who still suffer most in this society and in certain respects are worse off than they were before 1994 (Bond 2002; Ruiters 2002). Evidence from earlier research indicated that the installation of these meters have had adverse consequences on poor households, and women in particular (Deedat 2002; Public Citizen 2003; APF 2003; CAWP 2004; Hansen 2005).

We need to contrast the promotion of black women into positions of leadership in government and big business on the one hand, while on the other the vast majority of them are trapped in growing poverty in townships and bear the worst consequences of neo-liberalism in the crucial water sector. We furthermore explore the causal relationship between the impacts water commodification and prepaid water meters particularly have had on these women and the leading role they have play in social movements contesting these policies.

Finally, this study hopes to contribute empirical and theoretical knowledge to a topic that urgently requires the attention of sociologists in an area that has evidently been neglected by mainstream academic sociology across the world. As Susser (2002) notes, following the neo-liberal restructuring of local governments in the 1980's, "by and large urban sociology ceased to connect with the issues arising in cities, space and society at large" (2002:393).

The problem in context

Placing prepaid water meters in historical context.

The key problem is the adverse social consequences the installation of PPWM appears to be having for poor black working class households and women in particular, as a

result of the commodification of water and the social exclusion it entails. Prior to the first-ever democratic elections in 1994 black people not only suffered racism and national oppression but were simultaneously denied socioeconomic rights, such as decent and adequate housing and basic services, including water, electricity, and other basic amenities, such as hospitals, clinics, libraries, crèches and schools (Bond 2002a). Between 1652 and the 1994 elections, black people endured an oppressive and exploitative system, whose thoroughness, reach and intensity was unique in the world (*Inqaba Ya Basebenzi* 1988).

However, the irony in this study is that as regards water supply in Soweto – where the case study is based – households had unlimited access to water, most did not pay for, during the apartheid years. The commercialisation, corporatisation and later commodification of water through PPWM – beyond a tiny lifeline – began after the ANC came to power in 1994.

Pre-1994 shift in policy thinking

It would be mistaken to attribute the beginning of neo-liberalism to economic and social policies adopted by the ANC after 1994. As Manganya and Houghton (1996) state: "When official apartheid ended in 1990 South Africa was already experiencing the rapidly globalising world economy. Economic policy making, particularly monetary and fiscal policy, had already taken on board a neo-liberal framework" (1996:5). The former regime also had a minister of privatisation. But there were very significant changes after 1994, especially in social and public policies governing the provision of housing and basic services, such as water and electricity. The implications and impact of such policies as far as water supply is concerned is the subject of this dissertation.

An important point this context is concerned with is the fact that there were many indications in advance – especially between 1992 and 1993 – that though the ANC continued to express firm commitment to the Freedom Charter and to a redistributionist ethos, worrying, cautionary and contrary statements were simultaneously being made by leading figures of the ANC, which sadly did not elicit much opposition and public debate at the time. For example, this is what Cyril Ramaphosa had to say in 1992: "Macroeconomic populist pitfalls which can have the opposite effect of good intentions

in the medium term have to be avoided"[1] (cited in Stedman 1994: 36). Current Governor of the Reserve Bank, Tito Mboweni, also stated that "Something radical will have to be done to control the level of government expenditure" (ibid). In fact it is such statements that led Stedman (1994) to conclude that "The ANC is probably the only liberation movement in history to speak of financial discipline *before* it assumed power" (added emphasis) (ibid). As a result Stedman asserted with remarkable foresight: "The only way for the ANC to address its structural fiscal problems will be to make some brutal calculations regarding its constituencies" (ibid: 38).

Indeed, the ANC's historical constituency, the urban black working class and rural poor, have been faced with great social adversities and as the case study will later reveal, today suffer the ill-effects of neo-liberal policy decisions, such as aggressive cost recovery, inadequate "lifeline" supplies and the multifaceted disadvantages and dangers posed by PPWM in poor black communities. During the 1990 – 1993 period "Many civics questioned their own relations with the ANC which was regularly accused of making too many excessive concessions, especially to the neo-liberal wing of capital (as represented, in many concrete and policy struggles, by Johannesburg's Urban Foundation" (Bond 2004: 8).

But it is necessary to point out that faced with the strength of the apartheid regime, the declining fortunes of socialism, especially within countries they long relied on for support, such as the former Soviet Union, and a generally hostile neo-liberal environment, the ANC, or rather the more conservative or pro-capitalist section, exploited the situation to advance their own "class agenda" in the early 1990's, but much more after 1994 (Nzimande 2006c).

The weakness of the left outside the ANC alliance also contributed to the political, strategic and discursive domination of the more conservative and pragmatist elements in the ANC, led by President Thabo Mbeki, who largely steered the process that led to the adoption of the conservative neo-liberal macroeconomic policies in 1996, when the growth, employment and redistribution (Gear) strategy was adopted. The ANC had little political competition, but perhaps more importantly the demobilisation of civil society after 1990, the alliance with the Congress of South African Trade Unions (COSATU)

[1] There can be little doubt that the blessings important labour leaders, such as Ramaphosa, gave to the ANC's policy shifts, and the role they played in articulating the required policy stances made mass resistance much less likely and secured for the ANC the rationale they needed for their decisions.

and South African Communist Party (SACP) and the mass support the ANC enjoyed for several decades, ironically, hugely facilitated the fundamental compromises the ANC certainly made before and after 1994.

Post-1994 policy shifts.

Shortly after winning the 1994 elections the ruling ANC began modifying and emasculating the redistributive provisions in both the Freedom Charter and the Reconstruction and Development Programme, the former long regarded as its key vision for a democratic South Africa and the latter adopted by the party in 1994, and which basically constituted its electoral manifesto. Two measures taken by the Government of National Unity in 1994, led by the ANC, clearly indicated a conservative retreat from earlier redistributionist commitments. These were the 1994 *White Paper on Reconstruction and Development* (RSA 1994), which, unlike the original RDP document adopted early in 1994 by the ANC, emphasised the need for "monetary and fiscal discipline" (ibid: 21). Hence Maganya and Houghton (1994) could argue: "The first major indication that South Africa was moving towards a conservative fiscal framework was the revision of the RDP base document into the *White Paper on Reconstruction and Development* as early as December 1994"(1996: 6).

The other fundamental change resided in the *White Paper on Water Supply and Sanitation* (1994b). Unlike the RDP provisions for water lifeline supplies and cross subsidies and the provision of 25 litres(l) per person per day (PPPD) over the short term of 1-2 years and 50-60l PPPD over the medium term of 2-5 years, the state only supplied the short term amount of 25l PPPD from July 2001. The *White Paper* (1994) also stressed the importance of payment for services, cost recovery and self-reliance, all apparently at odds with the principals, policies and spirit of the Freedom Charter and the RDP.

As this study will show the ANC's policy shifts towards neo-liberalism and away from more redistributionist goals (Bond 2002a; Ruiters 2002) was not only influenced by similar macro processes worldwide, but that the microcosmic changes at the Johannesburg municipal level were strikingly similar to what had taken place in other European countries. Due to earlier huge public opposition to clear-cut privatisation,

especially of water, the commodification of water is assuming innovative forms, such as through the corporatisation of water and management contracts between municipal companies and global water companies.

Water corporatisation and commercialisation in Johannesburg.

Although Johannesburg did not opt for overt forms of water privatisation, as in the UK, through the corporatisation of water services – the formation of an arms-length private company – and its subsequent commercialisation, the resultant impacts are very similar, except for the small lifeline of 6kl. In fact this lifeline – though projected as caring for the poor and honouring the RDP - has become discursively a shrewd and disarming rationale for aggressive commercialisation and cost recovery thereafter. Sharp tariff increases above the 6kl point has tended to wipe out this benefit, especially for larger families who have to pay for the greater quantities they require at unaffordable tariffs (Bond 2006b).

This work deals with how the neo-liberal water and local government framework adopted between 1994 (RSA 1994) and the implementation of the iGoli 2002 Plan in 2000, impacted on the provision of water services in Soweto. A key focus of this work lies in an analysis of water and local government legislation and policies, which together provide the discursive architecture which we critically analyse. We will systematically show how international factors and forces have shaped water supply in Phiri, Soweto, where our case study is located. Basically, though there always are contextual and conjunctural differences, the outcomes of water commercialisation – which can and do occur even within formally public entities – are very similar, because:

> Commercialisation implies the rescripting of consumers and customers rather than citizens, a deliberate depoliticisation of regulation of water through the creation of arms-length regulators and a shift from social equity to economic equity in water pricing and hence considerations of willingness but not inability to pay – with the burden of increasing water bills falling disproportionately (in terms of income and access) on the most vulnerable consumers (Bakker 2001:25).

Vital importance of water for social policy.

> According to social scientists John Donahue and Barbara Johnston, systems controlling access to and use of water resources typically recreate and reproduce the inequities in the societies that generate them. Sociologist Karl Wittfogel goes further: he saw that “it was as the arbiters of water that tyrannies anointed themselves as legitimate (Huby 2002:104).

But it is the vitally important nature of water, especially in poorer communities, which appear to strengthen the necessity for governments and policy makers to be much more

mindful of the social consequences of the commercialisation and commodification of water. There are furthermore several inter-related structural aspects of water supply which make it very difficult to simultaneously achieve both commercial efficiencies (profit) and provide adequate water to poor communities and citizens (Bakker 2001; Galliani et al. 2003; Swyngedouw 2004). Galliani et al. (2003) captures the point as follows: "The water sector is characterised by the presence of significant externalities. Most water-related diseases are contagious. This generates positive externalities in the provision of clean water across society" (2003:4).

But it is the non-substitutable nature of water that is probably the most compelling attribute of essential consumption, because unlike electricity which has several alternatives, it has none. It is either consumed clean and safe from domestic taps or in desperation from possibly contaminated rivers, pools or other sources. This is what happened with the disastrous cholera outbreak in Kwa-Zulu Natal in 2000, when black women whose supply was cut because they did not have money to recharge expired communal prepaid meters, resorted to using water from contaminated nearby rivers. Over 200 people died and many thousands got dangerously ill (Bond 2002a).

Galliani et al. (2003) further argue: "These features – natural monopoly, presence of significant externalities and price in-elasticity of demand – have historically justified public intervention in the water sector" (2003:4). The price inelasticity of water basically means that demand for water – because it is so vitally essential for many daily activities of life – does not substantially drop even when prices are high. But there are cases where consumption can dangerously drop when affected households just don't have money to buy water and are forced to cut back on essential use or go without water, which the case study in this dissertation confirms (Eberhard 1999a). Hence Ruiters (2002) argues:

> Social policy debate has moved to the right as market environmentalism has gained ground. The prevailing market environmental discourse stresses cost recovery and the conservation of scarce natural resources through commodification (Ruiters 2002:113).

Disciplinary regime of social control and exclusion.

Crucial too to the erosive subterranean processes at work in commodified services is the internalisation of a disciplinary ethos, driven by extreme minimisation of consumption, as Mitchell (2000) asserts:

> Power is usually imagined as an exterior restriction…and it operates by setting limits to behaviour, establishing negative prohibitions and laying down channels of proper conduct. Disciplinary power by contrast works not from the outside but from within…at the level of detail…and not by restricting actions but by producing them (cited in Ruiters 2002:11).

It can be argued that no other technical device induces such self-discipline more than PPWM.

Commodification is the central problem

Furthermore, a clearly class and monetary-based differentiated levels of service (LOS) for water have arisen after 1994 (Bond et al. 2002). Poor people are not receiving what they need or what they were promised in the RDP but what they can pay for, beyond the tiny lifeline. Clearly the face of the public provision of basic services has fundamentally changed, ironically, after the ANC took office. And as clearly it appears from this research that the changes have had adverse effects on poor communities, especially when levels of poverty and unemployment have persisted and in fact often increased (Roberts 2005; Bond 2005c).[2] In fact if we look later closely at the empirical results of the case study it appears that these meters are bound to worsen poverty levels in Soweto. The basic thrust of the problems which constitute the sociological focus of this study is aptly described by Thompson (1996) as:

> a crisis in Keynesian forms of state regulation and planning in the context of a wider crisis of global accumulation. The neo-liberal restructuring of the state is an attempt to realign the state and international capital through a process of moneterisation in which decisions concerning service allocation and provision are depoliticised and increasingly subordinated to the abstract and indifferent power of money (1996:184).

What Thompson describes is in essence the problem of the commodification of water, and though he refers to the effects outright privatisation of water had in the UK, it equally applies to this study, with the difference that in Soweto and South Africa there exists a tiny lifeline, too little however to substantively alter the commodification thesis or paradigm, which we will later argue at much length. Hence we can refer to what I would call, despite the lifeline, the 'virtual commodification' of water. When we later compare the current 6kl lifeline with the historical levels of consumption of white suburbia in Johannesburg, the international levels of per capita consumption and what Johannesburg

[2] Unfortunately, the ANC has failed to realise and admit that despite its efforts at poverty alleviation and job creation since 1994, poverty and unemployment has risen. Many credible research reports from organizations such as the UN (UNDP 2003) and Statistics South Africa (2002) have produced evidence to this effect, but the party stubbornly refutes it and instead questions the methodology and integrity of both organizations and researchers.

Water itself found to be an average consumption for families in conditions similar to Soweto, the argument of 'virtual commodification' strengthens. This will take us into theorising an answer to the question Ruiters poses: "What kind of social landscape, material practices, imaginaries, forms of surveillance and territorial reconfigurations are produced by commodified-privatised services" (2002a:12)? And what kind of society is the post-apartheid creating for us and future generations if we allow poor people's sufficient access to and consumption of such a basic need as water to be controlled by money? Thompson (1996) asserts:

> Money is not simply an economic category but simultaneously political and ideological. The subordination of state and civil society to the power of money therefore implies a restructuring of the whole gamut of relations between capital, labour and the state. This subordination implies that the concrete and substantive rights of individual citizens are made increasingly abstract and mediated by monetary calculations (Thompson 1996:196).

But commodification of water particularly threatens relations between human beings and nature from which it is derived: "The frightening reality is not that humans are changing nature but that nature is ceasing to be common….it is becoming private property and exclusively controlled by its new owners" (Hardt and Negri 2004:72).

Importance of adequate water supply.

Critical to the approach taken in this thesis is recognition of the fact that the importance of the question of water supply in poor communities – the overwhelming majority of the population – is reinforced by the fact that they not only have to face the adversities and dangers to health of inadequate consumption but are surrounded by the ill-effects of wider and deeper poverty, of which water denial is just one, albeit one of inestimable importance to them. This is typical of international trends in which water poverty and inequalities are related to and often a cause and consequence of broader poverty and inequalities (Mehta 2000). Hence I argue that at the heart of South African social policy and poverty alleviation - let alone its eradication - is the question of water supply and sanitation in poor black working class communities.

Finally, many water scholars consider adequate consumption of water to be a precondition not only for a healthy and productive life but a requirement for participation in public life and an active and vibrant citizenry (Mehta 2000; Swyngedouw 2004; Marvin and Guy 1997a). Given our history and the unexpected

socially disenfranchising developments after 1994 it would be difficult to imagine a country where such a reality would be more welcome. We conclude by pointing to Thompson (1996), who succinctly captures both the key problem and potentially emancipatory solutions:

> There is a real sense in which the privatisation programme….provides the basis for a renewed and reinvigorated politics of the left that goes beyond the sterile and outmoded categories such as nationalisation and privatisation to explore in more detail the alienating and oppressive form of political and economic institutions of capitalist societies. The regulation of public services through money renders the alienating forms of these agencies more transparent and an easier focus for the struggle (1996:198).

Questions examined

I draw attention to the vast differences between the welfare state model in the UK and Europe and the nature of the state under apartheid and the discursive, theoretical, analytical and strategic implications this has for this study, which many scholars ignore dealing with. Andreason (2007) states:

> The creation of these welfare states (founded, in part, on the idea of welfare without stigma) was indeed a major achievement of the last century. I wonder, however, just how much there is to be extrapolated from these Scandanavian experiences in the past to the attempts to pursue development in impoverished regions of the world today (Debatelist listserve correspondence, 22 March, 2007).

The key areas this study is concerned with are: unravelling the public-private neo-liberal hybridised institutional matrix of commercialisation and commodification of water in the city of Johannesburg, through the corporatisation model; the privatised management contract between the City, Johannesburg Water and the multinational consortium, led by Suez; Johannesburg water tariffs and prepaid tariffs in Soweto; the socio-spatial, consumptive and behavioural transformations wrought by a neo-liberal water regime; the personal, familial, social, health, psychological and emotional impacts of commodification through PPWM in Phiri, a township in Soweto, where the case study is located; critically examining the discourses of social justice, human rights and the ‘commons’. We also examine whether both the iGoli 2002 Plan and the OGM project genuinely and meaningfully consulted the citizens of the City and Soweto. The reason for this is that participatory democracy and consultation, especially as regards new plans or projects in municipalities, is encouraged and emphasised in the Constitution (1996), the WSA (1997), the MSA (20002) and DWAF (2001a). Among others, there are several inter-related questions we need to examine:

1. Why and how has it happened that in certain fundamental respects water

services have deteriorated after 1994 and consumption has drastically declined in places like Soweto, and how does one reconcile this actual regression – in a wider context of growing unemployment and poverty – with the aims of the anti-apartheid and liberation struggles?

2 How do we also reconcile a new harshly disciplinarian post-apartheid neo-liberal regime, which oppressively polices consumptive behaviour and confines it to the barest minimum, to the extent that the health and well-being of poor black communities are threatened?

3. More specifically how do we understand and reconcile the decision to install prepaid water meters in Soweto with the fact that after the disastrous experience with them in the UK they were finally banned in 1999?
4. How much does our society, rulers and policy-makers truly understand about the multifaceted dimensions of water commodification – especially through arguably the harshest method of prepayment metering - and the implosive and erosive bio-politics that it gives rise to in everyday life?
5. Does the glibly used and celebrated notions of citizenship, democracy, social justice, participatory democracy and empowerment not become emptied of meaning in the light of the devastation wrought by the commodification of water in poor communities and official attempts to reconcile them?
6. Is commodification technically reducible to tariffs – even at higher levels or generous lifelines and cross-subsidisation - or is it more multifaceted and complex?
7. In so far as essential public services are concerned has the naked brutalities of apartheid been replaced by a more subtle but more damaging system of neo-liberal commercialisation and commodification of services and a new strategy of winning poor people over to cooperative commodified social relations, homogenising differentiation, instilling “choice” and embedding consumptive rationalities and class stratification in a new bio-politics of the body, best exemplified by water?
8. What are the empirical consequences thus far of these meters and how does this relate to the provisions for health, well-being and dignity in the South African Constitution?
9. Does universal free water lifelines and increasing them not deepen social inequalities because they are consumed freely by classes who not only don’t

need them but that as a result less free water is available for the really needy?

10. How helpful towards a radical redistributionist strategy are the universalist notions of human rights and the 'commons' or are they a questionable or liberal substitute for class struggles?
12. Politically, to what extent could what has happened to water supply have been avoided in South Africa or was it an inevitable outcome of compromises made in the Gear policy framework?

In this thesis these relations pivot on the degree to which – in a society with a supposedly democratically elected government and one with our history - poor communities who cannot pay for water, have sufficient access to this resource for a whole range of essential daily activities, such as cooking, cleaning, drinking, food gardening, recreation and so on. This question in turn raises many related others, about dignity, self-respect, personal and public health and well-being (Swyngedouw 2004; Ruiters 2002). Bakker (2002) asserts:

> The question of whether to privatise is thus more than mere technical; it is about our world view of water and society. Making space for this collective debate is necessary if we are to move beyond what risks becoming a stale confrontation between market fundamentalists and ardent defenders of the state (2002:22).

More than this, we probe how institutional form – in this case public corporatisation - can disguise or obscure the commercial essence of a service, when in fact all the features typical of privatisation - such as an emphasis on cost recovery, commercial efficiencies and a discursive construction of 'scarcity' to rationalise these and minimal consumption by the poor are prevalent. Inadequate consumption of water is widely held to be responsible for many illnesses, ill health and growing poverty in the Third World (Mehta 2002; Barlow and Clarke 2002). This is one of the key aspects of this study, in regard to the current tiny lifeline and the much greater consumption needs of households in Soweto. Polanyi (1944) argues that "To allow the market mechanism to be the sole director of the fate of human beings and their natural environment, including even the amount of and use of purchasing power, would result in the demolition of society"(Polanyi 1944: 28).

Polanyi's dire and dark prediction is becoming these days a stark possibility because if neo-liberalism is eroding even the most basic means of life – access to water - what future is there not just for the poor but for that of capitalism itself? Are we reverting to

the social barbarism evident during the period of initial industrialisation in the UK, where workers and their families were subjected to the most appalling working and living conditions? (Taylor 1996).

The thrust of the argument against water commodification is not offset by the current lifeline supply of 6kl, because it falls far short of what is required, and importantly, charges for further consumption are ratcheted up in a manner that suggests that it is meant to both recover the losses of providing the initial block free and, by conscious design, to actively discourage further consumption (Bond 2006c: 11). For this and other reasons increasingly water scholars in South Africa refer to the "paradox of free basic water" (Peters and Oldfield 2005:1). David McDonald (2006) argues that "Free basic water is simply a part of the commodification process because you pay for water after that. It is one piece of a larger, commodified block tariff structure" (Personal interview, April, 2006). In fact one could argue furthermore that precisely because FBW is so little it does not substantially detract from or contradict the commodification thesis and that it is in fact used to justify the overall commodified tariff structure that follows it. But it is also used to impose a disciplinarian regime bent on keeping consumption to the barest minimum, unless, of course you are able and prepared to pay for more water.

However, significantly, a spokesperson for the British Medical Association said: "It seems ridiculous to be still questioning whether or not a lack of water leads to disease" cited in Huby 1995: 220). They finally supported the banning of prepaid meters, which played an important part in the eventual legal victory against them in 1998 (BMA 1999). The question of minimal services – due to severe neo-liberal fiscal constraints, on the one hand, and commercialisation of the service, on the other - reminds one of the barest minimalism which also characterised the period of slavery. "Slavery arose from the wish of societies to obtain labourers who had to accept the minimum for their work – low-quality food, clothing and accommodation…." (Lenta 2007). There is under neo-liberalism a reversion to such barest minimalism for social reproduction.

The strategic purpose of the questions this study is concerned with is to finally be able to answer its key research question: in the light of the results of the case study and international experiences was the installation of prepaid water meters in a community with high and rising levels of poverty and unemployment, necessary, feasible, appropriate and justifiable. The validity of these questions are reinforced from the

perspective of social justice (Burkett 1996), especially given the centuries-long oppression, discrimination and domination black people faced, combined with inferior, inadequate and shabby basic services or often none at all, and therefore the wishes, aspirations and demands they had after 1994.

Scope of Study.

This study sets out initially to explore the political processes which produced the negotiated settlement, out of which emerged the 1994 democratic elections. It shows that thereafter certain policy, programmatic and ideological changes occurred within the ruling ANC which contradicted its earlier redistributionist vision and policy framework for a post-apartheid South Africa. In this way did neo-liberal legislation and policies take shape and steadily chip away at the redistributionist provisions of the Freedom Charter and the RDP.

The study analyses the cumulative fashioning of the different legislative and policy instruments for water supply between 1994 and 2000, first at a national level and then, when an adequate overall framework was established by 1997, the financial crisis in the city of Johannesburg appeared to provide the rationale for a decisive shift at local level towards the commercialisation of water and other basic public services, such as electricity. It is the 1999 iGoli 2002 Plan which clearly expressed a marked institutional and ideological shift towards commercialisation and corporatisation of various services. But, as has already been indicated, neo-liberal international institutions, such as the World Bank, and global giants in the water sector, such as Suez, extended their tentacles into the key Johannesburg municipality and assisted the plans, projects and processes which were to finally give birth to Johannesburg Water in 2001, and thereafter the OGM Project in Phiri, Soweto, which started in 2003. This project appeared to have at its heart the installation of PPWM in Phiri and the rest of Soweto, where water supply had become "unsustainable" and a "runaway problem" which required urgent intervention (JW 2001).

We will examine how the convergence of local, national and global forces defined the new rules and regulations of water supply in Soweto, and how they began to commodify water, restrict consumption to the barest minimum and bind poor households to contracts which would govern supply of water through PPWM. All this fundamentally and adversely altered the previous regime of flat rates for unlimited consumption and the fact that cost recovery was not enforced. The new regime of water supply and consumption

had wide-ranging negative effects, directly and indirectly affecting residents, who now face a new, intimidating and alienating technology of remote control through the meters; many technical problems which cut supply; having to make choices between these meters or a yard standpipe, which had many disadvantages and dangers, notably that the latter is not connected to the sewer; and many other negative effects, as we shall see later. Through the case study we will trace how fundamentally the iGoli Plan changed the way in which water supply took place in Phiri and thereafter examine the impacts it has had, and continues to have, on households.

However, an important international backdrop to this case study is the experiences with PPWM in the U.K. Some attention is paid to this experience for two key reasons. Firstly, we need to very briefly appraise the legal reasons for banning them. Two, the fact that they were found to be inappropriate and harmful in the UK - where poor households are on the whole significantly better off than those in Soweto – gives rise to the question of whether they could or should be found to be even more inappropriate in poor South African townships.

Regarding the conclusions of this study it appears that the empirical results of the case study tends to reinforce the validity of the decision by the UK government in 1999 to ban PPWM. But there may indeed be households and businesses where these meters could be much more useful than in Soweto (McDonald 2002). Their purpose and usefulness in poor townships does indeed seem highly questionable, if not objectionable, on several grounds, some of which are quite compelling in their social justice logic, pursuit of equity goals and last but not least, procedural fairness. The WSA requires that any household whose water supply for good reason stands to be disconnected, must, however, be given a hearing before a decision to terminate supply (1997: s 4 (3) . On the other hand much depends on the outcome of the present case against both the 6kl lifeline and PPWM, but even if the case against the latter is lost it is quite likely that the court could rule that the lifeline is insufficient for larger households.

However, there are a host of serious sociological and specifically health problems that the ideology and technology of PPWM's and the resultant commodification of water to poor communities give rise to and which this study will describe and analyse. The research also indicates several serious problems with the corporatisation model the city opted for and the many negative consequences it poses for democratic control, accountability, participation and social citizenship. Corporatisation – especially when the

newly formed entity is registered as a private company – does lead to commercialisation, which in turn facilitates commodification of a service. This is exactly what has happened in Johannesburg.

Approach and Methodology.

The methodological approach in this study is well captured by Cox when he speaks of a theory that is "supposed to open up the possibilities of choosing a different valid perspective from which the problematic becomes one of creating an alternative" (1980:128). Harvey (1990) speaks about critical research cutting through "surface appearances" by locating the issues being investigated in their historical and structural contexts" (1990). The "central motivation for encouraging a dialogical approach is that it can further the aim of developing voice among those who have been historically silenced. The opportunity to speak, to question and to explore is an importance aspect of the process" (Gitlin and Russel 1990:186).

The decision to conduct the case study in Phiri is due to the fact that it was the first township in Soweto to be targeted for PPWM installation, in terms of the OGM project. "The case study approach is particularly appropriate for individual researchers because it gives an opportunity for one aspect of a problem to be studied in some depth within a limited time scale" (Bell 1993:9). This project will be carried out throughout Soweto, covering about 160, 000 households (CoJ 2001; JW, 2001).

Besides, the historical significance of Soweto in South African resistance politics brought added significance to the case study (Swilling et al. 1991; Lodge & Nasson 1991). Phiri is also one of the poorest townships in Soweto, and it was there that JW claimed the wastage of water and "over-consumption" was at its worst, hence the need for their intervention to arrest the problem and bring 'unaccounted-for-water' (UFW) under control (JW, 2001). What further prompted interest in Phiri was the fact that it produced in 2003 the strongest community and political resistance to the installation of PPWM in the country to date.

This study combines qualitative and quantitative approaches (Bell 1993). Qualitative, in order to examine, grasp and analyse the wide-ranging perceptions and experiences of household members. Quantitative, because important aspects of the study concern deemed and actual consumption figures, from which levels and trends could be examined, discerned, compared and analysed. Furthermore, expenditure for varied water consumption, based on the block tariff structure and other empirical data required

quantitative approaches.

The study began with a community workshop, attended by social movements, community organisations, trade unions and political organisations in early 2006. The workshop consisted of the Phiri Concerned Residents Committee, the Coalition Against Water Privatisation, the Anti- Privatisation Forum, The Orange Farm Crisis Committee, Cosatu, Azanian Peoples Organisation, the Soweto Electricity Crisis Committee, the APF Research sub-committee and the South African National Civic Organisation. There were a total of 18 participants, of which 10 were women and eight men. Except for the representative from Cosatu most of the participants were poor and unemployed and were drawn from social movements, which were actively involved in the struggles against prepaid water meters and the insufficiency of 6kl lifeline and were generally very critical of the ANC. They believed that these problems were the result of the neo-liberal economic and social policies the ANC government adopted after 1994 (Naidoo 2004; McKinley 2005). The workshop discussed the OGM project, how it started, the resistance against it and thereafter the many-sided experiences of residents with both the 6kl lifeline and the PPWM. It was a highly informative workshop, providing a good overall sense of the project since it began in 2003.

The decision to conduct a survey of 200 households (11.5% sample size of a total household population of 1771) was thought to be the best way of collecting data about household experiences with PPWM, since the OGM project began. A non-random sampling method of selection was used by selecting houses at regular intervals (Nichols 1991). In this case every fourth house was selected. Initially a pilot study of 10 households was done, the results of which were used to consolidate, sharpen and finalise the survey questionnaire. Two unemployed women - who at an earlier stage were active in the initial resistance but withdrew later due to internecine problems within the Phiri Concerned Residents, the community organisation behind the resistance - were trained over a 3-week period to both understand and conduct the survey. They were accompanied to 5 households once the survey questionnaire was finalised in order to ensure that they were capable of conducting it. The completed forms were daily collected to ensure that they were properly completed. The survey was completed over a 4-week period.

The survey questionnaire was specifically designed to elicit maximum information about household experiences with PPWM, with a total of 65 questions. The results of the survey were collated and analysed over a 6-month period. The survey questions included demographic household information to detailed questions exploring the multifaceted

impacts PPWM have had on households, ranging from consumptive patterns, measures resorted to when there is no water, the effects these have had on households and the views and feelings of members of households about the fundamental changes to the method and terms of water supply.

A great deal of primary sources were studied and reviewed, ranging from local government legislation and policies, the City of Johannesburg, Johannesburg Water, the Department of Water Affairs and Forestry and the Department of Provincial and Local Government. The relevant academic literature, archival sources and previous case studies conducted in Phiri was studied. Much information was garnered from other secondary sources, including newspapers, periodicals and the internet.

Based on their expertise, knowledge and experience in-depth interviews were held with a total of 26 key informants, drawn from leading activists and figures in civic and community organisations, trade unions, and political organisations, including Phiroshaw Camay, former chairperson of the Rand Water board, Anthony Still, former executive director of JW and Kobus Khun, Project Manager for Water Services at DWAF, Jody Kollapen, chairperson of the Human Rights Commission and Kgalema Motlanthe, General-Secretary of the ANC. During a visit to Oxford University leading water scholars were also interviewed. Leading shop stewards of JW and SAMWU were interviewed and several meetings of the Coalition Against Water Privatisation were attended when the project began in Phiri in August 2003.

Unfortunately, many attempts to interview the general secretaries of COSATU and the South African Communist Party failed. It became evident after a period of 3 months of excuses and evasions that they were not prepared to be interviewed. It can only be surmised that because they were not actively involved in the struggles against PPWM – which were led by social movements - they felt uncomfortable at being interviewed, especially since the PPWM project in Phiri and community resistance to it received much adverse publicity.

Limits of study

This study faced a few important limitations. One, Johannesburg Water and the CoJ refused interviews because they felt or were advised that it would compromise their defence in the upcoming case against PPWM, the 6kl lifeline in Phiri and in fact the OGM project. Some requests for information were denied on grounds of confidentiality (JW

2006). The denial of information researchers face when a public service is commercialised is referred to as "the changing character of knowledge within the water sector. Information that was once in the public domain becomes commodified, takes on commercial significance and is often treated as confidential" (Swyngedouw 2006:58, cited in van Rooyen and Hall 2007:9). Even requests for some of the most basic data about Phiri and Soweto they failed to respond to.

However, what has more than compensated for this was their defending affidavits, totalling over 4, 000 pages, and which in fact provided much more information than would probably have been obtained from interviews. In fact the timing of this case has proved to be a blessing in disguise for this study. Two, despite persistent efforts the clearly evasive conduct by the general secretaries of both Cosatu and the SACP prevented important interviews. Their obvious distance from the issues which have been the subject of this thesis is probably the main reason why over a period of several months they frustrated many attempts to secure interviews.

Outline of Chapters

Though the entire thesis contains theoretical considerations the 2nd chapter deals more concentratedly with the theoretical context. It includes an initial conceptual overview of water as public good and as an economic good/commodity and attempts to critically distil the discourse; commodification of water and other basic public services as a distinguishing feature of neo-liberalism; the mutating nature of neo-liberalism; public-private partnerships; the meaning of privatisation, corporatisation, commercialisation and commodification; and finally briefly theorises the 'commons' as a counter-hegemonic discourse and the problems and prospects for a Polanyian countermovement.

The 3rd chapter trace water supply under apartheid; an overview of supply conditions and coverage in black townships; the role of the Department of Water Affairs and Forestry; and the role of Rand Water in the supply chain.

The 4th chapter has two parts. Part 1 deals with the national legal-policy architecture for water commercialisation and commodification since 1994. It begins with the 1994 *White Paper on Water and Sanitation*, the *Constitution of the Republic of South Africa*, the Water Services Act (WSA (1997), the *National Water Act* (NWA) (1998) and the Municipal Systems Act (MSA) (2000). It also explores the approach of the government to Free Basic Water. Part 2 deals with local government policy shifts after 1994, particularly the iGoli 2002 Plan, which grew out of the financial crisis in the city in 1997. This plan

may have been exaggerated and "talked up" (Beal et al. 2004:22) to justify going the route of corporatisation and commercialisation of services two years later. It explores and analyses the formation of Johannesburg Water (JW), the *Service Delivery Agreement* (SDA) with the CoJ, the *Sale of Business Agreement* (SOB) between JW and the CoJ, the management contract between JW and a multinational consortium, led by French water multinational, Suez, and later the OGM project in 2003 in Phiri, the centrepiece of which was the installation of PPWM.

The 5th chapter explains the shift to cost recovery and the commercialisation of water services in South Africa. It critically dissects and analyses the notion of a "culture of non-payment", Free Basic Water, paying for water and the oft-repeated notion of "scarcity". The notions of a "culture of non-payment" and "water scarcity" have in particular been used by the CoJ, DWAF and JW to justify cost recovery and PPWM. So uncritically pervasive is the notion of scarcity that some on the left who are critical of neo-liberalism sometimes have also succumbed to it. We expose its pitfalls and contradictions.

The 6th chapter examines the manufacturers and costs of PPWM; it dissects the technology of prepaid water meters; it analyses the involvement of black economic empowerment companies in the manufacture, sale and installation of PPWM in Phiri and other black townships; it appraises the views in support of PPWM by DWAF, the Water Research Commission and JW; it examines the economics and social impacts of PPWM in more general terms, utilising Marxist notions of commodity fetishism, reification, alienation and political and technological rationalities; it critically examines and contrasts the political affirmation of black women in the ruling ANC and their lot in the townships, on the basis of the effects water commercialisation and PPWM appear to have had on their lives; it examines the social justice and human rights implications of PPWM in black townships; and it assesses earlier studies on the impacts of PPWM in a few other townships, including in Phiri, Soweto.

The 7th chapter is devoted to the case study conducted in Phiri in early 2006; it explores the socio-geographical history of Soweto and Phiri; it explains the case study; it discusses the social dynamics between primary households and backyard shacks; it explains the OGM project which began in 2003; it critically examines the reasons JW provided for the project; it presents, discusses and analyses the result of the survey of 200 households, with regard to water consumption within the 6kl range and a whole range of problems households have encountered with the meters; it draws out the key issues which emerged from the case study; it shows how this case study goes beyond earlier studies and it

assesses the implications of PPWM for social policy.

The 8th chapter is devoted to exploring the prospects and problems of resistance to water commodification and the building of a Polanyian-type countermovement against it; it discusses the 'water wars' in Johannesburg; it specifically examines the struggles against PPWM and the 6kl lifeline and explores the problems, challenges and prospects of building local opposition in Phiri. It examines the reaction of the state to the resistance encountered in Phiri since the project began in 2003; and it critically examines the upcoming legal case against PPWM and the 6kl lifeline in Phiri.

The 9th chapter summarises the key research findings and makes some recommendations as a result of these findings.

CHAPTER TWO, THEORETICAL FRAMEWORK: WATER AS PUBLIC GOOD VERSUS WATER AS COMMODITY.

Introduction

> Theory is never a matter of pure abstraction. Theoretical practice must be constructed as a continuous dialectic between the militant particularisms of lived lives and a struggle to achieve sufficient critical distance and detachment to formulate global ambitions (Harvey 1996:44).

> Theory cannot be brought to bear upon the world of daily political practices without finding ways to embed it in the materialities of place, space and environment (Harvey 1996:45).

A political ecological approach within a historical materialist framework is the approach adopted in this thesis because it facilitates grappling with the substantive issues in more concrete and socially relevant ways. The discipline of sociology has been slow to study, analyse and reflect the impacts of neo-liberalism in the areas of social reproduction (Bezanson 2007), particularly with regard to vital basic services, such as water and sanitation, in 'Third World' contexts. "Social reproduction is all provisioning processes that sustain life on a daily and generational basis and operates at the levels of the market, state, family and households" (ibid: 420). Bakker and Gill (2003) provide a comprehensive definition of social reproduction, whose ontology strongly relates to the factors and processes that have shaped water commodification in this study: "Social reproduction….refers to both biological reproduction of the species (and indeed its ecological framework) and ongoing reproduction of the commodity labour power. In addition social reproduction involves institutions, processes and social relations associated with the creation and maintenance of communities – and upon which ultimately all production and exchange rests" (Bakker and Gill 2003:17-18). Water lies at the heart of the "biological reproduction" and "ecological framework" they refer to.

Some authors assert that Marx and Marxist theory and practice has almost exclusively revolved around the capital-labour polarity at the point of production, at the expense of issues of social reproduction, urbanisation, spatialisation and geography and their corresponding epistemologies and practices (Hall 2001; Harvey 1996; Callard 1998). However, Burkett (1999) denies this and cites extensively from Marx (1964) to show, quite convincingly, that in fact social reproduction was a key aspect of his work and that in particular 'nature' was central to even his economic analyses. "The harnessing of workers' living and work conditions to an increasingly social production process evolved according to monetary criteria – a development Marx calls the 'real subsumption of labour

under capital' – is and must be a process in which nature is likewise treated as a condition of monetary accumulation, both socially and materially. In this sense the subsumption of labour under capitalism implies a parallel subsumption of nature under capital" Burkett 1999:67). Burkett cites Marx to rebut those scholars who argue that Marx neglected nature and social reproduction. Regarding the lowest paid workers who face a daily battle to survive in a society in which so much of services and goods vitally essential for life are increasingly commodified and out of reach, Marx (1964) notes:

> Even the need for fresh air ceases for the worker. Man returns to a cave dwelling, which is now, however, contaminated with the pestilential breath of civilisation, and which he occupies only precariously, it being for him an alien habitation which can be withdrawn from him any day – a place from which, if he does not pay, he can be thrown out on any day. For this mortuary he has to pay….Light, air, etc – the simplest animal cleanliness – ceases for man. Filth, this stagnation and putrefaction of man – the sewage of civilisation (speaking quite literally) – comes to be the element of life for him. Utter unnatural neglect, putrefied nature, comes to be his life element (1964: 148-149)
> (cited in Burkett 1999:168).

Marx clearly registers the destructive impacts of commodification upon social reproduction in poor households but is equally mindful of the importance of "air, light, etc" in this regard. It is clear that waters' vital importance for social reproduction is even more important that that of fresh air and light (Illich 1995).

However, mainstream sociology, though slow, has been discursively transformed since the advent of neo-liberalism two decades ago (Burawoy 2005). The growth of 'urban sociology' (Susser 2002), 'public sociology' (Burawoy 2005) and 'environmental sociology' (Huber 2001; Catton and Dunlap 1979) clearly reflect the social pressures and impacts neo-liberalism have had in the vital sphere of social reproductive consumption and the lives of ordinary people. Susser put it this way: "Urban sociology was turned upside down, from the discipline studying social integration to the discipline specialising in the social conflicts of post-industrialism" (2002:393). Susser (2002) might as well have added more specifically "and those in social reproduction under neo-liberal commodification of basic public services". Huber (2001) argues that "Environmental sociology cannot avoid dealing with almost everything concerning humans and society, hence cannot avoid sharing those topic with researchers from other disciplines who approach these from their point of view" (2001:14). He also argues that while sociology and ecology are inextricably linked "sociology had difficulties adopting the ecological question" (ibid: 3) and that this was because it had "distanced itself from nature" (ibid).

However, there are no clear boundaries separating these sub-disciplines. The interactive fluidity between them reflects and refracts the integrated complexities of urban life, especially over the past two to three decades of neo-liberalism. Reflecting the sociological importance of newly emerging discourses of commodification and its wide-ranging social effects, Wilson argues that "It is precisely the role of the social sciences to be troublesome, to disconnect the habitual arrangements by which we manage to live along, and to demonstrate the possibility of change in more adequate directions" (1993: xiii). Burawoy (2005) is more assertive of the necessity of building on C. Wright Mill's notion of "making public issues out of private troubles" (2005:5).

He furthermore adds that "All too often the market and state have collaborated against humanity in what has commonly come to be known as neo-liberalism"(ibid:7), "The interest in public sociology is, in part, a reaction and a response to the privatisation of everything" (ibid), and "the standpoint of sociology is civil society and the defence of the social. In terms of market tyranny and state despotism, sociology – and in particular its public face – defends the interests of humanity" (ibid:10). "Public sociology is a form of both intellectual and political engagement. It is defined by a critical engagement with contemporary public issues (Cock 2006:303). This sums up the approach of this dissertation.

Mutating nature of neo-liberalism

The commodification of natural resources is not just characteristic of neo-liberalism but one of its distinguishing features. But neo-liberal capitalist globalisation is deeply heterogeneous, with its forms, content and relational dynamics often differing very much from one country to another. As Keil (2002) puts it: "neo-liberalism comes in many guises, is articulated on multiple spatial scales, and moves through divergent historical trajectories" (2002:125). Neo-liberalism therefore cannot simply sweep away the history, institutions, culture and struggles it finds in each country. Instead it articulates a discourse that attempts to find its bearings in the actual soil of the country, and appear as democratic, rational and even benevolent as possible, though the results of its policies are different. These carefully constructed discourses often assume forms of control and domination which resonate with the earlier period of colonialism, though this time it is not physical brutality and naked ra cism but subtle and no less devastating and insidious in

its socioeconomic and socio-biological effects. In fact both slavery-colonialism and neo-liberal commodification's attacks the human body, even its social reproduction, *for* capital. Hence Harvey (2005) and other writers refer to the "colonisation of life-forms" through the commodification of essential services. And that is why Crush (1995) can say that "the basic trope – that Europe shows the rest of the world the image of its own future – is of much deeper and broader purchase" (1995: 9). The cumulative effect of commercial penetration of basic services is the steady "dissolution of the public realm" (Clarke 2004: 27).

However, it appears that water commodification – part of the neo-liberal agenda - in post-apartheid South Africa is not just worsening poverty in several respects but creating new social inequalities and deepening existing ones (Bond 2002a; Ruiters 2002; 2006). While water supply and sanitation policy provided the ANC with its best opportunity to deal with the legacy of apartheid and serve as the foundation for the development of more progressive social policy in other areas, it has instead commercialised this 'lifeblood of society'. Hence "The old race-class debates now need to shift to exploration of how racism and class privilege are actively sustained and reproduced by the state, capital and other factors" (Ruiters 2002: 56). The question is: have our 'liberators' become - in the guise of 'democracy', 'emancipation' and a 'developmental state' - the instruments of subjugation to the rules and regimes of civilising missions of modernisation, commercialisation and commodification, in regard to the most vital daily need? And have they become the enforcers of obedience to and disciplinary compliance with new 'truth regimes' of dutiful payment, regardless of gruelling poverty and unemployment? The poor black majority are excluded from sufficient water because:

> That which cannot be financially represented (economically valorised) is ruled inappropriate or irrelevant (Power, 1997). There is a further neo-liberal paradox here. The economic calculus of neo-liberalism expels that which cannot be counted – but it seeks to bring more and more of human activity within the economic calculus. Most things – even those previously decommodified or uncommodified – can be brought to market (Clarke 2004:27).

We need to recognise that the privatisation of water is linked to and derived from the commodification of nature itself, bearing in mind that domestic water is derived from natural rainfall, before storage, treatment and reticulation.

> The apparently self-evident commodification of nature that fundamentally underpins a market-based society not only obscures the social relations of power inscribed therein, but also permits disconnecting the perpetual flows of transformed and commodified nature from its inevitable foundations, that is the transformation of nature (Swyngedouw and Kaika 2004:569).

Swyngedouw and Kaika (2004) continue a historical materialist analysis of nature and society and relations between these, drawing on the seminal work of Smith (1984) and Harvey (1996), for whom society has an inextricable relationship with both nature and culture, which is not 'out there', but indelibly and inseparably inscribed within society, in a mutual interaction of creation, modification and transformation. The "urbanisation of nature" one could argue water commercialisation represents, as a manifestation of capitalist penetration of daily life, bringing even public services long considered sacrosanct into the orbit of commercial profitability and an urbanised capitalist culture (Swyngedouw and Kaika 2004). And since water is derived from nature in its raw form it arguably lies at the heart of nature itself. To capture the depth of nature-society linkages Swyngedouw and Kaika refer to "socio-natures" (ibid:19). Finally, the derivation of water from nature (rainfall) and its vital importance for human health is reinforced by Strathern (1996): "With the elision between nature and biology, bodily functions have long been regarded as the special province of nature…." (cited in Macnaughten 1998: 29).

Water as a public or private good: critically distilling the discourse.

The phrase political ecology combines the concerns with ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic betweens society and land-based resources, and also within classes and groups within society itself (Blaikie and Brookfield 1987, cited in Peet and Watts 2004:7).

The neglect of social reproduction in the discipline of sociology in Third World contexts – particularly in so far as the crucially important water and sanitation sector is concerned - has resulted in an attempt to theorise these issues within the framework of political or human ecology. But if sociology is primarily concerned with social relations, political ecology - as defined by Peet and Watts (2004) - indeed share similar concerns. Political and human ecology are more specifically about social relations governing land-based resources – such as water - and is therefore of undoubted theoretical relevance for this thesis:

Political ecology serves to re-embed water politics in daily practice through its focus on management questions and the articulation of these with the changing context of state and market roles. Political ecology, in short, helps counter the abstraction of the apolitical and self-regulating markets…… Political ecology provides a powerful counter-narrative to the dis-embedded markets" (Peet and Watts 2004: 280).

Forsythe defines political ecology as "a more specific analysis of Marxist debates about materialism, justice and nature in capitalist societies, with a view to achieving a fairer distribution of rights and resources" (2003:75). But he cautions that a metaphor "can only reinforce social perceptions when used as a condensed expression of ecological reality" (ibid: 81). Urban political ecology theorises these issues within a historically

specific socio-natural environment (Forsythe 2003). It raises the key questions of resource allocation, distribution and redistribution and analyses the social relations within which water flows are inscribed, circumscribed and analysed (Peet and Watts 2004; Forsythe 2003; Swyngedouw 2004). In fact analytically and discursively political ecology enriches sociology by pointing to the issues it has neglected and which rightly belong to its discipline.

> Water is indispensable 'stuff' for maintaining the metabolism, not only of our human bodies, but also of the wider social fabric. The very sustainability of cities and the practices of everyday life that constitute the 'urban' are predicated upon and conditioned by the supply, circulation and elimination of water (Swyngedouw 2004: 1)

Crucial to understanding how water as a public good has been subverted is the role played by corporate-driven globalisation which has involved increasing commodification of natural resources. "….the commodification, not only of water, but of other parts of Nature and of life itself, is a distinguishing feature of corporate-led globalisation today" (Barlow and Clarke 2002:88).

Marvin and Guy (1997) assert that "Water is the lifeblood central to the socioeconomic structures of society" (1997:21). There exists a voluminous literature proclaiming water as rightfully a public and merit good, to which access should not be subject to monetary requirements (Marvin and Guy, 1997; Mehta, 2000; Black 2004; Bakker 2000; 2002; Bond 2002; Bryce 2000; Ruiters 2002: Huby 2002; Swyngedouw 2004; Jarman 1997). They argue at great length for the decommodification of water to enable poor people to have access to adequate amounts of it for basic life and health. Hence Jarman (1997) states:

> Water and sanitation are important pre-conditions for good health, and protecting the health of the poor to reduce their vulnerability. Chambers (1989) has identified a healthy body as one of the most important assets of poor people: a sick adult moves from being an asset to being a heavy liability needing to be fed, clothes and housed (1997:188).

Dickens and Lloyd (1981) also make an important point: "From the early 1970's, an important strand in geographical analysis measured spatial well-being as a person's relative position in terms of accessibility to valued public services (cited in Peet and Watts 2004:264). Black (2004) argues that "Natural forces may initially decide where water flows, and who is graced and who deprived by the arbitrary behaviour of weather, climate and hydrology. Beyond that, political and economic considerations prevail" (2004:23). This refers to government decisions that are taken about water supply policies, such as institutional mode of delivery, tariffs, quantities, state subsidisation, internal cross-subsidisation (and to what extent), social or community participation and control and

most importantly how water is viewed philosophically, socially and politically (Taylor 1996). Reufuss (1989) asserts: "Politically sensitive services, such as water and sanitation, which define the 'culture' of a city are seldom contracted out" (1989:10), unlike what has happened in Johannesburg. However, despite water's vital nature we cannot isolate this resource from many others required for "building a better life", such as electricity and food.

> It requires a policy framework that does not isolate the circulation of water from other sustainability-related processes. In fact, it requires a more comprehensive and integrated approach in which supply of water is integrated with health and sanitation policy, ecological considerations, socio-economic processes, urban planning and governance systems. The increasing fragmentation of policy domains (partly as a result of commodification and privatisation) makes this objective more remote than ever (Swyngedouw et al. 2002:127).

The circulatory metabolism of water commodification in Soweto.

The metaphor of 'circulatory metabolism' or 'metabolic circulation' (Swyngedouw 2006) illustrates the growing commodification of water in South Africa. Swyngedouw provides some useful insights into the dialectical processes which underpin "metabolic rifts" in water supply systems, leading to the commercialisation and commodification. The original word for 'metabolism' is *stoffwechsel*, which means "change of matter". This "simultaneously implies circulation, exchange and transformation of material elements" (ibid: 27). Swyngedouw (2006) states that for Marx "metabolism" was the central metaphor for his definition of labour and for analysing the relationship between human and nature, and that he and Engels "mobilised metabolism in an ontological manner in which human beings, like society, were an integral, yet particular and distinct, part of nature" (ibid). But it is to Marx himself that we turn to see his usage of the metaphor:

> Labour is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and nature. He confronts the materials of nature as a force of nature. He sets in motion the natural forces which belong to his own body, his arms, legs, head and hands, in order to appropriate the materials of nature in a form adapted to his own needs. Through this movement he acts upon external nature and changes it, and in this way he simultaneously changes his own nature……(labouring) is the purposeful activity aimed at the production of use-values. It is an appropriation of what exists in nature for the requirements of man. It is the universal condition for the interaction between man and nature, the ever-lasting nature-imposed condition of human existence, and it is therefore independent of every form of that existence, or rather it is common to all forms of society in which human beings live (cited in Swyngedouw 2006:26).

It is very clear from this approach that because water supply has its origins in rainwater, nature lies at its heart. Water, of all nature's metabolic products for life, is the most naturally derived compound without which we cannot live, work and play.

Hence this discursive and living reality imparts to the metaphor of circulatory metabolism powerful explanatory and illuminating properties. We can also see in Marx's approach above that, critical to metabolic circulation and explication, is shaping it to satisfy human needs. But it is a political ecological approach that radicalises the metaphor, towards solutions that transcend capitalist domination. Hence Swyngedouw (2006) argues:

> Nature and society are combined to form an urban political ecology, a hybrid, an urban cyborg that combines the powers of nature with those of class, gender and ethnic relations. In the process, a socio-spatial fabric is produced that privileges some and excludes many, that produces significant socio-environmental injustices. Nature, therefore, is an integral element of the political ecology of the city and the needs to be addressed in those terms (2006:37).

Hence 'metabolism' is not a value-neutral and apolitical metaphor concerned with the mere technical aspects of organic processes – for example, in how water in its raw form – rainwater - is first abstracted and treated. More importantly it refers to how clean and safe water is metabolised through distribution and redistribution, dependent on existing discourses, policies laws and regulations governing water supply in any city, in the manner suggested above by Swyngedouw. Wolman also asserts:

> The metabolic requirements of a city can be defined as the materials and commodities needed to sustain the city's inhabitants at home, at work and at play….The metabolic cycle is not completed until wastes of daily life have been removed and disposed with a minimum of nuisance and hazard (cited in Swyngedouw 2006:32).

However, it is the versatile usefulness of the application of the metaphor to the circulatory metabolism of the whole of capitalist society, covering production, distribution and exchange, which make it a potent imaginary and explanatory discursive device. Notions of class conflict and struggle are central to a metaphor which can expand and deepen understanding of the molecular processes at work in society, at the heart of which are shifts, changes and transformations occurring in every single aspect of socio-natural life. The usefulness of the metaphor resides in its ability to allow illumination of the dialectic directing internal interactions, relations and contradictions towards outcomes, whether for or against commodification. It therefore basically explains and throws light on the trajectory socio-natural molecular developments move along in the ongoing struggles for or against a particular position, policy or discourse.

The usefulness of a biological metaphor is enhanced because water is so crucially necessary to healthy bodily metabolism which is disrupted and threatened by the lack of it. From abstraction the production of water goes itself through various metabolic processes before it is reticulated to homes and once it is imbibed goes through various

processes of biological circulatory metabolisms. Marx (1977) produces a brilliant metaphor about the relationship between human beings and nature, which is striking in its relevance to water's vital importance for the body and life:

> Nature is man's inorganic body. Man lives on nature…nature is his body, with which he must remain in continuous interchange if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature (Marx 1977:72-73).

Marx's inextricably links between the human body and nature reinforces the growing danger Barlow and Clarke (2002) earlier point out. Human beings can go for a month without food but only a week without water (Illich 1995), which is required not just to prevent dehydration but for various metabolic bodily processes (Swyngedouw 2004). Combine this metaphorical metabolism with the fact that the black body during slavery and colonialism belonged not to himself or herself but to the master and coloniser then commodification of water, which deprives the black body of water, strikes a similar metaphorical cord. Harvey, therefore, rightly refers to the "body as accumulation strategy" under neo-liberal commodification: "Class, racial, gender and all manner of other distinctions are marked upon the human body by virtue of all different socio-ecological processes that do their work upon that body (1998: 403).

No doubt, for our purposes, water is the most important natural compound-material and resource involved in the final analysis in virtually every fact of life, economy and society. Even the inextricable links between water and food reinforces the centrality of the former in all socio-metabolic processes. After all, every kind of food cannot be grown without water, which is the wellspring of agriculture.

Therefore the fundamental policy and legislative changes to water supply in Soweto is a clear expression of "metabolic rifts', which according to the case study, has seriously disadvantaged and denied poor black people sufficient water, especially following installation of PPWM. The policy-legislative changes between 1994 and 2000 fundamentally altered water supply in Soweto. This metabolism is the political and discursive expression of the ANC-led state yielding to the pressures wielded by the World Bank and other neo-liberal world forces, which is why Swyngedouw (2006) argues:

> Metabolic circulation of the kind analysed by Marx, and now firmly rooted in generalised commodity production, exchange and consumption, is increasingly subject to the socially constituted dynamics of a capitalist market economy in which the alpha and the omega of the metabolic circulation of socio-ecological assemblages is the desire to circulate money as capital" (Swyngedouw 2006:32).

Hence while urban political ecology and social theory is the integrated theoretical framework in which we address the research questions, 'circulatory metabolism' is the complex, multifaceted, multi-layered and constantly transformative socially constructed and mediated dynamism which informs, shapes and decides the rules and regulations governing water supply. But this process includes spontaneous or organised resistances to these processes, which are not merely technical-material processes, of which people are passive spectators. These are permanent processes shaping and reshaping regimes of provision and distribution in one direction or another, and in one facet or another.

Privatisation, commercialisation, corporatisation and commodification.

> Commodification, in neoclassical economic terms, is anything that can be brought and sold in the market place in exchange for another commodity or money. Commodification, therefore, is any act, practice or policy that promotes or treats a good or service as an article of commerce to be bought, sold or traded through market transactions (Watt 1999; Brown 2003; Williams and Windebank 2003) (McDonald and Ruiters 2005: 19-20).

It is clear from the literature that since the onset of neo-liberalism in the early 1980's there has been a steady and in some countries, such as the UK, a rapid shift towards the privatisation and commodification of municipal water, through either outright privatisation or through indirect and less politically explosive measures, such as corporatisation, which basically means that a municipality forms a private company to deliver the services, but retains ownership and control over it, as has happened in Johannesburg (Taylor 1996). Referring to Bakker (2005) Van Rooyen and Hall (2007) captures the difference between privatisation and commercialisation well:

> Bakker (2005:544) describes privatisation as a process of organisational change where there is a shift in ownership and in management from the public to the private sector, while commercialisation is a process of institutional change where the management institutions (the rules, norms and customs) change to allow for the introduction of commercial principles (like the full-cost recovery and competition), commercial methods (like cost-benefit analysis, ringfencing and performance contracts) and commercial objectives (like short-term financial bottom-line and profit-making). It is running a public service like a business without necessarily any direct private sector involvement (van Rooyen and Hall 2007:6).

"The corporatisation, commodification and privatisation of hitherto public assets have been a signal feature of the neo-liberal project. Its primary aim has been to open up new fields for capital accumulation in domains hitherto regarded off-limits to the calculus of profitability" (Harvey 2005:160). There is a concurrence between Barlow and Clarke (2002) and Harvey (2005) in identifying commodification of hitherto public resources as a distinguishing feature of neo-liberalism. Harvey draws an analogy between the neo-liberalism's commodification processes and Marx's description of 'primitive

accumulation':

> A closer look at Marx's description of primitive accumulation reveals a wide range of processes. These include the commodification and privatisation of land and the forceful expulsion of peasant populations; conversion of various forms of property rights (common, collective, state, etc) into exclusive private property rights; suppression of rights to the commons; commodification of labour power and the suppression of alternative (indigenous) forms of production and consumption. colonial, neo-colonial and imperial processes of appropriation of assets (including natural resources); monetisation of exchange and taxation (particularly of land); slave trade; and usury, the national debt and ultimately the credit system as radical means of primitive accumulation (cited in Bond 2005:193-194).

Privatisation however is not only the full divestiture of state assets but it "now includes various kinds of delegation of public duties to private organisations", partly or fully (Bond et al. 2001:1). Services are contracted out to these private-public companies on a commercial basis. "Private-public" because they are essentially a hybrid, with one foot in the public sector and the other in the private sector. Private, because they are registered under the Companies Act and have to comply with the usual fiduciary duties common to all private companies. Public, because they still owned nominally by the state. However, commercialisation is the common thread running through privatisation and corporatisation (McDonald and Ruiters 2005). "Commercialisation has absorbed and penetrated the field of social relations, daily practice and consciousness, becoming the loadstone of ideological life" (Sader 2004: 258). Therefore the commercialisation of water can in fact be understood in its various forms as its commodification.

The overriding aim is to run service provision along business lines, irrespective of the institutional form (private or public). "Underlying all of this activity…are the broad forces of commodification: the transformation of all social relations to economic relations, subsumed under the logic of the market and reduced to the crude calculus of profit" (ibid: 23). Marvin and Guy (1997) capture these processes towards commodification well: "We are currently witnessing the dramatic emergence of new logics of utility provision in which essential infrastructure resources are being commodified and gradually differentiated, in both space and time, in terms of cost, availability and quantity" (1997:21).

The provision of water across the world has also often been a combination of private and public institutional forms, fluctuating from one form to another and even different modalities within forms and different degrees of combination, which are dependent on existing political, social and class relations of power and the outcomes of previous, present and future political and social struggles (Swyngedouw 2004). It is true, however, that for most of the world, in fact till today, water has remained in public

hands, probably because it is the most essential and non-substitutable daily necessity (Barlow and Clarke 2002). But the reasons for the struggle for public ownership and provision of water have gone beyond its necessity for daily life and survival, to include other powerful and often deeply cultural claims, because "The idea of water being a life-enhancing blessing provided by God for everyone to share has a long history. And for much of that history, water supplies were free, relatively abundant and normally safe to drink…." (Black 2003:32).

However, the World Bank and various other players in the water sector, such as multinational water companies which provide water for profit, have had fundamentally different views about water. They believe that water is an economic commodity, which should have a price tag and be subject to the laws of supply and demand, as other products (World Bank 1994). The *Economist* put it more bluntly: "The *Economist* has gone so far as to call water the 'first commodity', arguing that it is "a tradable commodity like coal and oil and timber…and should be treated as such" (cited in McDonald and Ruiters 2005:20). They further argued that "Only by accepting that water is a tradable commodity will sensible decisions be possible" (*The Economist*, 1992).

But growing poverty and unemployment in poor countries has led to these companies reviewing the feasibility of expanding their operations (McDonald and Ruiters 2005). It is a foregone conclusion, amply attested in the literature, that for poor people the world over the clamour has incessantly been for free access to sufficient water when they cannot afford to pay for it (Swyngedouw 2004). The great and heroic struggles for water in Cochabamba is probably the best known of these (Bond 2002). Studies make it abundantly clear that struggles for access to water has been the most burning issue for poor communities, particularly in the 'Third World' (Mehta 2002).

So politically sensitive is water supply and public interest in it that Suez, the giant water multinational which strongly supports cost recovery in poor communities, is compelled to sound very progressive about its stance: "Water is a common good. We are opposed to the privatisation of water resources precisely because in our eyes it is not a commodity. We do not trade in water. We do not sell a product, but provide a service"(Mestrallet, cited in Bond 2002: 213). Following massive public reaction against water privatisation Suez opted instead for indirect forms of privatisation, such as management contracts, in which the infrastructure remains under municipal ownership (Bond et al.2002). However, here again we see how sophistry exists in many forms in the water sector, probably because it's vital

public importance demands a strategy that projects the impression of noble aims in the public interest through new and commercialised institutional and ideological forms.

But commercialisation has so fundamentally transformed social relations and consumption patters that unless there is a paradigm shift to adequate decommodified provision the risk of poverty increasing to even more alarming levels is clear (Mehta 2002). It is this commodification of water – despite much research which points to its health risks – which has reinforced the conclusion radical social movements have drawn: that only concerted and persistent struggles will win their demands for water decommodification, at least to levels commensurate with a full and healthy life (APF 2003). Hence Huby (2002) states:

> Water and energy have a unique status in that up to a certain level of consumption they are essential and non-substitutable. Their contribution to public health and social well-being characterises them as merit goods. Taken together, these qualities confer the status of social goods and give the government a proper interest in the way that energy and water services are provided to meet social and environmental objectives (Hill, et al 1997). It is only beyond the level of essential consumption that they can be treated as commodities, subject to market forces (Huby 2002:137).

However, the big question that the public goods perspective has not satisfactorily theorised is: what is an adequate level of consumption and what are the criteria upon which to determine it? And while the social movements have publicly argued strongly for public provision they have often failed to provide a clear and coherent account of the multifaceted threads that link water supply to many other aspects of people's lives, such as waterborne sanitation, food, electricity, a clean environment, housing, hospitals, education, jobs and so on. In other words it is unlikely - as pivotal as water is to good health – that this will be achieved simply by providing adequate free water to poor families. However, poverty will be exacerbated without enough water (Mehta 2000). The problem is that under neo-liberalism water deprivation occurs alongside other serious social deprivations and inequalities, such as lack of access to electricity, food, housing and so on, all of which these days are also being driven by the pressures of commercialisation and commodification (Bond 2002a; Ruiters 2002).

Finally, Bakker (2001) captures the dangers of commercialisation and commodification in the water sector and places what has happened in Johannesburg very well:

> Privatisation and commercialisation formalised an important transformation in the underlying conceptions of justice in the welfare state, through dismantling what Waizer (1983) would term the separate 'sphere of justice' for utility services and re-classifying their products as commodities. Commercialisation implies

the re-scripting of consumers as customers rather than citizens, a deliberate de-politicisation of water through the creation of arms-length regulators and a shift from social equity to economic equity in water pricing and hence consideration of a willingness but not ability to pay – with the burden of increasing water bills falling disproportionately (in terms of access) on most
vulnerable consumers (2001:24).

Given the centrality of nature to water production all the above interrelated processe are occurring, according to Burkett (1999), because:

The harnessing of workers' living and working conditions to an increasingly social production process evolves according to monetary criteria – a development Marx calls the "real subsumption of labour under capital" – is and must be a process in which nature is likewise treated as a condition of monetary accumulation, both socially and materially. In this sense the subsumption of labour under capitalism implies a parallel subsumption of nature under capital (1999:67).

It is the constant emphases on efficiencies commercial and technological rationalities, such as PPWM, which leads to the need, according to Petrella (2001) to "Free the perception of water from the grip of techno-economistic concepts, to assert a vision not as *res nulis* (nobody's thing) but as *res publica* (a public good)…" (2001:14).

Public-private dichotomous discourse

The debate between public and private provision lacks the necessary sophistication because there can be problems of both the quantity and quality of water services under both systems (Taylor 1996). From experiences thus far, in the case of privatisation it is more obvious what the consequences for consumption and health will be for poor consumers, but it is less obvious that it could have similar results under public provision, where there has always been struggles for better services (ibid). However, the difference is that under such provision there have been struggles not between commodification and decommodification but within a framework of substantial decommodifcation, aiming at improving both the quantity and quality of services and resisting creeping commercialisation (ibid).

In Johannesburg it is the complexities of new institutional forms which straddle the public-private divide that has invested the discourses of privatisation and commodification with more exciting, but difficult and challenging prospects, requiring much more theoretical and analytical rigour than would obtain from outright forms of privatisation. These days formal public provision does not necessarily guarantee much because often so powerful and relentless are commercial pressures upon municipalities that cost recovery, cut-offs and other harsh credit control action can, and have, taken place under public provision (Ruiters 2002). But so mistaken is the preoccupation with institutional form and far less with what actually happens to the service itself that a senior

water official said: “Government policy has deliberately avoided adopting a particular stance on privatisation, preferring to focus on the goal rather than the instrument” Muller (2003: 1115). However, the government has indeed taken a specific stance in its decision to corporatise, commercialise and commodify water in Johannesburg, through JW is owned completely by the City. It is clear that Muller does not consider corporatisation and commercialisation as forms of privatisation, even under public ownership. He emphasis form and not content.

Hence, the debate has to go way beyond the dichotomous, superficial and sterile public-private division, in order to penetrate and analyse the institutional reconfigurations and molecular processes of commercialisation which have occurred within formally public infrastructure and space. But these need to be unravelled because they are not readily apparent, which is why van Rooyen and Hall (2007) can refer to “hidden processes of contestations and contradictions within public utilities such as Rand Water around hegemony building for commodification and corporatisation” (2007:60). Therefore the left stresses “the need to be more responsive to the public as community and the right stresses the importance of responsiveness to the public *in* the market” (added emphasis) (Stewart and Leach (1994:175). This provides a crisp insight into the social and political psychology of those seeking the commodification of water and other essential daily services within the public domain.

However, the fact that commercialisation can occur within public services does not detract from the great importance of maintaining it, but emphasises instead the need for removing and resisting the growing rationale, logic and demand for payments, when this is not possible. Understood as the provision of state-subsidisation or cross-subsidisation Edmond (1981) captures the point:

> Socialised consumption is contradictory to capital accumulation, not only in terms of the allocation of public expenditure, but also because it is an obstacle to the extension of the sphere of profit and accumulation, keeping whole sectors of social activity out of the logic of commodity circulation. And
> one of the major changes occurring seems to be the reorganisation of state intervention, to create or widen zones of profitability and make possible private capital investment in the sectors of consumption which are already socialised, a tendency to create the conditions for a ‘colonisation’ of those sectors by the logic of profit (Edmond 1981:10).

What Edmond refers to is in fact the creeping commercialisation of public services, still wholly under state ownership, but in which commercial interests steadily undermines public-political control and accountability, as we will see clearly happening in the case of the corporatisation of water services in Johannesburg. Edmond (1981) goes further to argue that: “Thus it is not only the existence of public services…and their level of provision in

terms of public expenditure, which is an issue for the struggle, but simultaneously the nature of social organisation, ideological form and the content of these services" (ibid: 8).

Being a 'natural monopoly', without competition, also leads to other serious problems. This is how Donahue (1989) states the problem: "Without a credible replacement, it is hard to harness private capabilities to public purposes" (1989:55). Natural monopoly, which water companies enjoy, also in turn leads to the monopolisation of knowledge by them, which strongly affects the capacity of the regulatory agencies to do their work effectively, since companies can withhold or distort information provided by them, which is referred to as informational or knowledge asymmetries (Rehfuss 1989). Other problems are "regulatory lag", in which regulation always lags behind the activities of companies, never able practically to monitor as activities are carried out (Harvey 2003). Furthermore, commercialisation and corporatisation always leads to greater - not less - organisational fragmentation, with often huge transaction costs (Rehfuss 1989:13). All these problems have simultaneously occurred in Johannesburg, which has undoubtedly "fragmented service provision, multiplying the number of agents and agencies involved, increasing the number of (micro) decision-making settings and generating new problems of co-ordination, regulation and scrutiny" (Clarke 2004: 37).

Public-Private Partnerships (PPP).

Even the public-private partnerships which have mushroomed over the past two decades are far from equal relationships and often tend to be dominated by a commercial ethos. Petrella (2001) is forthright in this regard: "Public-private partnerships in relation to water tends to cultivate and implement the visions and approaches of the water sector, so that water (the source of life) is in danger of gradually becoming one of the principal sources of profit, one of the last areas to be conquered for the private accumulation of profit" (2001:14). It appears that PPP have been promoted in ways which obscures the fact that despite its partial "public" nature it still leads to the – even if somewhat attenuated – "Destruction of resource rights and erosion of democratic control over resources…." Shiva (2002: xii). Furthermore, in response to claims that the private sector is more efficient and effective that public/state provision, some argue that "There is no empirical support from scientific research showing that privatisation helps when there is an 'inefficient' public utility" (Dalhuisen et al. 2002:116). The service contract between JW

and the CoJ is effectively a PPP.

'Water is life', but is it really?

This constant anti-commodification maxim needs to be critically examined because it often fails to address many inseparably related socioeconomic and political issues. Those who invoke it may not know that if this means unlimited amounts of water or an acceptable amount of decommodified provision this has often in history not existed. In fact for long periods of time water was privatised or commercialised, which only changed with the ascendancy of the welfare state in Europe after the Second World Water, but often did not exist in many Third World cities. Before the advent of the welfare state in Europe water supply swayed for long from private to public provision or vice versa, or had combinations of elements of both from one decade or regime to another (Swyngedouw 2004). In the light of such a history this maxim is rather idyllic and romanticised. However, there may also be times that it does not necessarily suggest an ignorance of this history but that in spite of it there is a conscious attempt to utilise this discourse for maximum political effect and thereby strengthen the demand for the decommodification of water to poor communities.

The fact that water was not always "life" and treated as such by governments but had to constantly be fought for is seen in this citing from Engels as early as 1845: "Let us review the circumstances once more with special reference to the health of the workers…they are deprived of all means of cleanliness, of water itself, since pipes are laid only when paid for, and the rivers so polluted that they are useless for such purposes" (cited in Swyngedouw 2005:1). Engels spoke of the health threats posed by the commodification of water. Therefore, this maxim reflects much more an ideal to be realised and a cry against the social consequences of privatisation or commercialisation of water, than a historical or natural right or reality. But though adequate water consumption is essential for our biological and bodily metabolisms and therefore health and survival and in that regard rightly considered vital to "life", is it any more vital than food? But in another equally vital sense we also need adequate amounts of food, housing, healthcare and so on. Therefore this maxim is a conditional proposition which cannot exist on its own but in constant reliance on other essential biological requirements, whose joint metabolism alone can sustain and reproduce life.

This maxim also entails the inherent risk of unwittingly excluding from consideration

the economic, ideological and institutional processes and transformations which treat water otherwise, as a commodity, and thereby may depoliticise the question, especially when water is seen as a "natural right" (Shiva 2002:25), which clearly flows from the assertion that "water is life". This approach also fails to provide a political ecological approach which would require either avoiding or dissecting abstract universalisms, because other than its source in natural rainwater from that point until water flows out of taps in homes there are various metabolised processes which are determined by ideological and socio-political factors, which in turn determine whether water is treated as a public good or a commodity, partly or fully. Confronted with the realities on the ground it is not very helpful therefore to refer to water as a "life" and a "natural right". This is not to deny the "human social 'metabolism' with nature" (Benton 2000: 83), but to unravel its historical materialist character, which illuminates rather than obscures both the origins of the problem and possible solutions.

Criticism of related concepts, such as that water is a "gift of nature" is also necessary. (Shiva 2002:34). Other than that it could be discursively utilised to argue more persuasively for water not to be treated as a commodity, when faced with the retort that "But God does not pay for the pipes" (Personal interview, Brian Hlongwa, 2003, Johannesburg), we are hurled into the orbit of political ecology from where discourse needs to be more concretely based. The point is that even "the deeply held values, including cultural beliefs, beliefs about nature, and beliefs about the relationship of human beings to each other and the place of human beings in the world" (Brown 2003:11) has to find discursive expression in more tangible approaches and arguments, which political ecology provides and which takes us back to the necessity to integrate these concerns about cultural and natural elements and even the spiritual qualities of water into a coherent alternative materialist framework. Hence the argument for the "importance of articulating environmental objectives to a broader societal project" (Adkin 2000:65). And to consolidate this approach Adkin asserts that "Oppositional struggles for a 'liveable' world need, however, to be interpreted as *democratic struggles*, in order to build *the most inclusive solidarities possible*" (ibid: 71). The problem with the more abstract and naturalist approach is that is could both obscure and delay this task. A political ecological approach within a historical materialist framework helps to grapple with the substantive issues more concretely. But Adkin (2000) captures a more helpful and illuminating ecological approach:

> It is not ecology per se, which provides the meaning of all other struggles to which we wish to connect ecology, but the way in which ecology is articulated to these other struggles (for example, for 'social justice', or gender equality or anti-racism). Hence the political meaning (or 'identity') of ecology is transformed by its innumerable and shifting articulations to other such 'elements' of discourse (ibid).

This is a very useful approach in South Africa, where these elements and more have historically been organic features of racial capitalism, often in unique combinations, quite peculiar to our history. It is in this sense too that we earlier applied the concept of "circulatory metabolism" or "metabolic circulation" (Swyngedouw 2004), drawing dynamically and interactively into its discursive field various natural, socioeconomic and political processes of permanent movement, flux and change.

The discourse on the imperatives of payment are varied and imaginative: "Food and water are basic rights. But we pay for food. Why should we not pay for water", says the World Bank's Ismail Serageldin (cited in Snitov 2004:1). But he is right only in the sense that we cannot separate water from food, not to justify payments for water because we pay for food. Though they go together so unique is water – even from a biological standpoint – that it does have the edge over food, if only from a survivalist standpoint. On the other hand even if dealt with on its own merits – which even singly is powerful – water decommodification can and will serve as a compelling inspiration to extend decommodification to all other basic needs. Water should not be treated in isolation if only because it inevitably gives rise to a wide spectrum of socioeconomic, political and environmental metabolisms.

Water permeates virtually every facet of society in one way or another, from industrial and agricultural production to domestic consumption, health, sport, culture, leisure and recreation. Brown (2003) also asserts why claims of ownership of water cannot be easily made: "This is partly because of the specific attributes of water. Unlike land, water is hard to "own". It flows; it evaporates; it seeps. It is hard to capture and fails to respect boundaries" (2003:1). But no matter how much water is all of this it is not "life" but key and critical to life. Would access to sufficient water make life much better if there was no food, healthcare, housing, jobs and so on? No, it won't. Finally, Gregory (2000) insightfully captures the commoditising and colonising pressures upon natures' water:

> the modern enframing of nature is inherently colonising no matter where it takes place: coercive, invasive, appropriative in all its sites, it makes nature available for inspection, codification, calculation and regulation. And, as I have said, it is a central concern of Marxist materialism to identify the instrumentalities by means of which this ever more effective domination of nature under a restlessly globalising capitalism sustained the effective domination of one class by another (2000:93).

The inherent and ontological centrality of water to nature perfectly fits the essentially commoditising processes described by Gregory and so too does PPWM fit the "instrumentalities" by means of which this in the recent period and in this study has occurred. Commoditising because of the "unfettered ascendance of exchange value over use-value" (Kovel 2006:6). There is probably no good or service in poor communities for which an appreciation of use-value is more important than water.

A Polanyian decommodification countermovement

> At the root of global water politics today is a Polanyian tension between the commoditisation of water and the counter-pressures arising from its embeddedness in social practice and institutions (Polanyi 1944). To this discussion political ecology brings a tradition of analysis that focuses on the local and the particular that provides a basis for questioning the abstract market as a uniformly valid mechanism of co-ordination (Peet and Watts 2004: 274).

We deal in this section with the theory of counter-movements but return in chapter nine to its more practical, organisational and programmatic aspects. Strong and ongoing resistance to commodification of social reproduction by social movements in South Africa – particularly in Soweto - has raised the important question of whether a Polanyian countermovement can develop to pose a challenge to neo-liberal hegemony.

"…the control of the economic system by the market is of overwhelming consequence to the whole organisation of society: it means no less than the running of society as an adjunct to the market. Instead of economy being embedded in social relations, social relations are embedded in the economic system" (Polanyi 1944: 57. Polanyi basically draws attention to the negative consequences of a marketised capitalist-dominated hegemony, which controls access to resources required for life through a moneterised economy. In this regard Polanyi (1944) further asserts:

> land and labour are no other than the human beings themselves of which every society consists and the natural surroundings in which it exists. To include them in the market mechanisms means to subordinate the substance of society itself to the laws of the market (ibid: 71).

However, a big weakness of Polanyi is that he does not locate processes of marketisation and commodification within a Marxist historical materialist framework and does not deal with important notions of class and class struggle (Block 2001). Commodification – particularly of social reproduction since the advent of neo-liberalism in the late 1970's – cannot be adequately discussed and theorised without recognition of the centrality of class and class struggles. In fact Block shows at length that Polanyi departs in his seminal work, *The Great Transformation*, from his earlier Marxist writings (ibid).

This book was published close to the end of the Second World War, after which rose the various welfare states in Europe. Africa did not benefit from this process. In fact exploitation of colonies in Africa probably grew after the war, to fund the rebuilding of Europe and the new welfare regimes. The present literature on Polanyi does not deal with this, which is a major omission in the discourses of commodification and decommodification in so far as Africa is concerned, including South Africa. Polanyi also hardly uses terms such as "class", "class struggle" and "capitalism" in his pioneering work. Instead he uses the more amorphous terms of "market society" and "groups" (Polanyi 1944:18). Any Marxist reading of Polyani's work does indeed make these omissions evident. Much of Polanyi's approach has a moral ring rather than a materialist class analysis: "Polanyi's theory is profoundly shaped by moral concern over the psychological, social and ecological destructiveness of unregulated markets" (Webster et al. 2008:3). Rather than a fundamental transformation of capitalist markets Polanyi wants them to be regulated so that society enjoys greater social protection (ibid). But improving welfare security does not challenge, transform or rupture capitalist social relations, at the heart of which lie commodification. It seeks to ameliorate these relations, while substantively commodified relations continue.

Besides, the "market society" of today's neo-liberalism – particularly in South Africa - is far more complex and complicated than that which existed in Polanyi's time. Because Polanyi does not locate processes of commodification clearly within a Marxist historical materialist framework he does not only not use terms such as 'class' and 'class struggle' but how they define commodification and decommodification narratives is as a result, not dealt with.

Block (2003) points to the political language Polanyi uses to validate his critique: "Terms such as "productive forces" and "ruling classes" are completely absent, and even "capitalism" is used very sparingly in the *Great Transformation*" (200 3: 28). Denying that Polanyi's language was a tactical shift Block persuasively states: "My argument….is that the shift of language is symptomatic of a theoretical shift that distanced Polanyi from the forces versus relations framework" (ibid). Similarly, the state does not feature prominently in his analysis. This is how Block captures the point: "The state is in the background; the most important relationship is between the worker and capitalist at the point of production" (ibid: 29). In fact Polanyi abstracts commodifiction from class

relations, when in fact it is the clearest and sharpest expression of class and social relations. Polanyi also did not deal with the varying characteristics of the state and its class nature and certainly - as is also the discursive and theoretical weakness of David Harvey, Castells and Esping-Anderson - did not sufficiently or at all take into account the wholly different situation in Third World contexts, where race, racism and colonialism fundamentally framed subsequent commodification-decommodification narratives and where, even after independence people were either denied the most basic services or received inferior and degrading levels of service if they could not pay for it.

That is why if the 'Second Great Transformation' is understood as the onslaught of neo-liberalism over the past two decades – to threaten and undermine livelihoods and labour achievements - a key question is where does the Third World and South Africa in particular stand in relation to both the First and Second Great Transformations? That is why it is critically important to understand that Africa experienced little or nothing – both socio-economically and politically - of the social democracy we have seen in Europe. Therefore in so far as its application to South Africa and Africa is concerned it is contentious when Webster et al. claim that "The erosion of worker power has de-legitimised trade unionism through these direct attacks and through the erosion of the welfare state" (2008:11). What welfare state? Where and when? Furthermore, partly a legacy of the past and partly the result of post-apartheid neo-liberalism millions of black people are still today without even a basic water connection, use unhealthy and degrading pit latrines and live in townships and informal settlements that lack basic infrastructure cities in Europe took for granted decades ago already. In fact it is these material conditions within a neo-liberal framework – still seriously constrained by the historical racism-capitalism intersection – which today impart a revolutionary significance to the demand for the decommodification of water in poor households.

Therefore the commodification and decommodification narratives have to be approached and analysed within a consistently materialist framework, without which any discussion of a countermovement in South Africa would be abstract. Because commodification is foundationally the essence of capitalism – more intensified under neo-liberalism – we cannot discuss it or its negation outside the framework of capitalism and class struggles. This is the single biggest weakness of Polanyi's work: it tends to abstract marketisation from class struggles, notwithstanding the fact that his real path-breaking

influence is to have pointed out the serious dangers to society of the growing commodification of goods and services that people rely on to live, which has reached its apogee under neo-liberalism. Linked to this danger is Polanyi's concept of 'embeddedness', the idea that the economy is not autonomous, but subordinated to social relations' (Webster et al. 2008:3). That remains valid for this study and the essentially false distinction between economics and politics: "Most of the confusion in monetary theory was due to the separation of politics and economics, this outstanding characteristic of market society" (Polanyi 1944: 195. The point however is that because the histories of Europe and Africa – including South Africa – are very different the commodification-decommodification trajectories would also be different, though they may have common decommodification principles in mind.

Polanyi's omission of the key question of the state is unfortunate because this study will show that whether we talk about the processes of commodification or decommodification and the public or private sectors involvement with either processes the state remains central, including *after* privatisation and commodification, whether fully or partly, in a perpetual cycle of regulation, deregulation and re-regulation (Bakker 2002). This shows not only the ongoing mythical pursuit of free-marketers for the state to be removed from the economy but that there is often greater involvement of the state following privatisation and commercialisation. Harvey (2001) therefore asserts: "The notion that capitalism ever functioned without close and strong involvement of the state is a myth that needs to be corrected" (2001:282).

This in turn reinforces the centrality of which social forces holds sway in the constant battles between the forces of commodification and decommodification and ultimately the pursuit of state power itself as the principal political goal. But the attainment of state power does not permanently resolve the battle either way, but contingently achieves hegemony, altering the balance of forces and shifting the terrain of power and social relations continuously. Keil (2002:72) therefore asserts:

> Caught between economic-technological imperatives which colonise space and time and increasingly rebellious collective social practice, the contours of the everyday are constantly shifting and can never be entirely fixed by social forces interested in the imposition of order (Ronneberger 2002).

This point serves therefore to reinforce the pivotal importance of the state, even with its alleged neo-liberal 'retreat'. Jewson and McGregor state that "Authors such as Will Hutton (1995) and Graham Thompson (1996) have argued that the role of the nation-state, while altered, has not been eroded to the extent that the globalisation argument goes"

(1997:4). So do authors such as Clarke and Newman (1988); Harvey (2005) and Castells (1983).

Key questions that the Polanyian decommodification countermovement literature (Block 2003; Bond 2002, 2004, 2005, 2006; Ruiters 2006) seldom deal with are: which socio-class forces will constitute the countermovement, what precisely will be countered, which alliances will it form, what will be its objectives, policies, programmes and strategies, will it participate in elections and constitute a political party or what organisational and political forms will it take? In other words the counter*movement* will depend to a large extent on the answers to the aforementioned questions, raising more sharply the questions of what the prospects are for achieving stated countering goals. Hence, there exists a discursive and dialectical relationship between 'counter' and 'movement'. In this regard these are some of the political, organisational and programmatic questions which are neglected in the literature (Block 2003; Keil 2002; Bond 2004, 2005, 2006; Ruiters 2006. But Polanyi (1944) is clear that some kind of countermovement is inevitable in highly marketised social relations: "For if market economy was a threat to the human and natural components of the social fabric, as we insisted, what else would one expect than an urge on the part of a great variety of people to press for some sort of protection" (1944: 67).

The bigger question, however, is that this "protection", for which purpose a countermovement is launched, is unlikely to go far without dealing with the aforementioned questions. The basic reason for this is that the expansion of commoditisation in the era of neo-liberalism issue directly and indirectly from the pressures unleashed by capitalism.

Is the 'commons' a counter-hegemonic project?

> The fact that current calls for commons are coming from many sources other than academics steeped in the literature indicates the broad appeal of 'the commons' after decades of neo-liberalism. Some of these proposals do not refer to scholarly work on commons, and those that do, often do so more to simply legitimise 'commons' as feasible options than to apply definitions and principles from the literature in a systematic and rigorous way. In fact it is unclear how much these many new 'commons' might have in common" (McCarthy 2005:10).

The "commons" as an objective call has grown in the literature but as with the earlier discursive weaknesses of a countermovement it does not answer the key questions we raise, some of which do not even arise at all in the literature. Hence McCarthy (2005) argues:

> What unites most of these calls for new commons is not so much a coherent vision of common property regimes, as their assertion of collective ownership and rights against relentless privatisation and commodification. Thus, the looseness of their connections to their academic literature ought to be interpreted not as indicative of analytical 'mistakes' or incoherence, but as a welcome opening of myriad fronts in struggle over the neoliberalisation of nature (McCarthy 2005: 10).

The problem, however, is that this approach – similar to the "one world with many worlds in it" adage - is very scant on detail about how the "myriad fronts" will lead to the defeat of neo-liberalism. But it is not just the lack of theoretical and political answers to these key questions that is a concern, but how the "commons" deals or fails to deal with the question of state power.

> Even social movements critical of the state seemingly took for granted that the remedies to failure of ostensibly self-regulating markets lay primarily in expanding the role of the state – in other words, they criticise the state for doing too little, not too much. It is striking then, that so many current reactions to the failure of ostensibly self-regulating neo-liberal markets are dismissive of the state, and turn instead to communities and commons property as potential remedies to market failure" (McCarthy 2005:11).

The problem is that any serious approach to a countermovement has to answer questions of political and state power, questions which are critical to the goal of decommodification, both of labour and social reproduction. Hence while the dynamic, many and varied calls for the 'commons' in recent years denotes a widespread reaction against the ongoing commodification of nature and is consistent with Polanyi's theory of the 'double movement' it fails to answer key political, organisational and strategic questions and often does not even pose them. The question is: are these varied "commons" projects genuinely counter-hegemonic if they do not raise and deal with these key questions? McCarthy (2005) makes the important point about an unrealistic, misleading and even naïve approach to decommodification:

> Even Klein, a leading and explicit critic of neo-liberalism, echoes some of these themes when she invokes a widespread 'rage' against government and advocates 'chucking out some of the traditional left's most basic ideas about how to organise a country' on the grounds that the last thing people want is, 'a stronger central state' McCarthy 2005:11).

Nowhere in the literature by Klein do we find a theory – let alone a strategy - of how the social and power relations underlying capitalist commodification will be transformed by such an amorphous approach. This is because Klein and others do not approach decommodification from a Marxist materialist standpoint. So while the vision of a global-scale commons can mean radical social changes to capitalism at a global scale, providing a language which refuses the spatial, political and environmental separations so necessary

to the maintenance of extraordinary inequalities around the world is imperative. Hence, referring to Klein McCarthy (2005) asserts: "I would argue that her vision of commons might benefit from a direct, robust engagement with arguments that the state, for all its flaws, remains the most democratic and democratizable of modern institutions" (ibid). While McCarthy's assertion is itself questionable in many countries what is not is the centrality of the state in any countermovement.

Little theoretical and practical attention is also paid in the scholarly literature to how counter-movements are built, with a tendency towards support for spontaneous and populist outbursts and autonomous currents. Munck (2004) argues that "Counter-movements cannot be seen as spontaneous, practically autonomous responses; they are constructed" (2004:257, cited in Webster et al.2008:7). Webster et al. (2008) also raise further key concerns around the neglect of the labour movement in the construction of counter-movements (Castells 1997; Keck & Sikkink 1998; Tarrow 2005) (ibid). They therefore ask: "How then can the labour movement be posited as a key facet of the counter-movement when it is in a crisis produced by the very forces that need to be challenged" (ibid:8). But this crisis – because much of it has resulted from the neo-liberal attacks on basic social reproduction in working class communities – has also opened up great opportunities for joint unity in action between workers at the point of production with newly emergent social movements which have focused on working class community households. Which is why the task for labour to identify and unite with "new sources of power" (ibid: 9) is vitally important.

The need for a theoretical review of the approaches we have criticised will remain important because a more rigorous theorising of a countermovement inescapably depends on it. In so far as the ongoing struggles against water commodification is concerned such a review is even more important when "Water has become one of the most contested resources, the last frontier of nature and the 'commons'. It is a political tool which provoked the 'wars of the 21st century'. And like other wars, it is replete with economic and political struggles" (Manahan 2006:1). These struggles will be ongoing because "Clamours for the de-commodification of water, improved access, people's control over the use, management and protection of water resources, better conditions for public water labourers, appropriate ecological management systems, appropriate technology, among

others, have become clear. Water has become one of the pivotal arenas around which social mobilisations and campaigns are launched" (ibid:2). Sayer (2003) also leaves us in no doubt that both the problems and prospects of a decommodification countermovement will remain with us for long:

> Commodification appears rampant, influencing social relations and culture to an unprecedented degree, and much of social sciences since Marx's time has been concerned with the studying the implications of this shift (2003:345).

"Forms of resistance that may be provoked by the continued extensive and intensive commodification of these domains may provide important sources of popular support for oppositional politics" (Benton 2000:88). This has accounted for the significant following social movements have achieved over the past decade in South Africa and Soweto in particular, against the commodification of both water and electricity.

Finally, decommodification can mean nothing less than a rupturing of capitalist social and power relations, which we are a long way off from. This has serious and somewhat intimidating implications for any countermovement. As McDonald (2002) writes: "Decommodification is an all-or-nothing proposition that takes us to the heart of the market economy, built as it is on the transformation of 'things' (with a use value) into products (with an exchange value) through the use of wage labour. To challenge this transformation process and the impact it has on growth and the allocation of resources is to challenge the very foundations of capitalism itself (Harvey 1982)" (2002:34).

CHAPTER THREE, HISTORICAL CONTEXT: THE POLITICS, POLICIES, IDEOLOGY, INSTITUTIONS AND SOCIOLOGY OF WATER SUPPLY UNDER APARTHEID

Introduction

This chapter moves from the theoretical framework to examine and analyse racial capitalism and water policy under apartheid in order to understand the historical background against which post-apartheid neo-liberal commodification of water emerged. It provides an understanding of the forces and factors which shaped both hydro-politics at a broader level and the empirical conditions of water supply, which we inherited after 1994. It also examines the historical centrality of Johannesburg as the powerhouse of production and the political significance of Soweto in the struggle for national liberation and social justice.

Some Key Historical Pointers before and after 1994

The historical intersection between racism and capitalism – as the overriding formative discourse - shaped both life during apartheid and the demands of black people after 1994. All social hardships could be traced to "the system", as black activists use to refer to it. Adam and Moodley (1993) claim:

> One legacy of the extensive politicisation in South Africa is that people now have high expectations that democracy will bring quick material improvements. A new ANC-led government may find itself the victim of the same unrealistic mass expectations that the ANC and other small groups encouraged during the period of repression (1993:221).

The commodification and decommodification theses cannot be addressed outside of this historical context, including the nature and terms of the 1994 political settlement. In fact the present water dispensation in Soweto – including PPWM - is both a direct and indirect result of this settlement and the hegemonic discourses which shaped both it and subsequently the post-1994 trajectory. Many interactions between the ANC, the previous regime, business, the World Bank and consultants between 1994 and 2000 fundamentally shaped the direction and nature of water provision in Soweto from 2003 (Bond 2002a). The key operative and discursive word during this process, regarding water provision in black townships, was the need for its "commercialisation" (CoJ 2001) at municipal level.

There is no record whatsoever which shows that the ANC expressed serious reservations or opposed this or the water privatisation which had occurred in the early 1990's in the Northern Cape, or took any measures to reverse them after they won power in 1994. At the same time this fundamentall+y shifted the discourse from "growth through redistribution" to "redistribution through growth", which was just another way of emphasising the priority of capitalist economic growth, which was hoped would enable some degree of redistribution to black people. A major shift had occurred from the 1990-1991 period when more radical policies were seen as imperative for dealing with the massive socioeconomic legacy of racial capitalism, a time when:

> There was a growing consensus between business think-tanks and the approach of economic planners in the liberation movement around the need for a "growth through redistribution" strategy. It is proposed that resources should be focused on a housing and services programme in order to stimulate the expansion of the domestic market, which it is hoped, will stimulate economic growth(Swilling and Shubane 1991: xiii).

But it strongly appeared that a major shift began to occur following Mandela's departure from nationalisation policies at the World Economic Forum Davos meeting in 1992. Given the specific history of South African capitalism, the onslaught of neo-liberalism in the 1990's and the enormous capital expenditure it would require to tackle gruelling mass black poverty and underdevelopment, this could only mean that white capital, mainly, would be required through tariffs and taxation to fund such projects. But there was deep resistance to any such ideas. In short, white capital – long conditioned to superlative profits from cheap black labour and minimal taxation under apartheid – would not finance post-apartheid projects to the extent required. Instead they exerted pressure to move in the opposite direction: minimise state intervention in the economy and in fact privatise and commercialise public services and therefore shed more of it to the private sector. This was the underlying logic that relentlessly drove developments. The way was cleared for more pronounced neo-liberal policies after 1994. Alexander (2002) accurately captures this shift:

> The most unexpected phenomenon of the recent past has been the breathtaking ease with which the ANC has accepted the most unpalatable of compromises and retreats. Almost everything that was formerly been propagated as sacred cows have become dispensable. Most notable among these was the policy of nationalisation of mines and monopoly companies. This is no longer even mentioned in the ANC (2002:65).

There are two processes simultaneously unfolding to seriously hinder any possibilities of addressing the socioeconomic legacy of apartheid: one, is the very restrictive, racialised

and undemocratic nature of apartheid capitalism, whose structural and material consequences have fundamentally remained intact, except for the formally non-racial new political dispensation, which is the main reason for deepening black poverty and unemployment in spite of this dispensation and meagre 'social wage' provisions (Meth 2004, cited in Legassick 2007:509). Two, another big impediment to redistributive policies at municipal level in post-apartheid society is the worldwide sway of neo-liberalism, which the ANC succumbed to. It is between these complex forces that we locate the emergence of commodification in social policy discourse.

The only way in which capital could be saved and stabilised within such severe historical constraints was through the creation of a black bourgeoisie and middle class and attempts to redress the apartheid socioeconomic legacy by combining an emphasis on both cost recovery and limited free services simultaneously, but only after it was introduced. However, in reality the one contradicted the other, unless, of course, a way could be found to blur the contradiction by progressive-sounding discourse, on the one hand, and designing the barest minimalist "free services" for poor people, on the other. We will see details of how indeed this was done when we examine free basic water, alongside PPWM, in Phiri. As Seekings (2003) points out: "The deracialisation of public policy in South Africa was achieved rapidly and smoothly because by the 1990's the maintenance of most white South African's privileges no longer required racial discrimination. Class had already replaced race as the basis of inequality in South African society" (2003:198).

National Water Policy under Apartheid

> The history of water in South Africa cannot be separated from the history of the country as a whole and all the many factors which went to create both one of the darkest and one of the most triumphal chapters in human existence. The history of water is a mirror of the history of housing, migration, land, social engineering and development (RSA 1994:4).

Included in this chapter is a discussion of various aspects of water policy and the relevant legislation and institutions which governed water supply under apartheid. We hope to show that cutting across the historical contrasts between the racist, oppressive and exclusionary apartheid period and the supposedly free, non-racial, democratic and equalitarian post-apartheid South Africa resides the striking irony that the black townships consumed more water under apartheid – for which they largely did not pay - than they do

today.

> Until the Interim Constitution came into effect, South Africa was divided into eleven different 'homeland' administrative and political areas – the four nominally independent TBVC states, six 'self-governing' territories and the dominant Republic of South Africa', governed by the tri-cameral parliament. The amalgamation of all water and forestry related personnel, functions and budgets of the previous homelands, together with the assumption of new functions of water supply and sanitation, will at least triple the size and budget of the previous 'RSA' Department of Water Affairs and Forestry. On July 1, 1994, a new Department came into existence by proclamation of the President (RSA 1994:1-2).

This shows the divided and fragmented structure of water supply under apartheid, driven by racist ideology. But it also shows what a huge and complicated task the amalgamation of these different territorial and political entities into a single national structure - the present DWAF – was. By the end of the 19th century most of the water was used for white commercial agriculture. Water for irrigation was generally diverted directly from rivers, since few dams had been constructed (RSA 1994:4).

Though apartheid was by then being cemented by an avalanche of racist legislation the 1956 Water Act (Act 54 of 1956) was "intended to ensure an equitable distribution of water for industrial and other competing users" (ibid). More relevant, "In the years following the Second World War subsidies for municipal water schemes were introduced to improve the standards of supply, although these were subsequently modified to assist only smaller municipalities that would otherwise not have been in a position to carry out works of a satisfactory standard" (ibid). The point is that though racially driven water supply was considered a priority in white municipalities, which "During the 1970s and 1980s received per capita infrastructure investments on a par with, or even higher than, most European and North American countries (Ahmed 1995) (McDonald and Pape 2002:20). Therefore white domination of water resources under apartheid also meant that "When expressed in racial (and gender) terms, this meant that the white minority gained access to the key decision-making structures, which meant that the balance of privilege in society started to manifest itself in the form of unequal access to clean water and sanitation services in hydropolitical terms" (Turton and Henwood 2002: 47).

The pivotal importance of white-statist domination of water resources for the benefit largely of all sections of the white population is clear. Turton and Hendwood

(2002) go on to assert: “White hegemony had been firmly established by the mid-1960’s and almost all of the irrigation land that could be appropriated had been appropriated by that time. In short, resource capture, first of land and then of water, had been institutionalised by the mid-1960’s, and all subsequent legislation was merely meant to tie up loose ends. This institutionalised resource capture became one of the cornerstones of apartheid strategy, but oddly enough is seldom written about by political scientists and analysts” (ibid: 50).

But how was this made possible? “For decades, wealthy ratepayers received an enormous subsidy from township residents. Township workers laboured in factories and offices, and township consumers bought goods in shops that were all located in white-controlled municipalities. These factories, offices and shops paid rates to Johannesburg, while township administrations relied mainly on beerhall revenues and, during the 1980s, some central government funding” (Bond 2002:216). This shows how harsh apartheid was for black people: besides being subjected to discriminatory and highly exploitative working and living conditions they actually financed much of the high standards of municipal infrastructure for white suburbs. Swilling et al. (1991) are more pointed:

> It has been argued that the fiscal system of the apartheid town and city facilitated the net transfer of resources from the poor black to rich white areas. This helped the white local authorities to be financially viable and enabled the white ratepayers to receive services at a standard that could be justified in a developed first world economy, but not a middle developing economy such as South Africa’s. This level of contrived privilege was only made possible by the structured extraction of resources from the politically disenfranchised, spatially marginalised and coercively exploited urban poor (Swilling et al. 1991:195).

So deeply ingrained, wasteful and irrational was apartheid that “Permanent Water Committees established between South Africa and the ‘homelands’ had to draw up international agreements governing the use of water from rivers which crossed and recrossed their boundaries; water supply pipes were built to serve one community but not their immediate neighbours in an adjacent ‘state’; separate waste water treatment plants were built almost side by side” (RSA 1994:5). “Within white ‘RSA’ the black townships were placed in 1982 under the authority of the ‘Black Local Authorities’ and also largely left to fend for themselves” (ibid: 5). As a result “Overwhelmingly, the BLA’s had neither administrative nor financial resources” (Swilling et al. 1991:179).

It is this history which created the dismal situation the country inherited in 1994

with regard to water and sanitation services in black areas. In 1994 43.4% of the black population had access to 'piped water distribution', compared to 95.6% for 'Coloured' people, 100% for Indians and 99.9% for whites (ibid:3). The population without piped water was 17, 3 million (ibid). DWAF reported in 1994 that 12 million people were without a water supply and 21 million without sanitation (RSA 1994:1). But elsewhere DWAF stated: "In 1994 an estimated 14 million people in rural areas had inadequate access to safe water…" (DWAF 2005). This is 2 million more than the 1994 figure. However, Earle et al. (2005) refer to "The legacy of apartheid left the democratically elected government in 1994 with a situation in which some 12-14 million people lacked access to formal water supply…" (2005:3). However, though this was a racial and effectively racist exclusion of the black majority, households in many townships – including Soweto - did have a domestic water supply which they largely did not pay for (DWAF, 20 May 2008, email correspondence; DWAF 1994).

Figures provided by DWAF for domestic water connections in black townships by 1994 show that of a population of 9, 532, 473 million in townships 6, 371,626 had either an in-house (3,059,849) or yard (3,311,777) domestic supply of water (DWAF 1994, Kobus Kuhn, via email, dated 20 May 2008). Of a total of 2, 315, 357 households 1, 853, 943 had in-house (894, 859) and yard (959,084) tap connections by 1994 (ibid).

Requests for information about payment rates and average consumption in black townships were unsuccessful: "I have been trying to source data on payment rates and average consumption during apartheid but I have not been able to find anything. The DWAF focus then was on natural water resources and not on regulating the water sector or on providing individuals with access to water and sanitation services – DWAF was known as a builder of dams" (Kuhn, Project Manager for Water Services, DWAF, personal communication, 16 August 2007).

But it is not true that the ANC introduced the privatisation and commercialisation of water services after 1994. "A 1980 progress report of the National Privatisation Committee – which has been investigating privatisation at local level – states that privatisation 'also suggest that sound private sector business principles, management techniques and work habits be introduced" (Heymans 1991: 164). And to show that the 'commercialisation' of services – as an alternative to outright privatisation - was

then already on the agenda: “Whereas privatisation seems to imply – at least in the perception of many observers – a transfer of ownership of control, commercialisation points at methods of management. The difference could be politically significant” (ibid). Later we will show how indeed the ANC carried to fruition these ideas which emerged in the 1980’s. Water services were indeed commercialised and corporatised in Soweto instead of the politically riskier route of overt privatisation.

The BLA’s could not easily increase tariffs to increase revenue, because “It soon became apparent that tariff increases to attain self-sufficiency would be self-defeating if this triggered more rent boycotts, which merely confirmed and compounded the problem of the BLA’s. This in turn resulted in acceptance that townships could not be regarded as financially self-sufficient” (Swilling et al 1991:180). It is probably for similar reasons that there were hardly any water cut-offs: it might have exacerbated an already combustible social crisis in many black townships, particularly Soweto. Earle et al. (2005) put the matter this way:

> The government carried on providing services in an effort to prevent further destabilisation of the country. The apartheid state carried on providing services to maintain the ‘client’ relationship with the majority – whether to win support in townships or to bolster support for homeland regimes (McDonald, 2002a:3). While water was securitised on a national level it was simultaneously politicised within the primarily black townships during the 1980s as part of the struggles between the UDF and the Black Local Authorities” (2005:3).

However we regard the situation under apartheid, the main point is that by far the majority of people both did not pay and were not therefore cut off. But could this partly be because the apartheid state regarded water as a public resource, not to be denied even to black people? Earle at al. (2005) assert: “The apartheid state had a statist vision of service delivery, with its role defined as the provider or subsidiser of municipal services – albeit in a racially skewed manner (McDonald 2002a:3).This is in contrast to the present government’s approach of implementing cost recovery in service provision and using a greater degree of private sector involvement” (Earle et al. 2005:5). They further add: “Most municipalities and townships did offer some sort of basic level of services to residents. Water was typically provided through a standpipe in a community. Those houses which did have in-yard or in-house connections usually paid a flat monthly rate for the services they received” (ibid). The official flat rate before 1994 has not been consistent. There have been several different rates mentioned by both the CoJ and JW, ranging between R103 and R160 (CoJ 2004; JW 2003). Furthermore, whereas the flat rate covered all services, such as water, sanitation, electricity and refuse removal, they

made it appear that it was only for water and sanitation, in order to misleadingly emphasise the advantage of switching to the PPWM, which – because of the free lifeline of 6kl and cheaper rates in Phiri - worked out less than the flat rate. However, there is no doubt that if the many disadvantages of PPWM are set aside, households would pay less than they did if they paid the flat rate before 1994 and the present rate (CAWP 2006:24).

However, it is also possible – which has both political and reproductive significance – that the apartheid regime thought that to either not provide water services or to cut off such services for non-payment may deepen unrest and negatively affect the economy, especially since sanctions had already been taking its toll.

Institutional Framework

The first section deals with the national institutions which shaped water supply under apartheid. The second section deals with the water policy in the city of Johannesburg more generally and Soweto particularly.

The TransCaledon Tunnel Authority/Lesotho Highland Water Project

The TransCaledon Tunnel Authority (TCTA) stands at the apex of the water chain. It was established in terms of Government Notice 2631 of 12 December 1986, and promulgated in terms of Government Notice 21017 of 24 March 2000 (TCTA 2004). The TCTA was set up to manage the financing of the construction and debt repayments related to the Lesotho Highlands Water Project (LHWP). The LHWP was an agreement struck between the South African and Lesotho governments in 1986. It authorised – through the construction of several dams in three phases in Lesotho – the export of water to South Africa, but mainly Johannesburg and the Gauteng province.

This very expensive project has drawn a great deal of public controversy, ranging from corruption to uprooting poor communities in Lesotho and being responsible in the final analysis for the high tariff increases in the CoJ, the brunt of which has been borne by poor black households (Bond 2002a). The TCTA acknowledged the "TCTA commends the Government and authorities in Lesotho for pursuing corruption that occurred: the prosecution of the parties that played a role in payment of bribes in the corruption investigation on the project in Lesotho" (TCTA 2004:10). The TCTA sells water from the LHWP to DWAF, which in turn sells it to Rand Water (RW), which we will hear more of

later when we discuss RW.

It cost R9.6 billion to build phase 1A (Katse Dam), completed in 1998, and R6.1 billion for phase 1B (Mohale Dam), completed in 2003 (TCTA 2003). “TCTA’s responsibilities in relation to the LHWP increased with the growing financial debt under TCTA’s management amounting to R18 billion at year end (TCTA Annual Report 2004). The gigantic size of this undertaking can be gauged by this statement: “Besides government, TCTA was the largest issuer of bonds in the local capital market during the year under review” (TCTA 2004:10). “We actually have to borrow money to service the interest and will only start to pay the capital loan redemption in 2014. So far the TCTA has paid about R8 billion in interest alone to various banks” (Personal interview, Bowes, January 2003). In their 2004 Annual Report the TCTA stated: “Currently, the LHWP stock of debt under management is R18 billion and this will grow to R23 billion by 2015” (TCTC 2004:7). Therefore there can be no doubt that the LHWP has had enormous consequences for tariffs in the CoJ (Bond, 2002a; Personal interview, Phiroshaw Camay, 10 January 2003).

The LHWP has a direct significance for water supply in Johannesburg because its exorbitant costs had a rippling effect on both tariffs and the decision to install PPWM to arrest the problem of “over-consumption” and non-payments JW complained about (JW 2001). “In South Africa, the project is funded by a levy charged to consumers within Rand Water’s service area, which, together with the water tariff, contributes towards enabling South Africa to meet its loan repayments” (Rand Water 2005:3). The LHWP is therefore integral to the water commodification thesis. This project agreement was signed during the height of the anti-apartheid struggle. However, former executive director of JW, Anthony Still, stated that he doubted that had these dams not been built the city would not have had enough water, supplied by the Vaal River system (Personal interview, 6 January 2003). This was significant because the CoJ and the ministry of water affairs have constantly stated that impending water shortages in Johannesburg made these dams necessary. Even Mandela had this to say:

> We in South Africa need the water from the Lesotho Highlands Water Project to meet the increase in our demand, and in particular, to meet the needs of previously neglected communities (Nelson Mandela, cited in Bond et al. 2002a:128).

It is highly disputable that this was necessary for “previously neglected communities”, as Mandela states in a letter to World Bank President, James Wolfenson. We earlier

pointed out the miniscule amount of water consumed in black townships, roughly 2% of the total water consumed. The costs of the LHWP will continue to have a huge impact on tariffs in Johannesburg and the broader Gauteng province for many more years to come. It is this situation which has fiscally played a central role in the promotion of cost recovery and the commercialisation and commodification of water in Soweto through the installation of PPWM. It is probably too why resistance to the project in Phiri was met with the full repressive might of the state. Too much was at stake for the state not to crush the resistance.

There has been widespread civil society opposition to dam-building and specifically to this project. And while Mandela stated that the project was needed to meet the needs of black people it was the poorest black people in Alexander township who led the fight against the LHWP (Bond et al. 2002). Bond et al. (2002) asserts that "The terrifying logic was that in order to pay for the extremely expensive LHWP its downstream buyers, especially Rand Water, would have to sell (not conserve) water". This is important to consider because the whole thrust of the PPWM project in Phiri was to conserve water, but in order to pay for the dams more water has to be sold and tariffs increased. Indeed, tariffs in Johannesburg have risen steeply over the past decade (ibid: 159). In fact the CoJ stated that tariffs have to keep pace with the financing costs of these dams (Personal interview, Brian Hlongwa, January 2003). This is how Asmal, a former minister of water affairs put the matter:

> The debt related to the water transfer part of this project will be redeemed by South Africa through income generated by the project. In other words the end users will pay for the project, at tariffs well within the capabilities of the beneficiaries, making it economically viable (cited in Bond et al. 2002:129).

It is also important to see that the World Bank was the main sponsor of the LHWP (Bond et al. 2002). So involved were they that they had a manager specifically dedicated to affairs of the project. As Bond et al (2002) writes: "The World Bank was the central organiser of technical, financial, social and ecological information about the LHWP…" (2002:136). And attempts by Alexander residents to meet the US executive director of the bank to raise their concerns, when she visited nearby Sandton in July 1998, drew a blank (ibid:134).

The LHWP also led to the serious displacement of communities. "The Katse dam directly displaced 2,000 people – approximately 300 households – but indirectly affected 20, 000 more who lost the use of common resources or income through the

submergence of 925 hectares of arable and 3, 000 ha of grazing land. Ancestral burial grounds were also flooded. Likewise, the Mohale dam would inundate 550 ha of extremely good cropland and force the resettlement of 400 families" (ibid: 143). Furthermore, numerous statements by affected people, particularly women, show that the promised compensation did not materialise and the houses built for those displaced were of poor quality (ibid). The Highlands Church Action Group argued "The project shows no sensitivity to the impact on gender issues and roles of women" (cited in Bond et al. 2002:143). Finally, the displacement from fertile farming areas also affected subsistence and incomes: "studies showed that household income figures for the LHWP northeastern mountain region fell 65% faster than the national average during the LHWP's initial years" (ibid: 144). Several affected residents also testified before the World Commission on Dams about the negative consequences the dams had on their lives (ibid).

It is clear that the LHWP affected households in the vicinity of the project. However, it is the effects the LHWP have had on water consumption in Johannesburg that is most relevant to this thesis. In this regard: "The LHWP is, in the discourse of the South African state, a developmental project. Quotes by Mandela and Asmal are emblematic of the marketing approach. The reality, in fact, appears to be the opposite: the LHWP makes water provision to low-income, black Johannesburg residents more, not less, difficult" (ibid: 148-149). Referring to the LHWP, Grant and Flinn (1992) warned: "While the scheme will ensure a water supply for Rand Water consumers, it will prove expensive for all, as there will be a levy on consumers, and the cost of raw materials will probably double. All of this does not bode well for the future, at a time when black residents have a service boycott until there can be what they call 'affordable tariffs' (1992:60)

A discursive trend is to regard PPWM as "developmental". A water activist in Orange Farm stated that the local ANC branch accused the opponents of these meters as "being against the ANC government and development of the area" (Personal interview, Phillemon Tjeka, December 2003). There is also evident confusion about a "developmental state". Geared - as current social policy practice in South Africa is – to palliative and minimal welfare, based on indigency, minister of social development argued: "We are not a welfare state in the sense that Germany, Britain and France are – and we don't want to be. Ours is a developmental state offering social assistance to those unable to support themselves

so they can lift themselves out of poverty" (cited in Boyle 2005). But given our past and present rising unemployment and poverty in post-apartheid South Africa many millions of poor people would find it extremely difficult to support themselves and independently find the means to lift themselves out of poverty (Webster and von Holdt 2006).

It is evident that the ANC has departed from the redistributionist provisions of the Freedom Charter and the RDP, though they persist in claiming adherence to them. This could be because "power, inequality and ecological devastation are legitimised and perpetuated through discursive construction" (Johnston: 203:1). Such construction is evident in virtually every piece of legislation and policy we have already referred to. Its purpose is basically to deny, obscure and mislead through manipulation of realities by playing with words, language and meaning. Low and Gleeson (1985) grasp the point:

> The 'fine print' of human rights declarations contains a tissue of omissions and interpretations supportive of existing power structures, including the power to dominate and exploit nature (1985:55).

The acid test for the notion of a "developmental state" has to be the ability or otherwise of the state to adequately meet the basic needs of poor working class households. But this is the heart of the problem because a state cannot be both fundamentally neo-liberal – as is the South African one – and at the same time "developmental". "As a development ideology, neo-liberalism most resembles the well known modernisation paradigm, but in fact it has less to offer because the role of the state has been minimalised" (Schurman 1993:12). Schurman goes on to make a compelling argument: "development studies should not be restricted to diversity but be explicitly concerned with 'inequality': inequality of access to power, to resources, to a humane existence….If we were to let go of this, there would be no justification for the existence of development theory" (ibid"30). This argument could be presented even more strongly in relation to water and sanitation services.

The Department of Water Affairs and Forestry (DWAF)

Under apartheid DWAF primarily served the white population and to some extent black townships that fell outside the homelands (RSA 1994a). "… successive pre-1994 South African governments were able to place the bulk of the country's water resources under

the control of a minority of the population" (Earle et al. 2005:3). Turton and Henwood (2002) argue that "DWAF did not regard itself as being responsible for ensuring that all citizens had a supply of water, and it had no political mandate for this responsibility" (2002:45).

In 1994 DWAF stated: "The goal of DWAF is to end the inequity in access to basic water supply and sanitation services" (ibid). And it is against such a background that the 1994 *White Paper* could state: "One fundamental issue to be addressed in the water sector is that of equity. The line which divides those with adequate access from those without is the same line dividing the rich from the poor, the hungry from the well fed, the line of race and privilege" (ibid:3). We will see later how this goal has been fundamentally contradicted by a tiny lifeline and PPWM.

DWAF is responsible for the management of all water resources in South Africa. With the exception of the Vaal River Barrage Reservoir, DWAF acts as the custodian of the nation's water resources, including all storage dams in the Vaal River System (Rand Water 2005).

Rand Water

Rand Water (RW) was appointed as the sole bulk water supplier to Gauteng in 1903, when it was formed (Rand Water 2005). Rand Water is governed in terms of the WSA (Act 108 of 1997). The Board is appointed by, and responsible, to the Minister of Water Affairs and Forestry for the financial and operative performance of the organisation (ibid). However, although it is a public utility it is "run on strict business lines. It finances its capital infrastructure by issuing long term loan stock and taking up institutional loans, while daily operational expenditure is financed by the sale of water" (ibid). RW is the largest water utility in Africa (RW 2004).

RW supplies all drinking water consumed by people, communities, businesses and industries across a vast area in South Africa which stretches over 18 000 km2. On average, almost 3000 million litres are pumped every day to consumers throughout Gauteng Province and as far afield as Rustenberg and Carltonville in the North Province, Bethal in Mpumalanga and Heibron in the Free State (ibid). The water supply chain in RW's supply area is made up of three parties who are, in essence, the suppliers, wholesalers and retailers of water in those areas. "Beginning with the suppliers of the raw water, the DWAF are responsible for building and maintaining dams, and then storing the raw or unpurified water. The water is then sold to RW, who, as a bulk supplier or

wholesaler, purifies and treats the raw water. It is thereafter distributed and sold as drinking water to the municipalities that store it in reservoirs and sell the water to residents and businesses" (ibid).

RW is responsible for the infrastructure and reticulation system from the start of the purification process to delivering drinking water to the retailer's supply points. From this point, the municipalities, as water retailers, take over responsibility for the provision, operation and maintenance of the intricate pipe reticulation networks winding through the cities, towns and villages which end at the supply points in thousands of businesses and individual yards" (ibid). RW "draws about 99% of its water from the Vaal River system" (ibid:2). "Rand Water is the only bulk water supplier in the world that provides water to a metropolitan centre that is not situated on a large waterway" (RW 2005):2).

The CoJ and JW have often said that unlike themselves the organisation in the water chain which does make substantial profits is RW (Personal Interview, Brian Hlongwa, 22 January 2003). This seems to be supported by the fact that in the 2003/04 financial year RW recorded a surplus of R375 million (increase of 33%) and revenue of R3, 258 million (increased by 13%). It is therefore reasonable to conclude that the tariffs at which RW sells water to the CoJ and other municipalities is based on making profits, and that this is one of the key factors which in turn determines the tariffs the city sets for its inhabitants. There is also nothing to suggest that RW has acted in a manner consistent with the recognition that water is a public good and that its commercialisation could deny adequate access to poor communities.

This is also why for RW, rather than be concerned with water conservation, they would want to sell as much water as they can (Bond 2002a). Bond points out that RW's tariff increases have hit the poorest consumers hardest (2002:159). He also shows that RW has been quick to cut supply to municipalities in arrears (ibid:165). RW, in turn, complain that they are forced to impose higher tariffs because the water they buy from DWAF is sold at a high cost and the chemicals they have to import from abroad are very expensive (Personal interview, Phiroshaw Camay 2003). The point however is that poor households in Johannesburg have to bear the burden of costs all along the water chain – from the TransCaledon Tunnel Authority (TCTA), DWAF, RW, the local municipal and finally JW. And the common thread that runs through this cascade is commercialisation.

Historical significance of Johannesburg

Built around the discovery of gold in 1886 and subsequent industrial boom Johannesburg has for long been the richest and most powerful city in Africa. This made it easily possible to adequately provide the most socially important municipal services, such as water and electricity, to black communities through either municipal cross-subsidisation or subsidisation from the national transfers (Bond 2002a). However, as we indicated earlier this socio-material possibility clashed with the neo-liberal commercial pressures steadily creeping into national discourse, especially after Mandela's statement in Davos. But it appears from this study that knowing the likely effects of such a fundamental departure the ANC waited to move in this direction only after the 1994 elections, especially since it adopted the RDP as its programme just before it. It appears that their strategic approach was to first capture state power, and once that had been accomplished, begin to make more boldly the necessary policy changes. In the case of water, this happened just six months after winning the 1994 elections (RSA 1994a). Beal et al. (2002) argue:

> Unlike many other cities, Johannesburg was provided with the extraordinary opportunity of reinventing itself, of fundamentally reforming its policies and planning practices and of radically reconfiguring its social and political institutions in the wake of South Africa's celebrated transition from an apartheid regime to a liberal democracy (2002:3).

Bond (2002a) also at great length explains why the city, with its enormous wealth, had the best chance to set a trailblazing precedent by adopting more progressive redistributive policies (2002a). It is therefore the most striking irony that whereas under apartheid black townships did not have any meters, few people paid for water, with hardly any cut-offs, after 1994 these townships were met with harsh cost recovery, commercialisation, cut-offs and PPWM. But it is the political ironies which are most striking: poor black townships, such as in Soweto, suffered these harsh changes in water supply under ANC rule, and in the richest city in Africa.

A city which could easily cross-subsidise a 20kl lifeline for black townships, with the concave curves taking effect after the 30kl point on the block tariff, as will see later. But this was not a promising prospect for the ANC because, as Bond (2004) put it: "Johannesburg would become less competitive as a base within global capitalism if higher tariffs were imposed" (2004:165). As a result "By buying into the logic of global neo-liberalism Pretoria reproduces and amplifies class apartheid in its municipalities" (ibid:169). In fact the power and wealth of Johannesburg – in which our case study is based – makes a very compelling case for social justice after 1994.

But the lack of 'political will' and fundamental compromises instead drove the fate and future of the city in a retrogressive direction because "The task of the new Johannesburg is not aided by the presence of a powerful commercial and residential elite who, while not overly demanding of the local state, are reluctant to contribute any further to the needs of the poor" (Beal et al. 2002:7). But in the first place it is to the exploitation and oppression of generations of poor black working class communities that white capital owes its wealth and power. This is furthermore unfortunate because "Johannesburg is the test case of urban reconstruction. We should go further and argue that the Johannesburg case has wider significance of how we understand divided cities across the world, Johannesburg can be seen as axiomatic of a 21st century in a number of ways" (ibid). Beal et al. (2002) conclude: "Historical legacies notwithstanding, the relationship between poverty and inequality in contemporary Johannesburg is also very much tied up with national macroeconomic policy" (ibid: 14).

The most unexpected class compromises have taken place in the most unlikely of places and at the expense of the most basic daily need of households who for decades endured highly spatialised and racialised social hardships, oppression and exploitation. Beal et al. (2002) also note that "Until the end of apartheid in 1994, South African cities were run by whites for whites in much the same way as colonial cities had been run by settlers or expatriates" (ibid:68). We combine such colonisation with the "dispossession" Harvey (2004) refers to as that wrought by neo-liberal commodification of basic public services, such as water.

Commodification - based as it is on undiluted and unbridled monetary access and availability – becomes the new oppressor, the new way of life under a deracialised capitalism and new neo-liberal democracy, with its host of internal contradictions. Beal et al. (2002) conclude: "Thus it was, and remains, that money lies at the heart of the unequal structure of city government in Johannesburg" (ibid: 68). And money has assumed such a determining power over basic services because the question raised by Swilling et al. (1991) has been answered in favour of neo-liberal commodification: "how macroeconomic policy approaches intend reorganising production…..will directly affect the nature of consumption and hence the resources available for urban reconstruction" (1991: xvii). Gear was the ANC's answer to this key question, in consultation not with civil society, the ANC's allies or even within the ANC itself, but with leading business figures and consultants, both here and abroad (Bond 2005).

This is the stark disjuncture between, on the one hand, the economic and financial power of the city and the role played by black labour in the process of white capital accumulation and, on the other hand, the post-1994 neo-liberal socioeconomic dispensation generally and water specifically. Between these forces were caught and sacrificed the legitimate expectations of the black masses after 1994, but in real terms this translated into an actual regression in water consumption, which we focus on later. This is the heart of a complex and multifaceted commodification thesis, straddling political, institutional, ideological, policy and discursive factors which metabolised to produce finally the technology and application of PPWM in Soweto, by abandoning or emasculating the emancipatory ideals inscribed in struggles over a long period and manipulating discourse to make it appear as a rational outcome (Loftus 2006).

Water supply in Johannesburg under Apartheid and before

White racist treatment of black people – including regarding water and sanitation services - was widespread long before Apartheid became official policy in 1948. Between 1903 - 1905:

> The population of Johannesburg was estimated at between 150 000 to 200 000 with the average consumption of water per European being 75 litres per day and 28 litres per Non-European (Rand Water 1979:30).

Yet over a century later and poor households are expected to do with 25l PPPD and even less for a family larger than 8. In fact growth in per capita consumption went from 90l in 1935 to 350l in 1978 (Rand Water 1979:30). “This can be ascribed to several factors, including the raising of living standards amongst all race groups, greater industrialisation and watering of gardens, parks, etc” (ibid). But in a newly democratic South Africa black households have access to far less water three decades later, in the midst of growing poverty, unemployment and inequalities (Meth 2004; Webster and Von Holdt 2005). Furthermore “It is no coincidence that the sites chosen for night soil disposal and later the slops pumping station were close to all three Black locations. The rich people lived at the other end of town in Bertrams and New Doornfotein” (Grant and Flinn 1991:58). However, in Johannesburg much later:

> In July 1988, the Water branch, an integral part of the City Engineer’s Department for many years was transferred in order to form a new Water and Gas Department (Grant and Flinn 1991:123).

Though water was transferred to form a new department in 1988 it was an internal reorganisation, with water still being provided directly by the City and without harsh cost recovery measures, until Johannesburg Water was formed in 2001. In 1992 there was still a statist public good conception of water (Earle et al. 2005). About water supply in Johannesburg Grant and Flinn (1991) assert:

> Unlike other services supplied by local authorities water is a commodity for which there is no substitute. The *amount* of water which can be supplied governs the growth and development of a community; it governs the very existence and survival of man (added emphasis) (Grant and Flinn 1991:60).

Johannesburg is situated in the Witwatersrand. "The Witwatersrand is situated astride a watershed. The name 'Witwatersrand' literally means 'White Water Ridge'), in a semi-arid area" (CoJ 2002). Ironically, there was a coincidence between this meaning and the reality of water supply in South Africa as a whole: water, as with all other resources, was controlled overwhelmingly in the interests of the white population, to the detriment and exclusion of the black population (Turton and Henwood 2002).

As in the rest of the country the general conditions of water and sanitation services was vastly different in the white suburbs – serviced by the white Johannesburg municipality - compared to the black townships, serviced by the BLA's. Because of water's vital importance for daily life this is a reflection of just how deeply systemic, thorough and totalitarian Apartheid was that water and sanitation was not treated any different from other aspects of the system. But this is the striking irony: in deemed consumption areas, such as Soweto, they hardly ever cut water supply to households in Soweto which did not pay.

Though under Apartheid deemed consumption was 20kl JW concluded that 56kl per household was the actual consumption (JW 2002). This was figure was reached by dividing the district meter total by the number of households (JW 2002). No precise figures for water losses through non-payment and leakages respectively have ever been provided by JW because it was impossible to determine the exact extent of physical losses through leakages in underground pipes in a 9,500 kilometre network (JW 2002). The only roughly estimated information we have about leakages in Soweto is that provided by JW in 2003: "7 billion litres go missing in Soweto each month due to leakages, costing the city some R158 million" (*Mail & Guardian*, 22 August 2003). And elsewhere, as a result of leakages, a "…high-volume loss of water in Soweto (30%)" was reported (*Engineering News*, 8 September, 2003).

Political history of Soweto.

On the one hand, what particularly imparts great strategic significance to Soweto is that it is located in the heart of rich and powerful Johannesburg. On the other, particularly since the 1976 Soweto student uprisings, the place became emblematic of the political struggles for liberation in South Africa the world over. And from the mid-1980's, coinciding with the 'Vaal Uprisings', rent and service charge boycotts were the primary means of political resistance. These were driven by a combination of poverty and unemployment and consciously using non-payment as a political weapon against the apartheid regime and their puppets in the BLA's, which governed townships. "The Soweto Civic Association was particularly useful in using boycott politics to highlight both bad living conditions in the townships and the discriminatory role of local government structure" (Beal et al. 2002: 70).

And therefore, probably more than elsewhere, it is here where: "The fact that patterns of racial and class inequality underpinned the questions of redistributive justice meant that debates about municipal reform assumed a sharp political edge" (ibid: 77). These "debates" refers to opposition to neo-liberal restructuring of the city through the iGoli 2002 plan by trade union and other civil society formations (SAMWU 1999). As a result resistance to PPWM have been stronger in Phiri than anywhere else in the country to date and probably in the world, and from where the first class action against PPWM was launched in 2006. It is here where the meters were ripped out of the ground and smashed to pieces in 2003 (Veriava and Ngwane 2005), when the project started and where the "water warriors" waged pitched battles against the police (APF 2003).

It is likely that because of this rich history of militant resistance in Soweto the CoJ and JW decided to launch the PPWM project there, because if they 'successfully' installed them and squashed resistance they would have the confidence to do so in any other township in the city or the country for that matter. In fact so crucial was Soweto for their strategy that they first piloted PPWM in Orange Farm to test the waters and on the basis of such experience embarked on the project in Soweto (APF 2004). But despite a rich political history the project in Phiri was completed and militant resistance squashed by the police, private security companies and local officials (APF 2006). However, Castells' (1978) warning is even more relevant to Soweto, given its history. Referring to the commercialisation of public services he states:

> It politicises the urban question in that as the state is the principle responsible agent, which is to say, on the one hand, that collective consumption will be put directly in politico-ideological competition rather than treated in economic terms, and on the other hand, that the demands called 'urban' will be strongly articulated to the question of power (1978:20).

It appears that social reproduction issues will be for the foreseeable future the heart of resistance in Soweto. As Castells (1978) asserts: "What is more important is that state intervention in collective consumption politicises the totality of urban contradictions, transforms the state into a manager of the equipment of daily life and globalises and politicises the conflicts which emerge in this sphere" (ibid: 43). Bond (2003) also argues:

> Contemporary Soweto could become as important a symbol of the grand anti-apartheid narrative as was the uprising of 1976, although this time water poverty, capitalism and patriarchy are operative as the main zones of conflict, instead of racial segregation (2003:17).

CHAPTER FOUR: THE LEGAL-POLICY ARCHITECTURE FOR WATER COMMODIFICATION SINCE 1994.

> The World Bank treated post-apartheid South Africa as a showcase for the greater efficiencies that could be achieved through privatisation and liberalisation of the market. It promoted, for example, either the privatisation of water or 'total cost recovery' by municipal owned entities (Harvey 2005:159).

The first part of this chapter examines national legislation and policies and the second part examines local government policy changes.

Part One

National legislation between 1994 and 2000.

We will briefly state the key legislation, polices and plans which since 1994 paved the way for the kind of water commodification we see today in Soweto. We will highlight the relevant provisions and briefly point out how they facilitated later commercialisation and commodification.

White Paper on Water and Sanitation (1994)

The *White Paper on Water and Sanitation* (1994) was the first clear indication that water supply will be provided along commercial lines and an equally clear expression of a fundamental departure from the redistributionist provisions and tenor of both the Freedom Charter and the RDP (Bond et al. 2002; Ruiters 2002). And though it drew attention to the inequities of the apartheid past in the water sector, stating that "This is a contradiction which is deeply felt and widely resented" (RSA 1994:4), it proceeded to emphasise the need for cost recovery and payments:

> Where a community does not pay and government has to cover these costs on their behalf the result is a rapid reduction in finances for the development of basic services for those citizens who have nothing. It is therefore not equitable for any community to expect not to pay for the recurrent cost of the service (ibid:23).

More significantly, it called for communities to look after themselves: "The need to empower communities to take responsibility for their own service provision" (ibid: 6) It is evident therefore that very soon after taking office the ANC began to shift towards neo-liberal approaches. But there were more ominous and revealing trends in this policy paper. Directly and matter-of-factly it stated that the quality of water services will be dependent on what people can pay:

There is a direct correlation between the standards of service and the cost, both in terms of capital and operation and maintenance. Where higher levels of service standards are to be provided the costs will not normally be supported by the government and it will not be part of the basic needs infrastructure (ibid: 8)

But the ANC knew well that black people were highly impoverished by racial capitalism. In fact the decade of the 1980's had seen increased poverty and unemployment in all urban areas (Swilling 1993). And where were the redistributionist provisions of the Freedom Charter and RDP? Instead, as we had earlier shown the *White Paper on the RDP* – departing from the base document – emphasised the need for fiscal constraints (1994: b).

The Water Services Act (1997)

The *Water Services Act* (WSA) (1997) is somewhat different from the 1994 *White Paper* in that it endorses the right to water and basic sanitation and an environment not harmful to health or well-being (Section 2 (a). Secondly, it makes provision for tariffs which considers the goal of social equity (s10 (3) (b), and the socioeconomic attributes of areas (s10 (2) (iii). Thirdly, it forbids the termination of services without the right to be duly informed and to make representations to avoid disconnection. Section 4 (3) requires that procedures for disconnection be "fair and equitable" and "provides for reasonable notice of intention to limit or discontinue water services and for an opportunity to make representations". Fourthly, it forbids a person being denied access to water if they can prove "to the satisfaction of the relevant of the water services authority, that he or she is unable to pay for basic services" (s 4 (3c). However, it also makes metering for all consumption compulsory for the first time. "The metering of all consumers on a 'pay for what you use' basis is legally called for in terms of requirements of the WSA" (JW 2002:23). But a parliamentary portfolio committee of water stated in 2004:

When providing people with water, especially the previously disadvantaged, the implementation of water meters should be considered and strategised. When water meters are implemented, those people who cannot afford to pay suffer the consequences of having their water cut off. This is against the provisions of the constitution, which states that everyone has a right to sufficient food and water (Parliamentary portfolio committee on water affairs and forestry, 12 November 2004).

However, except for the possible negative implications of metering for poor households these are certainly more progressive and protective provisions in the WSA compared to the 1994 *White Paper*. However, there is a vast discrepancy between

official word and social realities, which are particularly evident in the later case study. The WSA, unlike the 1994 *White Paper*, had to consider and reflect constitutional provisions of 1996, the year before it was enacted. This, like the Constitution itself, attempts to combine recognition of the human right to basic services and the recognition of cost recovery and neo-liberal budgetary constraints, in what is an inherently uneasy and in fact contradictory juxtaposition. However, it is the compulsory metering which is the most significant move because it inescapably imposes measurement and pricing, and therefore facilitates cost recovery and commodification. Metering, especially prepayment, is - for all the reasons already mentioned - the indispensable technology of reified commodification. The effects of PPWM appears to negate even an elementary meaning of "social equity", which the Act says must be considered when setting tariffs (s 10 (3) (b). In fact both the serious limits of the 6kl lifeline and PPWM - as the method of water supply and payment - appear to contradict the social equity and social justice provisions of both the Act and the Constitution.

The White Paper on Water Policy (1997)

The preamble of the *White Paper on Water Policy* (1997) contains probably the most anti-commoditising statement in water legislation, and therefore contradicts cost recovery and the commercialisation of water:

> We want the water of this country to flow out into a network – reaching every individual – saying: here is this water, for you. Take it, cherish it as affirming your human dignity; nourish your humanity. With water we will wash away the past, we will from now on ever be bounded by the blessing of water (RSA 1997a)

But the condition of water supply through PPWM is anything but the approach to water consumption suggested here. The pressures of commercialisation and commoditisation completely contradict the meaning and spirit of this statement. It is evident that promising social policy provisions in legislation were consistently undermined by the simultaneous advocacy of commercialisation, cost recovery, resultant substantive commoditisation, minimal free FBW and PPWM. The state's half-hearted provision of a tiny 6kl 'lifeline' – motivated more by the administrative costs of pursuing those in arrears and the payment imperatives commercialisation demands - fell far short of the constitutional promise of "sufficient water".

The National Water Act (NWA) 1998)

The *National Water Act* (1998) provides for the full hydrological cycle, including first tier tariff structures, whereas the WSA governs the direct service delivery under water boards, including the second and third-tier government tariff structures. The basic purpose of the WSA is to set national standards and norms for water services and tariffs; to ensure that water services are properly planned' to clarify the institutional framework for water service provision; and to promote effective water resource management and conservation" (DWAF 1997A:3) (Turton and Henwood 2002:51).

The NWA for the first time placed all water resources in South Africa under state ownership and control (s 3 (3), doing away with the riparian rights system. Under this system a farmer who owned the land would have automatic rights to access water from any water source, such as a river, which flowed alongside the farm. However, "Riparian land owners and concession holders who have gained the right to use public water are deemed to have the right of use but do not own the water" (RSA 1994:35). This was certainly a positive move because it effectively nationalised all water resources, which could then be harnessed for the public good, and particularly to address vast water inequities. However, while on the one hand this act nationalised water, on the other hand, in the WSA the state simultaneously made cost recovery and metering compulsory, and thereby the commercialisation and commodification of water. This shows how – as with FBW – contradictory discourses live cheek by jowl. Given our history how could the nationalisation of water be anything other than redistributing water more equitably to the poor majority of the 'nation'?

The Constitution of the Republic of South Africa (1996)

The *Constitution* asserts that "everyone has the right to have access to sufficient food and water" (RSA 1996, s 27 (1) (b). This commitment however is undermined by its dependence on "available resources" (Section 27 (2), which will obviously be seriously limited within a neo-liberal macroeconomic and budgetary framework. Prof. Themba Sono's response to this reliance was aptly put: "To claim as our silly subsection 27 (2) does, that the government shall deliver only when it has the material means to do so is to hoodwink the populace. What if the state never has enough funds to fulfil these rights? Does it mean that these right are held in permanent abeyance? Could such a right be a right then?" (*The Star*, 25 April 2000). How furthermore can we reconcile the harsh

consequences of PPWM with the right not only to sufficient water but to dignity as well (Section 10)? And how can we reconcile the right to an "environment which is not detrimental to his or her health or well-being" (Section 29), with the fact that when there is no money to recharge an expired PPWM there is not only no water for drinking, washing, cleaning and cooking but as a result also no water to flush the toilet? Can the state protect, promote and fulfil the right to "sufficient water" by having supply arbitrarily limited at a meagre 6kl, especially when by its own admission it is inadequate? Hemson (1997) argues:

> The struggle against apartheid was both a struggle against the politico-juridical system of racism and for improved quality of life. Improving residential infrastructure and service delivery – especially the vital supply of water and sanitation – are among the most crucial objectives of public policy by all accounts. Current legislation is wracked with contradictions – for example, children have the 'right to water', while the Constitution talks of the 'right of access to water'. One would hope the government would further the socially-just spirit of the law and not hide behind semantics and the technical caveats in the current legislation (1997:7).

It also requires us to question how "free" the 6kl limit really is because it is so little with more water denied if poor households don't have money. Does the inherent and severe constraint of the 6kl limit not alter the nature of the "free water" into a purposefully limiting mechanism not meant to sufficiently satisfy water needs and a healthy and productive life, and therefore ipso facto fundamentally a depriving tool, whose overarching aim is to limit consumption to the barest minimum and forbid further consumption through the imposition of the PPWM? In other words it is less to *adequately satisfy by giving freely* but more to confine consumption to a barest minimum. Hence the deeper commodifying logic has to be unearthed because it is not immediately apparent. A built-in and calculated constraint – to pave the way for commodification - is palmed off as beneficent free basic water and peddled by the state as the only country is the world to provide free water (Kasrils 2002).

But what we have at play here are the very same factors we earlier referred to: the national and international neo-liberal forces which have decided to manage the provision of water and other basic services and rights, such as electricity and health, along business principles, by either outright privatisation or the corporatisation and commercialisation of publicly owned entities, as in the case of JW. That is why our much-heralded Constitution has several major pitfalls few have critically analysed. In this regard, it is useful to cite Flynn and Chirwa (2005):

> The duty to respect the right to water and to promote greater access for all segments of society requires the state to ensure that pricing will not make water unaffordable, particularly for the poorest. For example, a decision to ring-fence a service like water and cut all other subsidies from other services may violate the duty to respect if it results in the new entity not having adequate resources to provide sufficient water to the poor (2005:64).

JW is a ring-fenced private-public company, whose mandate is to run water supply – beyond the 6kl lifeline – as any other business. In other words, the hybridisation evident in its nature is decidedly not *equally* private (commercial) and public (adequate and non-commercialised 'public good' supplies) but one in which commodification predominates, which is why the 'lifeline' is so little. However, the question of affordability in relation to commodification must be explained and contextualised, because tariffs cannot solely determine it. As McDonald and Ruiters (2005) argue: "Commodification is not – as some critics earnestly but mistakenly infer – simply an act of attaching a price to a good or service that used to be provided for free. Commodification is a systematic and comprehensive transformation of our material lives; prices is merely is external appearance" (2005:23). However, the commodification thesis is reinforced by the fact that the FBW limit of 6kl uses "only 1% of South Africa's available water" (Kasrils 2002:3).

The Municipal Systems Act (MSA) (2000)

The *Municipal Systems Act* (2000) is the overarching policy framework for delivery of water and other municipal services. The ministry of Provincial and Local Government is meant to ensure that local governments comply with the provisions and requirements of the MSA. It is directed towards enabling municipalities to take responsibility for the provision of basic services. The Act is meant to "… move progressively towards the social and economic upliftment of local communities, and ensure universal access to essential services that are affordable to all……" (MSA 2000: 2).

Another key objective of the Act is "to empower the poor and ensure the municipalities put in place service tariffs and credit control policies that take their needs into account by providing a framework for the provision of services…..". Elsewhere the Act states that "….the Constitution….enjoins local government not just to provide services to all our people but to be fundamentally developmental in orientation" (ibid). It also refers to the "provision of basic services to all our people, and especially the poor and the disadvantaged" (ibid).

But what we found in our case study in chapter 7 is very different to the noble

objectives spelt out in the Act. The very limited amount of free water and the wide-ranging negative effects of PPWM on poor households – due to neo-liberal fiscal constraints at national level - appear to strongly contradict these objectives. The reason for this contrast is important to explore. The problem is that alongside these objectives the Act also allows for a municipality to abandon the direct provision of services and instead allow "an external mechanism" (MSA s 76 (b) to provide a service by entering into a service delivery agreement with it. Such a mechanism includes a "municipal entity" (ibid: 76 (b) (i). JW is regarded as a municipal entity.

There is also an "internal mechanism" which also includes "a department…within its administration…." (ibid:76 (a) (i), which can be the conversion of a municipal department or utility into a corporatised private company - such as has happened with the formation of JW- but under local government ownership and control. But the problem seems to be that while local government will have ultimate ownership and control of such a company, because it is registered as private it operates according to private sector principles, such as cost recovery, commerce and profit, which seems from experience to undermine the ability of such ownership and control to adequately satisfy the consumption needs of poor households, to their detriment. The Act states that services should be as cost reflexive as possible (RSA 2000 s74.2.d). It therefore also makes it necessary that services be "financially sustainable" (ibid: 14). The question is how can the Act express commitment to the interests and needs of the poor but adopt social policy decisions which have the countervailing effect of depriving poor households of sufficient water and sanitation, which the literature clearly shows worsens poverty and inequalities?(Mehta 2002; Swyngedouw 2004).

The problem with these Janus-like legislative provisions – trying to protect the poor and adopt the principles of commercialisation and corporatisation - is that it seems to have negatively affected the delivery of water and other basic services, such as electricity, because the inevitable conflict between them has not adequately protected poor households from the adverse health and other effects of going without water when the limited 6kl lifeline is exhausted and a household does not have money to buy coupons and recharge the meter. That is why McDonald and Ruiters (2005) state "New post-apartheid legislation has also entrenched the shift to corporatisation with the sanctioning of stand-alone corporations to run water services and with an increasing emphasis on cost recovery and fiscal ringfencing" (McDonald and Ruiters 2005:25).

They also point out how the Act completely avoided stating that the public sector was in fact the "preferred provider" when in fact the National Framework Agreement - signed between Cosatu and the government in 1998 - specifically contained such a provision (ibid:26). Instead, Mike Muller (2002), former Director-General of DWAF, asserted:

> there is a vital role for private sector expertise and resources in providing water services…If we do not want to give credibility to those who describe private sector engagement as neo-imperialist expansion…we must demonstrate that it is the product of rational institutional decisions designed to achieve public objectives. This is not irrational optimism. There are good reasons to believe that we are at a juncture at which new approaches are possible (cited in McDonald and Ruiters 2005:27).

Though we focus on corporatisation later we need to point out here that it is an example of the "rational institutional decision" and "new approaches" Muller refers to, but more interestingly is how he ascribes "public objectives" to these institutional shifts and tries to make the commercialised transformations look beneficial and in fact attractive. Interesting too is the "rational" decisions he refers to, which reminds us of the political and technological rationalities which often precede and accompany neo-liberal commodification of social reproduction (Loftus 2005). In fact it is the Janus-like provisions in the MSA which allows Muller to make such a statement.

The big problem however is that all corporatisation of municipal utilities has entailed ring-fencing, in order to focus on achieving greater financial efficiencies by very detailed monitoring and targeted interventions, calculated to reduce costs and increase income and profit, with scant attention to the social effects these goals and processes have on poor households. Hence Ruiters (2002) argues that: "Ring-fencing negates the goal of integrated development. It is a narrow view: the first goal of commercialisation is to reduce everything to a precise money form…." (2002:22).

Section 77 of the MSA importantly requires municipalities to consult with affected communities in any contemplated changes to service provision but there is little evidence to support this requirement when OGM was introduced in Phiri in 2003 and earlier in Orange Farm when PPWM were installed by JW. In fact it both townships – especially Phiri – militant opposition was crushed by harsh repression, with many reported arrests of protesters and laying of criminal charges against them (APF 2003).

The Act also makes provision for differentiated tariffs, based on proving indigence (RSA 2000a, s 997(1) (c). Aside from the many sound arguments against the stigmatising and demeaning nature of having to both prove and experience indigence (Bond et al. 2002; Mehta 2002) a very important point is made by McDonald (2008): "… progressive black tariffs, indigent policies, and even limited 'free basic services' are not inconsistent

with cost recovery" (McDonald 2008:224). He adds: "Lifelines and block tariffs may serve to round out the roughest edges of the cost recovery agenda but they do not replace it" (ibid).

But that is exactly why he might be making too strong a point when says that "….the cost recovery policy in South Africa has explicit equity considerations and distinguishes itself from more orthodox cost recovery models based on simplistic downward sloping marginal curves: (ibid). Though we deal with this later on the very limited and insufficient 6kl water lifeline is just too little to be described as an "explicit equity consideration". It is difficult to regard as such an amount that is shown in empirical terms to be based on the barest minimalism and wholly insufficient, especially for larger families (Naidoo 2006). We return to this in the case study.

Finally, the MSA unfortunately sanctions the seizure of the property of those who are in arrears with payments for services (RSA 2000a, s104.1.f). This has reportedly led to the eviction of hundreds of thousands of poor families from their homes all over the country (McDonald 2002c: 170). It has thereby shown both just how serious the consequences of neo-liberalism are for low-income and poor households and how contradictory the stated pro-poor commitments are in the Act itself.

Approach of government to Free Basic Water (FBW)

Though we deal extensively with the discourse on FBW in the next chapter we will here briefly explore the approach of DWAF - in its Strategic Framework for Water Services (2003) and other documents - to FBW. In this regard it is important to point out that though the RDP, the 1996 Constitution and the Water Services Act (1997) to varying degrees and explicitly or implicitly made provision for a basic supply of water to poor households necessary – in the case of the Constitution universal access - it did not materialise until June 2001. In fact though the Constitution guaranteed access to sufficient water for all in 1996 poor households had to wait until 2001 to receive a very limited free amount of it, which our case study later and earlier research shows to be insufficient, especially for larger households, such as we have tended to have historically in black townships (Swilling et al. 1991).

The Strategic Framework for Water Services (SFWS) (2003)

Basically, the SFWS (2003) provides a summary of policy for the water services sector

and sets out a framework for implementation. FBW is a programme within the SFWS. "The primary purpose of the free basic water policy is to assist in promoting sustainable access to a basic water supply by subsidising the ongoing operating and maintenance costs of a basic water supply service" (DWAF 2003:28-29). Echoing the Constitution, the SFWS states: "The right of access to sufficient water is dependent on the state taking reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights (ibid:29). But the SFWS adds: "It is also subject to specific obligations, such as payment for services (over and above the basic amount) and the limitations and disconnections of the service in certain circumstances (ibid). This is a significant departure from the constitution which does not frame the right to water as subject to necessary payments. Earlier, in 2002, DWAF cast its FBW policy in these terms:

> The primary intention of the policy is to ensure that no one is completely denied access to a water supply simply because they are unable to pay for the service. Underlying this policy is the recognition that the supply of water at a 'basic' level assists in alleviating poverty, improves community health and frees women from time wasted on carrying water. These are substantial public benefits. A spin-off is that it may make local government credit control more effective. If households can access a basic amount of water free it will be hard for them to argue that they should not pay for higher levels of service (DWAF 2002: 2).

DWAF makes an important point about the community and public health benefits – particularly to poor women – of a basic amount of free water. However, it is important to see that they also acknowledge the point we elaborate upon in the next chapter: that one of the biggest reasons for the FBW policy was the fact that by providing it freely – besides the praise the government would earn thereby – it made lengthy and costly credit control measures unnecessary and redundant. But as importantly to note is their concluding refrain: that having a free amount of water should oblige recipients to pay for "higher levels of service". Both the sufficiency or otherwise of the FBW amount and whether those households needing more water were able to pay for it was from the outset not dealt with. This was particularly of concern because DWAF regarded a "basic supply of water" (ibid) as 25l PPPD, which was considered "sufficient to promote healthy living…" (ibid). They then did not realise that about 25l PPPD the *White Paper on Water and Sanitation* (1994) already stated:

> This is considered to be the minimum required for direct consumption, for the preparation of food and for personal hygiene. It is *not* considered to be adequate for a full, healthy and productive life which is why it is considered as a minimum" (added emphasis) (RSA 1994:15).

The barest minimum FBW was therefore a problem from the outset. This can also be

clearly inferred in the phrase "not *completely* denied" (added emphasis). To show how engrained this official minimalism was, about using communal street taps to supply the FBW 6kl DWAF stated: "It is seldom that consumers will use more than 6kl with such a device and therefore this service level is well suited….." (DWAF 2002: 19).

But DWAF made an important point about water used for sanitation: "Where poor households have waterborne sanitation the total amount of water accepted as a 'basic' supply may need to be adjusted upwards, to take into account water used for flushing" (ibid). This JW did not do when they provided 6kl to households in Phiri, alongside the installation of PPWM. The 6kl supplied in Phiri included water used for sanitation (Personal interview, Jennifer Makoatsane, 23 January 2007). Yet DWAF stated a year before OGM began in Phiri: "The issue of integration of a free basic water policy with a possible free sanitation policy is being given urgent attention by DWAF" (ibid: 9).

The funding of FBW was meant to come from national government's 'equitable share' grants to local governments and internal sources, such as tariffs (ibid). While the equitable share amount was determined by national government the extent of tariff cross subsidisation of FBW was a local government decision (ibid: 4). The decision to make this a local government responsibility was a result of the constitutional obligation on municipalities to provide basic services (ibid: 3). But DWAF stated that "The higher the ratio of wealthy to poor consumers, the easier it is to cross-subsidise" (ibid). What DWAF did not specifically state was that this ratio could also enable a bigger amount of FBW, such as could clearly have occurred in Johannesburg, the richest city in Africa, to the benefit of households in Soweto (Bond et al. 2002). Yet about the 25l PPPD or the 6kl per month DWAF did state that "it needs to be recognised that local authorities should still have some discretion over this amount. In some cases they may choose to provide a greater amount……" (ibid: 8). The SFWS is more specific about a greater amount:

> Where sustainable, water service authorities should give consideration to increasing the basic quantity of water provided free of charge (25 litres per person per day), aiming for the free provision of at least 50 litres per person per day to poor households. National government will give consideration to increasing the national subsidy over time to make this feasible….(DWAF 2003:29).

But DWAF once again repeats the intrinsic cost recovery paradigm of FBW when it stresses the necessity for "Collecting revenues for services rendered over and above an allocated free basic amount" (ibid). This is not necessarily a problem in itself, especially if the FBW amount can be significantly increased so that sufficient water is provided to poor households before cost recovery takes effect. This is especially important because

although FBW was supplied to all households "the target group for free basic water is clearly the poor" (ibid: 3). Though a significant policy departure from strict commercialisation of water services the serious limits of the FBW policy of DWAF – especially the very limited amount – is largely derived from the severe neo-liberal fiscal constraints within which after 1994 DWAF attempted to address the enormous and devastating socioeconomic legacy of the apartheid years, which required the allocation of much more resources. Low service levels and the financial criteria for the advance from low to higher levels is also the result of such constraints.

Part Two

Local Government Policy Changes after 1994: the iGoli 2002 Plan.

Following the financial crisis of 1997 in Johannesburg – partly the result of a drastic decline in intergovernmental transfers - the City developed the 'iGoli 2002 Plan' which was meant to rescue and rehabilitate it (CoJ 1999). This plan made provision for the commercialisation of all services and departments. It was a comprehensive and fundamentally different regime which was characterised by the corporatisation of services, meaning that private companies – but still wholly owned by the municipality – were formed to provide services on behalf of the city. And since corporatisation (the institutional form) and commercialisation (conducting basic services like businesses) operationally go hand in hand, the City (2001) described the change in this way:

> Corporatisation is a generic concept often used to 'ring-fencing' and commercialisation of government businesses. Broadly defined it encompasses what Johannesburg has done with its utilities and agencies. First, and most importantly, corporatised units are expected to act like businesses. By being more fastidious about raising revenue and cutting costs they reduce the burden on the Metro's rates accounts steadily over time (CoJ 2001:83).

Here we have in a nutshell a definition which established the political, ideological and financial framework for water services from 2001, when Johannesburg Water was formed, which in turn paved the way for the commodification of water. However, this is at the broader level. Having set in motion the legislative and ideological framework for commodification there still remained a serious problem for the City and JW: consumers will just still continue to pay for water and since they are not metered at all there is no way of enforcing cost recovery. By June 2007 the city's total consumer debt stood at R 7.864.718 billion (CoJ, 20 August 2007, personal communication).

They had to find a solution to this problem, which conventional metering would not resolve because non-payments may still continue. Other than incurring the wrath of

affected communities by physical disconnections and costly legal action to recover debt they needed another, more effective, solution. By this time prepaid electricity metering had been established in many black townships. It is under these circumstances that the City and JW turned its attention towards project OGM, which began in August 2003. In fact as part of rationalising the project JW mentioned that Sowetans had already had much experience using electricity prepaid meters (JW 2002).

The iGoli plan amalgamated four formerly independent metropolitan substructures, with the inclusion of Midrand and Modderfontein into a single 'unicity'. The CoJ believed that this was a very complex process which required international expertise to help the transition because the City did not have the necessary skills and experience (Personal interview, Anthony Still, January 2003). But it was not just the complex structural issues involved in the amalgamation that required such expertise. It was mainly the fact that water was going to be commercialised and run along business lines, which would entail complex institutional, legal, managerial and discursive processes for the required transformations. At the heart of this was the formation of JW as a private company and the distinct commercialisation of water and sanitation services in the iGoli Plan (CoJ 2001).

The iGoli Plan provided the institutional and ideological vehicle to move from non-payment to prepayment metering and thereby the matrix for substantive commodification of water. Because it inescapably enforces payment before consumption and avoids various debt-related problems this form of the commodification of water is shifting increasingly towards measuring water flows by metering. While commodification can occur with or without metering – such as when property value is the basis for calculating payment or with flat rates – it is more distinctly operational when quantitative measurement in one way or another occurs, because in this way one is charged for actual consumption and not for estimates, such as when flat rates or property value is the method of pricing. Hence metering is the clearest expression of commodified measuring of consumption.

> For the first time local government is considering the role that the private sector can play in delivering municipal services. This is evinced by the Greater Johannesburg Metropolitan Council who through the iGoli 2002 plan is spearheading such a restructuring process (GJMC 2000:2)

This plan heralded the restructuring and reorganisation of various services in the city, following the 1997 financial crisis, about which John Spiropoulos, adviser to then CEO, Nicky Padayachee, said: "Many people, at many points, could have stopped the crisis if they really wanted to" (CoJ 2001:33). Beal et al. (2002) corroborate this: "Without doubt

the Johannesburg crisis was 'talked up' in politically opportunistic ways in order to legitimise increasing neo-liberal tendencies within the council, and to pander to vocal and articulate middle class interests within the city" (2002:200).

However, it is amply evident that the CoJ decided tactically to opt for corporatisation as an institutional vehicle for the commercialisation of water services, because it feared strong opposition from the unions and broader civil society if it overtly privatised the service. However, the unions, in particular the SAMWU, considered corporatisation as a prelude to privatisation and were therefore no less against the plan. Neither did the fact that JW would be completely owned by the CoJ appease them. This was because, as we noted earlier, corporatisation operates on principles similar to outright privatisation: cost recovery, commercial efficiencies and profit is also what drives it. Hence Bond et al. (2001) state that though corporatisation is not privatised divestiture: "it is important to bear in mind corporatisation's basic institutional and philosophical linkages with privatisation" (2001:3).

But more than that it is essentially – despite its "public" institutional form – a *form* of privatisation. However, for the CoJ "contrary to popular belief, privatisation was only a small part of the overall plan" (2001:57). Corporatisation was not at all considered to amount to privatisation in any form or degree. For political convenience the CoJ could not or refused to see what was actually happening to water services beyond the formal public cover, because corporatisation disguises the molecular commoditisation processes beneath and behind the beneficent "pubic" appearance. McDonald and Ruiters (2005) regard corporatisation "as the logic of commodification par excellence: the compartmentalisation of all hitherto integrated functions into stand-alone, cost-recovery units…" (2005:23). It is to these underlying and often invisible processes that they refer to.

However, by virtue of corporatisation the former water department in the city hived off to form a private company - JW - and thereby split the service provider function from the political authority. The central idea behind this restructuring was to enable the newly-formed company to provide the service on a business-like commercial basis, unfettered by political considerations, except for the mandatory provision of free basic services. Here at the local level we had a repetition of the tensions and contradictions in national legislation and the Constitution - between many progressive, equalitarian and redistributionist sounding provisions and the negative simultaneous impacts of commoditising basic services, or in the case of the constitution, recognition of the legitimacy of neo-liberal

budgetary limitations. Besides, we have seen a drastic reduction in political and public accountability since JW was formed, to the extent where it has felt powerful and independent enough to refuse to provide requested information to the CoJ (Smith 2005).

The plan led to the creation of a much bigger bureaucracy than we had under apartheid when the city provided the service directly. Besides the formation of JW as a public-private hybrid, we had the formation of the CMU, the Shareholder Unit and a Capital Investment Committee, which represented the various roles the commercialisation of services gave rise to, splitting the City into an authority, a client and a shareholder (CMU 2003).

We must point out that there were other institutional options the CoJ could have gone for, such as that in the city of Porto Alegro, where the water utility is a separate legal entity but wholly-owned municipal company. However, it is not registered as a private company and does not pay dividends to the city, as JW does. Instead all profits are ploughed back into the utility directly (Hall and Viero 2002). There can be little doubt that the choice the CoJ made was influenced by the neo-liberal ideological, discursive and financial pressures the city was under, from, among others, the World Bank (Bond et al. 2002). But importantly, the white engineers and managers in the city's water department, appears to have also played a leading role in the decision to corporatise water supply. Wally Mayne, the lead project manager for water and sanitation in the city in 1999 and later of corporate affairs at JW, was quite frank about his interests: "I am a firm believer in capitalist principles and that the profit motive is a strong driver of efficiencies" (Personal interview, January 2003, Johannesburg). However, we can see that ours is a water commodification regime in which ideological, institutional, discursive, historical and political elements have combined to shape its content and contours, including the 6kl "free water".

But we need to point out here that the minimal 6kl "lifeline" formed part of a continuum of poor standards of service which began as early as a year after the ANC took power in 1994. According to the Urban and Rural Development Strategy (1995), released by the Ministry for the RDP:

> An average national distribution of 55:25:20 between full, intermediate and basic levels of service in municipal areas is considered a realistic target for the infrastructure investment strategy over the next tem years. 'Basic services' would mean communal standpipes (water), on-site sanitation, graded roads, gravel and open stormwater drains and streetlights (electricity). These services will be targeted at households with an income of less than R800 per month and charged between R35 and R50 per month. "Intermediate services" will mean water provision through yard taps on site, simple water-borne sanitation, narrow paved roads, with no curbs, open drains and 30 amps electricity with prepaid meters for households. These should be affordable to households which earn between R800 and R1700 per month and will cost them between

R100 and R130 per month. “Full service” mean house-connected water supplies, full water-borne sanitation, paved roads with curbs, piped drains and 60 amps electricity provision. It is anticipated that households in the R1700 to R3500 monthly income class could afford ‘low consumption’ costing them between R180 and R220 per month. Households with monthly incomes of above R3500 will be assumed to be able to pay for ‘full services at high consumption’ at charges between R270 and R350 per month (October, 1995).

Here, a year after winning the 1994 elections and ironically issued by the RDP Office, we have the most indisputable official expression of blunt moneterisation of basic services, purely dependent on income and class. Interestingly, the statement uses the term “income class”. This debunked the relevant provisions of the RDP, adopted by the ANC in 1994, and was bereft of the letter and spirit of the Freedom Charter. Revealingly, even such primitive “basic” standards – measured against the standards existing in white areas – was charged for, with the unrealistic assumption of relevant incomes, if any at all. However, this is the background against which the iGoli plan corporatised and commercialised services, providing the framework for future service delivery in black townships. No recognition of the essential and public good characteristics of water and sanitation and the positive externalities associated with such recognition was evident (Bond 2002a).

Here too we have the political and social policy framework for low service levels, which laid a basis for later commoditisation and specifically the provision for prepaid meters. Importantly too this must have laid a foundation for the 1997 WSA and the 2000 MSA which demanded cost recovery and payment for services, including the repossession of household goods of those in arrears. With one fell swoop both the legacy of apartheid and the basic socioeconomic aims of the struggle were forgotten and abandoned, shortly after the 1994 elections. And as we earlier indicated both the 1994 *White Paper on the Reconstruction and Development* - which inserted very specific neo-liberal fiscal constraints into the original RDP document – and the 1994 *White Paper on Water and Sanitation*, came just 6 months after the elections. The commoditisation of basic services shaped the urban municipal infrastructural terrain virtually from the start of our “miracle transition”, to refer to probably the most misleading catchphrase in our political lexicon, with which post-apartheid society has been described in the mainstream media. Beal et al. (2002) argue that:

The patterns of social differentiation and polarisation emerging in Johannesburg today have much in common with shifts in production processes globally, and have provided examples of some of the city-level impacts of macroeconomic change. Most notably, has been the spatial reconfiguration of the city, with a clear post-Fordist geography on class, not race; this is already evident in the map of Johannesburg (2002:198).

What is therefore clear is that both prior to and following the iGoli 2002 Plan we had various factors and forces converging to determine both the tiny 6kl lifeline and the installation of PPWM, two sides of the same neo-liberal coin, only marginally tempered by the little free water. Rather than honour the relevant provisions of the RDP and the redistributionist tenor of the Freedom Charter, then minister of water affairs, Kasrils (2003), told the National Assembly:

> The promise for the next ten years is to move up the ladder, from communal tap to the convenience and dignity of having water in people's own yards with each household having its own toilet and even, in time, hot and cold running water inside the house enjoyed by many more of our people. That's what I mean by climbing the water ladder. As we climb the ladder, so our people will experience better and better standards of supply and services (4 February, 2003).

When Kasrils made this speech it was 2003, nine years after the 1994 elections, and by which time every white household had been enjoying these standards for several decades. Instead, according to Kasrils these standards are to be achieved only in the distant future, and what he does not say is that even that is no guarantee because it is not only subject to neo-liberal fiscal constraints – in terms of infrastructure - but that once constructed people will have to pay for these services at the appropriate level. It could be argued that the ANC-led government was never really serious about providing sufficient water to those who needed it most. The fact that poor households waited for seven years for a miniscule 6kl, the pitfalls of this lifeline – as we have shown – and the installation of PPWM in these households conclusively show a lack of real commitment by the ANC-led government to treating water as a public and merit good, particularly in poor townships (Bond 2002a).

Johannesburg Water Launched.

On the 9th October 2000 the 'Transformation Legotla' approved the incorporation of the water and sanitation utility as a Propriety Limited company under the name of Johannesburg Water (Pty) Ltd, and for its registration under the Companies Act. JW was finally formed in January 2001. JW, however, is a company wholly owned by the CoJ. At its launch Anthony Still, first executive director of JW, significantly stated that:

> Water is an essential and valuable commodity and thus will be a 'political commodity', affected by social and value-driven issues within the community. We are faced with resolving the past inequalities in many of our poor and marginalised communities while ensuring a continuous supply of water to the growing number of people and businesses in Johannesburg (JW, 2002:1).

It is significant because it is a recognition that water is highly political and laden with

varying values. However, reflecting the hybrid that it is the literature of JW often interchangeably refers to itself as both a private company and public utility (JW, 2001:2). But, as we have seen, it is often the private side that determines the primary interests of the company. However, part of the problem – which results in greater pressures for commercialisation, harsh cost recovery methods and PPWM – is the requirement that JW must annually provide the CoJ with a dividend of at least R100 million (CoJ 2001:10). This naturally places JW under immense pressure to ensure cost recovery and payments, best served by PPWM, the reasons for which we have already shown. It strongly appears that this requirement and that, as a private company it has commercial responsibilities, led JW to urge the police to crush the resistance encountered during the first six months of the project. Since its formation as a private company the company has been enveloped in a business-like ethos, with a lot of time, energy and money being devoted to developing 'business plans'.

Corporatisation, although not full privatisation, appears to unleash numerous forces – both overt and covert – which push the service in an increasingly commercial direction. JW has been placed in a difficult situation by trying to strike a balance between two conflicting and competing mandates within the hybrid that it is. Ketso Gordan, former city manager put it like this: "Legally, it is a private company, but functionally it is a public utility with a public mandate" (Personal interview, January 2003, Johannesburg). But the imposition of PPWM is probably the clearest expression of the preponderant influence of the private company side of the hybrid. In the final analysis this institutional conundrum and the built-in pressures of commercialisation is the result of a political decision to corporatise water services.

Public corporatisation is the external legal-formal cover and commercialisation its functional and discursive essence. So when Gordhan says JW is functionally a public utility with a public mandate this is highly questionable because the unions have strongly opposed the formation of both JW and the iGoli Plan it issued from (SAMWU 1999). Where is the *public* mandate Gordhan speaks of? But it is not words that contradict such a characterisation. It is the actual results of the plan: the negative effects water commercialisation has had on poor households in Soweto (expressed in the tiny lifeline and PPWM (APF 2004; Hanson 2005). In other words, instead of the form concealing its content and essence, when unpacked and analysed, the secret of commodification is largely in the form itself: the "public" is commercialised.

Combine this with the fact that the CoJ ran roughshod over both union opposition to the iGoli plan and union/community opposition to Operation Gcin'amanzi (OGM) (SAMWU 1999) - which launched PPWM in Phiri - and the absence of democratic accountability is evident. Yet various pieces of legislation – both municipal and water – make meaningful consultation and in fact the direct involvement of citizens and their consent in any new plans or project imperative (RSA 1997; RSA 2000). Regarding the unhappiness of SAMWU with the enforced implementation of the iGoli plan Leon van Tonder stated: "The unions must understand that the management of this company cannot shut down and revert back to council. They must accept that we are here to run a business (Personal interview, 22 January 2003, Johannesburg).

Service Delivery Agreement/Sale of Business Agreement

JW has a service delivery contract with the CoJ, with the mandate to supply water and sanitation services to the entire Johannesburg municipality. This agreement is contained in a 5-year long 'Service Delivery Agreement' (SDA), which is renewable. This agreement must be seen alongside the Sale of Business Agreement (SOB) in which the CoJ sells its entire water and sanitation infrastructure to JW. JW acts as an intermediary for the CoJ in terms of Section 26 of the WSA. The SDA requires JW to comply with all relevant water and local government legislation in general and specifically regarding minimum standards and services, such as the FBW of 6kl. Importantly, the SDA permits JW to conduct any other businesses, so long as it does not interfere with its mandate (2001:2.11). This is a serious concern which inevitably occurs with private companies. There are many potential conflicts of interest, besides those that are embedded within the hybrid, and which we earlier referred to. This is also due to the fact that JW is considered an "independent contractor and not an agent of the Council" (ibid: 2.1).

The SDA gives JW the power to determine at its own discretion levels of services it thinks proper wherever it operates (ibid: 14). And finally, regarding the setting of tariffs, the SDA states: "it is the intention to render the company sufficiently strong *to achieve investment grade status* to facilitate the fulfilment of its functions *in the interests of the citizens of the council* as a whole…." (added emphasis) (ibid: 10.3). In this citation we have a crude commercial discourse which dovetails with the interests of citizens. Finally, "The company shall be entitled to enforce payment of all amounts owing to it for the provision of water services by such means as it may deem necessary" (bid:16.2). CoJ has given JW strong and wide-ranging powers to do as it thinks necessary, regarding

levels of services and tariffs (though this has to be sanctioned by the City).

The SOB purchase price was one R1 600 000 000 000 (One billion six hundred million), payable by JW to CoJ over a 30-year period, which is similar to the duration of the SDA. The SOB agreement was signed together with the SDA, on the 30 January 2001. The SDA and SOB agreements are lengthy and complex, leaving in their wake a myriad of transaction costs and new institutional configurations and associated fragmentations (Harvey 2003).

The City's Contract Management Unit (CMU) is required to monitor and regulate the contract with JW but they have been dogged from the start by a serious lack of resources (CMU, 2003). Besides, since the CMU is a CoJ entity it is unlikely to operate independently. In fact the initial senior officials of the CMU were themselves involved in the establishment of JW and other companies (CMU 2003). Besides, because the CMU has been set up by the City to monitor its own companies this is effectively a form of self-regulation which seriously compromises independent scrutiny. The CMU itself captures its dilemma:

> The CMU faces a number of challenges while it strives to……protect the interests of economically vulnerable segments of the population by providing affordable services. These challenges arise because the *purely financial objectives* tend to conflict with the socioeconomic and developmental imperatives (added emphasis) (CMU 2002:2).

Corporatisation and commercialisation has given rise to a great deal of fragmentation and resultant confusion about roles and responsibilities (Harvey 2003). For example, the City is the political authority, a shareholder and a client, at the same time (CMU, 2003). There are evident conflicts between these different roles, like that between fulfilling socioeconomic constitutional rights as the political authority and expecting optimum returns from JW as the sole shareholder (CMU 2003). The CMU is also contracted to the City to provide a monitoring function which makes the latter a client of both the CMU and JW. The CMU itself was later split into a Shareholder Unit and a monitoring unit, in order for the former to concentrate on returns on investments (CMU 2002) and the latter devoted to monitoring.

Management Contract.

JW and the CoJ signed a management contract with the Johannesburg Water Management (JOWAM) company, a multinational consortium, led by the giant French water company, Suez, which owned 20% of shares. The UK's Northumbrian Water

Group and the Water and Sanitation Services SA owned 51% and 29% respectively. Although Suez held only 20% of the shares they controlled the contract because Northumbrian is 100% owned by them. This performance-based contract was for a 65-month period, which ended in June 2006. The main purpose of this contract was for JOWAM (referred to as the 'operator') to take over the management of JW in all respects and to equip them with the necessary managerial and technical skills to eventually independently run the operation by the end of the contract (JW 2003). As Bond (2003) writes, "South African water has been subject to globalisation's techno-economic fix …..British and French water privatisers have been welcomed with open arms, notwithstanding convincing documentation of consumer exploitation, worker disempowerment and political corruption" (Bond 2003:126).

The formation of JW and the management contact are arguably two forms of partial privatisation which are institutionally inseparably linked, shown too by the fact that JW and JOWAM operated from the same offices. JOWAM was required to report to the board of JW, which controlled the contract (CoJ 2001). JOWAM had to prepare and produce a whole range of plans, reports and programmes which deal with different aspects of their mandate. Business plans, operation and maintenance plans, commercial management plans and customer services plans are among the tasks they had to carry out (ibid). One of the major responsibilities of JOWAM was to "review the level and quality of water and wastewater services provided to low-income customers (CoJ 2000:12). This indicates clearly that the installation of PPWM in Soweto is directly related to their mandate. In fact, Jean-Pierre Mas, operations executive, stated: "prepaid meters would allow customers to use only the amount of water they could afford, and help the utility avoid clashes over cut-offs" (cited in Bond 2004:162).

Conclusion

This chapter provides an account of the legal and institutional framework within which the commercialisation and commodification of domestic water supply proceeded after 1994. It is impossible to understand the significance and implications of the iGoli 2002 plan of the CoJ, the corporatisation of water, the management contract and later Soweto's Operation Gcin'amanzi without understanding these processes. Hence, these legal and institutional shifts demonstrably laid the ideological, discursive and political basis for all these projects.

It also very important shows that though the SA Constitution (1996) interestingly enshrines the right to water supply for domestic households the clauses within it which limit what the state can do and provide in this regard still falls within the overall neo-liberal shifts amply evident in subsequent water and municipal legislation between 1997 – 2000. In the final analysis the often progressively-worded and sounding provisions in both the Constitution and this legislation – which appear to enshrine and guarantee access – is constrained ultimately by the neo-liberal logic of its reliance on budgetary constraints, fiscal circumstances, the necessity to pay for water consumption and for this to be metered and measured.

On the one hand, the state assures access to "sufficient water", but on the other, it explicitly makes this provision dependent on finances and what the state or budget can afford or not. So, if communities protest about lack of water the state has convenient recourse to the provisions in the Constitution which make this reliant on available resources. Why these financial resources are inadequate for a crucially important daily need like water is not in the least dealt with in all relevant legislation, including the Constitution. The Constitution also allows for a "progressive realisation" of the right to sufficient water, with no attempt to quantify this right and indicate the degree of access in relation to specific timeframes for fuller realisation, whatever that might mean. In the lights of these various neo-liberal caveats in the constitution Flynn and Chirva (2005) conclude: "Ultimately, defining and enforcing these legal rights is a political struggle requiring the active participation of the poor and allies organisations (2005:74).

CHAPTER FIVE: THE POLICY SHIFT TO COST RECOVERY, A 'CULTURE OF NON-PAYMENT', FREE BASIC WATER AND 'WATER SCARCITY': A CRITICAL ANALYSIS.

Though a continuation of policy matters discussed in chapter 4 this chapter focuses on an analysis of those policy and discursive themes and considerations which lie at the heart of commercialisation and commodification at local level. While chapter 4 dealt mostly with policy in Johannesburg and at a broader and more abstract level this chapter analyses policy matters at local level more operationally and concretely.

A critical analysis of a 'culture of non-payment' and cost recovery.

> In those parts of the country where consumers enjoyed free supplies of water, the costs have been borne by the State usually through the now defunct homeland administrations. This was often because of the over-riding political environment and because of administrative and management inadequacies. In terms of the policy set out above this situation will have to change. Full payment of at least recurring costs will be introduced over a period of two years (RSA 1994:25).

In reality free water – where payments were not enforced and hardly any cut-offs occurred for non-payment - was not only available in the former homeland territories but in urban townships, such as Soweto, as well. The new government in 1994 gave early notice of a decisive shift to cost recovery. This discourse was accompanied – in fact to provide legitimacy often preceded by - pointing a finger at the 'culture of non-payment'.

> A culture of non-payment of service charges is a widespread phenomenon in South African cities and towns. The concept of prepayment has however been well established for electricity and communities have become accustomed to the idea (JW 2001:1).

So pervasive was the commodification discourse becoming that even the United Nations Panel of Water declared in 1998 that "water should be paid for as a commodity rather than be treated as an essential staple to be provided free of costs" (cited in Hallowes 2002:28). Ironically, under neo-liberal fiscal constraints the ANC appropriated the allegation of a "culture of non-payment" that the previous apartheid regime made during the payment boycotts under apartheid (Swilling et al. 1991). Hence such allegations occupy different phases of a discursive continuum which began during the apartheid era and was perpetuated by the ANC after 1994 (Bond et al. 2002).

The one thing all these issues have in common is the pursuit of money. It is money which underpins the discourses of non-payment, cost recovery and prepayment

metering. Both government – particularly municipalities - and water companies have been constantly preoccupied since 1994 with strategies and schemes to get black people to pay, a constant theme in both policy frameworks and legislation (McDonald 2002). The *White Paper on Water Policy* requires that to "promote the efficient use of water, the policy will be to charge users for the full financial costs of providing access to water, including infrastructure, development and catchment management activities" (RSA 1997:6), but on the other hand it also states that to "promote equitable access to water for basic needs, provision will be made for some or all of these charges to be waived" (RSA 1997: 6)

Contrasting imperatives are simultaneously evident in legislation. Hence Ruiters (2006) states: "The new South Africa after ten years has evolved to a new hybrid that combines elements of straightforward neo-liberalism supported by a skeletal welfare system (grants, pensions, feeding schemes and free basic services" (2006:7). However, the literature these matters traverses has made it very clear that the preponderant problem preventing payment has been the mutually reinforcing factors of poverty and unemployment, or what is referred to as "an inability to pay" rather than an "unwillingness to pay" (Bond 2002a). Bond also shows that in "virtually all the cases of non-payment, affordability has been the universal problem" (ibid: 234).

The problems of non-payment and prepayment is derived clearly from a combination of the legacy of the structural and social consequences of racial capitalism and post-apartheid neo-liberal economic and social policies – which are always ignored in official evaluations of the reasons for non-payment. Instead much time is spent on finding reasons why people can pay but refuse to. A constantly revealing official refrain has been that people who say they are too poor to pay can, however, afford to by cell phones, pay for calls and buy alcohol (Personal interview, Khetso Gordan 2004, Johannesburg). But importantly, these trends take place in a context of water commercialisation and the great fiscal pressures neo-liberal budgetary constraints have placed local governments under. "One of the biggest challenges that local authorities face is reducing the high level of financial losses incurred in the former apartheid townships" (DWAF 2002b). JW states:

> The estimated water loss figure for Soweto amount to R158 million per annum (excl. VAT). This figure also equates to a total estimated wastage of 68 076 000 of water per annum, which is equivalent to 5 673 000kl per month, and is also equivalent to a continuous flow of 7 750kl per hour. This figure is based on excess supply to each household of 31kl per month. This 31kl is derived from the difference between the actual supply of 56kl per household per month, and an acceptable supply of 25kl per equivalent household per month (JW 2002:2).

Cost recovery therefore became one of the most commonly used terms in the water services industry" (DWAF 2002b). Important to note here is that JW refers to an acceptable monthly consumption of 25kl, which is 5kl more than the 20kl they earlier found to be a good average monthly consumption and also 5kl more than the flat rate deemed consumption of 20kl. This emphasis on cost recovery must also be seen against the background McDonald (2002) asserts:

> Gear's effects on cost recovery have been profound. Firstly, it has resulted in an 85% drop (in real terms) between 1991 and 2000 (Financial and Fiscal Commission, 1997); Unicity Commission 2000). Moreover the amount of funding from central government is so low that it will take decades to address the backlogs. In fiscal 2000 the total value of transfers to local government was only R3 billion. Projections of capital costs required to address backlogs are in the order of R45 billion to R89 billion (depending on the level of service provided, with government-sponsored operating costs adding many billions more (RSA 1995, 2000c) (McDonald 2002:4).

So intense are these commoditising pressures that little consideration is given officially to the numerous positive externalities of a regular and sufficient supply of water to poor families, including huge costs savings, following a reduction in rates of diseases and ill-health (Bond 2002). But it is not only the adverse consequences that payment problems have for the health and well-being of poor families. It is also, importantly, about "Separating people from power over their own economic life, which is why though people won the vote long ago we still have mass poverty, starvation and unemployment" (Polanyi 1944: 201). This is the nub of the problem water commodification – alongside growing poverty and unemployment – poses for poor households. Hence, according to Thompson (1996) the processes of managerialism and commodification "results in the removal of water from direct democratic control" (1996:184). More than this, governments and water companies have vast resources at their disposal to deny and camouflage these realities and thereby dominate the discourse in various ways. The task of any counter-movement is therefore countering such hegemonic discourses, which is not easy because of the power these resources give water companies and government, compared to the meagre resources poor communities can muster in a world of growing poverty and shrinking funding.

However, a close study of the origins and genesis of the culture of non-payment and cost recovery show that it has been mobilised in inverse proportion to the pressures of commoditisation neo-liberalism unleashed upon local governments. And a great irony

is that while under apartheid it was an allegation the former apartheid regime often made against poor black communities, particularly in Soweto, where the non-payment boycott was probably strongest, today it is black ANC councillors and more senior leaders who have perpetuated the claim against the same communities. As the former mayoral committee member for municipal services stated in an interview, "We cannot deny that many people are refusing to pay but this is not apartheid where there were payment boycotts. We have a non-racial democracy now and people must pay" (Personal interview, Brian Hlongwa, September 2003, Johannesburg). It is also equally clear and well documented that the emphasis on cost recovery and payment for services after 1994 was a result of the neo-liberal policies and laws the ANC adopted between 1994 and 2000, in which self-financing municipalities and the necessity to pay for services were constantly stressed (Bond 2002a). McDonald (2002) makes a telling point:

> With the steady cutbacks in central government allocation to local authorities as a result of Gear, the market logic became more prevalent. For municipalities, reduced transfers from national government, coupled with expanded responsibilities, made cost recovery and cost-cutting measures an almost inevitable choice. In many cases, the most administrative intervention or via installation of prepaid technology (2002:5).

In fact McDonald and Pape (2002) points out that these cutbacks "resulted in significant decreases in intergovernmental transfers from national to local government, resulting in an 85 percent decrease (in real terms) between 1991 and 1997, and further decreases of up to 55 percent between 1997 and 2000 (Finance and Fiscal Commission 1997; Unicity Commission 2000" (2002:23). This led to enormous pressures upon municipalities to get households to pay for services.

Hence strong public urgings to pay for services, even embarking on a national *Masakhane* (Let's Build Together) campaign, was calculated to inculcate a new ethical ethos in public services, to instil the moral necessity to pay for services and thereby facilitate the processes of commodification and social acceptance of this policy and practice. This is how Layasuriya (2006) captures the point:

> What these new social forms and arrangements promoted….through its new social policy agenda points to a neo-liberal sociability which may be understood as a 'socialisation of neo-liberalism'. This understanding of sociability frames social issues or the 'social question' not in the language of social democracy, but in economic constitutionalism in a manner that makes it compatible with market efficiency. Hence in so far as this brings back the 'social' it seeks to reframe the social or economic problems within rather than in opposition to or in contestation to the market (2006:237).

The ‘socialisation of neo-liberalism’ Layasuriya refers to are attempts by the state to invoke a broad societal moral compulsion to pay and condemning failure to do so as irresponsible. But there is a striking contrast - a theme we have referred to – between the debilitating imperatives of cost recovery in poor communities and stated official commitments to the goals of social equity and justice by the ANC over the years. How does one both fight poverty and enforce cost recovery for water, especially when the latter deepens the former? Furthermore, while costs have to be recovered in order to sustain services and expand provisions the question is at which point of the tariff structure does one begin to peg cost recovery for poor communities. Various water commentators have at length motivated for a substantial increase in the 6kl lifeline before cost recovery takes effect (Bond 2000a; McDonald 2002) but to no avail. However, Dobbs (1973) warns against “the assumption that consumers are equipped with a given money income” (cited in Eberhard 2002:3).

This is particularly valid in Phiri, where in 2003 there was a 65% rate of unemployment (CoJ 2003), a fact cost recovery advocates fail persistently to take into account in designing tariffs and determining the current minimal lifeline of 6kl. No wonder then that the World Bank earlier argued that “A pricing strategy should be designed to ensure cost recovery, which creates a desirable form of financial independence for public utilities. With fewer budgetary transfers the government has less occasion to interfere, a key to managerial autonomy”(cited in Eberhard 1999b:11)

In many ways the age of neo-liberalism appears to take us back to the unbridled exploitative and oppressive socioeconomic conditions which characterised early capitalism, long before the advent of the welfare state and social democracy, when “The complete subordination of human needs to the reproduction of exchange value – in the interests of capital’s expanded self-realisation…” (Meszaros 1995:522) was of paramount importance. When cost recovery is imposed for water and sanitation services in poor townships – after a tiny lifeline supply and especially against the background of our history and water’s vitally important nature - it is hard to resist the conclusion that other than this little protection from market forces we are living under a substantively commodified water regime. As Fine (2002) put it: “It is Marx….who is recognised to have established that commodification turns qualitative social relations into quantitative ones of how much money there is to spend” (2002:69).

However, nowhere in the literature is the concept of cost recovery properly dealt

with, because profit is not a cost but that which remains after all costs incurred are settled. Often therefore there is the mistaken assumption that when we talk of cost recovery for water supply we are talking of profit, which is not the same thing. However, for neo-liberal advocates a discursive emphasis on cost recovery is to establish an accounting, social, cultural and psychological basis for profit, which cannot accrue unless all various costs have been met with income.

Xali (2002) notes that "In general cost recovery undermines the human rights that the South African working class has achieved" (2002:101) and furthermore, that "Cost recovery is not sustainable. Even on its own financial terms, cost recovery leads to excessive spending to recover costs. Given the high unemployment rate amongst the South African working class, cost recovery is unlikely to succeed" (ibid 117). But it is also clear that it has largely failed to recover costs, which is attested to by the fact that in Johannesburg debt owed to the municipality has increased steadily over the past decade and was at a staggeringly high and probably unrecoverable R7.864 billion in unpaid accounts by June 2007 (CoJ 2007, personal communication). It is why significant debt-write offs over a 3-year period have occurred but subject to a household's acceptance of PPWM (CoJ 2006). This meant that if a household signed onto the prepaid system and did not violate any of the terms of the system their debt would be entirely written off over a 3-year period. But elsewhere the CoJ stated that arrears would be immediately cancelled and not over a 3-year period (*The Star*, 22 Oct 2003). But the primary motivation driving these processes – while it appears to be beneficial and in fact partly is – is to incentivise a "culture of payment".

Even the write off of about R1.5 billion in terms of the Municipal Subsidy Scheme of the CoJ in 2006 was driven by such an overriding aim: "The Municipal Services Subsidy Scheme was a major incentive to poor communities in Johannesburg to relieve their burden of debts but at the same time create a culture of payment…" (*The Star,* 6 April 2006). The CoJ however fails to realise that it is precisely because of great poverty and unemployment that these households have such burdensome debt and that therefore if the debt write-off is an incentive it is unlikely to be effective in creating a "culture of payment" if the conditions of mass poverty and unemployment causing failures to pay accounts persists.

However, Marx's principle of "from each according to their abilities to each according to his needs" (cited by Low and Gleeson, in Burkett 1999:247) does appear a valid

social policy approach in the crucially important water sector. This would mean that where adequate income does not exist to pay for water it must be provided adequately and not minimally, as is the current position, because the prospect of worsening poverty and the real risks of ill-health arises when water cannot be afforded beyond such a lifeline (APF 2004). Therefore an emphasis on cost recovery at all costs – beyond this lifeline – appears inappropriate and ill-advised. But in the midst of growing unemployment and poverty and through the small lifeline and PPWM the CoJ has enforced reduction in consumption: "Research the city has conducted in other parts of Johannesburg shows that most people only reduce their consumption when they know it will run out if they don't or when they have to pay for it" (CoJ 2006: 40.12.6). There is a constant urging and enforcement of minimal consumption.

And while the poor are criticised for a culture of non-payment (CoJ 2003), the executive mayor of the City, Amos Masondo, conceded that government departments were among the worse culprits of non-payment (*Sunday Times*, interview with Chris Barron, 2 September 2007). He went further to state: "There excuses are non-existent. Every department receives its own budget and within that budget they are suppose to ensure that they pay their rates and taxes" (ibid). But these departments don't suffer automatic water cut-offs because they don't have PPWM, which poor households have been targeted with. Finally, reflecting on escalating civil debt in South Africa the CAWP claimed that "11% of all summons were for municipal water and electricity" (*Daily Business News*, 20 June 2003) (CAWP 2004:170).

Important to note is that the official tirade against a culture of non-payment has discursively dovetailed with that against a "culture of entitlement". In other words the implication is that the culture of entitlement breeds a culture of non-payment. The further implication is that lack of payment is not really derived from poverty or non-affordability. Even ANC MP Ben Turok pointed out: "The official line was that 'we must rid ourselves of the culture of entitlement' and called for tighter fiscal discipline and belt-tightening" (Turok 2003:272).

The origins, politics and economics of Free Basic Water

Before we delve into this question we need to state that the RDP did make specific provision for "a lifeline tariff" (RDP 1994: s 2.6.10, 2.7.8). Though former minister,

Kader Asmal, denied that this meant free water: “The RDP makes no reference to free water to the citizens of South Africa”(cited in Ruiters and Stein 2002: 266), it strongly appeared under neo-liberal fiscal pressures to be a watering down of the original RDP provision. The RDP furthermore states: “The RDP plans to supply 20 to 30 litres of clean water each day to every person within two years and 50 to 60 litres within five years from a point no more than 200 meters from their dwelling” (ANC 1994: 9).

Free Basic Water (FBW) is the expression used by the government to refer to the 6kl lifeline, introduced in 2001, and supplied monthly to each household in the country. The FBW policy was announced in 2001 (Government Gazette No. 22355 GN 509, 8 June. Reg.3, cited in Hansen 2005). Though the 6kl free lifeline or FBW is a small amount it is something for those who receive it. In so far as we are the only country in the world with such a policy it is a progressive stance which must be recognised, even by critics of its inadequacy. But this recognition must in turn be tempered by the fact that we inherited a vastly unequal distribution of water in South Africa in 1994: “The distribution of South Africa’s water across its own population is even more unequal, measured in class, race and gender terms, than the distribution of income. More than half of the country’s raw water is used for white-dominated agriculture, of which half is considered be wasted due to poor irrigation techniques and inappropriate crop choice. Another quarter is used in mining and industry. Around 12% of South Africa’s water is consumed by households, but of that amount more than half goes into (white people’s) gardens and swimming pools, and less than a tenth is consumed by all black South African households” (Hallowes, in Bond. et al 2002:35-36). This means that we need to question against such a background how much of a difference a meagre 6kl per household will make to their lives, especially at a time when poverty and unemployment has grown (Bond 2005).

Though the Constitution asserts the right to water it was only in July 2001 – five years after the adoption of the constitution – that the FBW of 6kl was introduced. Furthermore, it appears that even then it was less a real commitment to provide free water and more financial considerations which culminated in its provision.

When we trotted up the figures, we found that the costs exceeded the income from these homes because it was costing us more to run an account and bill homes than it was recovering from those who used less than 6kl a month” (Cited in Desai 2002:72).

This statement by Durban Metro's Neil Macleod clearly shows that the current free 6kl was not a genuinely redistributive and therefore decommodified step towards adequate water consumption, but, ironically, a costing decision. It therefore does not undermine – together with the tiny free amount – but reinforces the water commodification thesis. It is necessary to point out that it was in Durban where for the first time 6kl was given "freely" to poor households. The rest of the country followed Durban because the argument from there was persuasive for the government: free 6kl would be both a gift to all homes the country can be proud of and thereby obviate expensive and time-consuming cost recovery methods.

> According to the Thekwini Water Services (Durban Metro), the initiators of the Free Basic Water policy, 6 kilolitres is the breakeven point between the cost of collecting payment and the amount collected' (Bond, et al 2000:22). This is confirmed by Bailey (2003) from Durban Metro Water, who stated that in 1993, the Durban Metro began supplying informal settlements with water via a bailiff operated standpipe or prepaid ground tank system, which provided 200 litres of water per homestead and was filled daily. In 1996 the cost of collecting revenue from the prepaid tank system exceeded the cost of water being supplied, thereby resulting in a decision to provide the tank system water supply at zero tariff. The outcome was the provision of 6 kilolitres (200 litres multiplied by 30 days) free water per household per month (Bailey, 2003, cited in Smith 2005:8).

Nothing here suggests that the origin of this much-vaunted lifeline was motivated by anything more than administrative and financial cost considerations. Even DWAF in 2000 confirmed this but cast it in this light:

> The City of Durban has taken the logical and socially just and equitable step of making the first lifeline of water (6000 litres per household per month) free of charge. Thereafter, the more you use, the more you pay. This constitutes a significant savings in administrative and postage costs. It is win-win situation for all (DWAF 2000).

Two other key factors determined this lifeline: mounting unrest and adverse international publicity following the cholera outbreak in Kwa-Zulu Natal in 2000, which killed over 200 people, and at the end of the same year the local government elections (Bond 2002a; Harvey 2004). Furthermore, there were ongoing community protests against widespread water-cut-offs between 1996 and 2000 (Bond 2002). We earlier noted too that the government had failed to provide the water provisions it was committed to in the 1994 RDP, and that only in July 2001 did it provide 25l PPPD to households of eight members (less for bigger households) or 6kl monthly. But the City "acknowledges that the amount was never 'independently interrogated…' " (Mazibuko et al. 2007:14, Replying Affidavit).

It is arguable that had this combination of factors not occurred in 2000 we would not have had this FBW in 2001. It in fact appears that it was mainly this combination

and not the elections per se which led to FBW. The significance of the elections was that they occurred in the same year of the cholera outbreak, necessitating some bold action by the ANC. That the cholera deaths had an impact on government can furthermore be seen by former director-general of the DWAF, Mike Muller, actually conceding that "the government might have been a bit too market-oriented" in Kwa-Zulu Natal, where the outbreak occurred in poor rural areas (cited in Bond 2002: 233). Here black women who did not have money to recharge expired PPWM - attached to communal standpipes - resorted to using water from nearby contaminated rivers (Bond 2002:233). The decision to install PPWM even on communal taps is hard to believe because the disadvantages are even greater than those installed in homes and the adverse social consequences even greater in poorer rural areas.

This is why Rudin argues that "Because the FBW is more or less equal to administrative costs of charging and collecting for 6kl of water it does not seriously compromise commodification" (Personal interview, March 2007). However, quite clearly, the primary motivation for FBW was not because of water's vast health and social benefits and therefore social justice. Yet, the cholera disaster – the probable reason for FBW - made the necessity of an adequate supply of water absolutely essential for health reasons. However, FBW appears as part of a strategy to do two things. Firstly, to ensure the metering of consumption, especially important for those households which did not have meters but were required to pay a flat rate, which most did not pay. Secondly, to systematically enforce cost recovery and payments after using the 6kl, Dwaf actually stated: "The adoption of the free basic water policy has not negated the principal of user pays. On the contrary, the free basic water policy strengthens the principal in that it clearly requires consumption in excess of the free water supply to be paid for… (2003:29)" According to JW:

> The introduction of the free water concept has made the prepayment concept easier to implement because the social obligation of providing life line assistance to the poor can be easily controlled through this system and the onus is then on the user to control their further consumption (JW 2001:1).

These statements are an unambiguous revelation of the underlying strategy of FBW, primarily to use it as a sop to tie-in users to cost recovery, inescapably enforce payments *before* consumption – in the case of PPWM – and thereby attempt to socialise and naturalise the transformation of social relations inherent in this new commercialised system of supply. The point is that so long as the FBW can be kept at a low level the system can and will yield profit, but only if water is bought after exhausting the FBW

amount. This is perhaps why constant requests for an increase in the lifeline amount – including as a result of research – have been rejected since 2001. To increase the FBW – although JW and the CoJ have stated that they plan to increase this to 10kl this year in Soweto but only for those who are registered as indigents - is to decrease the need to use the PPWM to obtain more water, thereby possibly make the meters redundant and consequently fail to recover the high capital costs of installation. The consumption and credit controlling strategy of JW and the CoJ is pivoted upon a minimalist indigency which must still be proved in order to qualify. Hart (2007) aptly captures the danger of this approach:

> The new poor laws hinge crucially on sorting out the 'cant pays' from the 'won't pays' so as to limit the consumption of the former and force the latter to pay up – or have their water and electricity cut to the minimum. Accordingly, there is a powerful inbuilt logic to maintain the level of Free Basic Services as low as possible precisely to use them as a threat to enforce payment for services by the 'won't pays' (Hart 2007:5).

According to JW it costs R 900 to install a PPWM and just R300 for a conventional meter (JW 2003). Besides, it appears that the strategy behind increasing the FBW to 10kl could be to take the wind out of the sails of the case which challenges the FBW amount of 6kl and the PPWM, by showing that the City and JW does indeed care.

However, it would be a problem to simply dismiss the 6kl lifeline as meaningless because regardless of its origins and though it was clearly a strategy aimed at consolidating a culture of cost recovery, payments and commodification, it does mean something to those receiving it. The big problem however is the meagre amount of FBW, especially for larger black households, and the installation of PPWM with which to dispense this. International practice and research shows significant variation in what is considered an adequate amount of water, ranging from 25l PPPD to 110l PPPD, but that in the richer countries it varies between 145l-157l PPPD (UK) to 237l PPPD (Switzerland), depending on the availability of water sources, climate, cultural factors, household size, standards of living and aspirations (Flynn and Chirwa 2005).

Flynn and Chirwa (2005) also point out the inadequacy of the current 25l PPPD and that in fact this amount is consumed by a mere 2 flushes of the toilet (ibid). However, despite this Loftus (2005) argues:

> Perhaps nowhere else in the world are domestic water supplies so heavily regulated and controlled by technological infrastructure as they are in South Africa. Nearly all this technology is directed at limiting the water supplies of poor residents to a level considered sufficient to live on. In an irony, William Morris would have recognised, free basic water has actually been a limiting of domestic water supplies" (2005:1).

We need to place the severe limitations of FBW in relative perspective. The grossly unequal distribution of water we referred to in chapter 3 and the deep and extensive social inequalities in South Africa can only be worsened by such limits (Bond 2002a).

The key question of whether there should be metering of water consumption in poor households has to be dealt with more thoroughly, especially in relation to PPWM. This is because it is today impossible to address what an adequate amount of water is without addressing the critical question of metering, which in the form of PPWM have already been rolled out in various parts of the country which were not metered in any way previously. We return to the geographical spread of PPWM in the next chapter. The problem is that today JW is partly using the dispensing of FBW as a justification for PPWM because they argue that without it there will no FBW (JW 2003). The compulsory metering of water appears to proceed in inverse proportion to and reflects its growing commodification.

As to an adequate amount of water, research conducted by JW itself indicated that "An acceptable monthly household consumption for a working class region similar to Soweto with similar socioeconomic conditions is given as 20kl. Indeed this corresponds with the 'deemed consumption' figure currently levied for Soweto of 20kl" (2002:7). But JW subsequently stated many times that the current lifeline of 6kl was enough for households in Phiri, Soweto (CoJ 2007:40), and earlier went as far as to cynically advertise how many times households could take a bath, boil a kettle, wash dishes and so on with the 6kl per month (*Mail & Guardian*, JW public advertisement, September, 2003).

JW hereby attempts to make a virtue of the harsh consumptive restrictions both the FBW and the PPWM imposes, so that if a household can confine consumption to 6kl it is responsible, prudent and "waterwise" (JW 2001). But former minister of Water Affairs and Forestry, Kasrils, also acknowledged that "6kl is less than many people aspire to"(cited in Ruiters 2006:11) while the state acknowledges that 20-30kl is the average for black townships (Department of Finance 2003) (ibid). Hence Peters and Oldfield (2005) state: "We argue that FBW in the context of overall policies of cost recovery creates a paradox in which low income, poor households experience debilitating and insufficient access to water and increasing household debt…. (2005:314)" We repeatedly find the key problem about FBW being the amount it supplies. But according to the JW and the CoJ:

> International research and findings on access to water concludes that in the short to medium term promising to provide 6kl to all for free is itself more than most countries around the world are able to promise to their citizens and raising the limit at this point in South Africa's history across the country is not feasible. (2007:40).

Besides the fact that while JW and the CoJ can refer to international research but say nothing about research on PPWM – especially the UK experience - this response fails to consider the fact that this is precisely because the world is in the grip of neo-liberalism in the water sector, as in all other sectors, and that therefore it is a moot point. Mazibuko et al. (2007) also refer to "the unsubstantiated claim….that the City has been guided by research into the minimum amount of free basic water" (2007:15). Though non-payment under apartheid may have been unsustainable it remains an unalterable fact that then people in Soweto had access to much more water without suffering cut-offs. JW claimed that average monthly household consumption in Soweto before OGM began was 56kl (JW 2003:6). Since there were no domestic meters this was calculated on average by dividing the total consumption figure reflected in district meters by the number of households within a district.

There is a pervasive trend to praise the FBW provision in South Africa as a great achievement without addressing any of the serious concerns we have raised thus far with regard to both its amount and the method of supply through PPWM. But it is simultaneously this very limited amount and the fact that tariff charges beyond 40kl remains constant for really big consumers - regardless of how much consumption occurs. This denies JW and the CoJ with much-needed revenue to provide a much better lifeline for all households in Phiri, not on a stigmatised indigency basis. Therefore there are three inseparably intertwined issues here: the FBW amount, the PPWM and that tariffs above the 6kl block have to be paid for. It is not very helpful when the CoJ claim that these tariffs are subsidised (Eales, CoJ 2006: 101), when it is still unaffordable for many households, as the case study later shows. It is crudely the availability of money or not which determines how this triad plays itself out and therefore whether there is water or not for poor households. "Markets are not value-free. Passengers, viewers and patients all become homogenised as 'customers' and 'clients' who consume 'products'. But the importance of the customers is that they spend; the capacity to be a citizen depends upon spending power, without which citizenship disappears" (Hutton 1996:217).

Besides, into this equation falls household size, with bigger households being proportionately disadvantaged by 6kl because it has to be shared by more people.

Placed together these factors, simultaneously at play, question the integrity of FBW and in fact compromises its effectiveness in alleviating poverty and taking steps to prevent incidences of illnesses and disease which could follow water shortages (Mehta 2000). It therefore also seriously compromises constitutional assurances of access to "sufficient food and water" (RSA 1996: s 27 (1) (b). Ruiters (2006) argues that FBW is used to exercise greater control over poor users, primarily through disciplined (internalised) control of consumption, so that more than 6kl won't be necessary: "An active lowering of standards and consumption levels by municipalities re-inscribe racial aspects of inferiority associated with 'third world services' and black townships. This has important consequences for reinforcing powerlessness and knowing one's place" (2006:12).

But the inadequacy of the FBW amount is perhaps best illustrated by the government itself, already way back in 1994: "25 litres per person per day is *not* considered to be adequate for a full, healthy and productive life, which is why it is considered as a minimum" (added emphasis) (RSA 1994: 150). The contrast between this and both the CoJ and JW arguing that 6kl is enough to meet basic needs is therefore evident. But the problem is that national government and in particular DWAF did nothing to depart from this barest minimum and in that regard the main political responsibility for the 6kl monthly or 25l PPPD limit lies with them. JW uses this to justify the limit. DWAF determined that 25l PPPD was a "basic water supply" (DWAF 2002: 1.4.2).

> We have not come across a compelling argument to deviate from the guidance and direction given by DWAF that essentially 25 litres per person per day is, given the present circumstances of the city, still an adequate minimum amount to provide for *free* to each person (Eales, CoJ 2006:60).

This is so because within neo-liberal discursive constructions financial considerations and a barest minimalism take precedence over questions of that adequately required for health and well-being. Contradictions that are then rationalised by a play of words and their meanings, like this statement by former minister of Water Affairs and Forestry, Kader Asmal: "The RDP makes no reference to free water to the citizens of South Africa. The provision of such free water has financial implications for local government, that I as a national minister must be extremely careful enforcing on local government" (cited in Bond 2002: 266).

But there is no doubt that with hindsight the RDP - being a programme developed by broader civil society - lacked the necessary details that would compel the ANC to

introduce the relevant provisions within specified timeframes and with the necessary authority upon coming to power. However, these are formalities which cannot detract from the fact that Mandela publicly committed the ANC-led government in 1994 to implementation of the RDP: "That is going to be the cornerstone, the foundation, upon which the Government of National Unity is going to be based. I appeal to all leaders who are going to serve in this government to honour this programme" (cited in Bond 2002:197). Two years later the RDP office was closed.

That it was only in 2001 that the 6kl lifeline was introduced nationally makes very clear the lack of political commitment by the government to honour the RDP electoral promises of water supply in 1994 and the water provisions in the 1996 Constitution. Instead, we earlier showed how Asmal tried to evade such commitments. Furthermore, there is no evidence to show any reason for this failure to provide any compulsory free water between 1994 and 2001 other than macroeconomic constraints, largely attributed to the budgetary impacts of the Gear neo-liberal strategy and subsequent serious declines in intergovernmental transfers to local governments, reported to be a "85 percent decrease (in real terms) between 1991 and 1997, and further decreases of up to 55 percent between 1997 and 2000" (McDonald and Pape (2002:23).

Internationally there are various statements, instruments and organisations which explicitly recognise water as a fundamental human right, such as, among others, the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Covenant on the Rights of the Child (CRC), the International Convention on the Elimination of Discrimination against Women (CEDAW) and the World Health Organisation. However, the central problem is that all these declarations lack legally-binding and mandatory power, which is why they are not taken seriously, in the light of the fact that we still have over 1 billion people without access to water and over 2 billion without sanitation many years after some of these declarations were made (Bond 2002a).

How "free" is Free Basic Water (FBW)?

> Threats to livelihood water can generate as much political stress as shortages of drinking water. The salience of the politics of threats to livelihood water dwarfs that of drinking water problems because the volumes of water needed for livelihood are so much larger. Livelihood water for a community or nation can require a thousand times the volume needed for drinking water (Turton and Henwood 2002:31).

FBW gives rise to numerous questions simultaneously, but a key question we need to ask is how "free" is it really? If tariffs are designed so that the second and third blocks are quite expensive – despite claims by JW that it "significantly subsidises" consumption for users with PPWM up to 51kl (CoJ 2007:127) - and thereby inhibits further consumption, how free has the first block been? Firstly, should there not be an internal relationship between such "free" water and its amount, especially one that is necessary for a "healthy, full and productive life" (RSA 1994:15)? Why brag about providing 6kl free water for poor households when it is vastly inadequate, as the case study later shows? Besides JW has itself found that 20kl was a good average consumption figure for Soweto (JW 2003). To acknowledge that it is "something", as we do, cannot diminish its very limited impact.

Secondly, nobody knows if indeed such consumption is substantially subsidised and to what extent because other than what is stated we have no information to either verify or challenge it. And if the FBW is so little that it does not have a major impact in reducing poverty how free is it and how useful is it? We did earlier say that it is "something" but certainly not to be satisfied with. And should the integrity of the principle of "free" offerings not be questioned if it suffers from these serious limitations, including threatening health and well-being? Finally, the questions raised are reinforced tenfold by the fact that the initial decision to provide FBW was clearly not mainly for health and well-being, but as we earlier cited, because of the heavy administrative costs of pursuing and recovering arrears.

The critical question for social policy is: must poor communities just be satisfied with barest and woefully inadequate minimums – especially when it is projected as successful "delivery" and honouring constitutional provisions? These inadequate minimums prevent achieving decent standards of living which promote health and well-being and they are little more than virtual hand-outs by state or semi-state utilities. This question strikes at the heart of a constitution-based rights discourse, the negative effects of the simultaneous neo-liberal commodification of basic services and that which could justly be obtained from a genuinely people-centred system of production, reproduction and redistribution, whether one calls it socialism, collectivism or whatever.

To the contrary, as the numerous problems enumerated earlier show, it instils and reinforces a culture of commodificaton, despite all the free basic services rhetoric. McDonald argues that "Free water, as it is being implemented in South Africa, is simply a part of the commodification process because you pay for water after that. It is one piece of a larger, commodified block tariff structure" (Personal interview, April, 2007). This is the

block tariff structure which – besides the small lifeline – is based on payment for water above that. These tariffs take effect once the first free 6kl is consumed. We return for an in-depth discussion of tariffs later in the case study. However, perhaps more importantly:

> The 'free basic water' policy has removed pressures on municipalities to recover the costs of basic services directly from the consumers of those services. At the same time, however, it has intensified pressures to secure payments from those consuming more than basic services (Alence 2002: 715).

Finally, there seems to be a very close relationship between "free water", the difficulty of predicting how much will be consumed because of various fluctuating factors from one month, season or household to the next and what is an adequate amount of water and therefore a real and meaningful lifeline. Can a "lifeline" that is not adequate for basic needs be at all regarded a "*life*line"? This is the kind of problem we end up with when water becomes commercialised and commodified because "Capitalism is….a one-sided mode of production which inhibits the development of a consciousness of those needs which cannot be quantified or marketed" (Burkett 1999:63). There is probably no essential resource which fits this description more than water, especially in poor communities.

FBW as pedagogy of control

However, a particular pedagogical approach is adopted in regard to FBW: control and discipline consumption within the 6kl range so that the taps don't run dry, unless of course you can feed the meter. But more than that it is a self-imposed discipline so that the municipality and the water company don't have to worry about "irresponsible consumption", which leaves a household midway through the month without water, which could cause health problems, especially if knowledge of it leaks into the public domain. That is why JW prefers households to spread the 6kl over a 30-day period by providing a limit of 200l per day per household, so that it never runs out of water completely on any one day. In this way - although it will require harsh discipline and possible self-deprivation - it will at least ensure a minimum amount of water daily rather than no water at all on any day.

Ruiters (2002) states that JW "has conducted an education campaign to show the poor that six kl is enough to survive on in an urban setting. The company has led a crusade in schools and communities to teach families that they can survive on 6000 litres per month" (2006:13). In fact this campaign was much stronger and concerted in Phiri than in Orange Farm and the CoJ refers to it in their replying affidavit in the case against

the 6kl limit and PPWM (CoJ 2006). JW itself - refuting the argument that the lifeline was inadequate – stated "He is wrong in his assumption that 6000 litres of free water is not enough to cover an average household. Research shows it meets the needs of *sensible* customers" (added emphasis) (Chand 2003). Once more we see the tactical usage of consumptive rationalities amidst 'water scarcity'. Elliott and McCrone (1982) thus assert: "It is the trick of all successful rulership to persuade others that their compliance springs freely from their own wishes, that is, expresses their own desires" (1982:27).

This is the self-disciplinary pedagogy JW has been assiduously cultivating since the start of the project in Phiri. "Disciplinary neo-liberalism involves the way that social discipline is increasingly exercised through market-based structures…" (Bakker and Gill (2003:31). Paternalistically, the COJ itself has put it this way: "The importance of *rehabilitating* a significant section of the community will in the longer term prove enormously beneficial to the City. The rehabilitation of the customer….will (mean) communities beginning to endorse their *civic duties*" (added emphasis) (cited in Ruiters 2007:7). Here we have the clearest expression of the attempt by the political authority to socialise, cultivate and naturalise commodified relations. It is interesting how payment is construed as "civic duties" while nothing is said of the duties the democratically elected local state has to perform to honour constitutional provisions in the interests of its citizenry. Various questions arise in this context, such as whose water is this, whose state is it and whose utility is JW really?

This is the consequence of the commercialisation of a service which is removed from the direct responsibility of the local state by its corporatisation, namely the formation of an arms-length private company, JW. "We are witnessing the dramatic emergence of new logics of utility provision in which essential infrastructure resources are being commodified and gradually differentiated, in both space and time, in terms of cost, availability and quantity" (Marvin and Guy 1997:21).

Paying for water

Water commodification did not start after 1994. If commodification is understood correctly then it existed before 1994. The difference however is that while a flat rate payment for deemed water consumption was required under apartheid – because cost recovery was not enforced by credit control action and monies recovered - water was

provided virtually freely, especially when later arrears were scrapped in return for accepting PPWM (CoJ 2003). McDonald (2002) asserts that this resulted in "de facto subsidisation of township services" (2002:20). So there is a discursive commodification tapestry which stretches from apartheid to post-apartheid neo-liberalism, with the big difference that cost recovery and aggressive commodification did not take place under the former but the latter, except for the tiny lifelines. This is a central contradiction and searing irony in the difference between these two regimes.

But is paying for water as natural as its source? Capitalism never seriously concerns itself with the socioeconomic effects the system has had over a long period on the working class and its daily life, needs and aspirations. In fact neo-liberal economics and politics assume that they have jobs and incomes and therefore readily available money to spend as required (Eberhard 1999), even when statistics show alarming rates of unemployment and poverty (Roberts 2005). Alternatively government thinking is that whatever people's socioeconomic circumstances they must find ways of self-reliance (RSA 1994a). Municipal councillors seem to be driven by such a mindset.

Rather than a democratically elected state defending the interests of the electorate they must fend for themselves when services are commercialised and commoditised because "The ability of the state to protect and promote the public interest has been undermined and the authority of their citizens usurped. Power has become more remote and less accountable, acquired by an alliance of business interests and supra-national and quasi-state machines……." (Brendan 1993:13). This happens even when it is widely acknowledged that access to water is key to winning the battle against poverty (Kasrils 2003), because of the contradictions contained within official texts between an entitling rights-based discourse and payment imperatives or between its more progressive provisions and conflicting realities. But as early as 1994 the state ominously began to shift more unambiguously and cynically towards commodification:

> An insistence that disadvantaged people should pay for improved water services may seem harsh but the evidence indicates that the worst possible approach is to regard poor people as having no resources. This leads to people being treated as the objects rather than the subjects of development and generates proposals for unaffordable subsidies……(RSA 1994a:18).

The payment question ironically arose when poor black people sought protection from the ANC after 1994 but within months of coming to power the ANC began to turn the question into a matter of moral responsibility and failure, urging a departure from the past "culture of non-payment" and using this refrain in ways very similar to how it was used by apartheid, during the rent and service charge boycotts of the

1980's. Now non-payment was not seen as an *inability* to pay, but a *refusal* to pay, the back of which the Masakhane campaign hoped to break but dismally failed to (Bond et al, 2002). The ANC has furthermore not realised that in fact payments would become harder after 1994 than it was before because of the rapid rise in unemployment and poverty, due, ironically, to its own policies. Service charges debt to the CoJ grew from R6, 666, 438 in 2006 (CoJ 2006:6) to R7.8 billion in July 2007 (CoJ, 2007, personal communication). Furthermore, while Soweto and other black townships are said to have a "culture of non-payment" – which was the main reason for the installation of PPWM – "Recovering debt from the top 100 debtors, especially from businesses, government departments and residents able to pay but decide not to, could net R1.6 billion into municipalities revenue in one year" (The *Star*, 19 June, 2007). But businesses and government departments don't have PPWM, with the result that they don't have to face automatic disconnections without any right of appeal.

The ANC also failed to recognise the contradiction between the demand for payment in black townships and the fact that under apartheid white municipalities and residents were heavily subsidised by the state, though there are no figures to attest to what extent this occurred (McDonald 2002). Furthermore, the ANC has imposed harsh cost recovery methods not because it does not know the worsening socioeconomic conditions after 1994 but despite such knowledge it is compelled by the neo-liberal macroeconomic constraints it operates within to do so. Therefore McDonald (2002) asserts:

> In fact it is under the post 1994 African National Congress – both nationally and at municipal level – that the push for cost recovery on basic municipal services has been most clearly and vociferously articulated (2002: 20).

It is these unpalatable contradictions that has given rise to social movements in black townships, demanding the right to decommodified basic services and a recognition of the fact that in the latter part of the anti-apartheid struggle the right to basic services became a burning issue in places like Soweto (Swilling 1993). Therefore the whole notion of payments for water can be traced to the impact the transformation the ANC itself had undergone from the redistributive ethos of the Freedom Charter and the RDP to its post 1994 embrace – even if reluctant – of neo-liberalist economic and social policies. This transformation is the ideological, discursive, political and material matrix within which both the commodification and decommodificarion theses rests. Mashota (2004) put it thus: "We owe the ANC nothing, but they owe us, the working class of South Africa. We deserve better and the day will come when

millions will unite and form an alternative party to the ANC". The ANC has attempted to make it seem that paying for water is as natural as the source it comes from, but its own policies have deprived black people of the jobs and money to make payments. Monbiot (2004) argues that South Africa "could afford to provide everyone with sufficient water, as long as it was prepared to sting the rich and subsidise the poor. But that is non-market policy and therefore out of bounds" (*Mail & Guardian*, 5-11 November, 2004).

Therefore the countless statements from both the ANC and the ANC-led government, which emphatically commits them to "building a better life" and the realisation of "social justice" and "equity" is roundly contradicted by the simultaneous and aggressive pursuit of commercialisation, cost recovery and commoditisation. Herein lie the many-sided social problems of compulsory payment which neo-liberalism has spawned in recent years. To establish a disciplined socio-cultural and compliant psychological terrain - always necessary for effective commodification - is clearly going to be extremely difficult in places like Soweto, and will probably never succeed. This is because, as Bond (2004) claims: "Given the uneven development of Johannesburg, inequality and poverty are explicitly reflected in infrastructure and related services" (2004:1). The big difference however with PPWM is that it bypasses all the problems of non-payment which preceded it by making payment *before* consumption compulsory and thereby transfers to the household the consequences of not being unable to do so and in the process absolves the local state from any responsibility.

So embedded has payment for water become and its ethos of commercialisation that even schools have not been spared: "As for schools, they are included in the customer category 'industrial, commercial and institutions' as are disconnected when in arrears" (CoJ 2007:39.17.2). Finally, the CoJ continues to imply that the reasons for non-payment are not because of poverty or affordability but a stubborn unwillingness which requires moral rectitude and behavioural change in order "to rehabilitate the customer payment performance….." (ibid: 30.45.2).

Is water 'scarcity' real or a rationale for commodification or both?

> Look, we cannot get away from the fact that we live in a water-scarce country. If we don't ensure cost recovery we will have a serious problem on our hands (Interview, Brian Hlongwa, January 2003, Johannesburg).

> Water is scarce for one main socially constructed reason: the lack of political will to fundamentally transform inherited patterns of use (Bond 2002: 262).

It strongly appears that the notion of water scarcity has been used to emphasise cost recovery policies, such as PPWM. For that reason it has been a key underlying theme to justify the commercialisation and commodification of water. For the past few years water companies, DWAF, local governments and some water researchers and consultants, the World Bank and other institutions have been warning about the scarcity of water in this country and the need therefore for cost recovery, paying for water, regarding water as a precious commodity and an "economic good" (as against a public good), (*The Economist*, 28 March, 1992), curbing consumption, saving water, avoiding wastage and so on. However, it appears that both here and abroad the trend has been to emphasise the scarcity of water in inverse proportion to its privatisation, commercialisation and commodification. There exists the need to take issue with and rebut these arguments and the underlying assumptions.

There is no doubt that climate and the presence or otherwise of water sources, such as rivers, do determine the degree to which water is available and how these factors can and do affect the production, consumption and distribution of water. It is also true that Johannesburg is one of the few big cities in the world not situated close to a major river or other water source (Bond 2002). Hence prior to the Lesotho Highlands Water Project (LHWP) – which today supplies the bulk of the water to the city - most of the water came from the Vaal River System. However, there are other important considerations which also play a role in determining where water flows, in what amounts and at what costs. Water distribution patterns – as with that for food, electricity, housing and other services and good – tend to follow class and socioeconomic circumstances, such as income, unemployment and poverty, which are influenced and shaped by existing social relations. Though we are bombarded with scary scarcity stories we have to consider the often very unequal water distribution and consumption patterns – largely along racial-class lines – within which it occurs. Abrams (2001) therefore argues:

> Water scarcity is a relative concept – it is partly a 'social construct' in that it is determined both by the availability of water and by consumption patterns. Because of the large number of factors which influence both availability and consumption, the determining of water scarcity will vary widely from country to country and from region to region within a country (Abrams 2001:5).

But Abrams (2001) goes importantly further to contextualise the discourse of scarcity within a society of poverty and unequal water distribution: "Poverty is a major factor in water scarcity and susceptibility to drought" (ibid:6). This he states is because "in a given situation shortage will have more extreme consequences for the poor than the rich – for

one set of people it will spell disaster and for the other it will mean only inconvenience. It is for this reason that the macroeconomic policy and its effectiveness in addressing poverty, will have an important role in determining what constitutes conditions of water stress" (ibid). Abrams could also have added that this approach will also determine whether in fact 'scarcity' in the first place occurs, to what extent and who will be affected by it. But what he does – which is critically important – is to intrinsically link the notion of scarcity with sociological factors, such as poverty, water distribution and availability, which are conditioned by class.

While the discourse of scarcity is emphasised and black townships told to tighten their belts and reduce consumption, wasteful consumption by white-dominated agriculture and industry and hedonistic domestic consumption by mostly white upper and middle classes is allowed to continue. "52% of current water use in South Africa goes to agriculture, primarily to established white farmers. Small scale irrigation makes up 4% of the total irrigation in South Africa" (Shreiner and Naidoo 1999: 9). But nowhere have we seen concerted and sustained measures by DWAF to address water usage in white-dominated agriculture. In this regard Abrams (2001) argues: "To have the political will to develop policy and supportive legislation which will introduce the discipline necessary to manage water scarcity in South Africa and the sub-Continent, requires considerable political courage and foresight" (Abrams 2001:7).

On the domestic front poor black households who don't have swimming pools and big gardens and therefore naturally use relatively little water are told to save water and urged to have PPWM installed in their homes (JW 2001). That is why Schreiner (2001) can assert: "…it is an unfortunate aspect of the nature of water that it flows towards power. Thus it is always the powerless, the most vulnerable, who lack access to water, be it water for drinking or for productive purposes" (Schreiner 2001:1). But it is not the "nature of water" that accounts for this but the nature of the social and public policies governing domestic water supply. Schreiner (2001) further argues: "Thus in conditions of scarcity, such as in South Africa, the poor experience the real water scarcity, and poor women in particular" (Schreiner 2001:3). Minister of Water Affairs and Forestry, Buyelwa Sonjica (2004), herself stated:

> Firstly, we have enough water to meet our nation's needs for the foreseeable future. But we need to use that water sparingly, and we must reduce and avoid pollution. We need to be conscious of the fact that we live in a water-scarce country. We must remain conscious of the fact that in situations of water scarcity the poor are generally the ones who feel the pinch hardest. Indeed, even in situations where water is abundant, the poor often experience scarcity through the lack of infrastructure to bring water to where it is needed. We are not on the point of running out of water, but we have to use our limited water supplies more efficiently and effectively (Sonjica 2004:3).

What Sonjica did not point out is that often the infrastructure is in place, as is the case in poor Soweto households. But what is lacking is the money to buy water after their limited free allowance is used up. Hence such scarcity is directly related to poverty, unemployment or low-wage households.

"If current trends continue, by 2014 Gauteng will not have enough water to meet its needs. The implications for economic development and water pricing are huge. It is imperative that all users improve water use efficiency, to defer construction of a major new dam; a new dam could mean that water tariffs double" (Eales, CoJ 2007:1). Muller (2000) also states "We need to conserve and save water. This means introducing savings at all levels and considering new strategies to reduce waste an excess use. It also means building awareness about water scarcity" (Muller 2000:5). But Eales (2007) and Muller (2000) do not say what measures have been taken to address water wastage and inefficiencies among the biggest consumers of water, how this is monitored and what the results are.

Nothing is also said about how "water use efficiency" and "saving" water could be achieved by substantially raising tariffs to deter excessive and wasteful consumption. Big consumers are left to continue because they can easily pay for high consumption. PPWM have also not been installed in former white suburbia in Johannesburg to address water wastage. That is why Dugard (2007) argues: "water conservation, which although important, has been used as a smokescreen for the introduction of PPM technology, which is primarily a cost recovery mechanism" (2007: 2 (4).

This shows that it is not so much that water is being wasted and consumption too high by big water users – though this is clearly the case - but that payments are not made by mainly poor black households for their consumption. It is once again the problem of blacks not paying for what they use and what better way of dealing with this than through PPWM. Interestingly, we did not hear much about water scarcity during the apartheid years and see big public drives to lower consumption and save water in black townships. This has happened after 1994 when cost recovery and other neo-liberal policies were implemented. Therefore the major reason is less a greater environmental awareness than the greater commercialisation of water after 1994. Rather than redistribution in favour of the black working class we have had: "a distributional coalition between the old white elite and the new black elite, which……operates to the detriment of less wealthy whites and the poorest 50% of black households – the pauperised members of society" (Lawrence, *The Star*, 27 July 2004).

Rather than enhancing water security for poor households in order to prevent waterborne diseases and ensuring health and well-being poor households are told how scarce water is and how much they need to cut back on consumption, while rich households who can pay can consume as much as they like. It appears that while there can be no problem with calling for water conservation in a semi-arid country – in fact it is necessary to do so – the emphasis on scarcity is a discourse engineered and calculated to cultivate an ethos of responsibility for payments for that consumed and since most black people are poor and can often not pay they must reduce consumption. The water "saved" is not for themselves but water companies and municipalities which reticulate water to households. This appears the inevitable result of commodifying water, for which the scarcity notion is a discursive device employed to not necessarily reduce consumption per se but to do so for people who cannot pay for it. "Once the process of commodification touches the sacred, the latter is in serious danger of losing its reason for existence for it is no longer protected from the exigencies of the ordinary commodity world" (Corrigan 1997:39).

It also appears that the purpose of an emphasis on scarcity is to discipline demands and trim and temper rising expectations to not exceed minimal consumption when consumers cannot pay for more and thereby threaten commercial efficiencies and profit. The purpose of instilling a consciousness of scarcity is to internalise a disciplinary ethos while those who have power and money can consume as much as they like because they can pay. Instead of the market being disciplined in the interests of essential and adequate consumption of water the users are disciplined to obey the dictates of the market or to adapt their usage of water to its logic. In fact Shreiner (1999) – a director in DWAF – herself stated: "Some interesting recent explorations around the question of water scarcity have looked at scenarios of physical abundance and scarcity of water, and what could be called 'structurally induced abundance' or 'scarcity' of water". It is precisely this situation that explains why there exists very unequal consumption of water between poor black households and rich white households and agriculture and industry.

The recent neo-liberal obsession with the scarcity notion is referred to as the "dialectic of scarcity" which "offers a promising Marxist interpretation of the contradictory nature of capitalist society" (Panayotakis 2003:89). He recalls that according to Marx the progressive purpose that capitalist development and expansion through technology would serve will result in overcoming scarcity "once human needs have expanded and become enriched in the course of human history in general and capitalist development in

particular". However, neo-liberalism has reversed these trends, by commodifying ever more spheres of social reproduction, and specifically those provisions of daily life the working class is vitally dependent on. Neo-liberalism is therefore capitalism's "inevitable frustration of the potential it creates", because its "class character ensures that scarcity can be artificially reproduced even after it has become objectively obsolete" (ibid). Besides, in the case of Johannesburg the LHWP – meant to provide water for Johannesburg's expanding water needs – grossly overestimated the demand for water in the city (Bond 2002).

The problem with the notion of scarcity is that the discursive emphasis on it and hence the need for conservation is applied in poor black townships but not in wealthy white-dominated suburbia, agriculture and industry. It is for similar reasons that PPWM have been imposed in Soweto and not in wealthy Johannesburg. Therefore, "A freer, non-capitalist society that has conquered scarcity would no longer need to impose misery on the majority in order to secure the privileges of a minority" (Panayotakis 2003:89).

Kaika (1995) links "scarcity" with institutional form: "Water….. has now become discursively and materially constructed as scarce and valuable, and thus an inevitably expansive commodity to be bought and sold in the market. Even when water services remain public, water becomes commodified in one way or another" (Kaika 1995:143). The discourse of scarcity has to be placed at the centre of these processes, where alone its motivations can be understood. But Harvey (1996) captures succinctly the political economy of scarcity: "Scapegoating natural limits rather than the internal contradictions of capitalism is a well-tried tactic" (1996:381). He goes further to argue: "What is then evident is that all debate about ecoscarcity, natural limits, overpopulation and sustainability is a debate about the preservation of a particular social order rather than a debate about the preservation of nature per se" (Harvey 1996:148).

CHAPTER SIX: THE TECHNOLOGY, POLITICS AND SOCIAL IMPACTS OF PREPAID WATER METERS AND RELATED DISCOURSES

Introduction

While chapter 5 dealt with the shift to cost recovery this chapter focuses on prepaid water meter technology, manufacturers and costs and its impacts in some other townships in South Africa and in the UK, on black women in particular and its implications for social justice and human rights in South Africa.

The PPWM is the technological culmination of neo-liberal policies driven by the COJ and JW, bent on ensuring not only cost recovery but handsome profits if the meters are used, not bypassed and there is acceptance and compliance with the new supply system. Hence Veriava and Ngwane (2004) argue that prepaid meters are "the most profound symbol of neo-liberalism. It brings together its two most important characteristics, the commodification of the basics of life and the development of new forms of control. Through the prepaid meter life is turned into a site of accumulation and people cut themselves off" (2004:130).

PPWM have become a very attractive technological option for both municipalities and water companies because it not only assures payments and therefore cost recovery but it does so in advance of consumption, which we will focus on later. It is therefore not true that these meters amount to "pay as you go", as the CoJ (2006:52) claims in their response to the application challenging the constitutionality of the 6kl lifeline and PPWM. No, it is clearly a matter of "pay *before* you go". Besides, with PPWM consumers are left with no option to skip payments and use the money elsewhere, perhaps for an emergency, and cannot avoid payments, as they can with the conventional system of payment at the end of the month. This also means that the whole notion of cost recovery and costly and time-consuming credit control action for non-payment is dispensed with under PPWM. All conditions being equal it is the perfect water profit-making tool ever. In answer to the vexing question of using PPWM as a cost recovery method in poor areas McDonald (2002) furthermore argues:

> Prepaid meters are the ultimate cost recovery mechanism. They collect money in advance, thereby earning interests for the service provider in the process. They also do not allow the customer to go into default and, theoretically, they require no overt punitive measure to ensure payment for services (2002:19).

Manufacturers, costs and areas of installation

To credit an individual account with 6kl of water and 20kWh of electricity, is a simple matter. But collecting outstanding revenues for consumption in excess of these levels is trickier. Consumers can rightly demand their free water every month, leaving the service provider with the problem of connecting and disconnecting the service to deliver on credit where it is due. The answer clearly lies in a prepaid system" (Syntell, cited in ESI Africa 2002).

The manufacturer, Syntell, captures best the approach of private companies to the usage of PPWM in townships. It appears that these companies have understandably echoed what JW and the CoJ have been saying earlier about the virtues of prepayment metering and the contribution it is making to "building a better life for all" (CoJ 2003). "Syntell has invested over R50 million in public-private partnerships and we are enormously proud of the role we play in helping to improve service delivery to local communities and in improving the quality of life of communities" (ibid). The results of our case study are very different from the positive assessment of the role of PPWM. But they also have an explicit disciplinary rationing attached to PPWM and the 6kl lifeline: "We have designed prepayment systems that make it possible for ordinary people to manage their spending on services like water and electricity – and live within their means" (Syntell 2005). They also are keen to make this technology appear modern and even progressive: "Contemporary solutions need radical, proactive thinking. Our approach ensures that set-up costs to local authorities are virtually nil, and our products and services are more often than not, exceptional revenue generators for local government" (ibid).

These companies appear to have been hard at work selling – and quite successfully – PPWM to local government. "Widespread prepayment of water is fast becoming a reality, following the development of a new water and electricity prepayment dispensing system developed jointly in South Africa by Syntell and water-flow specialists Rhomberg" (ESI Africa 2002). Syntell adds: "The water dispenser, a first for Southern Africa, allows municipalities to track free water allocations of 6,000 litres per month as promulgated by the national government's Department of Water Affairs and Forestry. It will also facilitate the recovery of hundreds of millions in outstanding revenue, in much the same way that it has done with electricity" (ibid). It is clear that following on the heels of widespread prepaid electricity, PPWM are also beginning to spread – but more cautiously – in South Africa.

Among other areas in Gauteng Province PPWM have also been installed in Orange Farm, Kagiso, Cosmos City, Soweto, Tshwane, Westonaria, in Kwa-Zulu Natal in

Ladysmith, Mossel Bay in the Southern Cape, in Alheit, Lennertsville, Raaswater, Topline, Thabazimbi, Mafikeng, Brits and Grootdrink in the Northern Province, Stutterheim, Fort Beaufort and Kirkwood in the Eastern Cape, Mafikeng and Brits in North West Province (APF et al. 2004; Lesira Teq 2007) and Nelspruit in the Eastern Transvaal (Groenevald, 2006). PPWM have also been installed in Madlebe in Kwa-Zulu Natal (Deedat and Cottle 2002:81).

Several companies manufacture PPWM and dominate the sector. Conlog (Durban), Meterteq (Cape Town), Lesira Teq (which is the result of combining companies, Lesira and Technova), Elster Kent (installed PPWM in Orange Farm), Syntell (formerly Tellumat), Rhomberg and Invensys (Meinecke) (APF et al. 2004; ESI Africa, 2005). Lesira Teq meters are installed in Phiri (CoJ 2006: 30.55.101).

> Many bodies are looking at prepayment technologies in South Africa (e.g. Development Bank of Southern Africa, DWAF). The manufacturers of such technologies, mostly from the North, are waiting in the wings with sets of alternatives available for different circumstances…." (Marvin et al. 2001:3).

The cost of these meters is R900 (Personal interview, Mark Lotthe, January 2003). But today the price of a PPWM is between R900 and R1100 (*Cape Argus*, 13 March, 2007).

Arguments in favour of prepaid water meters

> Most prepaid meter systems provide for rising block tariffs and the option of having a zero first block. In this case they are suited to a 'free basic water' initiative (DWAF 2002a).

This is probably the clearest statement by DWAF in which they combine provision for rising block tariffs and FBW within the framework of PPWM. This is exactly what the present system in Soweto has evolved into. That is why DWAF went on to state: "Metering: Under a free basic water policy it is essential that all unrestricted supplies are metered" (ibid: 22). In Phiri, as in the rest of Soweto and other black townships, water was unmetered and therefore unrestricted under apartheid, and hence consumption was a "runaway problem" for JW and the CoJ (JW 2003). For the reasons advanced in the introduction above JW and the CoJ chose PPWM as the cost recovery option in Soweto.

Though undeclared officially it strongly appears that the authorities chose PPWM as the desirable cost recovery option – as against the option of installation of conventional meters and monthly payments – because it did not guarantee payments and would

potentially and against a background of a "culture of non-payment" in Soweto (JW 2003) probably result in a continuation of the problems which in the first place made OGM necessary for the CoJ and JW. As we pointed out above all these problems and more – such as costly credit control measures which also do not guarantee cost recovery thereafter – appears to have driven the decision to install PPWM in Soweto.

DWAF (2002) stated: "Electronic prepayment systems are a powerful tool for helping water service organisations to control water wastage and customer debt" (DWAF 2002:28). They added: "Administrative costs are reduced because there are no bills to send, no costs to chase and no expensive disconnections and reconnections" (ibid). In a 1997 study on the feasibility of prepayment water metering DWAF stated: "The main objective of this study is to contribute towards the development of an effective cost recovery and water supply management policy for use by DWAF and other authorities in communities where conventional billing is not viable" (DWAF 1997:1). Condescension and paternalism are also evident: "Well designed electronic prepayment systems are ideal for implementing programmes which care for poor customers whilst limiting the daily water use for the minimum requirements for healthy living" (DWAF 2000:28). In the light of the results of our case study in the next chapter this is also deeply ironic.

Following research it commissioned into PPWM in townships the *Water Research Commission* (WRC) (2001) was also generally supportive of PPWM. Other than urging greater technical reliability of prepayment technology, enhanced administrative capacity and more consultation with communities the WRC favours the usage of PPWM in townships (WRC 2001). In fact the WRC went as far as to regard FBW as an obstacle to the advance of PPWM: "If the municipalities that already use them are to broaden their uptake of prepayment meters, it suggests that the benefits outweigh the impediments imposed by vandalism, technical unreliability, cost efficiencies *and the implementation of the free basic water policy*" (added emphasis) (WRC 2001:34).

Elsewhere, the WRC urges municipalities: "Try to compensate for the losses resulting from the Free Basic Water policy and be aware of the fact that consumers are irritated by a lack of social participation, education and slow repair to faulty meters" (ibid:63). The WRC further states: "The market has a massive growth potential since only about 2%

of all households with piped water use prepayment meters" (ibid:65). And finally, "Given that most municipalities have not yet taken advantage of the technology there is massive potential for growth" (WRC 2001:34).

The *Development Bank of Southern Africa* (DBSA) (2001) appears to take a much more cautious approach to the feasibility of PPWM. It was as a result of receiving numerous requests by municipalities for financial assistance to install PPWM that the DBSA initiated a discussion document (ibid: 3). They particularly caution against an approach which proceeds from the premise that because electricity prepayment may have been seen as a success that therefore the same will apply to water prepayment: "Unfortunately, experience has indicated that whilst prepayment for electricity has been widely accepted, this is not the case with prepayment for water provision. This can be explained in part because water is an essential need and access to water is a constitutional right, whereas the use of electricity contains the element of choice" (ibid: 3). Though it is debatable whether electricity is not also in some ways an essential need in today's society the DBSA approach seems to suggest a less enthusiastic endorsement of PPWM.

Importantly, the DBSA state that "Applications to the DBSA for prepaid water meters are generally motivated either by an anticipated or an actual problem of cost recovery" (ibid: 3). This supports the strong links we have alluded to between cost recovery and PPWM above. But the DBSA cautions: "prepaid water meters should not be regarded as a panacea that will solve inefficient cost recovery and unsound water revenue management" (ibid:3-4). They further argue that "There must be customer acceptance of the cost recovery options used and of the revenue collecting authority" (ibid: 4). They also add: "No water supply project must be implemented until the community is fully informed and consensus-based decisions have been taken regarding levels of service, tariff structures and credit control measures" (ibid:5).

But the DBSA stops short of rejecting PPWM. Instead they argue that where funding applications for PPWM have been made by municipalities customer acceptance, reliability of the service and the "affordability to the customer and service provider" is necessary (ibid). They conclude: "On completion of this process, appropriately motivated applications for water metering systems using specific technologies can then be considered by the DBSA for appraisal by the relevant operational divisions" (ibid). It is important to note that unlike a research-based organisation, such as the WRC, the DBSA,

as a bank, understandably takes a more cautious approach before funding expensive projects, such as prepayment water metering systems. A PPWM is about three times the price of a conventional meter (JW 2002). Correctly, community acceptance of this technology and other related factors, such as tariffs, the DBSA has made precondition for funding.

The position of the City of Johannesburg

The pro-PPWM stance of the CoJ seems far less derived from solid and credible research that it claims it has done (CoJ 2007) than on having to dress them up to look attractive and necessary to suit the decision to commercialise water supply in black townships (CoJ 1999) and therefore take tough cost recovery decisions, such as the installation of PPWM, and to have to deal with the severe fiscal constraints local governments are compelled – as a result of macroeconomic constraints – to work within.

As a result the contentions JW and the CoJ make about the effectiveness of PPWM to address the run-away problems of "over-consumption" (JW 2003) and a "culture of non-payment" (JW 2003) - the ubiquitous twin allegations – appear forced and contrived. For example, the claim that following the exhaustion of the current 25l PPPD or 6kl per month lifeline PPWM "…do not restrict the right of users to sufficient water" (Brits, CoJ 2007: 11.4) is flagrantly contradicted by contrary statements JW (2002: 3) and the government (RSA 1994: 15) itself have made about the insufficiency of 25l PPPD, as we will see more of in the case study, in the next chapter.

It is also of great concern why the CoJ and JW in its research in Phiri "…..did not specifically focus on soliciting views on prepayment meters but nevertheless it emerged particularly from focus groups that there is in fact strong support for prepayment meters" (Brits. CoJ 2007: 28.4). Surely, posing specific questions in surveys would provide more specific and reliable data than discussions in a focus group, useful as the latter is. It is intriguing why they chose to leave out questions about what was really the heart of OGM, the installation of PPWM.

Our case study shows that the overwhelming majority of households were not happy with PPWM. But the CoJ and JW conclude that users were "…*very* happy with it as a means to control expenditure and particularly as means to avoid unnecessary debt"

(added emphasis (ibid). They also claim that "Prepayment meters do not restrict water use in ways which compromise their health or dignity….." (ibid: 28.5). The case study conclusively proves the exact opposite. And whereas the re-usage of water is time-consuming and inconvenient and can be potentially unhygienic the CoJ said that it was rather "of interest for us to note that households with prepayment meters re-use water more, especially at the end of the month" (ibid: 28.6). Besides, the fact that they do so towards the end of the month shows the pressures they are under then precisely because of the insufficiency of the 6kl per month.

The claim by JW and the CoJ that the "research" they did in Phiri showed that the majority of residents were happy with the decision to install PPWM is also disingenuous because it totally ignores the numerous disadvantages a refusal by residents to accept PPWM meant for households and how these appear to have finally broken the will of their resistance and forced them to sign their acceptance of the PPWM. The alternative to a PPWM – which OGM made a precondition for continuing to receive a water supply inside their houses they were used to for decades – was a yard standpipe (service level 2). This meant that the taps inside the house were removed and water could only be accessed by the yard standpipe (JW 2003). This also meant that for every of the many needs for water to perform household tasks – such as cleaning, washing and cooking - people had to go to the yard to fetch water in a bucket. It also meant that there was no longer flush sanitation because the pipes connecting the sewer to water supply in the toilets were removed. Residents had to therefore go outside, fetch water in a bucket and then go and flush the toilet. It is for these reasons that residents who were not happy with the PPWM were eventually compelled to sign their acceptance. That is why 4 years after the start of the project most of those who stubbornly refused to accept PPWM – 13 out of 21 – were by January 2007 eventually forced to signed their acceptance of the meters (Brits, CoJ 2007: 27.1).

Furthermore, the "research" done by JW and the CoJ proceeded from a fundamentally false premise: that because residents were already used to the prepayment concept, as a result of cell phones and electricity, they should not have problems accepting the concept for water supply (JW 2003; Personal interview, Khesto Gordan, 22 September, 2003). There are many strong reasons why the application of the concept to water is false, misleading and convenient for JW and the CoJ to assume, but the vital, indispensable

and non-substitutable nature of water – unlike with cell phones and even electricity - is the most compelling. The DBSA above also make the point that water is very different from electricity.

In the case against PPWM – launched by a few residents of Phiri in 2004 - JW and the CoJ appeared to rely a lot on the evidence in favour of PPWM which was presented by Mike Rabie, who was earlier employed by JW and responsible initially for conceptualising OGM and a strategy for its implementation, coordination and management. But his supporting affidavit is largely about recounting his experience with PPWM in another municipality, Mogale City, his more general experience in the water sector and with a new post he occupied in the USA after very suddenly and unexpectedly resigning from this project and his post just 3 months after it started. Rabie persistently refused to grant me an interview in which I meant to ask why he resigned so soon after the project began in Phiri. Interestingly, his resignation came just 3 months after the violent community resistance that engulfed the project in Phiri once the PPWM began to be installed (*The Star*, 13 October, 2003).

Though no hard evidence could be found there were a few stories circulating through the grapevine of the water sector in Johannesburg that he did not approve of the aggressive and confrontational manner in which the managing director of JW, Anthony Still, dealt with community resistance. It was Still who led the laying of criminal charges against protesters, prepared submission to court and pushed hard for prosecutions (APF 2003). But whatever it was it stands to reason that there must have been some serious internal problems about implementation of the project - not the concept - which accounted for his sudden resignation from it. Rabie was in fact specifically employed to direct and execute this project throughout Soweto over a period of 5 years (JW 2003) but he resigned just 3 months into implementation.

However, his claim that "a very extensive public consultation process preceded the implementation of OGA" was contradicted by the response of households in the case study in the next chapter. Rabie also contradicts himself when he stated: "Once the community liaison part of OGA in Phiri got underway, much of the early resistance to the project fell away as customers came to realise and understand that the project held out more advantages than disadvantages……..." (Rabie, 2007: 13). But earlier he said that extensive public consultation *preceded* the implementation of the project. How could it be then that only *after* the resistance "fell away" did customers come to realise these

advantages? One would expect that a “very extensive public consultation” would have secured broad public acceptance of PPWM *before* implementation.

Furthermore, Rabie’s claim that in Mogale City “payment levels for all services, including water, were in the region of 25% prior to prepayment and after prepayment averaged at least 85% (water only), is evidence of broad acceptance” is both invalid and untenable. It is so because he omits to mention that it is the very nature of prepayment that inescapably enforces payment in advance of consumption and that therefore ipso facto payments under the prepayment regime cannot be compared with a “culture on non-payment” under either the earlier deemed consumption in Phiri or elsewhere – when there were no meters at all – or with conventional credit meters where people pay at the end of the month. With prepayment there are strictly no possibilities of not paying or skipping payments in any month. Furthermore, you are paying *before* any water is consumed.

Finally, Rabie is disingenuous when he states: “Probably the biggest impact (newly created dimension) that prepayment can have on a service provider is the effective creation of customers and therefore the service provider becomes one of offering ‘customer service’ rather than continuing in a paradigm which considers the end-user to be only a ‘consumer’ who is not entitled to a relationship with the service provider” (Rabie 2007: 20.2). He in fact distorts and inverts what happens with any form of prepayment: the conventional customer or citizen relationship with a democratically elected municipality – for example - is subverted because prepayment automatically bypasses and in fact eliminates these customary relations. An example is necessary. With conventional credit meters – which unlike prepayment meters do not cut off supply once the monetary value of the prepayment voucher is exhausted – a person with financial problem can approach the municipality and request that the service not be suspended by due date and make arrangements instead to pay off the arrears. With prepayment no such possibility exists at all. In fact it removes all contact with the municipality and the water company because all relations are now mediated through the meter, which only obeys the cold logic of cash. If a customer went to say to JW or the CoJ that they have run out of cash and cannot recharge the expired meter they would say that there is nothing they can do. Rabie omitted important characteristics of prepayment in his evidence to the court.

Executive mayor of Johannesburg, Amos Masondo, who in fact officially launched OGM in 2003 (CoJ 2003), stated 8 months after the project began: "We wish to express our appreciation to the residents of Phiri for their support…and are confident that they will soon enjoy the full benefits of this initiative" (CoJ 2004). Our case study in the next chapter paints a very different picture. However, by January 2007 51,000 PPWM were installed in Soweto (Brits, CoJ 2007: 27.4.1).

Importantly, while the general secretary of the ANC, Kgalema Motlanthe stated that the ANC has never adopted PPWM in a letter to JW the Jabavu (Soweto) branch of the ANC was quite unequivocal about their support for it: "The above-mentioned organisation would like to have a meeting with you regarding challenges faced by the community in relation to operation gcina manzi. We fully support this process and we believe that if there are problems and challenges together we can resolve them (ANC 2005).

Experience in other municipalities

Not many municipalities in South Africa have installed PPWM. It is likely that the bad publicity and violence which marked its installation in Phiri made other places more cautious. eThekwini city manager, Michael Sutcliffe, expressed reservations about the usage of PPWM: "We do not agree that it is the way to go" (cited in Bond and Naidoo, 2008). The City of Cape Town also decided against the installation of PPWM (Groenewald 2006). Earlier, in the Cape Town township of Khayelitsha, the water engineer, noted that they are "too expensive to install and that it is doubtful that it will be possible to recover the costs of installation, noting the difficulties people in Khayelitsha have in paying for services" (cited in Xali, 2002: 112). "He argued that prepaid meters are appropriate for a private company…." (ibid).

There was also violent resistance when these meters were installed in White City and other areas of Soweto after the project in Phiri was completed (*The Star*, 2 May 2005). Following the judgement against these meters in 2008 – which we explore later - it is highly unlikely that other municipalities will still proceed to install them, unless the appeal by the CoJ was successful and thereafter a Constitutional Court – if the applicants decided in that event to refer the matter to it – judgement also ruled in favour of the CoJ and JW. This appears equally unlikely.

Many attempts to get information from DWAF and the Department of Provincial and Local Government (DPLG) on the number of PPWM in South Africa failed, both

before I submitted my thesis and once again thereafter. How is it possible that as regards a very important and controversial social policy matter like PPWM – so controversial that the High Court ruled against them recently – both DWAF and the DPLG have no information about how many there are in the country. But what was interesting and intriguing is that DWAF insisted that because local government has to approve their installation they must have this information. On the other hand, the DPLG insisted that it was the responsibility of DWAF to have it. "I am trying to assist Mr. Harvey with a request on the number of prepaid meters (per province) installed in the country. The information is not available in Water Services. I referred him to the DPLG as water connections (and therefore the number and type) is a municipal function" (Kobus Kuhn, Project Manager: Water Services, email correspondence, 6 April, 2008). To which the DPLG replied: "We do not have this information….." (Thoko Sigwaza, DWAF, 6 April, 2008). Attempts to contact prepaid meter manufacturers for this information also failed.

It appears that while there were ambitious plans to expand PPWM throughout this country and Africa – as we will see later in this chapter – the revolt in both Orange Farm and Phiri in particular has made municipalities reluctant to install them or at the rate intended. The violence in these townships, the adverse publicity and later the legal challenge against PPWM seems to have combined to dampen local government enthusiasm to install them.

Dissecting prepaid water meters

The metering of all consumers on a 'pay for what you use' basis is legally called for in terms of the Water Services Act (Act 108 of 1997) (JW 2002:6).

This Act also states that conditions under which water services will be provided "may provide for the limitation or discontinuation of water services where a consumer fails to "pay for services" (WSA, 21 (2) (b). JW has used this requirement in the WSA to justify its installation of prepaid metering, with the advantage that in this case they won't have any problems again with failure to "pay for services". The problem is that the WSA does not distinguish between conventional and prepayment metering or pronounce on the big differences between them and the wide-ranging negative effects of the latter. This caveat in the law enabled JW to install PPWM and not conventional metering.

The PPWM is an electronic device, made of metal and plastic materials, to produce

a computer-driven technical instrument which is specifically designed to allow, stop and resume the flow of water, dependent purely on whether or not the household has money with which to purchase recharge vouchers or what is referred to as a "tag" (Lesira TEQ 2005:1). These tags can be bought at special dispensing units or from hand-held mobile vendors who go around the township. All meter related training, management, coordination and support thereof is governed by the Total Prepayment System (TPS) (ibid). A customer interface unit controls the water supplies through a water Meter Management System (MMS), which is installed in a "Master Station" (Teqnovo 2005:5). The meters are factory calibrated.

There are a diverse range of activities which this system has to activate, monitor, manage and coordinate, such as the installation of the meter box, the meters and software, commissioning of the management system, cost structure, systems operation, gathering data and writing reports. The computer meter interface has several functions which are coordinated, such as:

- The PC tag-reader, which allows the computer to communicate with the tag.
- The vending unit PC interface which allows the computer to communicate with the hand-held vending units (HHVU).
- The tag meter interface. Every meter is fitted with a tag-reader that allows the meter to read and write to a tag (ibid:6).

All HHVU operators must be registered and then linked up to the centralised MMS. The relevant tariff schedule and whether a household prefers a limited 200l per day or the 6000l per month is programmed. The PPWM is programmed to provide the first 6000 litres freely, with charges taking effect immediately upon exhaustion of the 6000th litre. Whenever there are changes in the tariffs these are reflected accordingly. All aspects of the system are integrated into and controlled by the MMS, whose basic function is to regulate water supply to households through the PPWM with which it is linked.

The meters have an automatic shut-off valve which is electronically activated once the 6000th litre or subsequent recharging has expired. However, this entire system is unknown to users, who are only familiar with the end product, the PPWM installed inside their homes, which they often experience technical problems with, as our case study later shows. Politically and technologically generated fragmentation is evident in this brief

exposition. Workers are involved in the manufacture of PPWM and the HHVU, which reminds us of the hybrid of socio-political, labour and technological metabolisms (Swyngedouw 2006) we earlier dealt with.

Here we see ironically how one section of the working class works effectively against another section or really against themselves. At JW the SAMWU is the majority union. Their members, as workers of JW, are involved in the OGM project in Phiri and some of them live in Phiri and in homes where meters have been installed. To heighten the contradictions SAMWU had a strong national resolution against PPWM. On the other hand the PPWM are manufactured by workers. The point is that it is the working class that is simultaneously involved in all these activities, but in very contradictory relations to each other. We revisit these aspects later when we discuss a countermovement.

But we also see how neo-liberalism has created many more institutional and operational fragmentations than we had under apartheid. The further irony is that the original goal of the iGoli 2002 plan was to reduce fragmentation and achieve greater uniformity in service delivery (COJ 1999). But, as Clarke (2004) states: "Dispersal has fragmented service provision, multiplying the number of agents and agencies involved, increasing the number of (micro) decision-making settings and generates new problems of co-ordination, regulation and scrutiny" (2004:129). As we showed earlier the iGoli plan gave rise to a whole new set of structures and agencies. However, this is just at the micro level about the technology, management and administration of PPWM, but the institutional-political structures which both precede and underpin this reflects much more fragmentation, which we will return to later. But the exposition of the more technical sides of how water prepayment works is striking in the detailed measurements and data required to make commercial and financial sense. However, importantly, Bleitrach and Chenu (1981) state that fragmentation transforms institutions into "bodies which can deflect and defuse claims" (1981:108). This is exactly what has happened in the CoJ.

Nevertheless, the computerised information and statistics numerically reflects and refracts commodification processes, at the heart of which is always consumptive measurements and financial calculations and rewards. "There is a deep ontological principle involved here, for dialecticians in effect hold that elements, things, structures and systems do not exist outside of or prior to the processes, flows and relations that

create, sustain or undermine them" (Harvey 1996: 49). However, in the case of PPWM we have technology at the service of water commodification and the subjugation of poor households to the regime of microscopic control, surveillance and disruption of their consumption, the adverse effects of which are only slightly mitigated by FBW. Miller (1978) argues that: "With nature and people increasingly viewed as having only commodity and exchange value, the acquiescence of science to that same perspective can only lead to a deepening dehumanisation within society and to a further exploitation of nature" (1978:56, cited in Forsythe (2003:77). This applies to the case of PPWM.

However, the reification (Loftus 2005) earlier referred to is much more invasive, intensive and deepened with PPWM than conventional metering because the former works on an entirely different principal as it directly and immediately mediates commodified consumption on a readily and strictly cash basis, disallowing any form of credit, appeal or intermediary intervention. Households already suffering high levels of unemployment and poverty would have great difficulties recharging the meters to the extent required or if at all. With the PPWM commodification has set metabolised processes in motion which are wanton, exacting and alienating in their impacts, in a society with already the highest levels of social inequalities in the world (Bond 2005). Besides, the case study makes clearly evident the stressful emotional and psychological impacts PPWM have had on households. Brenner and Theodore (2002) refer to the "dramatic intensification of coercive, disciplinary forms of state intervention to commercialise and commodify…." (2002:63). Furthermore, one must bear in mind that these households were drastically hurled from no metering to prepayment metering and not conventional metering which all white households had for decades. We have shown some of the multiple impacts of PPWM in poor households, but return to this with much greater detail in the case study.

Because white household income is vastly superior to that of black households they would have no problems with PPWM, certainly not with the kind of affordability problems black households confront when the 6kl has expired. The government's own agency, Statistics South Africa, reported that in "real terms average black 'African' household income declined 19% from 1995 – 2000, while white household income was up 15%" (SSA 2002). Webster and Von Holdt (2005) also state that "There is general consensus that income poverty has increased over the past decade since democracy was

established in South Africa" (2005:29-30). Instead these meters have been imposed in poor places like Soweto. We prefer to use the term "impose" rather than "install" because it more accurately captures what actually happened, despite the insistence by the CoJ and JW that the vast majority of households wanted the meters and signed up for it (CoJ 2007). We deal in detail with this in the case study.

However, if reification is particularly understood to refer to the disempowering, alienating, estranging and frustrating experiences which machinery or technology imposes on people then the degree to which all this occurs is certainly epitomised by and embodied in PPWM, not just because of the disadvantages it bears compared to conventional metering but because of waters' quintessential nature and its historical, social, cultural and bodily vitality. Therefore, Keil (2002) refers to "the introduction of neo-liberal technologies of power less than a distant state act than as a project or re-regulating the everyday lives of people through ideological/discursive, economic and political interventions" (2002: 72). This is especially the case where overt privatisation does not occur but where the commercialisation and corporatisation of water – as in the CoJ – leads to similar effects, and in which we have different magnitudes of both political and technological remote controls simultaneously at play. In the case of the latter it is the PPWM and the former the fact that the CoJ owns JW. As a result "The contemporary social struggle around water is evidently the result of the deeply exclusive and marginalising ways in which political, economic and ecological power have been worked out" (Swyngedouw 2004: 33).

PPWM specifically highlights the emergence of increasingly alienating forms of technological disciplining of consumption, as Hoggett and Loader (1993) put it: "Could it be that the basic paradigm of social control in the coming period will draw upon models of self-regulating systems, and of remote rather than proximate monitoring and intervention?"(cited in Burrows and Loader 1993:3). However, in the case of PPWM it is not one or the other but as we have shown the simultaneous proximate and remote control and coercive disciplining. Inside the house it is the visibility and proximity of the PPWM and externally the more remote MMS. The objective is to achieve an internalised disciplinary behaviour which either limits consumption to 6kl or accepts that only payments in advance will activate the meter to provide water thereafter. Ruiters (2006) argues that "Prepaid meters, to borrow from Foucault (1995:23) are 'political tactics'. As technologies they educate, they create'modern' rational patterns of behaviour suitable

for marketised social life" (2006:15).

However, PPWM, as is now evident, has various discursive dimensions. But it is its oppressive and alienating dimension – constantly threatening as the water remaining is diminished or has finished – that is the most disturbing. Gorz (1994) puts forward an interesting perspective in this regard: "To use the potentialities of technology not to reinforce the domination of the apparatus over people's lives, consumer choices and time, but to free social individuals from the constraints of the social megamachine and increase their power over their own lives and the development of society – this is the alternative which today defines the Left-Right divide or, as Alan Touraine puts it, the 'central conflict' " (1994: 506). More striking for our purposes is that this was for conventional metering and not the more potentially devastating PPWM, in which "the increasing penetration of technological rationality, of commodification and market values, and capital accumulation into social life (or into what many writers, including Habermas, call 'the life world') together with time-space compression, will provoke resistances that increasingly focus on alternative constructions of place…." (Brenner and Theodore 2002: 342).

Therefore, so sensitive, controversial and unacceptable does PPWM appear in poor black townships that the secretary-general of the ANC, Kgalema Mothlanthe, told this writer about the violent clashes between the police and protesters in Phiri in 2003, that "Pre-paid water meters is not ANC policy" (Interview, 22 April 2007, Johannesburg). But it has been adopted as policy by the ANC-controlled municipality and the former and present presidents of both the ANC and the country, Nelson Mandela (Pilger 1998: 606, cited in McDonald and Ruiters (2005:34), and President Thabo Mbeki, have officially launched pre-paid water meter projects in various parts of the country. Furthermore, in Johannesburg, executive mayor Amos Masondo, former unionist and senior ANC member, officially launched the OGM pre-paid water project in Phiri (CoJ 2003). The City went on to argue in its reply to the application opposing PPWM in Phiri: "Prepaid technology was not a new concept or an unacceptable principle in people's lives. Many people had and were using cell phones and prepaid electricity" (CoJ 2006: 40.10.3). With due regard to its vital and non-substitutable nature how can the City fairly draw an analogy between prepaid water and cell phones or even electricity?

Black Economic Empowerment (BEE) and PPWM

There are two dimensions to the relationship between BEE and PPWM. Firstly, the multinational water consortium, JOWAM, has a 40% BEE stake in the company, owned by Malesela Holdings (JOWAM 2004). As we earlier indicated JOWAM has since 2001 managed JW in terms of the 66-month management contract between itself, the CoJ and JW, which ended in June 2006. Any major policy decision or change in JW therefore would most likely have come from JOWAM because its mandate is to oversee the total management of water operations in the city, on a sustainable basis (JW 2001). As JW (2001) put its mandate: "Services will be provided along business principle, ensuring customer satisfaction and cost recovery" (JW 2001:3). Furthermore, "To assist the company in achieving these targets JW has signed a five-year management contract with JOWAM (ibid). Therefore the decision by JW to install PPWM in Soweto was as a result of such a recommendation by JOWAM, the Suez-led consortium. This implicates black capital – in the form of the shareholders of JOWAM – in the installation of PPWM in Phiri.

Secondly, Conlog, which won the tender to install PPWM in Phiri, also has a 40% BEE stake in it. Former minister of defence, Joe Modise, was appointed its chairman in 1999 (Cottle 2004:4). "Modise believes Conlog's prepayment metering system will help alleviate the plight of poor communities with no access to water and electricity" Msomi (*Sunday Times*, 29 August 1999). Msomi goes on to cite Modise: "At the same time, these systems are critical to local government as they function as revenue management systems that are beneficial in difficult areas of administration", (ibid). Furthermore, JW has on its board of directors several senior black directors, such as Monhla Hlahla, also CEO of the Airports Company of South Africa. Besides, Cottle (2004) also points out – citing DWAF - that this "ground-breaking technology" was officially launched by President Thabo Mbeki (ibid:1).

Significantly, Conlog is the offspring of a merger between Anglo American's Control Logic and Israel's powerful Elron group (ibid). All in all it is clear that BEE and the ANC has played a key role in the roll-out of PPWM in black townships. It is therefore a moot point that the general-secretary of the ANC often makes: "No, the ANC has not officially adopted PPWM as its policy. It is what government has done" (Personal interview, 5 April 2007, Johannesburg). But Mothlanthe then goes on to say that "ANC members are in government as its representatives and with its mandate" (ibid). Therefore the fact is

that the ANC has introduced PPWM in black townships.

This in turn raises critical questions about the role of the ANC and the state it controls to actively facilitate and promote water commodification in poor black households, and it serves to reinforce the validity of the earlier critique of the effective marriage between the state and capital in neo-liberal projects (Taylor 1996; Swyngedouw 2004), not fundamentally undermined by occasional differences regarding certain aspects of governance, labour law, tax or the social wage. The further irony is that the PPWM manufacturing industry is dominated by white capital. This is significant because a black-led ANC state, waging a "national democratic revolution" – of which the black working class is said to be both the main force and beneficiary - and claiming to be a "developmental state" (ANC 2005), has collaborated with white and black capital to install PPWM in poor black working class townships. Given our history the political ironies are evident. In the Johannesburg municipality it is a black ANC mayor and his councillors who are the public face announcing and defending these policies. Rather than reflect the interests of communities with regard to the most vitally important service they have driven its commercialisation and commodification on the political side.

On the BEE side, based on their direct involvement in the Phiri PPWM project through Conlog and the shares they had in JOWAM, there is clear evidence that black capital has not cared that PPWM could have negative consequences for poor black households. Here again, we can see that capitalism – especially when many of today's richest black capitalists not long ago came from impoverished households – knows no colour or sentimental notions but is driven by the pursuit of profit. It reinforces the notion that the black bourgeoisie has not played a progressive role under a deracialised capitalist system – in so far as the interests of the black working class is concerned – but has piggybacked white capital which still dominates Conlog, and which is the overwhelming power in the prepaid industry. So much has prepaid metering spread in this country that Andrew Austin, marketing manager for Conlog, ambitiously stated that "The whole of Africa is a target for Conlog" (cited in Cottle 2004:4).

However, it is clearly as a result of cost recovery prescribed by national government and subsequently imposed by local government and their corporatised utilities, such as in the CoJ, that PPWM have emerged in places such as Soweto, as the only method to

inescapably enforce payment and deal with the scourge of a "culture of non-payment". Mamaila (2004) states that "Realising that it was not possible to collect money for services the council opted for the prepaid system. While this was hailed as a positive development by some residents who had endless problems with the council's billing problems, other rejected it"(Mamaila 2004: 22). However, in the case of PPWM it was much more a matter of rejection for reasons other than billing problems – as our case study shows later – because almost every household was not paying bills in any case. Swyngedouw (2006) argues that "Prepaid water meters is a technique of social disciplining because it is only the poor who get these meters and therefore it is inherently stigmatising and stratifying, a technology of controlling the poor" (Personal interview, June 2006, Oxford).

We conclude by citing McDonald and Ruiters (2005) - which contrasts the earlier insistence by Mandela that nationalisation was necessary for redistribution to his later stance on both nationalisation and PPWM: "No less an authority than Nelson Mandela has publicly endorsed prepaid water and electricity meters and the creation of public-private partnerships, going so far as to say that 'privatisation is the fundamental policy of our government" (2005:34). We noted earlier that Mbeki has also opened PPWM in black areas. Finally, Shepherd (2004) makes it clear why PPWM were installed in Soweto and elsewhere and reveals some of the problems with the process followed:

> These areas were and still are typified by poor cost recovery, which was the original reason for selecting prepayment as the 'solution' in service delivery – prepayment ensures cost recovery. This appeared to be the answer at the time, but the implementation approach was wrong (the consumers were superficially and hurriedly briefed rather than consulted), the expectations too high, economic viability questionable and acceptance of the technology by the people who matter most – the consumer – was marked by its absence (Shepherd 2004:4.1).

Notwithstanding such serious reservations former director-general of DWAF, Ronnie Kasrils, in a letter to the New York Times in 2003, referred to these meters as "an example of how South Africa is harnessing home-grown technology for development" (cited in Bond 2004:163). Hence, "The debate over the word 'development' is not merely a question of words. Whether one likes it or not, one can't make development different from what it has been. Development has been and still is the Westernisation of the world" (Pieterse 2000:181). The hijacking and appropriation of the notion of 'development' by neo-liberalism, especially in its version of 'sustainable development' is evident in the literature (Schuurman 1993; Shiva 1988; Aseniero 1985). On the other hand, Ohlsson (1995) argues that "Access to safe and adequate provision of water and

arrangements for its disposal remains a tremendous bottleneck to *development* and, indeed, a *hindrance to human dignity and well-being*" (added emphasis) (1995:115).

From non-payment to prepayment: progress or harsh technological commodification-reification?

PPWM provides the inescapably most effective mechanism to compel compliance with its logic, enforce payment and cost recovery and because it escapes various transaction costs associated with poor communities (Marvin and Guy 1997) can potentially procure handsome profits. But how did we reach the stage where PPWM are aggressively penetrating poor black households? Central government and municipalities in black areas had serious problems with low payment rates for water services – as described in chapter 3 - before and even more so after 1994 (JW 2001). And while changing legislation between 1994 and 2000 for both water and local governments established an overall framework for water commodification, there were still ongoing problems with low payment levels (JW 2003).

There are big differences between conventional and prepayment metering. With the latter it not only means paying before consumption and frog leaping other debtors but also the insidious impacts which the resultant loss of control over consumption, the alienating frustrations and indignity felt by consumers and the many negative social, health, emotional and psychological consequences water cut-offs presents.

But how we problematise and theorise these dynamics is important. In this regard the multifaceted impacts of these meters have invoked notions such as "social injustice" and the violation of the 'human right to water' (Huby 2002). Huby states that "Metered households can reduce bills by reducing water use but there is concern that health may be put at risk if reductions reduce water use below essential needs" (ibid:120). Drakeford (1998) claims that "The connection between prepayment purchase, debt and hardship in the water industry is indisputable" (1998:594). The point is that if prepayment demands payment *before* consumption *beyond* the 6kl lifeline it is a foregone conclusion that poor households, already suffering the effects of unemployment and poverty, would be hardest hit. We emphasise *beyond* the 6kl lifeline because it is somewhat misleading to state that "With cut-offs, one is punished for non-payment *after* receiving a service, whilst with the prepaid meter, you have to pay *before* you receive a service – you are cut off until you

can pay" (Naidoo 2007:62). In Soweto, as in other townships which receive the first 6kl free, this lifeline is indeed a service received *before* the service is terminated *after* the 6000th litre is consumed. So with the PPWM there is a service – seriously limited though at 6kl – before the meter is activated to compel further monetarised consumption. This is an important distinction to make, otherwise we are not acknowledging that there is a free service and consumption before the PPWM is activated. But Naidoo (2007) insightfully points to the overriding discursive context in which this meagre "lifeline" of 6kl is strategically embedded:

> A significant consequence of such concessions is that collective political demands are converted into individualised bureaucratic arrangements, forcing individuals into binding technical arrangements that erase the politics. The demand for free services slowly transforms into a debate about how high a 'life-line' should be, or what the average household size is, issues related to how populations should be measured and managed, and how demands formulated in struggle can be converted into quantifiable 'outputs' and so on (2007:61-62)

Upon closer examination these "technical arrangements" Naidoo refers to are socio-political controls by JW and the CoJ , to which users are subordinated. Structured individualised micro-management – through the lifeline and particularly the PPWM - both diverts and dilutes collective action and solidarity. Marvin and Guy (1997) assert furthermore that:

> Prepaid technologies allow water companies to effectively 'disengage' from high transaction costs with poor and low-income customers. Prepayment effectively closes direct relations by mediating all contacts through the smart meter. This remote technological management shifts responsibility for water use to customers who must now communicate with the meter, charge the meter and even disconnect themselves from the water network when they cannot afford to pay. The shift to prepayment metering provides a graphic example of the reshaping of relations between production and consumption interests. Prepayment meters allow utilities to avoid the high transaction costs of dealing with the problems of late payment, debt and disconnection typically associated with the marginal and low income users (1997:39).

They assume that it is the *user* that disconnects herself or himself from the network. But the ruling which banned these meters – against the argument of the water company – found that it is not the user who disconnects himself or herself from the network but it is the *company* which installed the meter that is responsible for such disconnection (Director General of Water Services, UK 1999).

But prepayment metering – for both water and electricity – has become big business in South Africa, including the involvement of a BEE company, Conlog, the leading manufacturer of these meters. And the Suez-led multinational consortium, Johannesburg Water Company (JOWAM), which won the management contract in the city, have a few

black shareholders (CoJ 2006). So big has the industry become that there is a plush annual show for manufacturers of the latest technology in both water and electricity, including a competition for the best innovations (SA Prepayment Week 2004). Of interest is that while the industry is overwhelming white-dominated it has been very successful in persuading black-led local governments of the advantages of these meters for cost recovery. Except for the human resources director the entire management team of nine of Conlog is white (Conlog 2003). This is how the SA Prepayment Week (2004) show captured its stance on prepayment technology:

> Prepayment continues to revolutionise utilities' ability to collect revenue and although it remains controversial markets worldwide are showing increased interest in the technology. South Africa has emerged as a world leader in the development of innovative prepayment systems, with millions of prepayment meters installed across all socioeconomic levels. Metering has become the essential component in the utility value chain (SA Prepayment Week, 2004).

When we hear the CoJ and JW praise PPWM and strongly advertise them it is startling because these meters were banned in the UK in 1999, primarily for the dangerous health impacts they had in poor communities (Director General of Water Services (UK) (1999). This is how Brian Hlongwa, former mayoral committee member for municipal services in Johannesburg summed up his views on PPWM:

> I support prepaid meters because it will bring an understanding of the costs of water, because we are living a lie. People say that water comes from God. It may be but God does not pay for the pipes. We need to change the mindset. We need to educate people about the costs and that as citizens we have rights and responsibilities. For me prepaid will help us manage the problem. It will be a useful tool (Interview, 29/01/03, Johannesburg).

It appears that the attraction of local government to PPWM is mainly because they save much money and time by disengaging from high transaction costs associated with credit control action and avoid the potentially combustible political repercussions of physically disconnecting defaulting users. The PPWM obviates all this and any further interactions between both government and water companies and users, since the only relationships the user is involved with is buying vouchers with which to recharge expired meters. This situation is bound to create feelings of impotence, frustration and alienation for users who don't have money to recharge the meter. There is nobody to talk to, appeal to and reason with because all those social relationships which existed between users and the municipality have been replaced by the meter, which in purely mechanical fashion opens and shuts the valve controlling flows of water through the tap, conditional upon the ready availability of cash.

The PPWM is far more effective for cost recovery and profitability because "it forecloses any negotiation or institutional mediation. The only option becomes feeding the device"(ibid: 134). It is upon this scheduled and mechanised interaction between the programmed meter and the user that the notion of alienated reification Loftus 2006) is pivoted and is most troubling and threatening in terms of the entitling and democratic notions of social citizenship and human rights.

In relation to the nature of PPWM the notion of reification – which refers to the oppressive control over people which machines and technology capitalist social relations have (Lukacs 1971) – leads Loftus to refer to the "dictatorship of the meter" (2006:1). Lukacs developed the notion of reification, which combines the Marxian notion of the "fetishism of commodities" and the Weberian concept of political and bureaucratic rationality, to show more graphically the alienation and marginalisation that grows out of reification, i.e. when technology has power to control, oppress and deny people and thereby determine the fate of human beings (Loftus 2006:2). Loftus extends this concept to water meters, and says that "reification gives things an alien form and a power over people, and in the case of the water meters, over those consuming and needing water to live" (ibid). But nurturing a sense of appropriation and ownership of and pride in this "tool" which supposedly has so many benefits is part of the seductive arsenal of the commodification apparatus. This is how Hazelton et al. (2002) put it: "Meters are installed just inside the boundary of a customer's property, to encourage customers to regard the meters as theirs and to take care of it whilst still giving the council reasonable access to the meter…." (2002:9). It could be argued that this sounds like the polishing of the chains of commodification.

However, Loftus was dealing with conventional meters. PPWM has more intense, harsh and different forms of disciplinary control and subordination. Therefore, he says, we need to "explore the different kinds of relationships which are embodied in PPWM compared to conventional meters". But the alleged "advantages" or "benefits" of PPWM or describing them as "pro-poor" appears untrue (CoJ 2007: 111).

It does not appear that PPWM help to *contro*l consumption because it is instead the *denial* of consumption beyond a small lifeline that is the big problem. So pervasive is an array of flow-controlling and restricting water devices across the country that Loftus (2005) argues: "Almost without exception, the costly new technologies now being developed are intended to oversee and regulate the supplies of water to the poorest

in the city – ironically those who currently consume the least" (2005:2). How can one control that over which one is denied adequate access to? Denial appears the *actual control* exercised by the meter against the moneyless user, whereas it is inversely presented as an advantage in the hands of the user. JW also attempts to cast the meter as helpful since it enables the user to take "ownership of consumption" (JW 2001:2) whereas it is in fact an instrument of deprivation if there is no money to recharge it. It appears murky waters lurk beneath the gloss of "ownership". Furthermore, such claims are also a rhetorical device obscuring the self-disciplinary regime it instead imposes. Mitchell (1991) asserts that:

> Power is usually imagined as an exterior restriction….and it operates by setting limits to behaviour, establishing negative prohibitions and laying down channels of proper conduct. Disciplinary power by contrast works not from the outside but from within…at the level of detail….and not by restricting actions but by producing them. Disciplines work within domains and institutions (cited in Ruiters 2006:2).

The constant domestic visibility of the meter possibly serves to increase and impose an awareness of the necessity of frugality, especially in really poor households, and may even result in a kind of self-limiting and self-monitoring consternation (Drakeford1998). Hence the PPWM is the congealed embodiment of an invasive and intense form of commodification which appears to have severely disrupted and violated the constitutional right to "sufficient water", which however has not been quantified. The reality is that the PPWM makes neither ownership nor control of consumption possible in any real sense. Loftus aptly captures this situation: "Reification, or "thingification", describes the manner in which people are reduced to things and things come to acquire social characteristics" (2006:2). PPWM go far beyond the alienation and destructive effects of reification described by either Marx or Lukacs, in relation to commodified goods and services under capitalist social relations in the era of neo-liberalism, because it is so much more intense. PPWM is a new technological innovation that most epitomises commodified reification. At the individual, household and micro levels it is the most concentrated expression of how technology can come to control, regiment and alienate human beings in the service of capitalistic commoditisation. We can liken this also to what Hart (2007) refers to as the "assertion of new technologies of rule" (2007:93).

The traumatic effects a computerised technical device – which only obeys the dictates of moneyed power - have on human emotions and daily needs, especially in the light of water's vital importance and the historical, social and cultural symbolism is strongly

evident in our case study. Public Citizen (2004) captures this mental anguish well: "Picture yourself, that you, in order to get a glass of water, wash the dishes or take a bath, need to insert money into a machine. It sounds absurd – but this is increasingly what we are asking the poorest in our society to do" (2004:1). And though prepaid operates also in the electricity sector its water version is probably the most troubling and contentious social policy issue in the country today. Marvin et al. (2001) argue that "Prepayment meters are not a neutral technology. Instead the technologies embody important social assumptions about the content and power of relationships between users and produces of utility services" (2001:7)

Marvin *et al*. (2001) go on to say that "Prepayment is potentially a way of coping with unexpected bills and a tool that can be used in training people in water demand management" (ibid: 3). However, though on the surface this proposition seems credible, we need to ask: if water demand management is the main objective then should the priority not be to target the biggest consumers of water, such as agriculture, industry and hedonistic domestic consumption, rather than poor households who use relatively little water? And because this is not happening McDonald (2002) states:

> To date prepaid systems have largely been used to pressure the poor. A far more efficient use of prepaid technology could be applied to large-scale corporate users. Through on-line systems, bulk uses could prepay for consumption. This would generate massive cash flow benefits and interest income for local authorities. Big users are amongst the most delinquent bill payers though they need not be. Setting up a prepaid system for these users would be far more administratively manageable than fighting the war on installing prepaids in poor households…..(2002:19).

But so vastly different is the social status of the poor black townships from the wealthy white suburbia that aside from industry and agriculture – by far the biggest consumers of water – there is also the view that if PPWM was a positive and necessary development why did it not start in the suburbs. An elderly resident in Soweto angrily asked: "If these meters are good why did they not start with it in the rich white areas where people have lots of money? Why start in Phiri, where people are poor" (Personal interview, Alena Mofokeng, 23 August 2003). Why furthermore would PPWM – already banned in the UK because of the ill-effects on poor communities – be aggressively marketed in poor black communities in South Africa?

One thing is beyond any doubt: neo-liberalism has worsened the lot of black working class households. Therefore, probably nowhere is Harvey's (2005) notion of "accumulation by dispossession" more robustly relevant that in the case of PPWM. But the fact that it is a kind of dispossession deeply felt by users in Soweto who, even

under apartheid, were not deprived of water makes this concept both more potent and as deeply ironical. We argue that though we have a 6kl lifeline does not fundamentally disqualify the application of the concept of "dispossession", or, as we have argued earlier, that of "commodification". Dispossession follows commodification. Hart (2007) refers to this process as the "depradations of livelihood" (2007:95).

The discussion of PPWM has exposed the inner workings of a technologically, politically and discursively metabolised instrument which combines the interests of various players, such as the CoJ, the CMU (regulator of JW and other commercial entities), JW, DWAF, DPLG, prepaid meter manufacturers, the World Bank and other big business interests. In 2003 The World Bank met with Conlog on a visit to South Africa (Conlog 2003). Conlog was invited to give a presentation on prepayment. Brian Hill, a manager at Conlog stated: "Prepayment supports a capital recovery model for financing which means organisations such as the World Bank are more receptive to funding such initiatives" (ibid).

Rather than a "tool" with which to control and own consumption we see a tool of invasive consumptive discipline and regimentation in poor households. Ruiters (2006) captures the attempt to instil and internalise the necessary consumptive discipline:

> Knowing one's station, living within one's means, and one's standard of living all resonate with knowing one's place in the socioeconomic order. Place construction occurs as a material, financial, symbolic and social process that involves struggles, defeats and victories both in the world of work and residence (2006:2).

However, "place" is not only seen in a sociological and consumptive sense but also in a political, ideological and geographical sense, since Soweto, where the case study is located, resonated – and still resonates - with all these identities and these restrictive and depriving socio-political metabolisms. It appears that the objective of the propaganda to win the "hearts and minds" of users to the "virtues" of PPWM is to give the impression that this "tool" is really meant to help "*control* consumption" when it is in fact meant to instil internal discipline to *confine* consumption to the minimum, if no money is available to recharge.

Hence Keil (2002) states that "Isin (1998) has looked at neo-liberalism not as merely a prescription for state retreat but rather as a complex set of *changing technologies of power*" (2002:124). In fact PPWM are indeed "technologies of power", but in much more direct, reified and dangerous ways. Keil (2002) further states that "a shift has occurred in the technologies of power towards privatisation and away from accountable public

processes" (ibid). We therefore assert that notwithstanding the formal public cover the commercialisation and commodification of water assumes today, such as in Johannesburg, the empirical results of PPWM in our case study has blown this cover away because in reality all their effects within households are completely privatised. Not only are the actual effects hidden inside the walls of homes but the numerical extent of "self-disconnections" are not published and is not found in either municipal or JW company reports.

The social impacts of PPWM are only experienced – though invisibly and silently inside homes – in the racial-geographical spaces inscribed in the apartheid social fabric, like Soweto. Effectively, these areas continue to suffer disadvantages relative to the formerly whites-only suburbia, following the major compromises the ANC already made to water down their radical demands and accommodate the interests of white capital and the white electorate. These townships are targeted today as they were under apartheid, only this time new forms of commoditised class apartheid and oppression have taken the place of former open, brutal and legalised racism. About the installation of PPWM in black townships by JW, Smith (2005) states:

> The company's efforts to introduce water demand management are focused on consumption reduction techniques in low-income Southern suburbs, while no attention has been put towards water conservation in the affluent Northern suburbs, which consume the bulk of the city's water through plush gardens and filling swimming pools. The head of JOWAM has indicated that JW would be foolish to reduce the income stream of the company by trying to promote water conservation from households that actually pay their bills as this is where, at present, the bulk of the company's water revenues come from (2005:37)

Coming from an insider – Smith was at this time an employee of the CMU, the city's regulator for all utilities – this is once again a revealing presentation of the mainly financial considerations directing both the installation of PPWM and selective application of water conservation, with its discriminatory socio-racial and class implications. The overriding emphasis on financial considerations and the monetary calculus that lies at its heart is the pervasive theme of commodification.

Following much adverse publicity about the OGM project in Phiri in 2003 we began to see a significant and revealing discursive shift from "pre-payment" to free-payment" in the official statements of JW (2005). Underlying this shift was an attempt to downplay the negative publicity PPWM received in the media, by foregrounding the free lifeline before payments are required. This, combined with wise, prudent and responsible usage of water, could result in a situation most desirable for the poor: confining water consumption

to 6kl, not paying anything for that amount and in the process conserving water. Such is the "rationalisation" we referred to earlier, in which the object is to make it look reasonable, just, in the interests of users and therefore desirable.

This seductive logic is to make users want the PPWM more than JW wants to install it. The switch from pre-payment to "free-payment" appears a discursive trick to entice users to not only appreciate the free water but to appreciate that it is the meter that dispenses it and therefore that it serves a useful purpose, to the benefit of users, and thereby hopefully to curb resistance. However, universally the experience is that "Metering becomes mandatory as the commodification of water increases" (Ruiters 2002: 54). But more than that "Metering…could become a way of using price as a way of rationally disciplining households into economically (and thereby also racially) defined consumption patterns" (Loftus 2006:6). This depicts the ongoing salience of race in our new commodified water system, in which past and present black poverty compromises adequate water access.

Black women, PPWM and water commodification

> Women's daily struggles around issues of primary relevance to their lives become politicised; food prices, the cost of living, drains, the lack of social services (Moser 1989; Sen and Grown 1987). Women's daily struggles become the means to empowerment. Struggles for empowerment take place in the home, the state and the workplace (Townsend 1993:173).

This citation is much more strongly relevant to water usage, particularly in poor communities, for the reasons we have already provided, and the historical fact that it is women who most bear the burden of the commodification of water and other basic necessities (Bond 2002; Mehta 2002; Connell 1987). Beasley (2005) asserts: "Women's higher rates of depression and illness disappear when married men and women both share domestic duties" (Beasley 2005:228). However, we see a striking contrast between the great emphasis placed on the advancement of black women in politics, particularly within the ruling party, government and in black business, and the many-sided adversities of the majority of black women in townships. It is this situation that inextricably links gender with race and class, and which is why it is in the final analysis poor black women who are still the worst off in post-apartheid society, largely due to the sway which neo-liberalism has over social policy in the vital area of basic services (Harvey 2006).

But the root of this problem was evident before the 1994 elections. Turok (1993)

asserts: “in the current debate on economic reforms in South Africa women are conspicuously absent both from the debating for and from the subjects being debated” (1993:63). But black working class women have borne the brunt not only of water commodification but of general poverty for decades (Swilling 1993; Bond 2002a). This is why “The quality of public services is a particularly important issue for women and especially for women in deprived and marginalised neighbourhoods and communities” (Turok 1993: 63). And the fact that black women are most directly affected is reflected in the fact that they constitute the majority of the social movements which have arisen to tackle the issues of commercialisation of basic services (Bond 2004:4).

It is also important to point out that despite the multiplicity of adversities they daily face and their lowly social status they are also the majority of the population in South Africa (Harvey 2005). These are further reasons why “It is important that…the social knowledge, especially of a kind that could be influential in shaping social policies and changing social institutions, should reflect the interests of women” (Maclean and Groves 1991:199). They further argue “the fact that it is more often women than men who are on the receiving end of social policy means that the idea that feminist research should be research ‘for’ women has particular resonance” (ibid:23). Lawrence (2007) insightfully points out that “Mbeki, while presenting himself as the champion of the welfare of his racial kinsmen and women, had……pursued a policy that was directly inimical to their interests, not to speak of their health and right to life” (*The Star*, 22 February, 2007). Nowhere more evident it this than with black women’s access to water under the prepaid regime. Hence Benjamin (2004) argues that: “The private space that women occupy in their homes is under attack. Post-apartheid South Africa has seen an onslaught on the provision of basic services through the commodification of water, electricity, health and housing” (2004:148).

And the main reason why these women face a daily uphill battle to survive, and are as a result of PPWM often without water too, is because they simply don’t have money or enough of it to pay for all these basic necessities of life, and the power – as yet – to change this. Harvey (1996) asserts that “Appeal to money valuations condemns us, in short, to a world view in which the ecosystem is viewed as an ‘externality’ to be internalised in human action only via some arbitrarily chosen and imposed price structure

or regulatory regime" (1996:154). Ironically, the state recognised in 1994 the central importance of women in social reproduction: "Women are key to household health and have borne the burden of underdevelopment for years" (RSA 1994:13). But clearly the effects PPWM have had on poor black women has flagrantly contradicted this policy statement. Instead, Phillemon Tjeka, a water activist in Orange Farm - where PPWM were installed before Phiri - states: "When we raised concerns about the PPWM because here people are very poor the local ANC branch accused us of being against development of the area and just being trouble makers (Personal interview, December 2003, Orange Farm). However, so important does Orloff (1993) see the question of gender in social policy that he advocates that "the conceptual apparatus must be reworked to incorporate gender" (1993:306).

A survey conducted by Johannesburg Water itself in 2002, showed that a very significant 14.6% found the idea of PPWM "bad", 23.0% "terrible" and 8.7% "Okay for some, but not for you" (JW 2002a). This reflected a total of 46.3% who were not happy with the idea of PPWM. Unsurprisingly, the Water Research Commission praised PPWM as "empowering each consumer to become the owner of both the budgeting and decision making processes related to the payment for water, each consumer will contribute to the wider service delivery challenge being confronted by each municipality" (WRC 2002: 2). The discourse of portraying PPWM as promoting "ownership" and "empowerment" had gained a wide institutional foothold by 2002. Pape (2002) argued:

> In many municipalities the prepaid meter becomes the technical instrument for implementing the block tariff. But the prepaid meter is not redistributive, not progressive, it is regressive. It redistributes from the poor to the rich. It's not even pay *as* you go – it is pay *before* you go. The service provider gets the money ahead of time – and then they can use it for whatever – but it won't be for development of the service. So the prepaid meter is not developmental. It satisfies accountants – not the citizens (Pape 2001:1).

It is important to note that when Loftus (2005) critiques the "dictatorship of the meter" (2005:1) he is referring to conventional metering, which, as we have shown, is totally different from PPWM. We argue that in fact this critique applies much more to PPWM than it does to conventional metering, and therefore the socio-gender implications of the latter for poor black women are much more devastating. As Benjamin (2004) asserts:

> The private space that these women occupy in their homes is under attack. Post-apartheid South Africa has seen an onslaught on the provision of basic services through the privatisation and commodification of water, electricity, health and housing (2004:148).

Impacts of PPWM in other areas of South Africa

We briefly examine earlier research conducted in Phiri and in other areas, such as as in Orange Farm, Madlebe in Kwa-Zulu Natal and Lennertsville in the Northern Cape. We begin with Orange Farm.

Orange Farm is a very poor township in the south of Johannesburg where PPWM were installed in 2002. “In such poor economic conditions it is difficult to imagine how Johannesburg Water and the Johannesburg Metropolitan Council can expect residents of this area to pay for water that they need”(APF et al. (2004:16). In order to further justify tackling Phiri JW and the CoJ repeatedly asserted that the project in Orange Farm was a big success (JW 2003; CoJ 2003). “In the case by JW for the installation of prepaid water meters in Phiri, it cited the case of Orange Farm as a success story for residents, promising the same results in Phiri” (APF et al. (2004:12) They further stated: “the logic of prepaid systems seems already to have been accepted by the state and private companies without proper interrogation of its attacks on people’s basic human rights, and the widespread social devastation that it brings…..” (APF et al. (2004:12). They argued that the “research” the City claimed to have done was “only that water was being ‘wasted’ in the area, and had nothing to say about the social problems in the area related to water delivery” (ibid).

The Orange Farm research report by the APF et al. showed results strikingly similar to what we found in our case study in the next chapter. “In general prepaid meter place untold pressure on social relations. As social relations are gendered, such pressures have, at times, consequences for gender relations in communities” (ibid: 20). As a result “women are the ‘shock absorbers’ of the problems related to lack of access to necessary water” (ibid: 23). The report states that “many respondents described how they had to beg for water from neighbours because they had no money” (ibid). So much were households affected by the 6kl lifeline and PPWM that “Researchers were asked to pay 20c for a glass of water by residents during their fieldwork in Stretford, Extension 4” (ibid:20). The report concludes:

> Prepaid meters are having devastating effects on the already fragile social cohesion of poor communities. Not only are residents being forced to live according to how much they can afford to pay rather than according to their needs, but traditional and cultural practices that are based on communal and collective approaches to water and life are also being eroded and social relationships constantly undergoing changes due to economic hardships (APF et al. 2004).

Problems with the inadequacy of 6kl, PPWM and affordability beyond 6kl (APF et al. 2004), were remarkably similar to our case study, which grows out of the high rates of unemployment and poverty common to both Orange Farm and Phiri.

Research in Phiri by the CAWP (2004) was based not on actual experiences households already had with the 6kl lifeline and PPWM, but on envisaged household concerns with the change to a new water supply system and what their anticipated fears might be when the new system became operational. (CAWP et al. 2004). It therefore took place during the transition from the deemed consumption and flat rate regime to the 6kl lifeline and PPWM. "Among the negative effects that prepaid water meters could have, respondents pointed to their likelihood of bathing less often, not letting children use the toilet and not letting children use water when it is very hot. Almost one-third of residents felt that they would re-use dirty water" (ibid:171).

The CAWP report also pointed out that 97% of respondents said that "Government is unfair to come with prepaid to poor people"; 95% said that "Government is forcing us to take prepaid water"; 45% said they will not flush the toilet each time it is used; 95% said that "Some people like prepaid, but most of us will run out of water"; 69% said "Women will have more work with prepaid water"; and that "97% also stated that their health conditions would worsen as a result of the installation of prepaid meters" (ibid: 171-172). And about consultation the report noted: "the majority of respondents indicated that they found out about the installation of prepaid water meters when they saw the council workers laying pipes in the streets (ibid: 174). Finally, "78% expressly indicated that they had been threatened with cut offs if they did not accept the installation of prepaid meters" (ibid: 175).

Research conducted by Deedat and Cottle (2002) in Madlebe in Kwa-Zulu Natal provide many agonising stories of the effects of PPWM on another poor black community. A resident who ran out of water said: "We tried to get water from other meters. Otherwise we go and ask for water in the township. Sometimes these people will say water is expensive and they cannot give water" (ibid:89). The effects on social relations among communities when people are in need of water is graphically demonstrated:

> We use to help each other with water before but we now have to pay for the water and they cannot help me pay so I cannot give them. Other times it results in an argument in the community so the council told us not to give each other water. It is still causing problems in the community amongst neighbours – people fighting each other. So what happens is when you go to town or go to sleep people come and steal water (cited in Deedat and Cottle 2002:150).

Research conducted by Deedat (2002) in Lennertsville in the Northern Cape show a community which initially "accepted the prepaid meters since we could control our water" (Deedat 2002:151). But after many painful experiences with the meters they turned to bitterly opposing them. "Ja, we are begging for water because of the prepaids but we are the ones who said 'Viva' for the prepaids. We said viva because we thought it was a good system but we were not properly informed" (ibid: 152).

In 2005 research on the 'socioeconomic impacts of a corporatised water and sanitation service" by Melissa Hansen found "63.3% of respondents in Phiri and 30% of respondents in Orange Farm Extension 4 said they were not happy with water and sanitation services in their communities" (Hansen 2005:26). Furthermore, "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" (ibid). As with the research by the APF, the CAWP and what we found in our case study there is striking similarities in the findings. For example, she found that "People often also cycle 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 bathy water; not bathing as often as before; not washing clothes as often as before, etc" (ibid:27).

Finally, in 2006 the APF and Coalition Against Water Privatisation (CAWP) went back to research the impacts the 6kl lifeline and PPWM had in Phiri. "The research showed that over 95% of respondents in a survey of 174 households stated that they felt deceived by Johannesburg Water and their local councillors, and that they had not been properly consulted with regard to the installation of the prepaid meters" (APF, CAWP 2006:5). This reinforced the lack of consultation in their 2004 report. The research notes a wide range of problems households experienced since 2003 with both the lifeline of 6kl and the PPWM and that "households surveyed…spent on average, between R20-R50 per month on water. With the cost of water being R5.36 per kilolitre this translates into each household having consumed, on average, between 8.7 and 15.3 kilolitres of water per month, over and above the free 6kl" (ibid:17). This contradicts the confidence that both the CoJ and JW expressed that with careful use households could use even less than 6kl per month (CoJ 2004). In all of these studies the experiences with PPWM were negative.

PPWM within the context of service delivery

> There must be a redistribution of resources and power. A process of redistribution must be carried out by….increasing the production and provision of basic necessities of electricity, water, transportation, housing, education, health and welfare, food, clothing and recreational facilities. The state must ensure that these basic services are retained in public hands and any such services that have been privatised should be renationalised (COSATU 1992, cited in McDonald and Pape 2002:3).

The problems of PPWM exists within a much broader service delivery framework which has becomes increasingly commercialised and commodified since 1994, as we have seen in chapters 3 and 4. It is only within such a context that PPWM emerged, as the culmination of a host of earlier policy pronouncements and legislative measures by the state which signalled a decisive shift to increasing commodification, despite the small current lifelines for water and electricity since 2001. The move towards commodification and privatisation was accompanied by levels of service (chapter 4), which were crudely pitched at levels of income and affordability. "Applying such extraordinarily low standards…….ultimately linked service delivery to cost recovery. The guiding principle had become one of 'you get what you can pay for'"(McDonald and Pape 2002:5).

The significance of these policies and processes of cost recovery and commodification is that it directly undermined relevant redistributionist provisions on the RDP and the 1996 Constitution. Therefore, arguably, at the heart of the "service delivery" protests of the past few years – though not clearly articulated because most of these have been spontaneous upsurges – are problems of commercialisation and commodification of the most essential services, such as water, sanitation, electricity and housing. The growing poverty and unemployment which underlined resistance to cost recovery was the socio-material basis for these protests. This - combined with the often undemocratic manner in which services were privatised and commercialised by local government and repression often meted out to resistance to these decisions and processes (APF 2003) – determined the often violent and dramatic nature of service delivery protests. The frustrations residents experienced with the complex, demeaning and stigmatising indigent policy (McDonald and Pape 2002) probably also contributed to underlying mass dissatisfaction.

The point is that prepayment metering – for both water and electricity – not only inescapably secures cost recovery for services but bypasses potentially explosive defensive action by communities targeted for cut-offs due to non-payment, avoids the

dangers this poses for the lives of those disconnecting households and results in households "disconnecting" themselves. As we have shown this places PPWM at the centre of service delivery problems in communities where they have been installed.

Examining social justice in water consumption.

> Young's 1990 general criticism of distributional justice and recognition of how class and other geographically based differences and divisions within societies must in turn inform paradigms and patterns of redistributional justice, rather than a universalist approach which treats unequals equally, and thereby in fact exacerbate social inequalities (Burkett 1999: 265).

How much social justice is there with both the FBW and the usage of PPWM in poor working class households? Not much, it appears. Our approach is that the acid test for both a definition and practical application of this over-used and under-theorised concept is indeed access to and consumption of adequate amounts of water and waterborne sanitation in poor households. Such satisfaction of the most vitally important daily necessity arguably constitutes the heart of social policy and justice in poor households in South Africa. Earlier, we pointed to the disciplinary limits placed on water consumption by virtue of the 6kl lifeline. Harvey (1998) talks at length of how neo-liberal capitalism "frequently violates, disfigures, subdues, maims and destroys the integrity of the labouring body…." (1998:409), how deprivation and limited consumption impairs the body (ibid) and that "it is at this point that the connection between what we refer to as 'globalisation' and the body becomes explicit" (ibid:409). Water arguably lies at the centre of this discourse of the human body and the metabolic processes which either satisfies its needs or not.

> The body that is to be the 'measure of all things' is itself a site of contestation for the very forces that create it. The body (like the person and the self) is an internal relation and therefore open and porous to the world. The study of the body has to be grounded in an understanding of real spatiotemporal relations between material practices, representations, imaginaries, institutions, social relations and the prevailing structures of political-economic power. The body can be viewed as a nexus through which the possibilities for emancipatory politics can be approached (Harvey 1998:420).

The body as metaphor for the socio-metabolic processes which either provide or deny it essential water is very useful for the purpose of making the physical, emotional and social impacts – which we see later in our case study - of commoditisation more tangible, and illustrating the lack of basic social justice which biological and bodily health requires. That the body not only materially consists largely of water but that for its basic metabolic functions it is essential does strengthen its metaphorical significance and correspondingly

lays bare bodily and social injustice. Regarding the provision of basic services the Social Movement Indaba (SMI) presented their conception of social justice:

> We believe we represent a growing voice in South Africa that speaks for something different – for a world in which, at least, the resources necessary for life are decommodified. This is what will continue to bring us together in spite of how we are presented by our critics, who have the power of capital and institutions on their side (*Mail & Guardian*, 25 June, 2004).

Quite clearly the notion of social justice has to get to grips with political, economic and social power relations which underpin and control the issues it gives rise to. The key question which determines whether social justice or injustice prevails is the nature of the power that governs the lives of peoples, the policies adopted and the extent to which they are involved in the decisions that effect their lives. Hence the search for social justice has to confront unequal race, class and social relations and is therefore, we argue, necessarily anti-capitalist. Besides, in this country whether we speak of social justice, environmental justice or ecological justice, were are referring to inseparably interrelated justices. Social justice is in fact what we choose to make out of it. Castells (1983) states that:

> For some the problems of the 'quality of life' are substitutes for the contradictions between capital and labour as they become new causes of social antagonisms. For others, urban contradictions are only one expression among others of the class struggle between the working class and the bourgeoisie (1983:36).

However, there is no contrast between these two approaches, which are instead different emphases. In the final analysis we have already seen that the crisis of social reproduction (Webster and von Holdt 2005; Cock 2006; Bakker and Gill 2003) neo-liberalism has plunged poor communities into, is indeed reflections of class struggle under structurally new conditions. Where is social justice when people have to go without water and sanitation and suffer its multifaceted consequences because they are too poor to pay for it or stuck with inferior and degrading levels of services for the same reason? In fact so essential is water that this approach animates the concept of social justice with a powerful discourse because it resonates with the life and sustenance which water gives to our bodies, for survival, health, joy, play and productivity. Commodification of water therefore strikes at the heart of even elementary notions of social justice because it unconditionally demands payments to meet the most basic daily needs of poor households. Barlow and Clarke (2002) argue that:

> In a world where everything is being privatised, citizens must establish clear parameters around those areas that are sacred to life or necessary for social and economic justice. Equal access to water is absolutely central to both life and justice (2002:208).

Hence Corrigan (1997) asserts:

> Once the process of commodification touches the sacred, the latter is in serious danger of losing its reason for existence for it is no longer protected from the exigencies of the ordinary commodity world (1997:39)..

Commodification does not only affect the lives of the unemployed, informal, casual, part-time and temporary workers but that too of full-time workers who despite having employment are still considered poor (Webster and von Holdt 2005; Barchiesi, 2005). Webster and von Holdt (2005) also point out that "There is general consensus that income poverty has increased over the decade since democracy was established in South Africa" (ibid:29). As a result water commodification in poor households will only worsen levels of income and material and social poverty and therefore decommodification is critical to the social justice discourse. As Jarman (1997) points out: "Poor people emphasise the importance of security, self-respect and independence as well as material sufficiency, thus challenging economists' exclusive focus on income as a measure of poverty". Though commodification of social reproduction has been a distinguishing feature of neo-liberalism, Burkett (1999) asserts that:

> The reduction of workers to a sub-natural state by the capitalistic dequalification of their natural consumption needs is an important, even central, theme throughout the writings of Marx and Engels" (1999:238).

The concept of social justice needs to go much further to deal with the suffering, disempowerment, alienation and reification – particularly through PPWM – which commodification in Soweto has entailed. This requires combating the harsh, unhealthy and dangerous self-disciplining effects commodification can have on poor households. Every oppression, denial and exclusion becomes a potential indicator of social injustice, and therefore liberation from these becomes necessary to achieve and enjoy social justice. Harvey (1997) captures this point well:

> Labour strives to raise its standards of living by reducing the cost of living and increasing the use values it can command, but capital constantly seeks to subvert this drive, often through the agency of the state, into a reduction in the value of labour power and into 'rational modes of consumption from the standpoint of accumulation (1996:57).

We in fact have seen simultaneous attacks upon the already low standards of the working class at both ends of what is essentially a class continuum, which renders the

concept and case for social justice much more compelling. This is especially so since "the separation between working and living is at best a superficial estrangement, an apparent breaking asunder what can never be kept apart "(ibid: 62). Indeed the historical presence of these multiple and coterminous dimensions weighs heavily upon the concept of social justice, no more visible, we believe, than in the crucial water sector. The same would apply to the concept of a 'developmental state' (Schuurman 1993; Keil 1997). Harvey (2005) points out that a sense of justice has to be historically and geographically constituted (ibid). This is indeed our approach to this study. Smith (1995) aptly captures the South African context: "The argument underpinning the discussion which follows is that a form of egalitarianism provides an appropriate universal framework to guide thinking about social justice in South Africa but that its application requires attention to the particular inheritance of apartheid" (1995:46). About unequal distribution and its implication for social justice Harvey (1997) asserts:

> Since most poor people are people of colour, the impact is racially discriminatory. And if we care to think about it all, there is a symbolic dimension, a kind of 'cultural imperialism' embedded in the whole proposal – are we not presuming that only trashy people can stomach trash? The question of stigmatising of 'the other' through, in this instance, association of racially marked others, wit pollution, defilement, impurity and degradation becomes a part of the political equation (ibid: 368).

However, what Harvey does not consider and analyse is how the trajectories of 'Third World' history has shaped a fundamentally different situation there compared to the 'First World'. Whereas the latter generally enjoyed and took for granted for decades a fairly generous welfare state the former had little or none of it. In fact the most basic services, such as water and sanitation, were seriously lacking and where they existed were largely charged for. Today of the 1.2 billion people without access to water all are in the Third World. Therefore when neo-liberalism descended upon the Third World it worsened an already bad situation. And as we pointed out earlier it is the exploitative ravages of colonialism and neo-colonialism which facilitated and made affordable excellent public sector systems in the First World. But Sullivan (1987) points out: "The object of state welfare provision was to cushion insecurity and to ameliorate excessive inequality rather than to promote equality" (1987:74).

These historical realities have profound discursive, political and strategic implications for both the commodification and decommodification narratives which we see little or nothing of in the works of Polanyi, Harvey and Esping-Anderson. While their work to a large extent has an undoubted universal relevance and usefulness

the historical specifics are seriously lacking. The further point is that the serious limits of their work – in so far as the Third World is concerned – are hardly recognised and acknowledged. It was refreshing therefore for Harvey to state: "For all my geographical interests, it has remained Eurocentric, focused on metropolitan zones. I have not been exposed much to other parts of the world" (2001:21). As further evidence of such a discursive chasm this study found few scholars of colour to draw on. Castells (1983) argues that:

> It is evident that the social sciences can confront the new urban crisis only if they accept the primacy of practice, the need for new theoretical avenues, and the overcoming of intellectual ethnocentrism (1983:13).

It is the plight of poor black women – those who suffered most from apartheid and who now suffer most from water commodification – which invests both social policy and the quest for social justice with a striking relevance. These women have particularly been at the receiving end of social policy, under apartheid rule and arguably under later ANC rule. Hence we find this approach by Huby (1998) compelling in the South African context:

> Where social policy is framed in accordance with Rawl's theory, resources will be allocated in a way that benefits most the least advantaged. The concern is no longer simply to ensure the sanctity and voluntary nature of transactions, but to weigh them in terms of what inequalities are created, whom they benefit, and by how much (Huby 1998:75).

Given our history social policy has to consciously and normatively be framed in such a way that prioritises meeting adequately the needs of the black working class in social reproduction and that this be either directly subsidised by the state through appropriate taxation or/and cross-subsidised through appropriate tariffs. This is the one side. The other side of this same redistributive coin is to steadily erode the neo-liberal hegemony in which current social policy is framed. The point is that apartheid social policy has come to dovetail post-apartheid neo-liberal social policy in uncanny and unexpected ways.

So vast are the income and social inequalities between black and white in South Africa or more specifically between Soweto and formerly white Johannesburg suburbia, that even if 20kl of free water for poor black household was cross-subsidised it would be a minor dent in the overall picture of deep, extensive and multifaceted social inequalities that characterises the built environment in this city. But not to take such measures will most likely exacerbate inequalities. Since these are matters which determine the conditions of life of people long oppressed, exploited, denied and excluded the steepest

possible cross-subsidisation from wealthy households to them is fully justified and of the highest importance for social justice redistribution. Swyngedouw (2004) spells out this approach: “Political ecology attempts to tease out who gains and who pays, who benefits from and who suffers (and in what ways) from particular processes of socio-environmental change” (2004:32). For example, referring to the Western Cape, Bell citing a former unionist, Roger Ronnie, stated that “our calculations show that the province’s golf courses use enough water on their fairways and the greens to supply the basic needs of 14.8 million people” (*The Star*, 15 January 2005).

The question is: for the purpose of social justice should at least the standards that obtained in former white working class areas - such as Newlands or Brixton in Johannesburg – not be the minimum standards for water, sanitation, housing and other urban amenities in places such as Soweto? Orloff (1993) defines social rights as “the whole range from a modicum of economic welfare and security to the right to share to the full in the social heritage and *to live the life of a civilised being according to the standards prevailing in the society*” (1993:306). But we know that there are still vast differences between the services that households in these respective areas receive and can pay for. For example, unlike in Soweto all households in these areas have in-house taps and baths and houses are much bigger. Most households in Newlands and Brixton would most likely also be in a better position to pay for water above the lifeline of 6kl than those in Soweto. The service conditions and affordability differences with Soweto would be much bigger in wealthier areas in Johannesburg, such as Parktown and Houghton. In this regard the social-psychological perspective by Deutsch (1985) is useful:

> As with dissonance the presence of inequity in a person creates tension that is proportional to the magnitude of the inequity. And as with the tension aroused by dissonance, the tension aroused by inequity will motivate the person to eliminate or reduce it, the strength of this motivation being proportionate to the tension (Deutsch 1985:13).

We will see in the case study some of the measures households take to “eliminate or reduce” the tension aroused by wholly inadequate supplies of water, and why many have illegally bypassed PPWM when they have no money. Visser (2001) points to the importance in his research of what people directly affected have themselves to say about what their needs are for resources they rely upon: “part of the answer to the question of how goods should be distributed is to be found by looking at the way that people think that they ought to be distributed” (2001: 1676). Deutsch (1985) furthermore argues:

> Procedural justice is a key aspect of distributive justice, and it reasonable to believe that the sense of injustice is more often aroused by complaints about the procedures involved in a distributive process than about the distributive values governing it: the distributive values are commonly taken for granted while the procedures are not (ibid:35).

This is relevant to the roughshod manner in which both "consultation" with households in Phiri took place and how harshly opposition was dealt with (APF 2003). According to the APF those arrested and charged were prevented from "any interference with the project"; "a ban on coming within 50 meters of the project"; and a "ban on attending any meeting to discuss the project" (ibid). Democratic procedures and meaningful consultation is as important as democratically reaching agreement on the substantive issues involved in new plans or projects and in the quest for social justice. The UN recognises that the "right of individuals and groups to participate in decision-making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water" (UNCESCR 2002:12).

How useful are the discourses of human rights and universalism?

> In societies governed by deep inequalities of political power, economic wealth, social standing and cultural accomplishment the promise of equal rights is delusory with the consequence that for the majority, rights are merely abstract, formal entitlements with little or no de facto purchase on the realities of social life. In so far as social life is regulated by these abstract principles and in so far as the promise is mistaken for its fulfilment, then the discourse of rights and justice is an ideology, a form of mystification which has a causal role in binding individuals to the very conditions of dependence and impoverishment from which it purports to offer emancipation (Harvey 1996:389).

The serious limitations of our constitutionally enshrined rights to water and health and is starkly different with regard to both the quantity and quality of services black townships receive and can pay for, as we will see clearly later in the case study. There is therefore an evident contrast between promise and reality, which Harvey refers to. However, in a later work, Harvey revisits the issue of human rights in the Universal Declaration of Human Rights, more sanguinely:

> And on the question of rights the bourgeoisie has created such a maelstrom of contradictions on the world stage that it has unwittingly opened up several paths towards a progressive and universal politics at the global stage. To turn our backs on such universals at this stage in our history, however fraught or tainted, is to turn our backs on all manner of progressive political action. Perhaps the central contradiction of globalisation at this point is the way in which it brings to the fore its own nemesis in terms of a fundamental reconception of the universal right for everyone to be treated with dignity and respect as a fully endowed member of our species.

But such universalism is in the South African context not very helpful, if not a redistributive liability. The arguments by Bond et al. (2002a), that universal cross-class

lifeline provisions help build political solidarity between them has little or no relevance to our context. What building of cross-class solidarity can there seriously be between poor black Alexander in Johannesburg with neighbouring rich white Sandton? To the contrary, Sandton's white ratepayers initiated a rates boycott in 1997 when they faced the prospect of cross-subsiding Soweto's basic services (Bond et al. 2002: 216). Instead, social justice would best be met by geographically-based tariffs, which exclude poor townships, such as Soweto, for the first 20kl. The Water Services Act (1997) makes provision for geographical-based tariffs (RSA, 1997, s5.1). Low and Gleeson (1998) framed the matter in this way:

> In the main, spatial social science has followed the utilitarian practice of measurement of distributional outcomes. Reflecting this substantive concern, the notion of 'territorial justice' emerged as one early socio-spatial measure of fairness (e.g. Davies, 1968; Harvey, 1973. Davies (1968:39) defined territorial justice as 'an area distribution of provision of services of its population'. Although Johnston *et al*. (1994:300) defined geographical justice as 'the empirical and theoretical study of the….fairness of the geographical apportionment of benefits', it is true that much of the work undertaken beneath this rubric has focused on the distribution of publicly provided 'goods' (Low and Gleeson, 1998:105).

As with the concept of social justice, human rights and the 'commons' discourses are often differentiated, wide, dispersed and fragmented, without a coherent theoretical core or uniformity, and often begging clearer definition. But we need to anchor the discourse of both social justice and human rights around very specific issues - such as the lifeline, PPWM and cost recovery - to test and develop both its definition and applicability, otherwise these are often woolly and abstract. Roberts (1998) usefully asserts that:

> Abstractions such as 'environmentalism' and 'community' are emptied of their specific relations of inequality and injustice, are recurring temptations for weakened socialist left in search of ways to unite a diverse movement, and also impatient for short term success (Roberts 1998:2).

It is precisely at this discursive juncture that we place the commodification and decommodification of water and other "basic needs". However, the arguments by Muller (2003) in relation to cost recovery, free basic water, commodification and privatisation and many other institutional and ideological issues clearly indicate that there are unbridgeable differences between the governments and its opponents, whose struggle for decommodification we focus on later. However, Robertson (1991) throws light on human rights and social justice discourse:

> What good is it to have freedoms, such as speech, movement and religion if you are hungry and living in poverty? Some say that civil and political rights are almost meaningless to a starving squatter. Therefore, social rights come before other rights. They say that the poor, wisely or not, would choose a full belly than the right to vote (Robertson 1991:169).

And since we can go for about a month without food but only a week without any water the vital significance of an adequate and uninterrupted supply of water it is a foregone conclusion and with that the centrality of water for human rights and social justice discourse. Lefebvre's (2004) "right to the city" provides a fresh and thought-provoking take on the social rights and justice we dealing with. For Lefebvre the city and everything in it belongs to and should be democratically appropriated by its citizens without being subjected to the demands of commoditisation (ibid).

However, the universalism of FBW has opened up new ironies and contradictions because, on the one hand, it gives 6kl free to rich and middle class (largely white) households which do not need it, and on the other, it has deprived poor black households in Soweto, who under apartheid consumed unlimited amounts without the enforcement of cost recovery and compulsory prepaid metering. Though water is related by many discursive threads to other social reproduction and consumption, because of its nature it is the best barometer with which to advocate, measure and monitor the cause of human rights and social justice for poor black households. However, the universal roll-out of FBW is not social justice but serves to deepen existing socio-material inequalities. There should be no free services for those who benefited from apartheid for a long time, at the expense of black people, and who don't really need it and can easily pay for it. The same predicament exists if the FBW amount was to be universally increased to, say 15kl. The rich and others who can pay will be getting even more of their water freely. That cannot advance the cause of social justice, especially when for long "apartheid coddled whites and ignored blacks in social policy" (Pilger 2001).

At variance with universalism Harvey (1996) captures this point well: "Inequalities multiply rather than diminish. What appears as a just procedure, produces unjust consequences (a manifestation of the old adage that 'there is nothing more unequal than the equal treatment of unequals" (Harvey 1996:191). Therefore a key question regarding the tenet of universalism is this: Was the original thrust and emphasis of this tenet not to secure a dispensation that does not *exclude the poor* who cannot buy water and not to *include* those who did not need free services? "It is wrong on every count to treat unequal need equally" (Pratt 1997:199).

Furthermore, in the same vein, the following Marxian maxim is appealing in the quest for social justice: "From each according to their abilities, to each according to their needs"

(cited in Burkett 1999: 247). This particularly applies to affordable tariffs – in so far as "abilities" are concerned – and to a much better lifeline as far as "needs" are concerned. Universalism is problematic because it conceals and obscures socio-class divisions behind attractive-sounding ideas about equal allocations. Universalism does not confront but rather condones and reinforces glaring inequalities. Besides, it leaves capitalist and commodifying hegemony and exploitative socio-class relations and its deep stratification undisturbed. But of huge significance for social justice and from an unlikely source - the USA's House of Representatives – an anti-commodification resolution was adopted in 2004, with the "support of hundreds of citizen organisations and 38 Congressional co-sponsors".

> In order to counter the international privatisation agenda, the Water for the World Resolution affirms that water is a global public good and should not be treated as a private commodity. It recognises that government policies should ensure access to water to meet basic human needs and that no one is cut off from water due to economic constraints (Public Citizen, 2004:1).

Understanding water's physics, chemistry and geology are more technical aspects, we have little need for. No, water's biological, nutritional and survival metabolisms are most important. We don't think of water from an engineering standpoint. We think instead of engineering new social relations which recognise adequate and unimpeded access to water as a fundamental and irreconcilable right. As regards water this is the highest human right to social justice we could advocate and aspire to. And we think the key question of whose water it is, anyway, is powerful precisely because it acknowledges that fact that water in its raw form comes from nature and therefore is or cannot be "owned" by anyone. That is why the critique of alienation which deprivation of water results in is so strong. Hence Foster argues that "Such alienation, according to Marx, 'estranges man from his own body, from nature as it exists outside him, from his spiritual essence, his *human* essence" (2000:113). Ball (1999) therefore poses an insightful question: "One might as well ask: what does it mean to be human. The answer may be found in our relation to water, the mother of life" (1999:106).

The point is that as much as we stress that we must not separate water from the rest of our lives we cannot undermine the fact that it is quite unique. Ohlsson (1995) asserts: "We are creatures of water, dependent not only on ingesting water daily, even hourly, to keep up the flow of life through our own bodies, but also on safeguarding the flows of water through the structures of the societies we have built, and the biosphere making up our only basic-life support system" (1995: 3). These are not idealised and idyllic

projections but expresses the deep and unalterable fact of the socio-metabolic materialisation of water in multiple ways, all of which are critical, we argue, for the cause of social justice. However, we need to temper this fundamental point because it is equally a fact that while - if really desperate for survival - we could get water from several public sources, we cannot as easily find food to eat when hungry. And food also comes from nature and so in fact does everything else in the final analysis, following the interaction between human beings and the physical environment (Swyngedouw 2004). The point however is to always link water to so many other basic and daily biological and physical requirements human beings have. But though there will be no water equity until the social inequalities of our world are addressed, "they show that you can fight for water without fighting for water per se" (Barlow and Clarke 2002:246).

However, we need a discourse of human rights and social justice which clearly and comprehensively articulates the numerous injustices water commodification lead to inside poor households: "Such incidents produce a feeling of uneasiness, discomfort and anxiety, which threaten to tear down the laboriously built and elaborately maintained security and safety of familiar places" (Kaika 2005: 68). So much so that it generates feelings of "not being at home in one's own home" (ibid). We see much of such feelings in our case study. If we cannot have justice – in which we have adequate amounts of water for everything we need it for - in our own homes and for healthy bodies, minds and spirits, what hope is there of finding it anywhere else? Water is the very essence of being human and therefore foundational to our livelihoods.

Water is often personal, private and intimate - with washing, bathing, cleaning, drinking and sanitation - and yet at the same time the consequence of the lack of water is profoundly public. It is therefore in a sense difficult not to romanticise water. The satisfaction and joy we feel when we have a drink of cool water on a hot day or after a bath, shower or swim is the feeling which only water can give. In this sense with regard to the effects of PPWM we can appreciate Kaika's (2005) claim of the "dehumanising aspects of technology" (ibid: 85). But the technology is in this case just a tool expressive more of the underlying socio-political and economic power relations than of itself. In other words it is the end to which this technology is put that is the problem. PPWM technology is the means in the service of commodification ends - which cannot be

achieved with conventional metering - because with the former you cannot escape payment whatsoever or even have the opportunity to make representations for the purpose of continued consumption. PPWM represent what Swyndgedouw (2004) refers to as the "politics of technological fix" (2004:47). This means that technology is used as a way to solve problems, such as non-payments, discipline users and avert potentially explosive physical cut-offs.

Therefore, when Brown (2003) states t hat "commodification reduces to money the range of values humans hold with respect to water" (2003:19) the social injustices are so much more brutal with PPWM and therefore intensifies the suffering and alienation Loftus (2006) invokes when he refers to the "dictatorship of the meter" (2006:1).
As a result the tension and injustice Deutsch (1985) says is created in proportion to the "magnitude of the inequity" (1985:113) is so much greater in the case of the PPWM because in one fell swoop it combines physical water deprivation with the subsequent psychological and emotional trauma and powerlessness which such deprivation leads to because of the vital nature of water and the dependence of our bodies and many basic daily tasks on it.

We need to briefly examine whether ethics plays a role or ought to in the discourse of social justice and if in relation to this question it is realistic to avoid normative issues. There is certainly an important motivational, discursive and political space for ethics in the discourse of social justice, particularly given our past. In fact Low and Gleeson (1998) regard justice itself as an ethical question (1998:33). Can we ignore or avoid the moral implications of both the devastating social legacy we have inherited from apartheid and equally the negative and dangerous effects the case study shows neo-liberal commodification has had on the black working class after 1994, both in terms of jobs and social reproduction (Webster and von Holdt 2005)? We cannot because ethical questions are inextricably involved in any discourse of social justice. In fact given the history of South Africa since 1652 ethical questions have a profoundly important place in social theory, social policy and the quest for social justice after 1994, in particular regarding questions of the distribution and redistribution of vital resources. Therefore Low and Gleeson (1998) state:

> It is significant that one of the most eminent Marxist geographers, David Harvey, has conducted his analysis of the spatial dynamics of power in capitalism always against the background of a concern for justice. The distribution mechanisms of a city are unjust because the fundamental rules and norms through which urban development is produced are unjust (Harvey, 1973; 1992) (Low and Gleeson 1998: 31).

It is significant that the economic writings of Marx often contain moral condemnations of the degrading conditions capitalism subjected working class families to, including child labour. The political saliency of social justice in an era when market relations dominate the globe is evident. Hence Marx (1845) argues: "If man is shaped by his environment, his environment must be made human" (1845:131, cited in Low and Gleeson (1998:263). We once again return to the centrality of adequate water consumption for bodily health, human rights and social justice, in a way that mutually reinforces each other:

> Many scholars have pointed out how the individual body and the social body have been deployed as metaphors and metonyms for each other (Thonghai 1994). In this way, the bodily health of the individual citizens and the well-being of the collective nation become culturally intelligible through commonly deployed metaphors of blood, vitality and race (Peet and Watt, 2004: 281).

We have already alluded to the powerful metaphorical properties of water, which is inextricably mixed with "blood, vitality and race", and therefore human rights and social justice must expansively include confronting all the adverse social consequences of commoditisation, such as the indignity, stigmatisation, internecine strife, exclusion, insecurity, fears and risks to health and well-being water deprivation can result in, with PPWM in particular. And because this is not really happening Peet and Watts (2004) ask: "How would rights be protected and future needs accounted for? Concerns such as these have spurred a countermovement of considerable vigour" (2004:287).

However, theorising human rights and social justice concerns for access to water concerns both inner bodily metabolisms and outer bodily and exterior surfaces:

> Our theme is the power of water to clean, to detach what sticks to people, to their clothes or their streets. The power water has to penetrate body and soul and communicate to them its own freshness, clarity and purity is another theme with an altogether different history (Peet and Watts 2004: 300).

But this is furthermore why water will not easily be commodified and therefore dis-embedded from societal structures, customs, cultures, "civilisation" and "human rights", and why therefore in our own understanding it would not be a "cooperative commodity" (Bakker 2000:1). Kaika (2005) traces the embedded networks of water and sanitation:

> The purified water that flows into the modern home is as much the product of the interaction between the physical environment and human beings as the water that flows out of the modern home in the form of sewage. The production and flow of both hybrid forms of water depend upon the existence of a complex materials and social networks (Kaika 2005:64).

Contrasting this and the explicit public nature of water with the alienating technology of PPWM is important because the latter privatises inside the walls of

homes the multiple miseries going without water poses for its inhabitants. These are all dimensions of human rights and social justice, which are discursively two sides of the same coin. This is why commoditisation of water has provoked various forms of social resistance in various countries, particularly in South Africa. It is for so many reasons arguably the most uncommodifiable commodity we have today, which is why the very heart of social justice in poor black households is unimpeded access to adequate amounts of water. It also highlights why Benton (2000) asserts that "Humans are embodied and have physical and psychological needs that must be met on a regular basis" (2000:155). Water commoditisation and deprivation can therefore be seen as attempts to embed the natural embodied metabolisms humans depend on for their lives and survival within markets, or as Polanyi will say, attempts to dis-embed economy from society (Polanyi 1944).

We can see therefore that the body's natural metabolisms are disrupted by water commodification and led often therefore to deprivation in poor households. But there are deeper social justice resonances for us: it is the black body, the body which has been the objection of colonisation in old and now new forms. It is the black body that has been subjected to slavery, colonialism, neo-colonialism and now neo-liberalism. The common thread running through all these forms of domination is a mutating colonisation: owning, enslaving, controlling, subjugating and depriving the black body. Here we need to combine commodification and colonisation of the black body at the points of production and reproduction. We argue that since white racism has been central to slavery, colonialism and even neo-colonialism and neo-liberalism - and poor black people at the receiving end of all these processes for centuries – commodification of social reproduction today serves to perpetuate, reinforce and indeed in several respects worsen their socio-historical lot. And because the essence of commodification is monetary payments the assertion by Gorz (1994) is particularly important for the vast majority of black people in South Africa: "The more we can extend the sphere of activities about which we can say, 'This is not for sale' or "I can't put a price on this', the richer are our individual and social lives" (1994:511). Instead neo-liberal commodification has increasingly dispossessed black people of the little they had.

Furthermore, specification of the *black female body* – especially in relations to various domestic water uses which they are largely responsible for – and this discourse has even more powerful metaphorical properties, all of which are important for social justice. That is why we earlier argued for a historicised and historical materialist

approach to human rights and social justice. Images of Soweto are invoked:

> Place is space which has historical meanings, where some things have happened which are now remembered and which provide continuity and identity and across generations. Place is space in which important words have been spoken which have established identity, defined vocation and envisioned destiny. Place is space in which vows have been exchanged, promises have been made and demands have been issued (Brueggemann, cited in Liburne, 1989:26) (Harvey 1996:304).

But it is this historical legacy of Soweto, which, according to leading social movement activist, Trevor Ngwane, resists PPWM and commodification: "Prepaid meters only worsens the social inequalities of apartheid because poor households who find 6kl too little are forced to use these meters but they have no money to recharge the meter, so there is no water. But it is not a question of arithmetic but of neo-liberal power relations which dominate us" (Personal interview, November, 2006).

Johnston (2003) says that "enclosure" "represents both a property space and a moral space that extends the colonisation of modern forms of control, commodification and instrumental rationality to increasing domains of the lifeworld" (2003;224). The evidence from the case study appears to reinforce this assertion. It is ironical that PPWM have been installed – some argue imposed – by a black-led party formerly committed to redistributionist social policies to deal with the devastating socioeconomic legacy of racial capitalism for the black working class.

However, in conclusion, it does appear from this study that there are indeed contradictions between the human rights discourse and capitalist hegemony (Harvey 1996). In fact, these tensions and unfulfilled expectations – contrasting human rights promises with conflicting social realities – will continue to open up several avenues for contesting commodification and building a strong countermovement.

The prospects of utilising human rights discourse for radical ends – which in fact require transcending neo-liberalism - will be greater in South Africa than probably anywhere else for reasons we have already provided. "Strict enforcement of such rights would entail massive and in some senses revolutionary transformations in the political economy of capitalism. Neo-liberalism could easily be cast as a gross violation of human rights" (Harvey 2000:90). The chasmic divide between word and reality that exists in human rights discourse appears yet another manifestation in which the ongoing "pretence that capitalism is consistent with real democracy…..wears thinner and thinner…" (Hobson 1938, cited in Smith (1990:94). That is why too despite all the grandiose declarations of both water and human rights over the past few decades poverty and inequalities have grown (Harvey 2000).

The UK experience

It is as a result of the adverse consequences which PPWM had on poorer households that in 1999 the UK government banned their installation in any home or public institution (OFWAT 1999). PPWM had a devastating impact on poor households in the working class neighbourhoods of Birmingham, Liverpool and other municipalities (England and Wales High Court 1998; Drakeford 1998). Drakeford claimed that "The connection between prepayment purchase, debt and hardship in the water sector industry is indisputable" (ibid:594). It was the public health threats posed by cut-offs which compelled the British Medical Association to conclude: "Disconnections of domestic water supplies for reasons of non-payment should be made illegal" (BMA, 1994:500).

The BMA joined the campaign – led by various councils – to have PPWM banned (ibid). Their own research – and that of others - supported the view of the applicant councils that PPWM posed a health threat to poor households: "By removing access to water, the water companies not only put the household at risk but also the health of the local population with whom the household may come into contact" (ibid). Importantly, Under the UK's Housing Act of 1985, a dwelling without water is considered unfit for human habitation (ibid). Furthermore, "The Environmental Protection Act 1990 makes provisions for a dwelling without water to be declared a statutory nuisance" (ibid).

CHAPTER SEVEN: CASE STUDY

Case study location: Phiri, Soweto

This case study is located in Phiri, which is situated in Soweto, an acronym for 'South Western Townships'. Soweto is an integral part of Johannesburg and comprises 8.7% of the Greater Johannesburg Metropolitan Area (JW 2002:3). Though the first township in Soweto, Klipspruit, was established in 1904 by the then British-controlled authorities, most of the 87 townships in Soweto were established during the 1950s (Beal et al. 2002). Klipsruit was set up after black and Indian residents of Bricksfield in Newtown were removed following the outbreak of plague in what were then unsanitary and unhygienic living conditions (Grant and Flinn 1992). But it was only in 1963 that the name Soweto was officially adopted for the sprawling townships that occupied what was earlier the farms of Doorkop, Klipriviersoog, Diepkloof, Klipspruit and Vogelstruisfontein (Wikipedia 2005). 65% of Johannesburg residents live in Soweto (CoJ 2003).

Soweto, with a population of well over one million people (CoJ 2003; Beal et al. 2002), was built to provide rudimentary housing for black labourers who worked on the mines and in other industries in the city (CoJ 2005). As a designated 'dormitory township' Soweto has always been plagued by poverty and unemployment: "The perennial problems of Soweto have, since its inception, included poor housing, overcrowding, high unemployment and poor infrastructure. This has seen the settlements of shacks made of corrugated iron sheets becoming part of the Soweto landscape" (CoJ 2005). Soweto's only hospital, Baragwanath, was built not for its residents but, during World War II, for convalescing British and Commonwealth soldiers (Wikipedia 2002).

In 1994 Sowetans earned on average almost six and a half times less than their counterparts in wealthier areas of Johannesburg (1994 estimates) (ibid). A reflection of this poverty can be seen in the fact that Soweto contributes less than 2% to Johannesburg's rates (ibid). Poor and inadequate housing is also evident: "The backyard of almost every Soweto house has shacks or formal outbuildings, house-extended family or payment tenants, mostly the latter" (Beal et al. 2002: 34). And about 80% of houses have the toilet in the yard and only 20% have in-house taps and a sink (ibid). However, all houses have waterborne sanitation and tap water, though it is largely situated outside the

house. So small are most of the houses that they were dubbed “matchbox” under apartheid (ibid). 57% live in 4-roomed houses and 20% in single-roomed backyard structures (ibid: 162).

A history of Phiri

Phiri is one of the oldest and poorest townships in Soweto (CoJ 2003). In terms of existing municipal demarcation Phiri and Senoane falls in ward 15 in Region 6, which comprises of Soweto and Doornkop (CoJ 2003). It was founded in 1950, “after the National Party government settled about 300 families in Phiri” (Xaba 2003) and had an unemployment rate of 65% in 2003 (CoJ 2003). However, a request for the present unemployment rate in Phiri stated that it is 30% (Phiri council office, faxed correspondence, 25 June 2008). This is probably incorrect because in 2004 the CoJ stated that Phiri experienced a 49 percent increase in unemployment between 1996 and 2001 (CoJ 2004). Therefore, it is likely that in 2008 – in the context of a rising national unemployment rate over the same period - it is higher than the 65% reported in 2003 (CoJ 2003).

The approximate population of Phiri is 8,500 (Phiri council office, faxed correspondence, 25 June 2008). Strangely, this figure is roughly half the figure of 16, 472 the CoJ provided to Hansen in 2005 (Hansen 2005:13). The total number of houses is 2, 157, of which 300 are the 2-roomed ones first built in Phiri in 1950. The rest are 4-roomed houses built later in Block A, B, C and D and where PPWM were first rolled out in Soweto (ibid). Several families shared two-roomed or four-roomed houses. The original 300 two-roomed houses were not included in OGM because the tenants were in the process of being moved by the council to Braamfisherville due to their small size and poor condition. That is why these households were able to assist those households in Blocks A, B, C and D with water after their 6kl allocation expired. Because these houses were not targeted for PPWM they continued to receive the deemed consumption of 20kl, for which at the time of the project they were not paying for. The main road in Phiri, Mabalene, divides the 2-roomed from the 4-roomed houses.

The CoJ itself stated what it was like in Phiri under apartheid: “Four families shared four rooms in a crammed single house unit. Families had no family personal privacy in these units. They also shared the most personal of amenities, like a toilet” (Xaba 2003). The CoJ also acknowledged that: “The Phiri housing units story is especially touching

because it is a cruel reminder of the level of human degradation caused by apartheid rule" (Xaba, *The Star*, 16 September 2003). About Phiri and surrounding areas a report concluded: "The socioeconomic structure of the area is homogenous and is considered to be representative of the Greater Soweto area" (JW 2002b). In a study by Naidoo/CAWP (2004) - with a sample size of 174 households – they found that 89% had to access water from yard taps. In a later study with a sample size of 166 households they found that 82% of households did not have a bath inside their homes (Naidoo/CAWP 2006:17). Phiri is undoubtedly a township with high levels of unemployment and poverty and with lack of "social protection" (JW 2000b:35). It is also very clear from this that Phiri was and is one of the poorest and worst-off townships in Soweto. "Phiri is a part of Soweto with high levels of unemployment and poverty" (APF/CAWP 2006: 13).

Phiri itself has no police station and no hospitals or clinics (Phiri council office, faxed correspondence, 25 June 2008). It has one public library and a hall. Officials were unable to provide any health statistics for Phiri, including cases of HIV/Aids (ibid). It is unlikely that with a total of 2,157 households the council's figure of 800 pensioners (37.2%) (ibid) is correct because our case study of 200 households had a figure of 121 pensioners, which was 61.5% of the sample size.

Backyard shacks

An estimate of the number of tenants living in the backyard shacks is about 1,500 (Phiri council office, faxed correspondence, 25 June 2008). But this figure is probably incorrect, especially if the number of backyard dwellings in the 1990's of 1,963 (Morris 1999, cited in Naidoo 2004:164) was correct. This is even more so in the light of the rapid rise in the number of these shacks after 1994 which interviews with key informants, Mpholo and Biya (18 June 2008) made clear.

It is important to note that due to lack of sufficient and proper housing for black people under apartheid there were often several households in Phiri living on one council stand. The main household would build or allow rooms to be built or shacks erected on their stands, usually in the backyard. A key informant stated: "The pressing need for accommodation by many black people who came from the rural areas to look for work and the opportunity to augment the household income in struggling times led to many rooms being built in backyards" (George Biya, personal interview, 18 June 2008).

The rooms were built with bricks and cement but the shacks were built with wood, aluminium, zinc or plastic sheeting.

In recounted the origins of these shacks and the purpose they came to serve Biya provided some very important insights into the transition from the apartheid to post-apartheid situation. He stated that under apartheid regulations and control there were not many shacks and that those that did exist were largely for family members of the household, like when a son or daughter got married and needed their own place. But he traced their rapid growth to two factors: the terrifying violence that broke out between hostel dwellers and township communities in the 1980's – which received great coverage in the media – and the post-1990 influx of black people from other parts of Gauteng and the country, following the euphoria that greeted the release of former president, Nelson Mandela.

He said that Mandela's release and the negotiations that began between the ANC and the old apartheid government led many black people to believe that there would be more opportunities for work and accommodation for them in Johannesburg. Furthermore, "The thousands of displaced people from various hostels – mainly Zulu speaking - and townships during the violence that occurred in the 1980's led many to desperately seek a place to stay. Remember that many hostels were under the control of the Inkatha party then (later renamed the Inkatha Freedom Party)". He said that these two factors were the main reasons for the growth of backyard shacks in Phiri and elsewhere after 1990 and particularly after the 1994 elections, when greater numbers of black people from around the country and neighbouring countries flooded into Johannesburg, seeking accommodation and jobs.

Biya went further to provide a compelling account of social relations between these shacks and the main household, especially once these properties were transferred from the council to the ownership of the registered household after 1994 and why and how these relations became increasingly tense and conflict-ridden since. "Once these properties were transferred to their (the registered tenant of the main household) names many or even most of them became even more oppressive towards their backyard tenants". Biya gave many examples of how they would use services the shacks relied upon - such as water and electricity – to "squeeze as much out of them as possible". Our case study showed that of the 200 households only 3 were renting. The rest had taken ownership of their houses.

Biya said that such exploitative practices got worse as the conditions of

unemployment and poverty worsened and the current very high cost of living increases occurred. “But this was often because of what the new landlord himself was going through. It was just a dog eat dog situation. Nobody cared anymore. Because they were often themselves out of work and struggling to make ends meet they used their properties to rip off the backyard tenants”. He added that “it is now crudely just survival of the fittest” and that “This crisis is going to be with us for a long time because of the ANC’s policies”. Biya said that even if these tenants tried to organise themselves the owner would resist it and that because they do not have any leases signed they are very vulnerable to evictions: “These guys even control who the tenants have relationships with and who they can and cannot have as visitors”. The tenants have to pay the owner whatever he charges for rent and services, such as water, electricity and refusal removal.

He said that the installation of PPWM and the limited 6kl free water left tenants even more at the mercy of these owners. “They just tell the tenants what they must pay for water and electricity and if they don’t like it they must go”. He added: “There is a saying in Zulu which says that you can deprive someone of anything but not water. But since this prepaid project came nobody cares anymore about these customs”. Biya also spoke of how “tenants have become submissive because they know they can be thrown out easily”. He concluded: “I don’t know if you know we have a huge rodent problem in Phiri, especially when we are sleeping. Now let me tell you something. The owners even blame this problem on the tenants. They say that it is the dirty and untidy conditions of the shacks that breeds this problem, and because they use paper and cardboards to block the wind. It is bad I tell you”. But he concluded: “The court ruling against prepaid meters and for a better lifeline may help a bit to improve relations” (Biya, personal interview, 18 June 2008).

If there were any doubts about these oppressive power relations between backyard shacks and their landlords – what is basically intra-class oppression, exploitation and conflict - another key informant and former ANC councillor for Phiri, Jerry Mpholo, dispelled it further. “Look, the owners are the bosses. They can do anything they want to with these tenants because there is no lease to protect them” (Personal interview, 18 June 2008). “If you did research and wanted to interview the shack dwellers themselves in most cases I can guarantee you that the owner will not allow it because he will think that it undermines his authority. In fact it is possible that the tenants will themselves not give you an interview because they scared of what the owner will say. It will be difficult

to talk to them without the permission of the owner". But he added: "Look in some cases there is a good understanding between them but most of what I know and have seen while I was a councillor is that there is lots of conflict". He also reinforced what Biya stated: "The shacks have to be very careful all the time because they can be kicked out. I know of one case where the owner's friend needed a place. He just gave the tenant one month's verbal notice and he had to go".

Mpholo doubted however that the owners made a lot of money from the tenants: "Look, they only charge, usually, about R50 a room for the month, and for the garage about R100. And then some money for water and electricity. So I don't think they can be making a 'killing' from these shacks. I think it is just for them to get by". He also made the point – which is confirmed later officially – that because the 6kl is for the registered owner and not the shacks he can decide whether to allow the tenants to use of it or not. He added: "In fact I know of many cases where if the owner is cross with the tenant for something he won't allow him any water or will charge him a lot to use it. There have even been cases where the owner keeps the key to activate the prepaid meter, so that even if he is not at home the tenant cannot get any water because he needs the key to open the taps. The key is always with the owner".

Where multiple dwellings occurred there were "approximately 3 households on a stand….." (Brits, CoJ 2007:25.21). The CoJ stated that "…..the number of people living on a stand is continuously in flux" (ibid). Aside from the above adverse social dynamics multiple households living on one stand would have this meant that the FBW of 6kl had to be shared among all the households per stand: "The City's present allocation of 6kl free per accountholder is effectively provided per stand and is not necessarily 'per household' where there is more than one household living on the same stand" (ibid: 24.20).

This means that while 25l PPPD was the average supply for a household of 8 if 6kl per household per month was supplied it would naturally be much less when it had to be shared by 3 households, especially when our case study below shows an average household size of 6. 9. If we multiply 6.9 by 3 we get an average total of 20.7 persons per stand, bringing in those cases consumption down to under 10l PPPD, way below the 25l PPPD advocated by the World Health organisation (Bartram and Howard 2000). In fact the CoJ itself found that "8% of units have 13 or more people in the consumer unit….." (CoJ 2007: 25.21).

Explaining the case study

The case study presents and analyses the results of a survey conducted in Phiri, between March and May 2006. The main objective of the study was to research and analyse the impacts both the 6kl lifeline and PPWM have had on 200 households, which represented a 11.3% sample size, drawn from a total of 1771 households. A community workshop and key informant interviews were also held with leading activists in Phiri.

The questions were wide-ranging, from demographic information to a very specific set of questions about the thoughts, feelings and actual experiences households have had with the 6kl lifeline and PPWM. Though the lifeline came into effect in July 2001, it could not be implemented in Phiri because there were no meters there. As with other Soweto townships, Phiri households were required to pay a flat rate, the equivalent of 20kl of water per month (JW 2001) since the apartheid years. When OGM started in 2003 the flat rate was R103.40 for water and sanitation services (Hlongwa 2003). In practice, however, and as this case study shows most households did not pay the flat rate at all or paid only a small amount per month or irregularly. The installation of the infrastructure for PPWM began in August 2003, just over 2 years after FBW was introduced.

At the start of the project the managing director of JW, Greg Segoneco, stated: "This programme is proof of our commitment to supply high-quality water at affordable prices to all residents of Johannesburg"(CoJ 2003). This initial statement gives an idea of the commercialised thrust of the project, the heart of which was the installation of PPWM. Nothing was said about FBW, the health benefits of adequate water and most importantly how fundamentally PPWM would alter water supply for households who for decades lived with the flat rate and virtually an unlimited supply and overwhelming non-payment. Though unlimited and careless consumption would certainly have been unsustainable - even in a radically new dispensation – cost recovery, the limited 6kl lifeline and later PPWM have fundamentally transformed conditions of supply and consumption to the detriment of poor households.

Segoneco further stated that "Johannesburg lost an estimated 7 billion litres of water each month due to leakages on private properties or from municipal infrastructure" (ibid). "The City cannot afford to waste this amount of water. If we can prevent the losses we can save the City up to R158 million a year" (ibid). "The main financial driving factor that motivates for the implementation of the project is the potential savings in purchases

from Rand Water" (JW 2002:2). Three years after the project began the City stated: "Unaccounted for water is saving us 31 billion litres in total. The City is currently saving 2.4 billion every month and the rate of savings is rising steadily" (CoJ, 2006:27.4.2). But strangely, "A report by the National Assembly Water Affairs forestry portfolio committee paints a bleak picture of hundreds of million of rands in backlogs in water infrastructure provisions in Gauteng while 'lost water', mainly in Soweto, has a monetary value of just more than R240 million a year" (*The Star*, 20 August 2007). How do we reconcile these two conflicting statements? It also appears to contradict the glowing reports of success of the PPWM project (JW 2006).

What is evident about the commodifcation of water through PPWM in this case study is not only the *extensive* effects it has on poor households but the *intensity* of the experiences of cut-offs or "self-disconnections" - as it is misleadingly called by some (APF 2004) – and resultant deprivation. The domestic fights, violence and many-sided frustrations which both the limited 6kl lifeline and PPWM have caused and which is documented in this case study, is evidence of such intensity. Strong emotions were evoked when households responded to the questions and described their experiences.

Launch of Operation Gcin'amanzi (OGM) Project

> It is therefore proposed that the individual metering of all formal individual properties be adopted as a major objective of this project. This approach is considered non-negotiable, either with the community or the City of Johannesburg. Any conflict arising from this standpoint will need to be managed and hopefully resolved without leading to a mass class action type opposition to same (JW 2002:23).

Here we can see in a nut shell the approach of JW to this project. The project – upon which the case study is based - was launched in August 2003. Financial considerations and calculations dominated the approach to this project. Metering was a "high priority" (CoJ 2002:3.3). "This Gcina Manzi project is identified as a 'New Services Delivery Project' and is 'strongly aligned to the Mayoral Strategic Outcome (High Priority) relating to *service delivery excellence*…" (added emphasis) (JW 2003:53). We earlier theorised how commercialisation can be dressed up in modernist and progressive language which conceals or obscures the ultimate monetary logic which poor households are required to comply with. How can drastic reduction in household water consumption to - which followed installation of the PPWM - be regarded as 'service delivery excellence"? Ronnie (2003) captures this point: "JW shamelessly pretends that the current flat rate system of payment is not only old-fashioned, but a relic of apartheid. Prepayment meters, by

contrast, are sexied-up as 'the modern, new system'.

To reinforce a minimalist approach, a year after the project began JW stated: "Only in exceptional circumstances will the consumption of a family exceed 15 000 litres per month and *by managing consumption it is very possible for consumption to stay below 6 000 litres per month*" (added emphasis) (JW 2003). Three things are significant here. The first is the admission that 15 000l is a greater reliable average consumption than the current 6 000l. In fact in 2002 JW concluded that 20 000 was a good monthly average for households in Soweto (JW 2002). Second – which contradicts the first point – the claim that it is "very possible" for it to be below 6kl is a stark reminder of the barest minimalism dominating the approach of JW and the CoJ. If the government as early as 1994 (RSA:15) stated that 25l PPPD is not adequate how could households do with even less a decade later? Smith (2004) argues that "Being poor does not mean you need less water. In some cases, low-income earners have needs that demand more water" (cited in Ntshingila 2004).

Third, JW actually urges users to cut down consumption below an already low level of 6kl, which it dubiously calls "managing consumption". Besides, "25l….is used when a toilet is flushed twice" (Ronnie 2003). With a cistern capacity of 12-13 litres two flushes equals about 25l per day. Hence Ward (1997) refers to "the permanent struggle of low-income people against the oppressive economics imposed by private companies backed up by the law" (1997:100). "Water is so essential to the health and comfort of mankind as the air we breath….and to public health, that it should be most abundant" (ibid:136). We have earlier shown how FBW is a small part of a larger commodified system, which Titmuss regards as "the philistine resurrection of economic man in social policy" (cited in Ward 1997: 138). This study shows the 6kl lifeline as a form of rationing of water.

So concentrated was the emphasis on cost and water consumption reductions that would best be achieved by PPWM that Hlongwa (2003) furthermore stated: "This is a powerful instrument in the hands of consumers to provide them with the ability to cut down on wastage, manage their consumption and slice the current flat-rate water bill by more than two-thirds". But even this was given a democratic pretence: "This is a very welcome measure to ensure 'the active participation of the communities in the management of their water….." (ibid). Rather than this version the case study reveals a stark lack of meaningful consultation and the virtual imposition of PPWM. Hlongwa goes further to state that "To set the record straight, Johannesburg Water is a public utility, wholly owned by the city (and the people) of Johannesburg".

But SAMWU, the majority union at JW, was strongly opposed to the iGoli Plan (SAMWU 1999) - out of which JW was born. The Phiri Concerned Residents Committee (PCR) was totally opposed to the PPWM project (APF 2003). In fact so strong and widespread was militant opposition to the meters that both the police and private security firms were mobilised to enable the infrastructure to be installed (JW 2003). Prior to this the meters were ripped out of the ground and destroyed (Veriava and Ngwane 2005). The dramatic events in Phiri received international news coverage and led to an international campaign in support of the right to adequate water and therefore the resistance against PPWM (*The Star*, 12 September, 2003).

While many water scholars (McDonald 2002; Bond et al. 2002a) pointed out that demand-side measures, such as a systematic leak detection and repair programme and much steeper tariffs for big consumers would probably provide better conservation results and be less costly JW opted for PPWM as its focus. But it appeared – once more – that it was the financial costs involved in a leak detection programme that determined instead the decision to go the route of these meters: "Since water pipes are dug underground, often passing beneath other infrastructure, solving the problem is a nightmare for the city's water engineers – who have 9 500 kilometres of pipes to watch over" (CoJ 2002). This "nightmare" seems less like finding the leaks but more the costs involved or both. However, "stopping leakages, rather than relying on metering to conserve resources, would be a better investment and would benefit conservation, without potentially risking individual and public health" (Labour Party, UK 1997:21).

JW and the CoJ required households to sign a contract binding them to specific terms for the supply of water and sanitation through the installation of the meters (JW 2003). The contract made very clear that henceforth "The Applicant *irrevocably accepts* that, after the free basic water allocation is fully utilised per month, the supply of water to the property shall forthwith be terminated upon their being no valid credit amounts reflected on the display unit of the meter" (added emphasis) (JW 2003). It goes further to impose punitive measures – a downgrading of water supply - if there is "any tampering and/or vandalism of the meter" (ibid). In the event that there is JW will "levy an administrative cost and/or remove the meter from the property" and "shall further limit the water flow and pressure by retrofitting a flow-limiting device to the Service of Level 2 standpipe connection, to ensure that the average consumption per month does not exceed the free basic water allocation" (ibid). In this case the yard standpipe is disconnected from the sewer and all in-house water connections are removed, with the result that water can

only be obtained from the yard standpipe.

Furthermore, each time the toilet inside the house is used water has to be fetched from the yard to manually flush it with. No water would flow to any house except through the PPWM or the yard standpipe. Thus, a new, harsh and commoditised regime of water supply was installed for the first time in Soweto's history. While 1771 PPWM were installed in Phiri, in Soweto as a whole "over 55 000 customers have had prepayment meters installed as a result of the project" (CoJ 2007:30.4.5).

Finally, if a household went away for a month or was away for most of the time within a month the 6kl or whatever was left within that month is automatically forfeited "If there is any water left from the previous month's 6kl they take it away on the 1st of the next month when the next 6kl amount is given. They say that is the rule and we cannot do anything about it" (Personal interview, Jennifer Makoatsane, 12 December 2006, Phiri).

Presentation and analysis of survey results.

Table 1: Demographic household information, drawn from survey.

Total household population	1771
Households surveyed	200
Sample size	11.3%
Average household size	6.29
Target population	1259
Total adults	846
Total children	413
Employed	155 (18.4%)
Unemployed	468 (55.3.%)
Piece jobs	71 (7.2.%)
Pensioners	121 (14.5%)
Grants	30 (3.5%)
Males interviewed	72 (36.5%)
Females interviewed	128 (63.5%)

The sample size of 11.3% (200 households) was sufficiently representative of the total of 1771 households where PPWM were installed. The average household size of 6.29 is

way above the figure of 3.80 provided by Census 2005, the official statistics (SSA 2006). In fact the CoJ itself found that the average household size in Phiri was 7.2 in its 2004 Human Development Strategy (CoJ 2004:29). Since the 6kl lifeline translated into 25l PPPD for a household of 8, at 6.29 it would be slightly higher, at 31.7 PPPD, and 28.6 PPPD for a household size of 7.2, considerably below the minimum of 50l PPPD universally recognised as essential (WHO 1998) and the RDP medium term amount of 50-60l PPPD (ANC 1994). We also earlier showed that SAMWU and COSATU's research indicated a minimum of 63 - 110l PPPP, an estimate however that "does not include water used for subsistence gardening or the operation of small business – practices which are often essential for the survival of the poor" (SAMWU and COSATU 2003).

The unemployment figure of 55.3 percent is considerably higher than the national estimate of 40 percent (Statistics South Africa 2003). Besides, the 55.3 percent figure excludes the 7.2% who did various low-paying small, piecemeal and irregular jobs, such as washing cars or selling fruit and vegetables from small stalls. This could hardly be described as employment according to Webster and von Holdt (2005). However, Besides, this case study also showed that even those who are employed (23.2%) work in relatively low-paying jobs. Add to that the fact that all the households to varying degrees face a combination of high unemployment, poor-paying full-time jobs, piecemeal and irregular part-time work and others who largely survive on pensions and grants (18%) and the overall income and affordability profile is dismal indeed. The study found that the majority of households (67.5%) spent relatively little on food and electricity because of income and affordability constraints. "There is general consensus that income poverty has increased over the decade that democracy was established in South Africa" (Webster and von Holdt 2005: 34-35).

However, because of the traditional domestic division of labour (Kaplan 1992) and the corresponding roles women have played in water collection and usage in households universally (Mehta 2000) the survey was consciously geared to eliciting the experiences of more women than men. Therefore while men constituted 36.5% women were 63.5% of the sample.

Table 2: Monthly food expenditure.

Monthly expenses	R200-R300	R300 – R400	R400 – R500	R500 – R600	R600-R700	R700+
No. of Households	35	64	36	15	16	34
Percentage	(17.5%)	(32%)	(18%)	(7.5%)	(8%)	(17%)

For a household average of close to 7 these households spend very little on food. In fact 67.5% of households are spending under R500 at a time when food prices generally have been rising sharply, in the wake of several steep fuel hikes over the past 2-3 years (*Business Report*, 12.6.07). Numerous scholars (Swyngedouw 2004; Bond et al. 2002; Ruiters 2002; Drakeford 1998; Mehta 2000) have shown how in poor households there is the constant usage of monies needed for other essentials – such as food and medicine (Eberhard 1999) – for water. The study found that most of the households which spent more than R 500 on food had one or two members who were employed. The links between income and the amount of food and water consumed is clearly established.

Table 3: Monthly electricity expenditure.

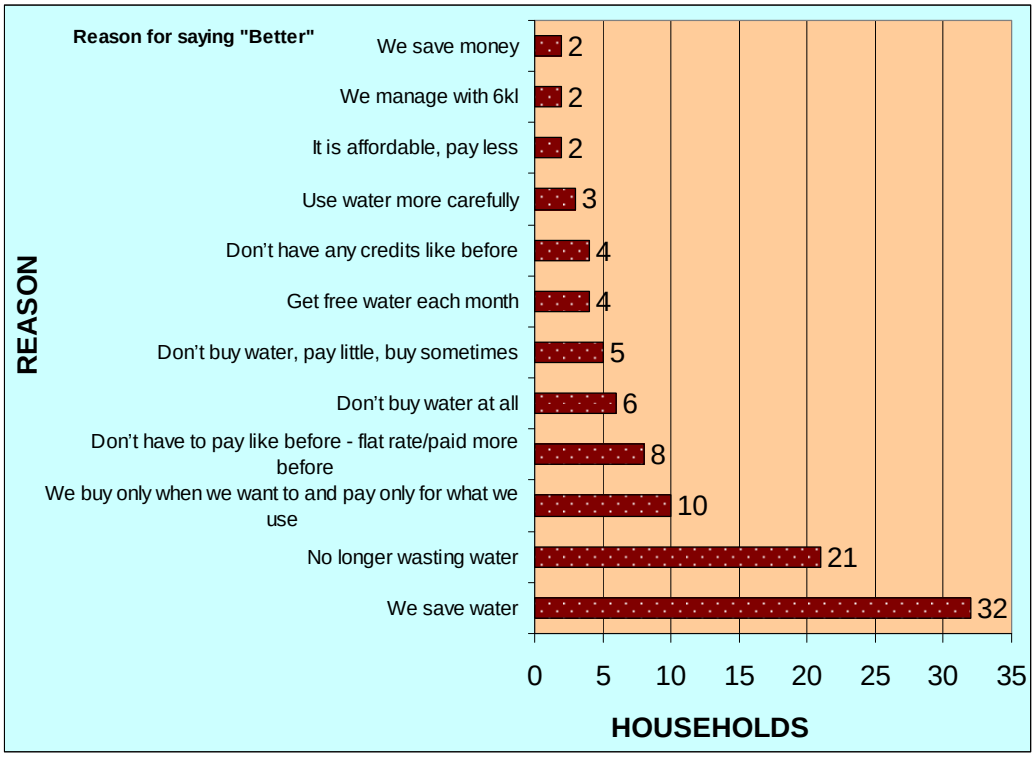
Monthly expenses	R20-30	R30-40	R40-50	R50-60	R60-70	R70-80	R90+
No. of households	16	22	40	28	42	8	52
Percentage	8%	(11%)	(20%)	(14%)	(22%)	(4%)	(26%)

The study found that 163 households (81%) also used electricity prepaid meters. Furthermore, 145 households (72%) answered in the affirmative to the question of whether there were times that they went without electricity. These meters operate on the same principle as PPWM: once the consumptive value of a particular voucher has expired – or the initial free amount - the electricity also expires, which can only be resumed when the meter is recharged with the purchase of voucher. This cycle is an expression of technologically generated commodification and is an example of a socio-technical metabolism, which either provides or denies electricity or water, dependent on a readily available layout of cash. However, add to this situation expenses for school fees, uniforms, lunch and transport – often for several children - and it becomes very

clear that we have what can safely be described as a social crisis *before* examining the impacts of the 6kl water lifeline and PPWM on such households.

The respondent's answer to the question of how they rate the PPWM system was overwhelmingly not in favour of it. Whereas 32% said it was "better", 68% said it was "worse". These vastly different answers do not by themselves say much unless they are quantified and qualified by specifically stating what the reasons are for the ratings. Because the reasons for or against the meters were many and varied we will examine some of them in order to assess how clear, coherent and compelling they are.

Graph 1. Reasons why the new system is "better"



Those who said it was better appear to be repeating a lot of the arguments JW and the CoJ have put forward and many of which we have already alluded to. These included: that water was "saved" and therefore no longer "wasted"; that water was only bought when it was needed; that they only paid for what they used; they saved money; they don't have credits like before; they often don't have to buy water at all because they "manage" with the 6kl; when they do buy it is only a "little"; and others did not have to buy water at all because 6kl was enough.

A close examination of these reasons reveals a pattern of acceptance of doing with a

minimal amount of water and therefore a quickly ingrained frugality is evident. They almost seemed proudly stoic about consuming little water, in a perverse manner, considering the fact that sufficient water was so vital to personal and public health. It is difficult not to link much of these responses to the propaganda – including threats we give evidence of later – of the CoJ and JW when the project began and there was much community opposition to the meters and households had to make hard choices. JW went to all the houses to explain why PPWM were not just necessary but positively good for users because it allowed them to "better manage" or "better control" and "take ownership of their consumption" (JW 2001). Later we examine the reasons many households said they felt coerced into signing the acceptance forms for PPWM installation. But the reasons for saying the meters were "better" does certainly appear to reflect the door-to-door propaganda of JW and resultant internalisation of frugality. A clear sense the survey conveyed was that though much else was oppressive under apartheid households preferred the system then: a flat rate for a deemed consumption of 20kl no matter how much more or less they consumed. But an unspoken sense one got was that the old system was better because despite not paying for water due to the rent and service charge boycotts their water supply was not cut off. For poor households struggling to cope with the new cost recovery ethos and the rigours of PPWM such a sentiment is understandable.

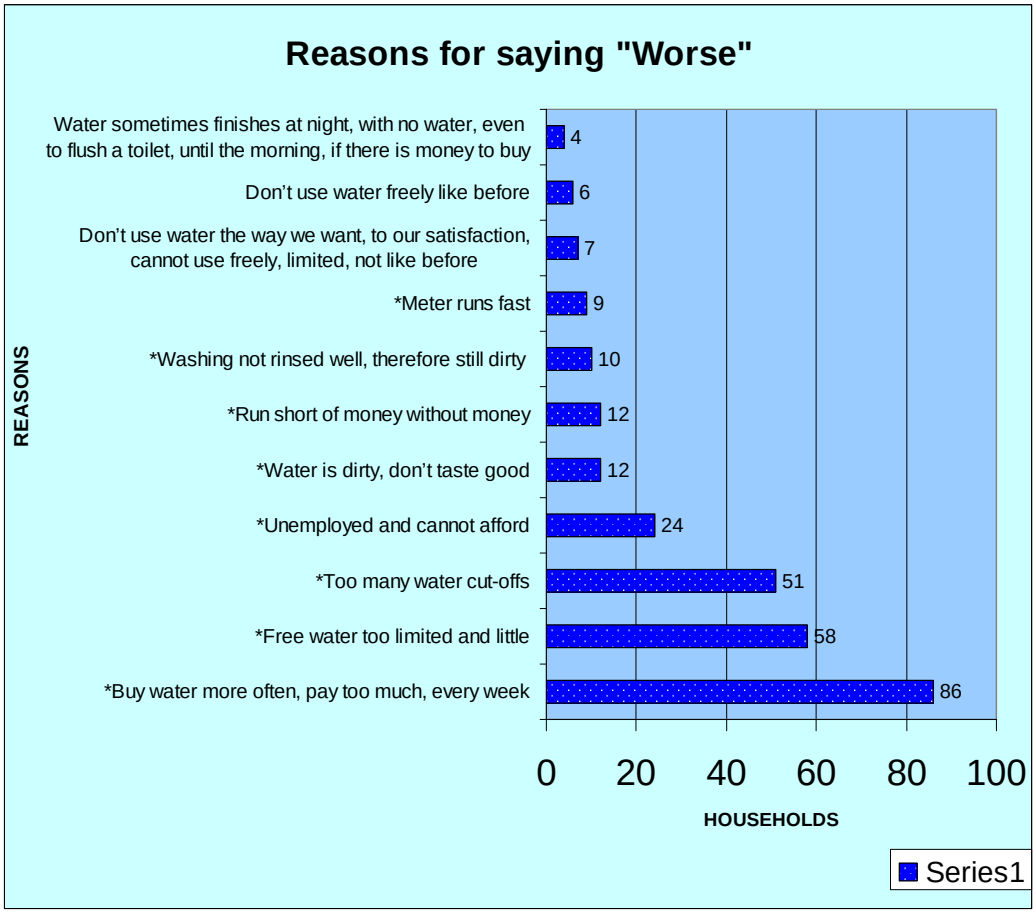
However, what is interesting is a particular pattern between those who said the meters were better or worse. Those who said they were better did not provide good reasons for this. For example, when they said that they got free water every month they either were unaware that the government had already in 1994 stated that 6kl was not enough for good health, hygiene and productivity or that JW concluded that 20kl was a good average for Soweto households. Furthermore, when they said that they use water "more carefully" they did not seem to realise that while all households should do this there is a difference between this and being deprived of enough water in the light of the inadequacy of the 6kl and that they may not have had money for more water. An enforced frugality appears evident, which is consistent with the constant urgings of both JW and the CoJ for households to "control" their consumption to the barest minimum.

We earlier cited JW stating in fact that households could even do with "less than 6kl", if they were very careful about usage. It appears that this discourse of frugality had restraining effects on these households, not however because they necessarily found

it attractive but because they found it necessary since they had no money to buy more water after using the 6kl. Instead what comes across is that it is virtuous that many "don't have to buy water at all" or only "a little sometimes". What seems unfortunately to have happened here is a perverse internalisation of commodified frugality among poor households, not in their health interests but in the interests of a municipality and its water utility which have largely commercialised water, adopted minimalist neo-liberal policies, a technology which dispenses both with credit control action and fair procedure - required by legislation - and unleashed a flurry of propaganda to sanitise PPWM and to make strictly minimal consumption appear virtuous.

There is another question this situation also gives rise to, which requires more research: is it possible that some black people may have accepted the discourses produced by the ANC, the CoJ and JW: that the ANC is indeed "building a better life"; that water was wasted during the apartheid period and even after 1994; that they can and should do with less water; that some ANC members felt compelled to accept the party's line on the necessity for the PPWM project in Phiri? There is a contrast between the stance taken earlier by Motlanthe, when he said the ANC had not adopted PPWM as its policy, and the fact that senior ANC officials were sent to Phiri to convince dissident members who were unhappy with it, a matter we return to later in this study. It seemed that while ANC councillors were won over to the need for PPWM the grassroots members were not satisfied. About the approach of ANC councillors a resident at the workshop stated: "They say to us, 'I know you love the ANC. I know you love Madiba'. And then the people cannot say no" (Phiri community workshop, March 2006).

Graph 2: Reasons why the new system is "worse".



The majority of households (68%) who felt that the PPWM made life worse than with the old flat rate system appeared to provide more credible and compelling reasons for their disapproval of the new system, with both the 6kl limit and the PPWM. It is important to note that households in Phiri continued on the flat rate even after the 6kl lifeline was introduced in July 2001, with the vast majority still not paying for their water consumption up until the project began in August 2003. This was because there were no meters at all, which made measuring and providing 6kl impossible. In fact the FBW became ironically the rationale not only for finally metering consumption but through PPWM to limit it to 6kl and eliminate permanently the "over-consumption" JW was determined to "bring under control" (JW 2001: 4). It is however a fact that there was no way in which the 6kl could be provided freely unless consumption was measured and therefore metered. And this is precisely the biggest problem – though completely neglected and under-theorised - facing social movements.

Even when they call for increasing the lifeline to whatever figure this can only result

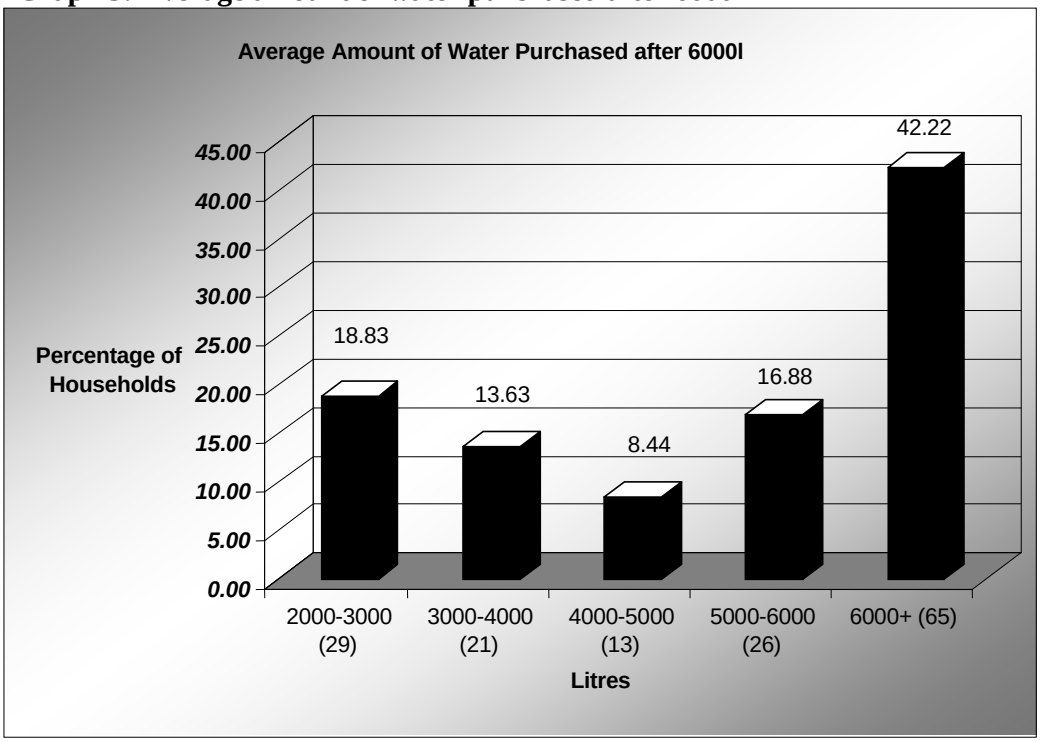
from – in the case of Phiri – prepayment metering, the technological instrument water flow is measured with and which lie at the heart of the commodification thesis. This is the inescapable reality and painful dilemma the "water warriors" and anti-commodification and embryonic countermovement is confronted with. The point is that water metering in general and PPWM in particular are tied up inseparably with commercialisation, commodification and capitalist social relations. It is an expression of the current balance of socio-class forces and to that extent a "reality" to be confronted. But how is the big question.

However, far from being a liability for JW and the CoJ the 6kl lifeline was a blessing in disguise because it ensured cost recovery and permanently removed the decades-long problem of a "culture of non-payment" and a host of costly, time-consuming and dangerous credit control measures, such as physical cut-offs. Hence since 2001 metering – and increasingly prepaid metering - became for the CoJ and JW the top priority to arrest the "runaway" water consumption JW complained about (JW 2001).

So determined was the CoJ and JW to install PPWM that it was not surprising that they ignored the findings of research done in both Orange Farm and the UK, when they began OGM in Phiri in 2003. Instead JW, the CoJ and JOWAM (The Suez-led multinational consortium) trumpeted that Orange Farm was a big success when it was not (JW 2004) (APF/Public Citizen 2004). But they had to do this because in the final analysis their big target was Soweto, which JW described as "a make or break" project (Personal interview, Anthony Still, January 2003, Johannesburg). In fact many of the reasons given by those households who were unhappy with the effects of PPWM were very similar to those found in the UK (Drakeford 1998).

This could partly be why a resident said "I have never met anyone who is happy with the prepaid system" (Phiri Community Workshop, March 2006). "I don't believe the meters will ever work properly. In England they have been banned. The whole world is fighting the installation of water meters" (ibid). But Johannesburg mayor, Amos Madondo, six months after the project began stated: "We wish to express our appreciation to the residents of Phiri for their support….and are confident they will soon enjoy the full benefits of this initiative" (CoJ 2004). When we examine the negative experiences the majority of households have recounted in Graph 2 and later in this study it is hard to see how this can be reconciled with both supposed benefits and the "importance of the pro-poor agenda of the City" (CoJ 2006: 12.2.1).

Graph 3: Average amount of water purchased after 6000l



This graph shows that most households (total of 77%) indicated that they purchased water after the free 6kl is consumed, varying between 2,000l to 6,000l and more. However, JW stated that only 57% used more than the 6kl lifeline (Personal correspondence, 6 March 2006), less than 20% compared to this study. More importantly, they stated that 43% used under 6kl per month (ibid). This is a stark indication of how drastically consumption had declined since the PPWM project began in 2003, bearing in mind that for households larger than 8 this would be less than 25l PPPD. JW also states that average consumption has declined to 10kl (ibid). In 2002 they concluded that an average of 56kl per household was consumed (JW 2002:7).

The health consequences of such drastic decline in consumption has not appeared to matter to both JW and the CoJ. “The city is currently saving 2.4 billion litres of water every month and the rate of savings is rising steadily” (ibid: 27.4.2). Nowhere is there any health concerns JW has expressed about the sharp drop in consumption, because all along their primary motivation for the project was financial. But what reduced per capita consumption even further is that “The City’s present allocation of 6kl….is effectively provided per stand and not necessarily ‘per householder’ where there is more than one household living on the same stand” (CoJ 2007: 25.20). Our research showed that 41% of stands had backroom shacks or ‘householders’ which had to share the 6kl allocation

between them, thus reducing the per capita consumption further, depending on both the number of household units and its size. This also has implications for how much water has to be bought when necessary and related charges.

The question is whether the contemplated increase from 6kl to 10kl for registered indigents (CoJ 2007: 30.61.2) – which took effect on the 18 July 2007 - will significantly improve levels of consumption for them. But it does not seem that it will have a significant effect, unless the household size was small, say 3 or 4, and there were no backyard shacks to share it with. "An increase in the allocation of free basic water to 10kl targeted to registered indigents would provide 25l to 13 people" (ibid). Here we can see that 25l PPPD is still what stands receiving the increase will have access to if there are shacks on it. This only goes to show how households – especially bigger ones and where there were backyard shacks – must have been struggling with the 6kl since the project started in 2004. Furthermore, an even more serious reservation is that the increase to 10kl is restricted to the current 118 000 registered indigents, thereby excluding the vast majority of poor in the city. A further problem is that the CoJ has made indigent grants conditional upon accepting PPWM, which is yet another disciplinary measure: "The installation of prepaid electricity and water meters was made compulsory when households apply as indigents" (CoJ 2007: 30.45.1).

The repeated emphasis on minimising consumption and financial expenditure is evident again: "Households with prepaid meters conserve water more carefully that those with credit meters. As a result a larger proportion of households with prepaid meters are likely to be using less than 6kl of water a month, compared to households with credit meters" (Eales, CoJ 2006). Even when the 6kl is evidently insufficient the CoJ still persists in making a virtue of the arbitrary limit of 6kl they imposed on households. The serious limits of the 6kl lifeline and the socio-material circumstances dictating and inhibiting how much water is consumed is not even mentioned. Neither is anything said about the multiple drawbacks of PPWM in poor households (Drakeford 1998). Important to note too is how clearly enforced reduction in consumption is not only construed as "conserving water" but it also has a conscious, moral and even voluntary connotation. There is evidence here that this is a discourse of conservative consumptive rationalities, based on the barest minimum within a larger commoditisation paradigm.

To appreciate the drastic reduction in consumption these figures indicate we must see them against the background of their earlier "deemed" but in fact unlimited consumption

because though the flat rate was for 20kl, households could consume more. The point to be made here is that by far the majority of households were not paying for whatever their real consumption was – which was not measured because there were no meters.

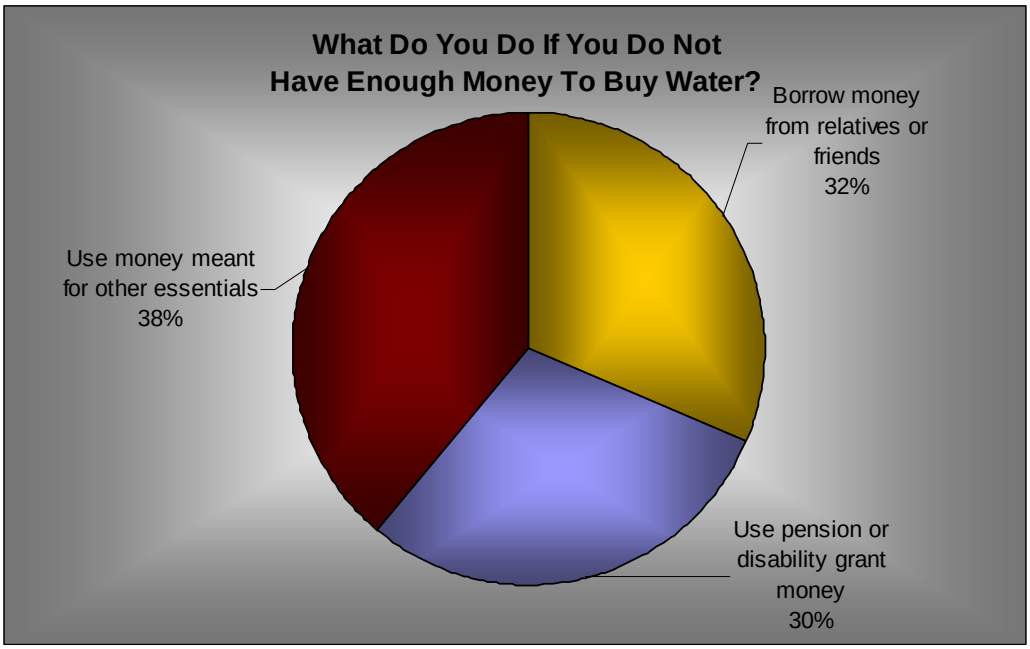
However, those who did pay (no reliable official records of the percentage are available) for the deemed consumption of 20kl may have been actually using less than 20kl – especially since they did not have pools, big gardens and other water-guzzling features – but they had to pay the flat rate of 20kl, even if they used much less. But the authorities would not have decided on the deemed amount of 20kl if it was not considered a reasonable level of consumption for households in Soweto. However, the current "lifeline" is less than one third of that amount. We earlier pointed out that according to research undertaken by JW they concluded that 20kl was a "good average level of consumption of water per household per month" (JW 2002:7). An independent report also concluded: "Average water consumption for residential properties only was 23.63kl/month", based on a "population of 6.35 per residential erf" (ibid) (JW 2002).

Of much significance is the fact that of the 200 households surveyed 23% (46) said that they did not need more than the 6kl, but to show frugality many of these households – 35% - had more than 8 members, indicating that in these cases there was a per capita consumption of even less than 25l. This, though the government itself stated that 25l PPPD was not enough for a healthy life and other independent research indicated that much more was required (APF 2004; Hanson 2005). This appears the consequence of the discursive emphasis JW placed on frugality from the outset of the project, which included stating that with careful control households could do with less than 6kl (CoJ 2007). "The rights only apply to a certain level. If you are poor and powerless you have no rights" (Resident in Phiri Community workshop, March 2006).

It is therefore striking and unfortunate to see how instead of having access to adequate amounts of decommodified water with which to perform daily tasks and raise standards of living, these poor households have been subjected to constant urgings (CoJ 2003; JW 2003) to do with the barest minimum, regardless of the consequences. What this means is that rather than adequate water being a critical necessity with which to conduct essential daily activities and therefore a means to liberate these households from the multiple agonies of water shortages and resultant health threats current neo-liberal hegemony in the crucial water sector has deprived them of sufficient water.

Rather than a key resource which could positively impact on living standards, prevent illnesses and diseases and impart dignity to users water has become a limiting, exclusionary, controlling and disciplining commodity.

Chart 4: What do you do if you don't have enough money to buy water?

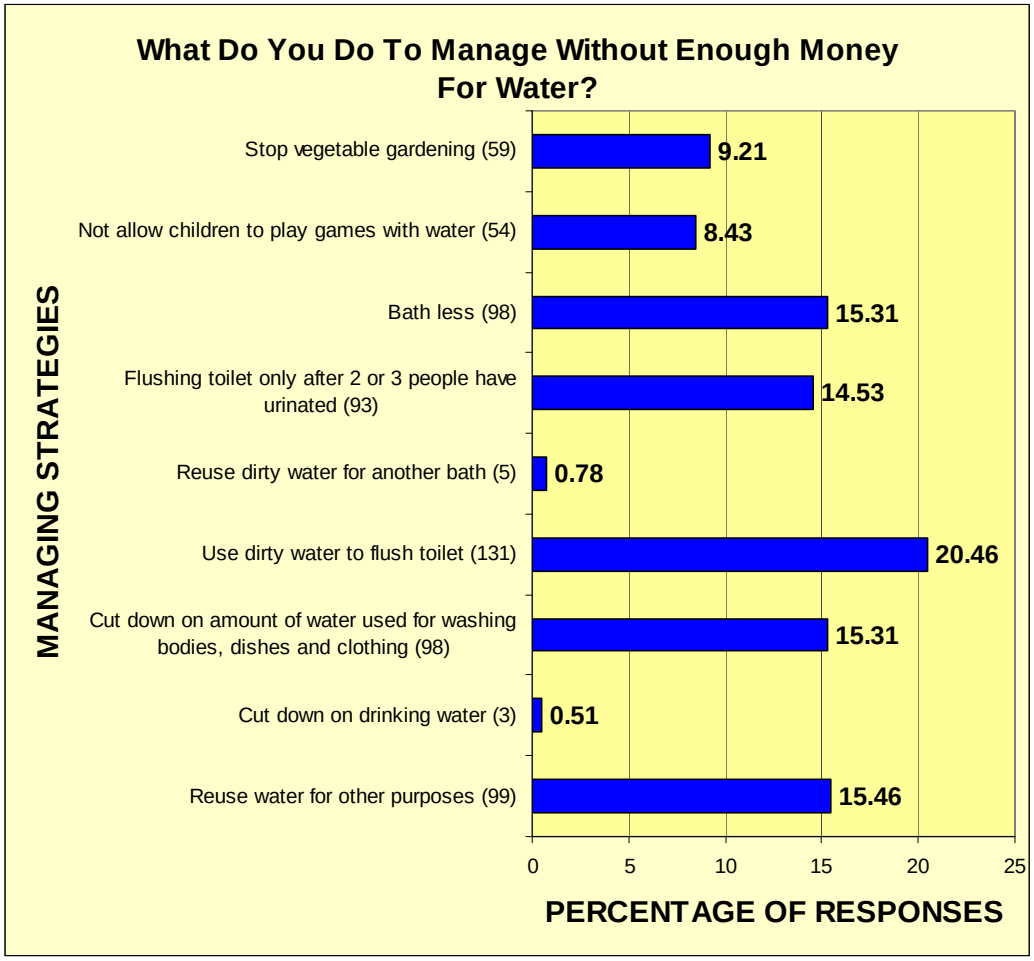


The answers given to the question of what households do when they don't have enough money to buy water is revealing and significant because the measures they are compelled to take impacts thereafter on other daily essentials, like using money meant for food, medicine or transport (38%) or using pension, disability or grant money (30%) meant primarily for the sustenance and maintenance of those receiving them. This must have an even more burdensome impact on poor households, driving them into deeper poverty. Furthermore, there is the question of the inconvenience and indignity of having to borrow money from friends or relatives, especially for basic household needs. Material deprivation breeds not only potential health problems but a host of personal and social indignities which have negative psychological and emotional consequences for household members. Commodification threatens both physical and mental health.

There are several further problems which arise. One, these difficult choices about the usage and distribution of very limited resources for basic social reproduction are usually left to women to make because of the traditional role they have played in households. Two, according to research it is as likely that it would be mostly their responsibility for where and how money required will be obtained for basic essentials, like water (Public

Citizen et al. 2004; APF 2006). In other words, women not only mainly take responsibility for the many daily domestic activities for which water is required, but also for obtaining the money with which to purchase water for performing those activities. Hence the oppressive and dehumanising effects of commodification are felt mainly by poor black women.

Graph 5: What is done to manage without money to buy water?

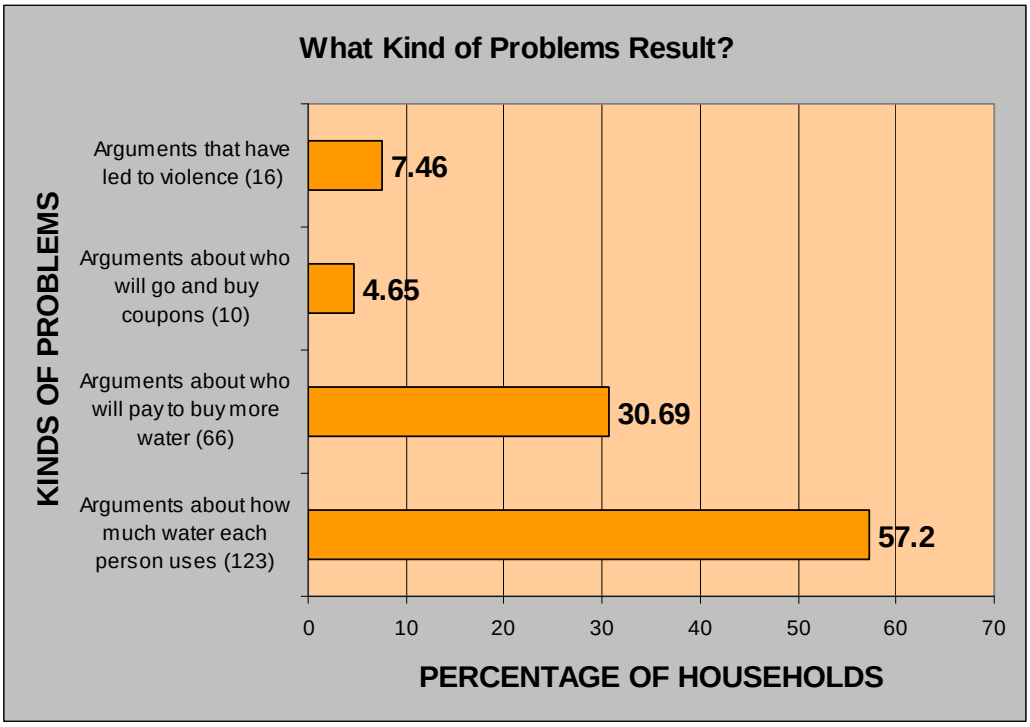


From the varying answers provided to this question the impacts PPWM and the 6kl lifeline appear to have had are in several respects very unhealthy indeed. Each of the measures the inadequacy of 6kl compelled household members to resort to pose direct and indirect threats to both internal and external bodily health (drinking less water, bathing less, washing hair, clothing (and other household fabrics) and hands less, to name a few negative effects). Livelihoods are also threatened by ceasing vegetable gardening, which a significant 9.21% of total responses said they were forced to do. On per household basis this figure rises to 25.2 percent.

Less water also means less household cleaning or less water used for such activities, which can also compromise hygiene and health. There is also the indignity and embarrassment of foul urine smells from toilets not flushed each time it is used. This was reported also happening in the UK (Drakeford 1998). Interestingly, similar to legislation in the UK which declares that a house without water is not fit for human habitation, a resident argued: “It is very clear that water is a human right. If you cannot access water, you do not have a home” (Phiri Community Workshop, March 2006)

At this workshop residents spoke much about the same problems listed in this graph, including the unpleasant smells in toilets due to not flushing the toilet each time it is used and other indignities, particularly being forced to share bath water. This is besides the added inconvenience and need for containers to store used water for other purposes and having to continually carry buckets of used water for other purposes. Finally, preventing children from playing with water is unhealthy because it denies them the physical and spiritual joys water brings to children, especially in summer months. Why must children from poor households even be denied playing with water in the summer months? “The sharpest contradiction comes with prepaid – your right to life, your dignity is gone when that water is finished” (Participant, in Phiri community workshop, March, 2006). Another resident remarked: “It is an unhealthy system. Children go to relieve themselves outside to save water”. Another resident spoke of how “Ladies go to the schools where the gates are not locked in the evenings and are forced to steal the water from the schools”.

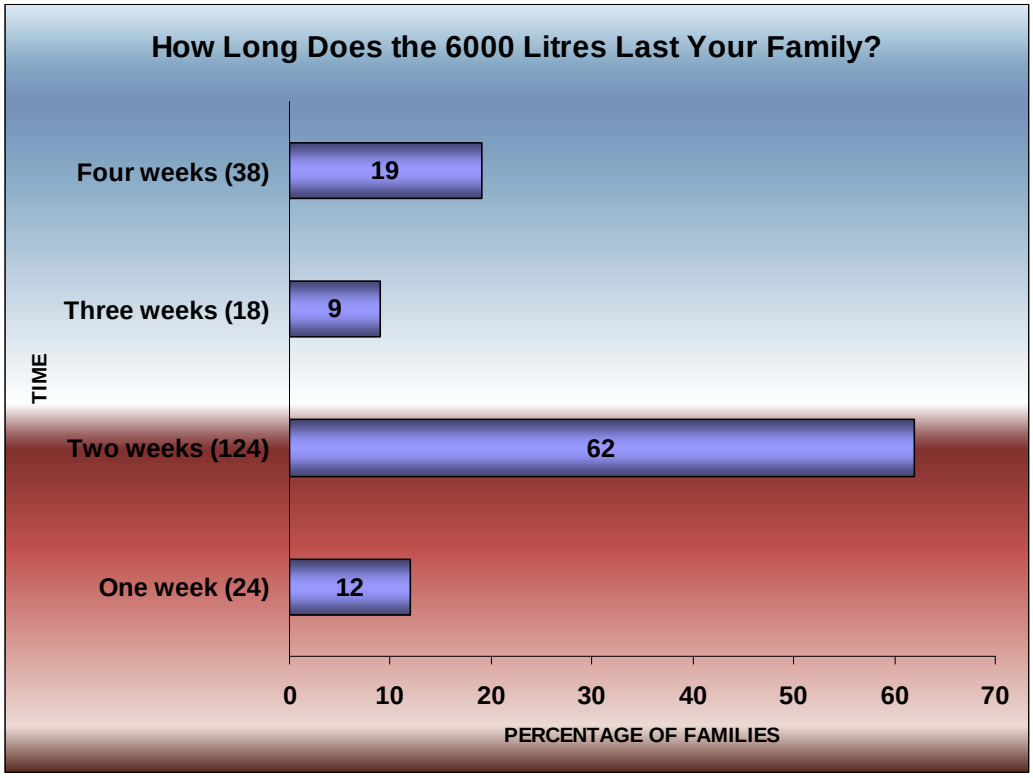
Graph 6: If you have household problems as a result what kind are these?



The response to this question reflects the intra-familial tensions and even violence which water shortages have created within households. This question arose as the result of the community workshop in Phiri in early 2006, in which it was repeatedly stated that various arguments had developed between household members – particularly between husbands and wives – about the amount of water usage and payments (Phiri Community Workshop, 11 March 2006). In one incident the workshop heard that the physical violence between two household members led to charges being laid and a court case and in another matter: "I can give you the address. The woman has five children and the man has one child and they don't talk to each other because of tensions over water usage". The argument about who will pay was another indication of little, irregular or no income among household members, in a community with very high levels of unemployment and poverty. It also became clear that water shortages had a stressful effect: "Stress levels have gone up and even if you are able to buy a coupon you worry when it will finish" (Resident, Phiri community workshop, March 2007". The leading spokesperson and campaigner against PPWM in Phiri, Jennifer Makoatsane, told the workshop: "I never spoke to my father for three months because he signed for the installation of the meter".

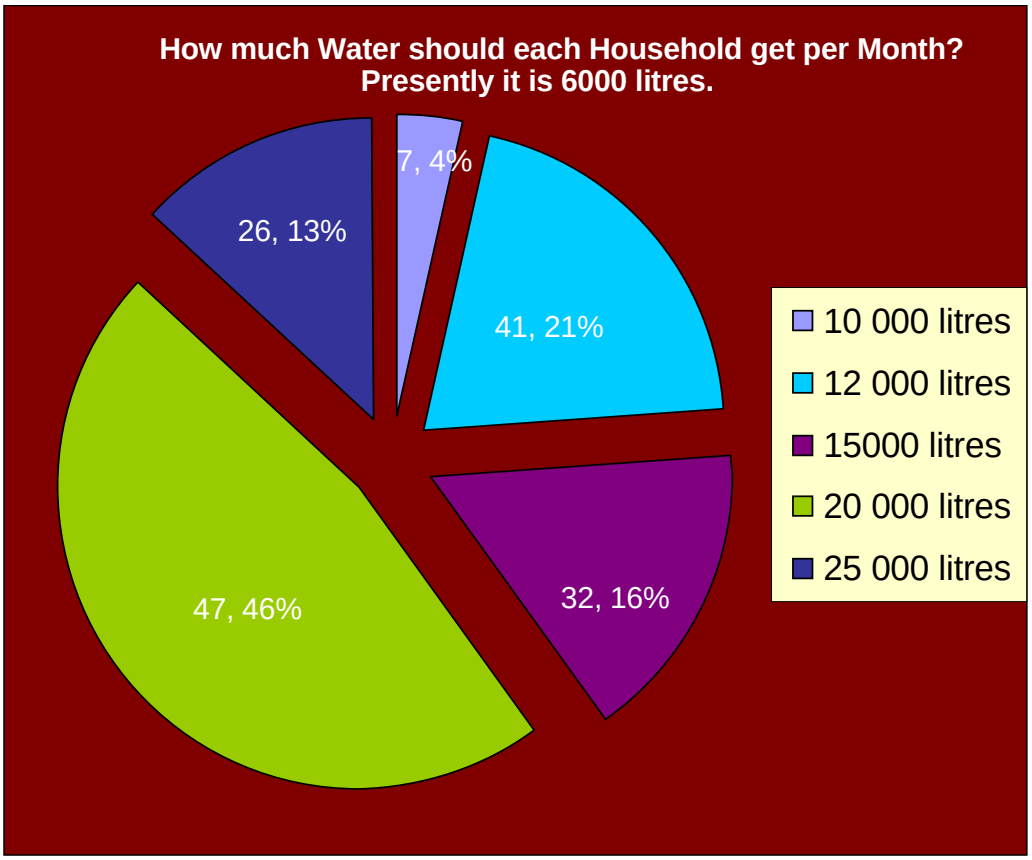
Here we not only see a reflection of the underlying oppressive and disempowering social relations governing water supply to poor households but how these are compounded and aggravated by alienating internal stresses which polarises families, breaking the first line of community solidarity a successful countermovement would require. There are also gender tensions implicit in the "arguments about who will go and buy coupons". Healthy though, because it suggests that women may be asserting themselves and insisting that their husbands or sons could take turns to buy coupons. In our study, of the 152 households which bought water the gender spread for male and female was 34% and 66% respectively, with wives or daughters still largely responsible for going to buy the coupons and for fetching water from neighbours, schools, churches or other sources. Furthermore, "What can a single parent do when they come home at night and there is no water…and women cannot walk or travel at night" (Resident, Phiri Community workshop, March 2006). Another resident at the workshop summed up the root of the domestic problems households faced: "For a person who has had water for thirty years, and then to have your water cut to a third of that…the psychological consequences of that…. You are changing my life completely. You are saying to me that I must change my life to suit your programme".

Graph 7: How long does 6kl last?



It is important to bear in mind that this question was posed within a discursive context in which frugality was persistently emphasised by the CoJ and JW. Yet, despite that 62% of households stated that the free 6kl lasted two weeks and a significant 12% just one week. This strongly suggests that if there wasn't a discursive emphasis on water wastage, scarcity and frugality it is likely that the 6kl would have been consumed even sooner. In fact these results are more important in the light of the fact that later we will see that despite their best efforts to "manage" with 6kl – including being forced to resort to unhygienic practices - the majority of households (62%) consumed it in half the period for which it is allocated, namely two weeks. In fact, JW itself stated that 6kl "would *go a long way* to meet basic needs of the average household" (added emphasis, (*Mail & Guardian*, 5-11 September 2003). Most of the participants at the workshop said the 6kl last one to two weeks. "Only a person who stays alone is happy with the system" (Phiri Community Workshop, March 2006).

Graph 8: Amount of water necessary per household.



This result was interesting in several ways. Firstly, though 32% of respondents said PPWM was a good thing and 24% said they don't use more than 6kl they all responded to this question, implying that the 6kl was not enough. Secondly, the probable reason why the majority 46% said that 20kl would be enough was because the earlier flat rate was based on the same amount. JW also reported that this amount is a reasonable average for working class households in Soweto (JW 2002). In fact JW also mentioned a higher figure in 2002: "an acceptable supply of 25kl per household per month" (JW 2002:3). But this result certainly indicates the varying inadequacy of the current 6kl, which will only be slightly ameliorated by the decision of JW to increase it to 10kl, but only for registered indigents (CoJ 2007: 30.61.2). The decrease in consumption is made more stark by the fact that JW concluded in 2002 that consumption in Soweto was an "actual supply of 56kl per household per month" (JW 2002: 3).

Interestingly, in this case study only 4 households (2%) said they were aware of council's assistance to those registered as indigents. This strongly suggests that the

take-up rate for this increase from 6kl to 10kl will be very low. Already just 118 000 since 2001 have registered as indigents in a city of about 3.5 million people (CoJ 2007: 30.45.2), in which a "very large percentage" is poor (Beal et al. (2002:203). Nationally, "Estimates for the scale of poverty range from 18 percent of the population (UNDP 2003) to 33 percent of households (The Presidency 2003) to a staggering 57 percent of the population"(Webster and von Holdt 2005:30).

The allocation of the increase to 10 000l JW has calculated in this way: "13 people x 25 litres per day x 30.5 days per month = 9912.5 litres" (CoJ 2007:25.20). The CoJ has concluded that "the average size of these consumer units on the stand is 10" (ibid: 25.21). Significantly, "8% of units have 13 or more people in the consumer unit, with the additional allocation those in the consumer unit should be able to cover all needs" (ibid). Not only is this extension still calculated at the very low minimum of 25l PPPD but it is considered adequate to "cover all needs". Not only is there no credible basis upon which such a conclusion can be made but to the contrary, the national government itself in 1994 stated that it was inadequate (RSA 1994:15). Furthermore, an independent report concluded: "On the consumption side, it is possible that improvements to the standard of living will lead to an increase in water consumption for personal use, together with proportional increase in the quantity of sewage discharge" (JW 2002).

However, a positive development exists in the new 'Social Package' the city will introduce in July 2008. The most important thing in this regard is that: "It is envisaged that the new approach will use the value of property in which residents live, rather than proof of income, as the primary assessment criterion" (CoJ, 2006: 26.10.3). This new scheme "seeks to replace the current system of registering indigents with an approach that is less administratively cumbersome, more inclusive and removes the possible taint of stigma" (ibid: 26.10.1). We earlier explained why the inclusion of rich households in free basic services could actually widen social and consumptive inequalities. The CoJ stated that the rationale for the exclusion of richer households from July 2008 is that "The large number of poor people in Johannesburg means any attempt to provide more than 6kl…..requires very careful targeting and consideration" (ibid: 25.7). The envisaged changes "has now been rescheduled to 1 July 2008" (ibid: 26.11.1). It is important to note that however these changes are considered and analysed there is no evidence to suggest that both JW and the CoJ consulted the citizens of this city.

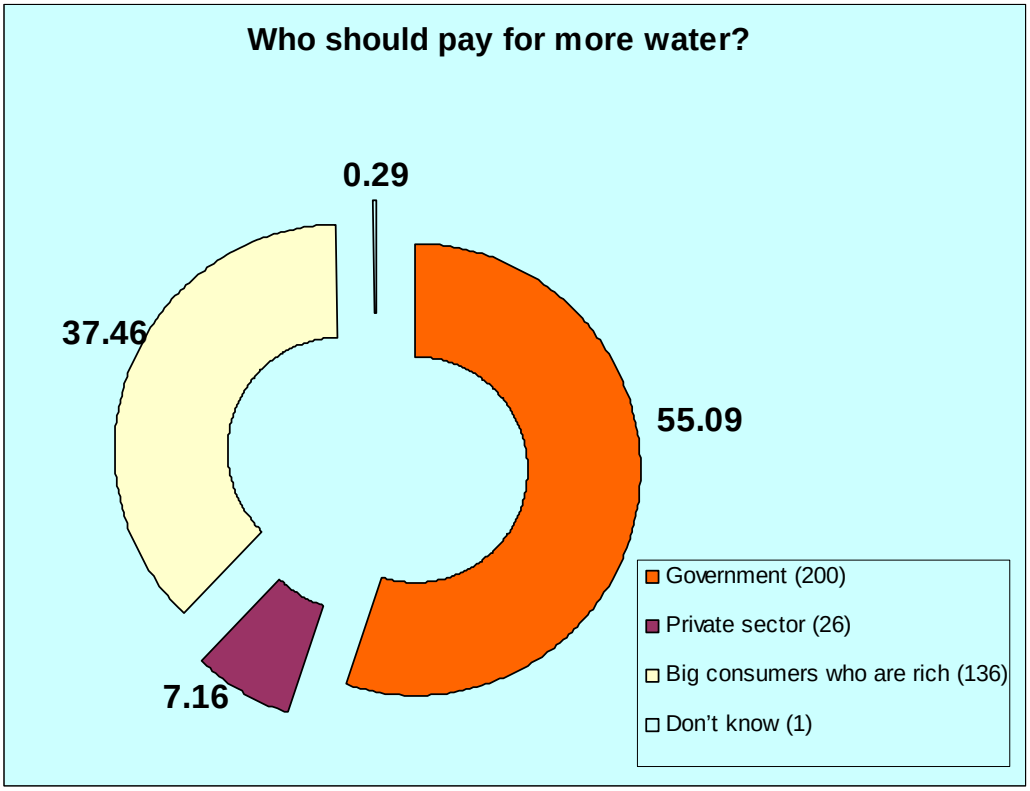
But the most important aspect of these changes is finally the admission that the indigent system was possibly stigmatising, which could perhaps explain why in a city

with 3.5 million residents and high levels of poverty and unemployment only 118 000 people are registered as indigents. The question however is to what extent changing the assessment criteria for indigents from income to property value will reduce stigma.

It was discovered that the 6kl lifeline is also used for sanitation. “We were surprised. We don’t know exactly how they work it out, but the 6kl is divided between water and sanitation” (Personal interview, Jennifer Mogotsane, 12 December, 2006). This is a big problem which further compromises larger households. Mazibuko et al. (2007) argue that national policy – such as the 1994 *Water Supply and Sanitation White Paper* - always drew a distinction between “water for direct consumption” and for sanitation (2006:17). This is indeed a compelling argument because nowhere in national water law is water for direct consumption and sanitation combined in reference to the 25l PPPD. They further argue that “Whether or not the amount of 6kl per stand is sufficient as contemplated in the Constitution does not depend on the “circumstances of the City”…..Instead, what is sufficient must be objectively in line with what people need to live a life of dignity” (ibid:19). This has profound implications for social policy, especially given our history.

Finally, views at the community workshop veered between an “unlimited” and “sufficient” amount of water. One participant said: “Let us not talk unlimited – let us talk of an amount”, while another said “What is sufficient for me is not sufficient to someone else. I have six in my house and she has eight. So ‘enough’ is a tricky word”. Another said “The word ‘sufficient’ is problematic”. Clearly quantifying sufficiency will vary greatly, depending not only on family size but on existing standards of living and aspirations for improved standards. But it is arguable that the amount should not be less than 20kl, which is what the deemed consumption figure during apartheid was. Increasing amounts of water can only be beneficial (WHO 2001), especially if one links this question to improving standards of living (JW 2001). Besides, “Limitations oppress the poor people, for those who cannot afford to pay” (Resident, Community Workshop, March 2006). Another resident followed: “It (limited water) forces people to live like pigs”. But about the experience with 6kl and PPWM in Orange Farm the CoJ said: “Masondo (Mayor) said the figures show that 75 percent of households in Orange Farm Extension 4 consume less than 6000 litres of free water per month allocated to them in terms of government policy” (CoJ 2004). Once again the City appears to extol minimal consumption, with scant regard for health consequences. This multi-answer question strongly indicates that most

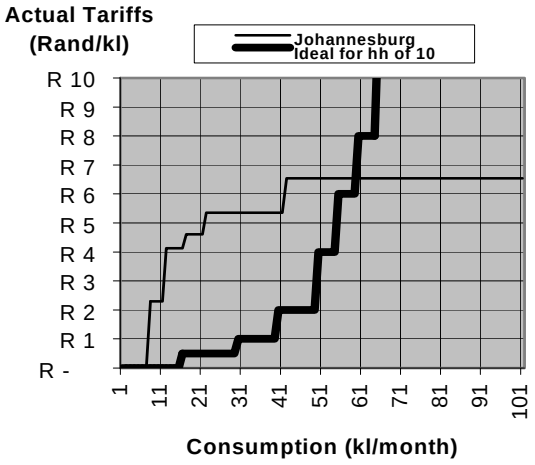
Graph 9: Who should pay for more water?



households think that government (55.9%) and big consumers (37.4%) should mainly be responsible for subsidising a better lifeline. It is likely that because the ANC has won every election (Personal interview, Jerry Mpholo, January 2007) in Phiri most respondents stated that it is mainly the responsibility of government to finance more water for them. A workshop participant argued that "The government is running away from their responsibility". But also important is the next biggest category of "big consumers", indicating an awareness that this payment could occur through tariff cross-subsidisation. "The industrial sector must pay and subsidise domestic consumption. Government must push for industry to pay for every drop they use" (Resident, Community Workshop, March 2006).

Regarding the prospects for tariff cross-subsidisation in Graph 10 below, Bond (2006) suggests a tariff structure that would be able to provide and finance a much better lifeline for poor households (Bond 2006:49).

Graph 10: Divergent water pricing strategies – Johannesburg (2001) v. ideal tariff for large households.



Source: Bond 2006: 49

The thin line (convex curve) is the current tariff structure, in which there is a flat rate from 41kl upwards. This means that really big consumers who use much more than 40kl pay the same for 100kl as they would for 40kl. The compelling arguments by Bond (2006) is that this does not discourage or penalise high consumption but instead rewards it and that this flies in the face of both the great emphasis placed by JW and the CoJ on water scarcity and the need for conservation (JW 2002). Besides, Bond shows at great length and convincingly that as the richest and most powerful city in both South Africa and the wider African continent Johannesburg was in the best position to finance a much better lifeline for poorer households (2002a; 2006). Asked about the present lifeline in South Afroca, Damien Dewhirst, formerly with the Birmingham Council in the UK, and the person who led the campaign against PPWM regarded it as "ridiculously low" (Personal interview 12 July 2006, Oxford, UK).

Alternatively, Bond (2006) proposes the thick line (concave) as the ideal tariff trajectory that will enable substantially more water to be financed by much higher tariffs as consumption rises above 51kl. The big difference between this and the current tariff structure which flattens when it reaches 40kl is that it will substantially increase revenues with which to subsidise a lifeline, for example,

of 20kl. But the city has rejected such a proposal, largely it appears, because it will discourage local investments (Bond 2002a). There is no doubt that given the history of this city and its enormous wealth a tariff structure which allows sufficient cross-subsidisation to finance a much better lifeline would have been fully justified, socially and morally. If the central or local state could not directly subsidise such an increase, say to 20kl for all poor households, the only other way to do it was either through taxation or tariffs. This approach is strengthened by the fact that the present tariff structure does reflect the political will necessary for cross-subsidising a much better lifeline for poor households.

Table 4: Johannesburg water tariffs for 2007/08

1- 6	Free	
7-10	R4.40	+20
10-15	R5.90	+30
16-20	R7.40	+40
21-40	R8.80	+40
40+	R10.40	+50

Source: City of Johannesburg service tariffs 2007/08 – tariffs exclude VAT.

On the right side of the table is the actual increase per tariff band. Instead of substantially increasing consumption above 40kl not only are tariffs constant for any consumption but there is a mere ten cents difference between the increase in the band of 16-20kl (40c) and that above 40kl (50c). The importance of this point is reinforced by the fact that JW itself concluded in 2002 that 20kl is an acceptable monthly average for Soweto households (JW, 2002). This should have meant that tariffs up until 20kl be sufficiently cross- subsidised by a much bigger tariff increase for consumption above 40kl. Here was a great opportunity too to enhance conservation by charging much more for water above 40kl in what is reputed to be a water-scarce country (DWAF 2005). Therefore Middleton and Sanders (1997) argue: "Pricing is a necessary and effective tool in controlling

use of water. The question is not therefore "Is there a need to pay for water, but rather who pays, how much, determined by whom and with what consequences" (1997:107).

But it is important to bear in mind that commodification and decommodication theses entails much more than just tariff structures. As McDonald and Ruiters (2005) assert, prices are just the external reflection of commodification and that its real meaning is how it fundamentally transforms socio-power relations and impacts directly on how people live and reproduce their lives (2005:23). But if this is so are tariffs and the amount of lifelines really important at all in the broader scheme of things? Trevor Ngwane (2007) argues that questions about the lifeline of 6kl or more are "questions of arithmetic, whereas it is the social and power relations behind it which is more important" (Personal interview, 11 February, 2007). But he goes on to say that we need to connect the lifeline to challenging capitalism itself, "which is the real enemy" (ibid).

However, there is another key and troubling question that radical water activists and sociologists need to answer: how much free water is necessary or should there be no limit to free water? As long as these questions are posed within a broader capitalist framework – with its multiple, deep and systemic social inequalities - and water is not inherently and discursively connected to all of them and the key question of the standards of living people aspire to, answers will be limited, inchoate and inconclusive.

"Free" or "decommodified" water is itself an abstraction that we need to concretise within a clearer conceptual framework, which also organically links it to other socio-material needs, demands and broader struggles. If tomorrow the lifeline was increases to 15kl or 20kl, what then? The other conclusion – difficult to resist – is that as long as we live within a capitalist framework water requirements will differ widely within and between communities and classes. Dewhirst (2006) makes an important point about water usage: "We need to draw a distinction between essential and discretionary water use. Most of working class households really use water because it is necessary for various

domestic tasks. If others want to use lots of water for pools and, lawns and gardens they must pay much more for it" (Personal interview, 12 July 2006, Oxford). Households covered in this case study were all poor and with high levels of unemployment, an overwhelming homogeneity. Not only do they not have swimming pools, lawns and big gardens but many had to stop the vegetable gardens they had since the PPWM were installed and the available water was limited to 6kl. Dewhirst (2006) further argues that: "Because water is, has always been or should be a truly public good, by definition it cannot be commodified" (ibid).

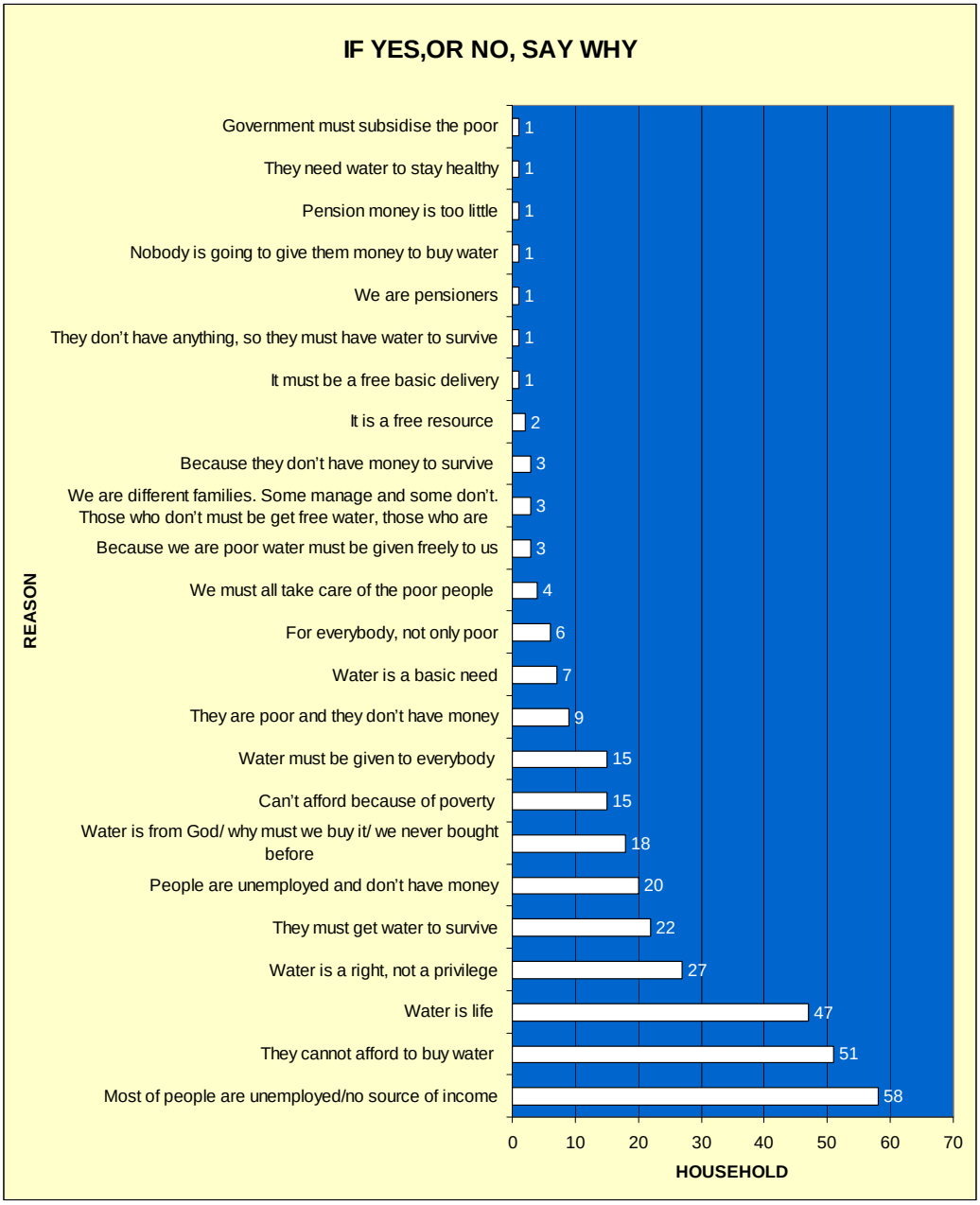
It is very clear that water distribution and consumption in Phiri – beyond a meagre 6kl lifeline - in every respect revolves around not need but money, i.e. what households can or cannot pay for. Human need is subordinated to commodified moneterisation and in fact redefines and alters it in accordance with financial dictates. So beyond 6kl households in Phiri are left to fend for themselves, go without water, ask neighbours or fetch water from other sources.

Should water be supplied freely to poor households?

Yes - 199 (99.5%)
No - 1 (0.5%)

The significance of this result is that except for one respondent every household answered in the affirmative, including those who were in favour of PPWM and the sufficiency of the 6kl lifeline. This indicates very wide recognition that poor households should be entitled to free water. Though the even more important question is the amount of free water.

Graph 11: Why should poor households receive free water?



The majority of households (total of 157) reported "unemployment/no source of income", "don't have money" and lack of affordability as the main reasons why poor households should be supplied with free water. Though there are various reasons why respondents believe water should be provided freely to poor households the major reasons are significant: most people are unemployed, poor and therefore cannot afford to buy water. Other significant reasons were that they never bought it before; it is needed for survival; water is a right, not a privilege; water is life. The real socio-material significance,

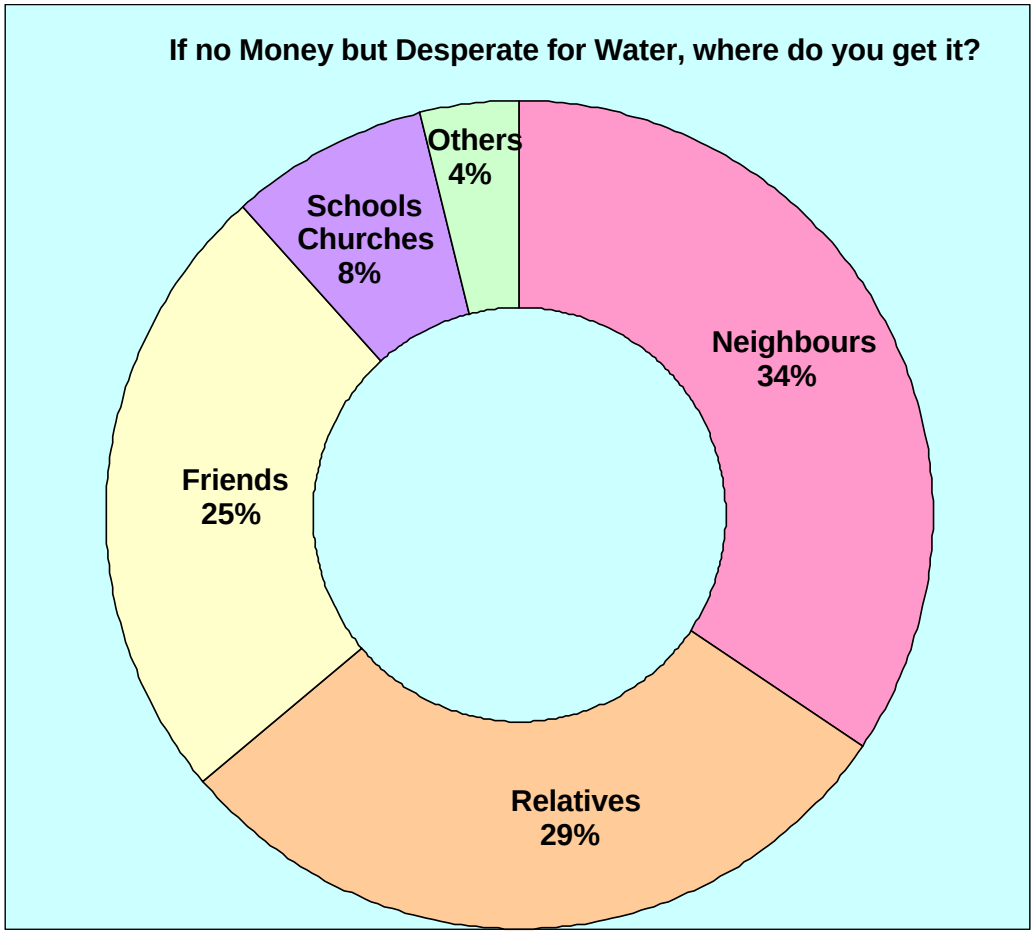
however, is that the biggest reasons had to do with jobs, income and poverty and not the more abstract reasons, such as that "water is life" or "water comes from God". Not only in Phiri but very widely black households often argue that "we never paid before for water" (APF 2003; McDonald 2002). But except for one every respondent (99.9%) said that water should be supplied freely to poor households, providing various reasons.

The interesting and revealing thing about this response was that everybody – whether they agreed or not with PPWM - affirmed that poor households should be supplied with free water. This pervasive unanimity in favour of free (decommodified) water for poor households appears to reinforce the very high priority and social value the respondents placed on water. Other reasons given were that water came from God and that they never paid for it before (during the apartheid period). "Water is life" (47), "water is life, and not a privilege" (27) were the other main reasons. Clearly, the ideological influence of the APF and Phiri Concerned Residents was evident in these responses. These slogans have been used in the campaigns of the APF, the CAWP and in particular the Phiri Concerned Residents Committee since 2003 (APF, Public Citizen 2004).

But of further importance is that overwhelming support for free water reasonably implies that it either opposes or at least questions measures which deny adequate free water. This is so despite the fact that many of these households stated that they were happy with PPWM in an earlier question, the technology which denied any further water once the 6kl is utilised. It was also very significant that though there were big differences between households about the sufficiency of the 6kl and whether they were in favour of PPWM, 99.9% of households said that poor households should receive water freely.

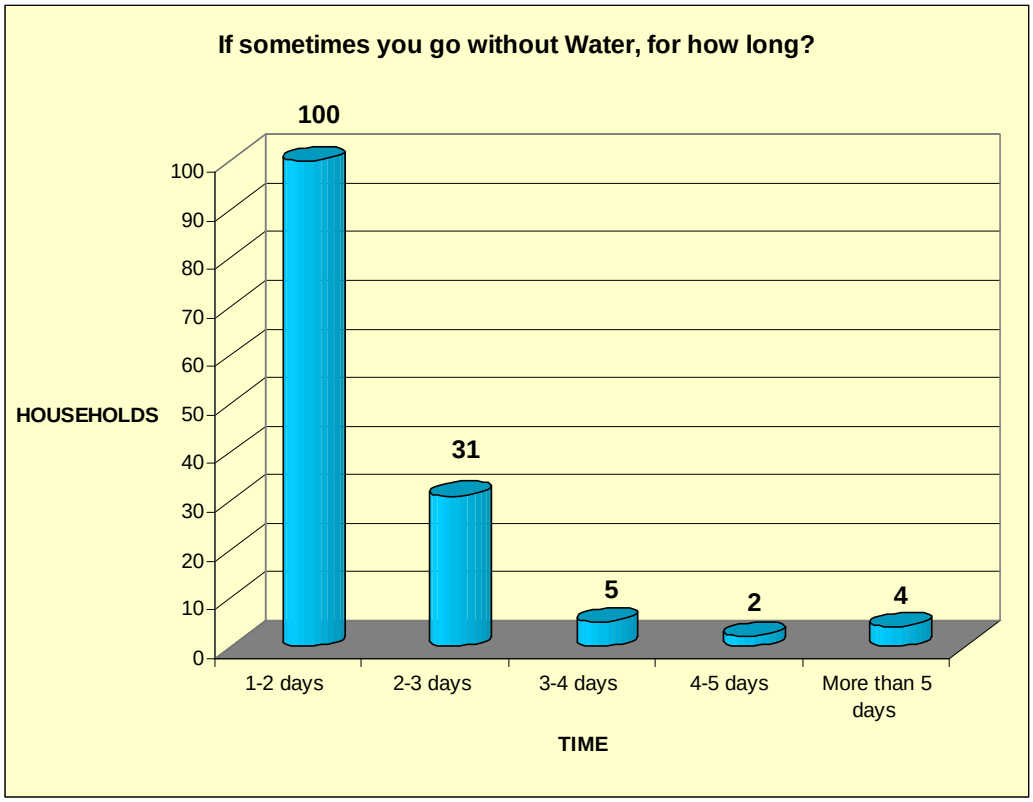
However, what is abstruse is the fact that the CoJ acknowledges great poverty and high unemployment in Phiri, as we noted earlier. They are therefore aware that payment for water is very difficult to achieve in such townships. They furthermore stated that the 6kl "goes a long way", implying that it is inadequate. In fact the 6kl often does not go a long way because of large household size. Our study showed that for most households the 6kl lasted two weeks. This is in spite of evident frugality by households, as the results of this study amply shows.

Graph 12. Where do get money for water when desperate?



This graph shows the various measures households without water and money have to resort to. Important to bear in mind in this regard is that 72% of respondents who also use prepaid electricity meters said that there are times that they also go without electricity. The indignity and agony of water deprivation inside homes is compounded by that of having to not only ask for water in the neighbourhood but to have to carry it in buckets back home, in full public view. Schreiner and Naidoo (1999), senior staff at DWAF, concluded that carrying heavy buckets of water have reportedly damaged the spines and backs of people. For the same reason not much water can be carried in buckets, meaning that several trips may need to be made by those in search of it.

Chart 13: For how long do you go without water?



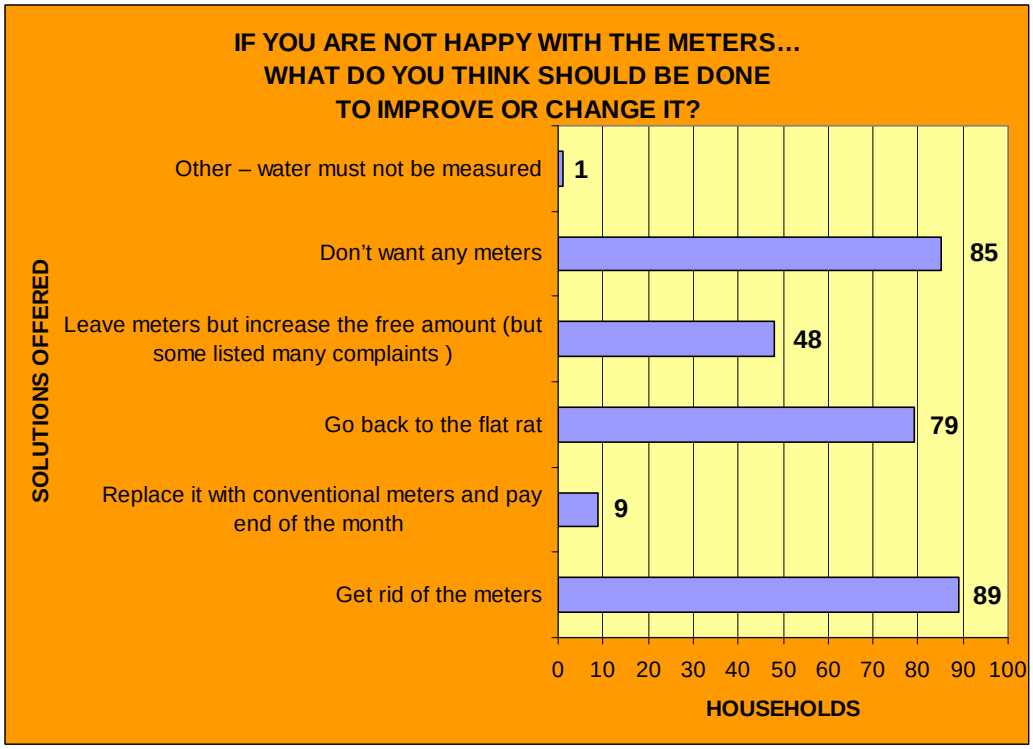
Although the vast majority indicate that they go without water for 1-2 days – for a shorter period than the others who go without it for longer - it represents some serious problems because food preparation and hygiene is affected and for sick people (particularly those with Aids) on medication it could be particularly problematic.

It is naturally much worse for those who go without water for longer periods. In this regard a significant number of households (total 42) reported going without water for longer than 2 days. This represents 21% of households. However, these households mean that they have to go without prepaid water but not that they don't try and get water from other sources, as we seen in chart 12. But the amount they can consume is seriously restricted because of the heavy weight of water to carry, unless it was from a neighbour, in which case more water could be carried. This could perhaps be why getting water from neighbours was the biggest alternative source in Chart 11.

There has to be an inverse relationship between the period that households go without water and the notion of water as a human right – the Constitutional right to access sufficient water - and social justice. The longer the period that people go without

water the greater and more intense the violation of such rights and the social injustice. "They said it will last for a month but it finishes in two weeks. Sometimes in one week" (Resident, Community Workshop, March 2006). The problem is that JW and the CoJ seem content with households drastically reducing their consumption due to poverty and unemployment, but "Simply reducing the amount of water that is not paid for does not solve the problem of the poor" (Public Citizen et al. 2004:6).

Chart 14: If unhappy with meters what should be done?



This multiple-answer question is interesting because there is a strong reaction against not only PPWM (89 = 44.5%) but any form of metering (85 = 42%). This represented the dominant view, followed by reverting to the flat rate system (79 = 39.5%). One gets a sense that the reason why the next biggest alternative to PPWM was reverting to the flat rate is simply because then payments are required at the end of the month and not immediately and even before consumption. Besides, that system does not lead to immediate water cut-offs – even when payments are not made at the end of the month - as is the case with PPWM when there is no money after a voucher has expired. Besides, it is quite possible that an undeclared reason for favouring a return to the flat rate is that if household needs are great it allows them to use more water than they are billed for.

But it does not appear that residents are aware that if they were to pay a flat rate now it would be paying more for the same amount of water than what they are paying under the current prepayment tariffs. Had they known it this proposal will probably not have been offered. Table 12 below shows the comparative tariff charges for a conventional meter, a prepaid meter and current deemed consumption. In fact to prove their claim that PPWM are beneficial and cheaper the CoJ argues that: "The table…in essence, reveals that consumers using PPMs pay R35.45 (or 27%) less for 20kl of water and sanitation than they did under the deemed consumption system (or would under an ordinary credit meter system" (Eales CoJ: 2006:104).

Table 5: Combined Johannesburg water and sanitation tariffs, excl VAT.

Kilolitres per connection per month.	2006/2007 Measured consumption with credit meter	2006/2007 Measured consumption with prepayment meter subsidised.	2006/2007 Deemed consumption 20 kilolitres
0-6	R51.70	R0.00	R131.25
10	R68.55	R20.10	R131.25
15	R96.40	R49.60	R131.25
20	R131.25	R95.80	R131.25

Source: Eales CoJ 2007: 62.

There can be no doubt that according to these figures 20kl of water from a prepaid tap (R 95.80) is cheaper than from both a conventional credit meter or the current deemed consumption flat rate (both R131.25). But what does that prove? The superiority of PPWM for poor households over conventional meters or that they were "pro-poor"? From the beginning JW – expecting impending resistance to PPWM - was determined to explore a cheaper tariff for them in order to serve as an incentive to accept the meters (JW presentation at portfolio committee for municipal service meeting, 12 December 2002). What it does indeed mean is that if households wanted to revert to the flat rate deemed consumption they would pay more, not less, than now. But that is a very different proposition from trying to avoid the numerous problems of both the current 6kl lifeline and PPWM we have discussed so far. Besides, R95, 80 is a lot of money for poor households who may require 15-20kl per month. Bond (2007) argues: "these shifts have generally occurred in a manner that *retains* the bias against low-income households

which consume in the range of 6-20kl/month, even with the adoption of slightly lower Gcin'amanzi rates". Considering widespread unemployment and poverty in Phiri there is a big increase in Table 4 from 10kl (R20.10) to 15kl (R49.60) and 20kl (R95.80).

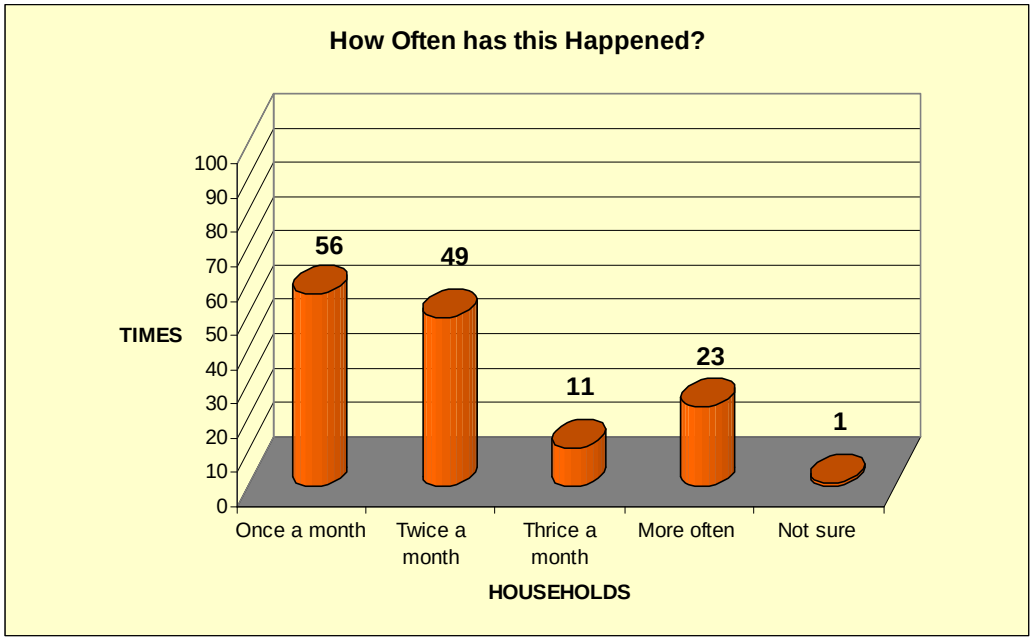
Therefore the fact that it is cheaper than that charged for credit meter consumption does not necessarily make the cheaper tariffs affordable and/or make PPWM more attractive for poor households. Hence, we need to draw a distinction between the meter and required consumption, though to refuse any kind of metering is perhaps a bit problematic because without it how would that which may be considered a good lifeline, say 20kl, be measured and implemented? However, opting for conventional metering and thereby an entirely different basis of charging and payments does not in the least alter the commodificaton thesis, but only alters the time-scale for payments but without the onerous consequences of PPWM. It's just that PPWM accentuates the negative effects of commodification in a brutal manner and imposes by its immediately demanding nature a unique technological reification, which credit meters don't do and can't do because the principles upon which they operate are completely different. None of these and many other drawbacks of PPWM are considered by both the CoJ and JW. It was purely financial considerations which motivated the decision to install these meters.

But the CoJ attempts to play down and obscure the negative impacts PPWM have had on households and neutralise their purpose in the first place: "The point at which the customer's free basic water will run out is not a function of the Prepayment Meter but of the City's policy regarding the provision of free water and the amount it can afford to provide and should provide given a range of relevant circumstances" (CoJ 2007: 28.10.21). The supply cut-off at the 6kl mark is indeed a function of the PPWM, which has been deliberately programmed to automatically do so. The point is that both the 6kl limit and the PPWM are inextricably linked. To separate them is false and misleading. Basically, the PPWM is the CoJ's chosen technology to implement the 6kl FBW policy, restrict free consumption to that amount and demand cash payments for any further consumption.

As a result the PPWM and the 6kl lifeline are basically two sides of the same coin, the inevitable consequence of the CoJ opting to dispense the 6kl lifeline through prepayment metering. It is the PPWM which stops any consumption beyond 6kl and it is the 6kl limit which is programmed into the meter to only supply so much freely. So from a social

policy standpoint the 6kl and the PPWM are discursively and functionally intertwined, working hand in glove. The meter is activated to charge for commodified consumption when the free 6kl ends. A question that could and should be raised is the *qualitative* value of the 6kl "lifeline" because of its very limited *quantitative* value. What this means is that so little is 6kl water – especially for larger household which may need 15 or 20kl - that it may require us to question the purpose, meaning and integrity of the "free" water policy of the government. And it is the empirical, social and political fact that it is poor black people who are faced with the multiple problems of insufficient water supply, and not the white households who benefited from apartheid. Furthermore the de facto decommodification of water – which is precisely why people say they "never paid for water before" (under apartheid) – is a striking and touching irony.

Graph 15: How often do you go without water?



This result appears to reinforce the results in graph 13, indicating that most households have to buy water after two weeks, meaning that the 6kl lasts for about 2 weeks. That is why in this graph most households say they go without water once or twice a month. But importantly, this going without water can only actually mean that these households don't have the money readily available to recharge the meters and that therefore the duration of being without water is the time they take to try and get some money to recharge them. The anxieties which accompany the search for money with which to recharge expired meters

can only compound the general anxieties which are embedded in poor households already facing growing unemployment and deepening poverty. The non-substitutable and indispensable nature of domestic water – unlike electricity – will most likely determines the extent and intensity of these anxieties.

Though the inadequacy of the 6kl lifeline is greatly evident in this graph JW and the CoJ made it appear at the start of the project that it was a lot of water. They had numerous advertisements, showing how many times 6kl will allow households to boil a kettle, take a bath, wash clothing and dishes and flush a toilet (JW 2003). "Each time you flush the toilet you use between 10-12 litres of water. With 6000 litres you can flush 500 times a month – that's 16 times a day" (JW 2003). But this was cynical deception because by trying to impress people by the number of times a particular activity can be carried out they failed to see that the much more important question was whether 6kl was sufficient for the entire family to daily carry out various activities – many more than they mentioned – for the entire month.

They also tried to impress residents with 6kl by stating at every opportunity that "This is the equivalent of 30 large 200 litres drums" (CoJ 2007:25.15). At mass meetings and on the streets of Phiri they displayed these drums and said that this was how much water households would get each month. It appears that they tried to conceal the little water 6kl for a month was in reality by this spectacle, hoping that the 30 large drums shown together will give the impression to residents that it was a lot of water.

Graph 16: If any, what are the worst disadvantages of prepaid meters?



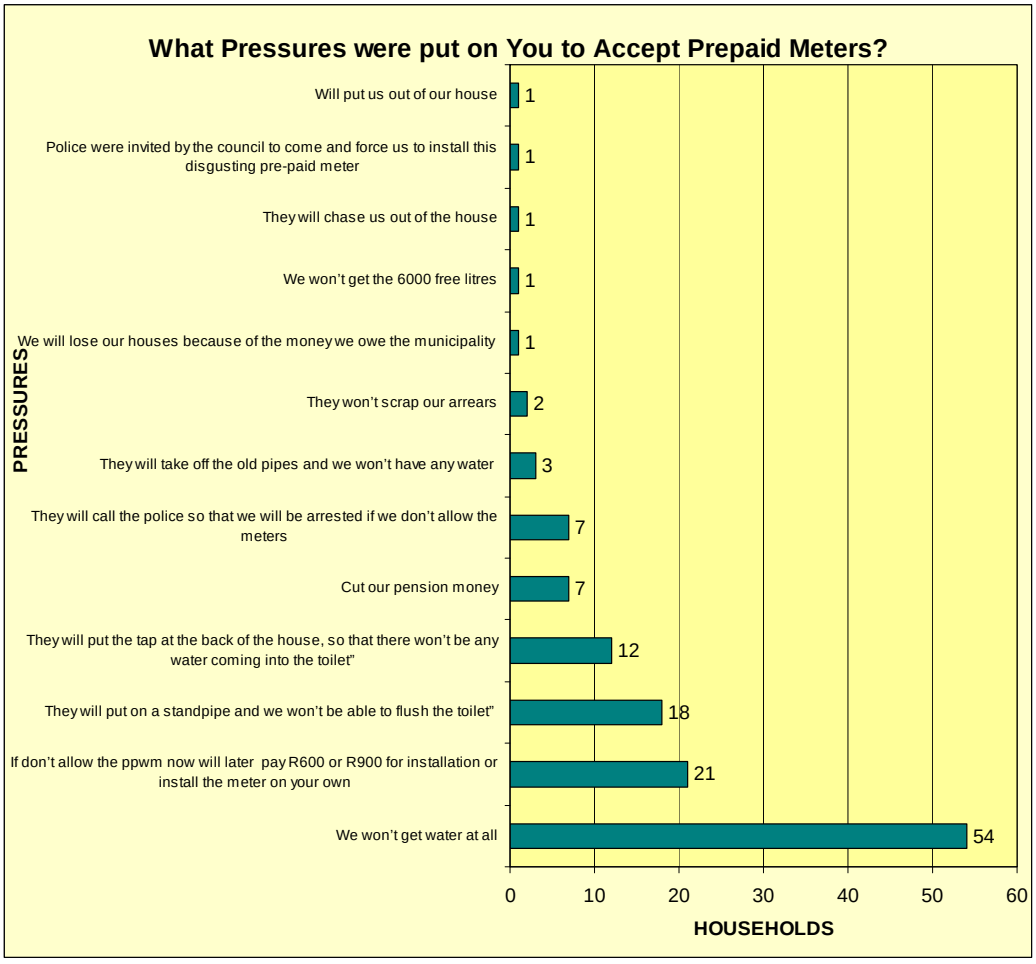
This multiple-answer question shows wide and varied identification of disadvantages these households experience. The response "no longer washing hands after using the toilet/not properly", by 32 households (16%), was significant because it reinforced the research done by Sanders et al. (2007). Other significant responses are: not being able to take medicine; using buckets to wash hands; and using buckets to rinse washing. Washing hands in buckets and not under flowing water could also pose health risks, which Sanders et al. (2007) are emphatic is essential for good hygiene.

Based on collaborative research in Phiri Sanders et al. (2007) show at length the potential health threats the lack of proper hygiene this situation has resulted in. First,

they note that “Handwashing behaviours before handling food and after using the toilet are accepted as the best predictors of diarrhoeal and other diseases spread via the faecal-oral route” (Sanders. et al. 2007:2). Second, they discovered that “In general, hygiene behaviours were worse in households that were being supplied by the prepaid method” (ibid). Third, they note that “there was a significant difference in the proportion of household carers with demand versus prepaid water who never washed their hands with flowing tap water (13% with deemed consumption versus 77% with prepaid meters)”. Finally, they conclude that “In a country where poverty is rife, where there is soaring unemployment, where there is a massive housing backlog, and where hunger is a daily reality, it is unrealistic to expect poor people to purchase, in advance, a basic good such as water” (ibid:3).

But what this wide-ranging manifestation of the adverse effects of PPWM and the 6kl lifeline show is just how broad and deep necessary water usage runs in multiple daily activities, particularly in working class households. Peet and Watts (2004) make some compelling cultural observations about water usage: “Development, right into the late twentieth century, has remained associated with water and soap” (2004: 310). They furthermore point out that “Shame at being smelled, embarrassment at coming from a smelly environment, and a new proneness to be offended by smell – all taken together – place the citizen in a new kind of space” (ibid). Water is evidently very closely tied to personal and social development and health. Criticising various international conventions on water Sullivan (2002) argues that “None, however, recognises the unique importance of water to all forms of life. Without *adequate and efficient* water supplies, i.e., where there is ‘water poverty’, any measures to reduce income poverty is unlikely to be successful (2002:1). He goes further: “If standards of living are to rise, water consumption per capita is also likely to rise. This means that water availability, or lack of it, is linked to economic and social progress, suggesting that development is likely to be influenced by how water resources are managed” (ibid) `

Graph 17: Were any pressures put on you to accept prepaid meters?



This graph captures the response of households to the question that if they were placed under pressures to accept the meters they should state what these were. The question before this asked if there was any pressure to accept the meters. 53% said there was no pressure and 47% said there was. These questions arose from the fact that the APF and the Phiri Concerned Residents alleged that during 2003 and 2004 - when the meters were being installed - households were being pressured to accept the meters (APF 2004). While there are different versions among households on this matter the former ANC councillor for Phiri, Jerry Mpholo, said that the ANC did send former MEC for finance in the CoJ, Kenny Fihla, to Phiri: "Kenny Fihla came here to say that the ANC branch must agree with the project or join another party" (Personal interview, 14 February 2007, Phiri). This would suggest that there was some resistance to the project encountered amongst ANC members in Phiri.

But it is very unlikely that 27% of respondents (54) would untruly state that they "won't get any water at all" if they did not accept PPWM. Mpholo furthermore stated that "SANCO at regional level said that they supporting the project but when they came here they were chased away with violence by local SANCO members who opposed these meters. After they ran away - in fact they were escorted under police protection - they never came back" (Personal interview, 14 February, 2007, Phiri). Besides community resistance this makes it very clear that there was significant opposition to this project from within both the ANC and SANCO. But one thing appears likely: so important was this project for the CoJ and JW that it is possible that households were pressured into acceptance. "Those people who we elected must to talk to us, find out what our needs are and consult with us. There was no consultation and we were not involved. This was forced on us" (Resident, Community Workshop, March, 2006).

Former managing director of JW, Anthony Still, stated that "This project will make or break Johannesburg Water" (Personal interview, January 2003). Furthermore, so important was the project that the CoJ decided to scrap all arrears if households accepted PPWM (CoJ 2004). The APF and CAWP argued that these meters have been "forced on the poorest residents in such a manner that they have had little choice but to accept them as a means of accessing a resource absolutely necessary for life" (APF, CAWP 2007:2-3). This situation strongly suggests – especially since fiscal constraints forced the CoJ to commercialise services – that local ANC leaders did place resistant households and ANC and SANCO members under some degree of pressure to implement the project. Research done in Phiri and Orange Farm by Public Citizen, the APF and the CAWP confirm this (Public Citizen et al. 2004; APF, CAWP 2006).

While in 2002 JW stated that PPWM will not be imposed on households but only be installed with their consent what happened in Phiri was tantamount to imposition because households only had a choice between such a meter and a yard standpipe, whose disadvantages seriously compromised their safety, health, convenience and the amount of water they could practically carry in buckets from the standpipe to wherever it was required indoors. It would particularly be unsafe for women and girls to go outdoors to fetch water at night. Rather than endure these disadvantages and inconveniences residents finally signed the acceptance forms. But a letter sent by JW on the 8 November 2004 to residents who had not signed up for the PPWM system does suggestion a degree of coercion:

> We are aware that you have still not signed for the installation of a meter or a standpipe in your house. We would like to inform you that your failure to sign for any of the two available options might unfortunately lead to you being left without water during the decommissioning phase of the project" (JW 2004, cited in Earle et al. 2005:38).

Faced with the difficulty of choosing between a PPWM and a yard standpipe – especially in the light of the negative stories Phiri residents heard about experiences in Orange Farm, the lack of consultation with them and concerted state repression following the installation of the meters - it is quite understandably that some households refused to exercise this painful "choice" and as a result nine households refused both a PPWM and a yard standpipe (CoJ 2007).

Graph 18: What arrangements are made to share the 6kl with backyard shacks?



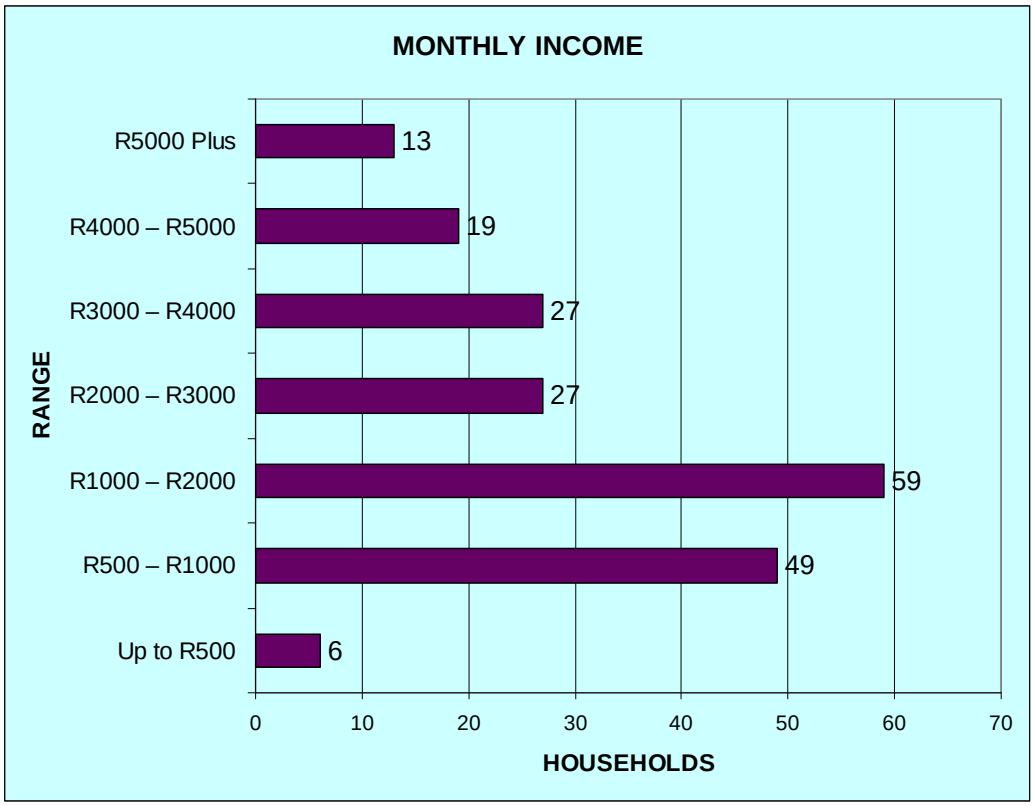
There is not only competition for and conflict between household members for water – as we seen above - but further difficulties exist with the fact that the 6kl has to be shared with any backyard shacks. If 6kl works out to 25l PPPD for a family of 8 - depending on how many people there are in both the main houses and these shacks per stand it

could that if the 6kl was shared between them - there could be a per capita consumption of anywhere between 10 – 20l if the total number of people was between 9 and 15. In such cases the per capita consumption would be much less than the already low base of 25l for a family of 8.

But examining the responses in Graph 18 shows a strong similarity with the measures resorted to in Graph 5 and Graph 16, which respectively deals with measures taken to "manage" with 6kl and the "biggest disadvantages of prepayment metering". Whether it is among household members or members of backyard shacks it is the same refrain: water consumption for each of the main activities, whether for washing, bathing, cleaning or cooking, must be drastically curtailed within available means.

Participants spoke of the awful experiences they have had of toilets not being flushed, both as a result of standpipes, and as a result of trying to conserve water by restricting the flushing of toilets in households on the prepaid system. They highlight the serious dangers such as unhygienic conditions posed for the health of individual, households and the community (APF and CAWP 2006:21-22).

Graph 19: Monthly Income



In Graph 2 and 16 above we seen similar complaints about water shortages restricting the regularity with which toilets are flushed. This graph also shows that by income

category most households earn as little as either between R500-R1000 (24.5%) or R1000-R2000 (29.5%) per month. Most of the rest are still by today's high cost of living in a relatively low range, between R2000 and R5000 per month. Only 6.5% (13) are over a modest R5 000 per month. It should be evident that it would be very difficult for the majority of households to pay for water, even if was R30-R50 per month, especially in the midst of growing unemployment and poverty and rising socio-class inequalities (South Africa UNDP 2003).

Implications of PPWM and lifeline for social policy in Soweto.

The battles against PPWM in Soweto, described in the following chapter, have been much in the media but no ANC leader has come forward to express concern or regret at the situation in Phiri. Instead ANC councillors who initially had reservations about using PPWM in a poor area were finally won over to the idea (Harvey 2003).

However, national and international experiences and forces converged upon Soweto, to determine the commercialisation and corporatisation of water and the installation of PPWM, made possible by ANC policy shifts, which was itself shaped by such forces from the early 1990's. Lefebre asserts that: "Caught up in the contradictions between the macrostructures of capital and the state and microworlds of everyday life, urban politics is no more local affair, but rather is multiscalar, potentially universalist and most importantly transformational"(cited in Keil 2002:74). There is much evidence that the Suez-led multinational consortium managing JW through the management contract it won has been aggressively pushing the need for cost recovery and PPWM as the best instrument to achieve it and thereby obviate lengthy and expensive credit control action, which also does not guarantee payments, as these meters do. This, though they were fully aware that PPWM were declared unlawful in the UK in 1999 (Personal interview, Segre, December, 2002). Jewson and McGregor (1997) highlight furthermore the importance of both the micro and macro context of the decommodification struggles in Soweto:

> What has for long been true of city politics also becomes the case for national politics, that is public policies can only be explained by looking at their place within the larger socio-economic and political context. So, ironically, in this era much can be learnt by national government from studying what happens at city level (1997:7).

The point is that such study is more important now, in the light of the results of this and other research, and the fact that little or no studies appear to have been conducted

on the feasibility and appropriateness of PPWM in poor places such as Phiri prior to their installation, particularly the UK experience, although both the CoJ and JW claim that they did "considerable research" before embarking on the Phiri project (CoJ: 2006: 48). However, other than this claim nowhere in the official literature is this evident. Nevertheless, given its history and the effects of PPWM and a vastly inadequate water lifeline – in a context of high rates of unemployment and poverty - it is very likely that Soweto will be the key site for the development of a Polyanian countermovement, social policy and rigorous political and discursive contestation.

Rather than the 6kl lifeline providing an effective anti-poverty measure - with which to at least reduce poverty - it is in the light of our case study becoming a disciplinary weapon to harshly instil minimal water consumption if households don't have the money to buy more thereafter, with wide-ranging adverse consequences, for health, hygiene and food production. Peters and Oldfield (2005) argue that "Free basic water (6kl lifeline) in the context of overall policies of cost recovery creates a paradox in which low-income, poor households experience debilitating and insufficient access to water, and increasing household debt…." (2005:314).

It is interesting to cite Pheko (2007), who was arguing against MP's clamour for bigger salary increases: "By permitting private water companies to install prepaid meters in various cities in our country, they failed to understand that people who can't afford to flush their toilets will start defecating into pots, which they will empty out of windows onto foot paths that children use to go to school. Is this what parliamentarians want to be rewarded for" (*Sunday Times*, 22 April, 2007). The case study shows serious health and hygiene consequences when the credit in the PPWM has been exhausted and there is no water to flush toilets and wash hands, let alone how the lack of water has other wide-ranging negative effects.

These are all clearly the empirical results of commoditisation pressures upon poor households sandwiched between a meagre lifeline and the stoppage of water flows when the automatic shut-off valve mechanism kicks in upon expiry of the meter. It is therefore hard to accept the rebuttal by the CoJ: "it is simplistic and reductionist to state that because Johannesburg has a corporatised water utility, water has been commoditised, and that consequently the marginalised and vulnerable sectors of society are disadvantaged" (2005:2). Surely it is disadvantageous to one's health and numerous daily household tasks which require water, such as washing and cleaning, when the 6kl lifeline runs out and

there is no money to recharge the meter. It should be clear even to the CoJ and JW that corporatisation has had numerous disadvantages for poor households, even though the utility is wholly owned by the CoJ.

Commoditisation traverses private and public forms, often with hardly significant differences, except perhaps in the degree and intensity of its impacts, but not a difference in operational principal, namely commercialisation. It is commercialisation that is the driver of commodification, which can and does occur independent of institutional forms, though obviously it is in its more natural environment and in full swing if there is overt and outright privatisation or divestiture. Therefore, the Sierra Club's (2003) assertion that "all water resources must be protected as a public trust so that commercial use of water does not diminish public or ecological benefits" (2003:1) is correct only if it does not mean or imply that under a formal public trust commercialisation cannot still occur, unless this is explicitly prohibited by law, and there are vigilant public bodies scrutinising each aspect of a service and ensuring decommodified access to adequate amounts of water for all poor households. Clearly, we do not have such bodies and the CMU does not and cannot perform this role.

The great concerns with PPWM in Soweto – as in households in other townships where they have been installed – is that alongside the many other negative effects of the generalised social crisis they face, it is bound to not only deprive them of sufficient water, but to thereby worsen overall poverty and widen already great social inequalities between these townships and formerly white suburbia. Commodification appears to be the present great leveller, determined to exact payments from poor household for basic services, such was water and electricity.

Case study goes beyond earlier research

There are many ways in which this study goes beyond the findings of earlier research into OGM in Phri, done by Hansen (2005), Naidoo (2005) and the APF/CAWP (2006), and at a wider level the findings of research by Deedat (2002) and Deedat and Cottle (2002).

Before stating the advances made by this case study in comparison with other studies we need to note that our sample size of 200 households was greater than that of studies done by the APF and the CAWP in both 2003 and 2006, which was 174 (Naidoo 2005:157) and 166 (APF/CAWP 2006:12) respectively. The sample size by Hansen

was even much lower at 30 (Hansen 2005:12). Furthermore, because our case study was done two years after the project started we naturally had much more experiences and therefore empirical information to work with and analyse, than had Naidoo (2005) and Hansen (2005). Because of this advantage we were partly able to pose more questions and elicit more responses and information which the timeframes of both these studies did not permit.

In relation to the later study by the CAWP (2006) – also two years after the project began – our case study makes considerable epistemological advances, which we discuss below. Quite clearly, what also influenced the much greater depth, range and intensity of our case study and subsequent analysis was that it was for a PhD, which naturally demanded that it be much more detailed (61- pages). We now turn specifically to the advances this case study has made in comparison to those mentioned.

The Hansen (2005) study- in partial fulfilment of a masters degree - was very limited (a total of 39 pages), including the number and type of questions put in the survey, responses and subsequent analysis. Many questions our study considered imperative were not included, such as how much more water households needed to buy each month and how much in monetary terms this cost; the gendered dimension of who was responsible for buying coupons; exploring the internal conflictual dynamics within households about water usage between members; critically exploring and analysing survival and coping measures - both internal and external - households were forced to resort to when they did not have money to buy water; enquiring whether PPWM have indeed helped to reduce consumption and save water; whether or not residents believed that poor households should receive free water and why; how much water should be provided freely, if 6kl was insufficient; how long needy households go without water if they don't have money to buy recharge vouchers; and what arrangements are made with backyard dwellers to share and manage with 6kl or pay to buy water thereafter.

All these additional questions in our study elicited a great deal of information and relevant analysis and findings not present in the Hansen study, which admittedly was a "small sample number of 30" (Hansen 2005: 12). As a result, whereas Hansen found that the PPWM were inappropriate (ibid: 26) and the 6kl inadequate (ibid: 20-21) this was supported by relatively little and sketchy empirical information and even less rigorous analysis of the survey results. As is amply evident in this chapter our case study shows a high degree of micro-level detail, both in eliciting information and analysing it. Such an extensive and detailed case study of OGM was not done before.

We probed much deeper than the few studies conducted before, which will enhance both knowledge and understanding of the complex social dynamics underpinning both the PPWM and 6kl lifeline and thereby the commodification thesis.

The emotions households affected by water shortages experienced and expressed were registered and analysed to produce new knowledge about the hidden world of anger and anguish water deprivation leads to inside homes. For example, responses to the question of what households do to cope either within the 6kl range or once exhausted outside it revealed a disturbing but dynamic and creative sense of survival amidst grinding adversity, centred on the most important daily need human beings have. In graphs 2, 5, 6, 12, 15, 16 and 18 and charts 4 and 13 we show the varied, combined and unprecedented insights into the devastating and disintegrating effects PPWM and a very limited water supply had on poor households at a microscopic level, the degree and intensity of which was absent from both Hansen (2005) and APF/CAWP (2006).

We also show how and why adequate water access and sanitation is intrinsically related to the most basic notions of civilisation, development, health and well-being in ways which are not seen in both these studies (see graph 16). This and much more discursive connections enrich our case study in ways not seen in either of these studies.

Similarly, the relationship between primary households and backyard dwellers revealed new knowledge and understandings, both as regards water consumption matters and other social dynamics which did not exist in both these studies. We show how the indispensable and non-substitutable nature of water inversely determines the nature and degree of deprivation, anguish and resentment. Our case study in virtually every respect links the effects of PPWM and water shortages with the policies not just of cost recovery but with the deeper structural and ideological character of South Africa's post-apartheid version of neo-liberalism and its denial of sufficient water to poor households in Soweto.

Who in an electoral and constitutional democracy and from among the role players must finance more water for poor households who cannot afford to buy it, for example, was another question not put in any of the earlier work in Phiri, as was the question of whether or not it is true that households wasted water before OGM began, an allegation both the CoJ and JW constantly made over the years (JW 2003). We also explored and found new understandings about the relationship between the primary household and backyard tenants, in relations between them, not tackled in previous studies. We

furthermore investigated what households thought were alternatives to PPWM, which was also absent from the study by Hansen (2005).

Key informant interviews also gained knowledge about important matters no previous research had uncovered, namely, that the ANC had to sent a senior leader, Kenny Fihla, to persuade and in fact compel disgruntled members to accept PPWM in Phiri or join another party (Interview, Jerry Mpholo, 14 February 2007). These interviews also discovered that senior SANCO leaders who were directly threatened with violence had to run away under police escort when they tried unsuccessfully to convince their members about the virtues of PPWM (ibid).

The findings of the earlier work by Deedat and Cottle (2002) – based on factors which contributed to the devastating outbreak of cholera in the rural area of Madlebe in Kwa-Zulu Natal - were empirically limited to four issues which "linked cost recovery to the cholera outbreak in Madlebe" (ibid: 95). These issues were the affordability of water to a poor rural community, the technical breakdown of the meters, lack of information about how they worked and maintenance (ibid). Linked to these issues were the severe financial implications of both the technical breakdowns of the PPWM – which were then in an earlier stage of development - and the cholera outbreak. As a result most of the issues in our case study - which took place in a different urban context and period - were understandably absent from this study.

Unlike our case study the later study by the APF/CAWP (2006) does not deal with and therefore has no key research findings on these important matters: the reasons why residents rated PPWM negatively or positively and an analysis thereof ; how much households spent on buying water per month; what measures households were forced to take to get water when they did not have money to buy it; details of the kind of internal household conflicts as a result of water shortages; what specific measures water-saving households are forced to take during the month to cope with 6kl; whether PPWM have indeed succeeded in getting households to save water and how this was achieved; requesting households to detail the most negative effects PPWM and the limited 6kl lifeline have had on them; what specific coercive pressures – if any – were they subjected to in order to get them to sign acceptance of PPWM; asking respondents if they believed that water should be supplied freely to poor households, and if so how by much per month; what specific water-saving arrangements are made between the primary household and backyard shacks to share the 6kl; and what specific alternatives households suggested

to resolve the problems.

Conclusion

The empirical results in this case study strongly suggests that both the 6kl lifeline and PPWM have had wide-ranging negative consequences on the health and well-being of the vast majority of households, and are therefore inappropriate. It shows that 6kl is totally inadequate as a "*life*line" and that prepayment metering is both ill-conceived and ill-advised for installation in poor working class households.

This study also makes it abundantly clear that water supply to these households have been subjected to harsh neo-liberal policies, particularly a one-sided and disproportionate emphasis on cost recovery and financial imperatives at the expense of the sustenance, sustainability, health and reproductive needs of these households. This preponderantly neo-liberal framework is reinforced by the fact aside from the serious concerns this study raises "At present it is estimated that approximately 105, 000 households do not have access t piped water within 200 meters of their dwelling and approximately 196 000 households do not have access to adequate basic sanitation" (CoJ 2007:121.4).

The study shows that the many disadvantages and potential dangers of PPWM in poor and large households makes it inappropriate as a method of measurement and that it would much better suit richer households, big farmers and industry, for whom payment in advance would not be as great a problem as it certainly is for poor households. Relative volumes of consumption between richer and poorer areas is another important indication of the appropriateness or otherwise of PPWM, and is a major reason why some argue that faced with relatively little consumption – but their many negative and dangerous drawbacks – they should not be installed in poor areas (McDonald 2002). However, if the CoJ remain firmly committed to these meters over the medium to longer term – despite evidence to the contrary - and resistance is too weak to force a change in water supply policy then a much better lifeline is absolutely necessary to protect poor and large households.

The decision to increase supply to 10kl for only registered indigents will not achieve much because it will exclude most poor people who have not and are unlikely to register. There is no doubt that a very poor uptake of 118 000 registered indigents, years after it began, clearly indicates that for most poor people it is stigmatising and

unappealing. Why else would a city with high levels of unemployment and poverty only have 118 000 registered indigents? The other problem is a lack of information. 96% of respondents in this case did not know anything about the indigent policy.

Faced with the numerous disadvantages and inconveniences of yard standpipes – as the alternate to PPWM - there was no real, meaningful and fair choice, with the result that households were virtually forced to accept these meters. Many respondents also made it clear that various threats were made if they did not cooperate, particularly that they would not have any water at all. The threat contained in the answers of respondents appears to have induced reluctant cooperation.

It is also disturbing to see the various measures affected households have been forced to take when they don't have the money and cannot get it elsewhere to buy water or when water bought runs out. It is a graphic and intimidating insight into what households have been compelled to resort to in order to either "manage" with the 6kl or with water bought thereafter. A significant 28.5% (59) said they discontinued vegetable gardening because of both the limited lifeline and the PPWM. This must be seen in the light of the fact that many households in township, where possible, engage in vegetable gardening for subsistence. Ceasing such activities would therefore naturally have a negative impact on sustainable livelihoods.

65% (54) said they had stopped their children from playing with water, which children have universally always done, especially in hot summer months. More seriously 49% (98) said that they bathed less and 46.5% (93) said they shared bath water. Others (65.5%) used dirty water to flush toilets and 49% (98) cut down on the amount of water used to "wash bodies, dishes and washing". These are the various negative effects the inseparably related 6kl and PPWM have had on these households. But it is evident that there are particular dangers to health which the lack of water poses for these households, as a result of policy decisions they were furthermore excluded from.

Just 30km from the richest stock exchange in Africa poor black households go without water and often electricity too because of a lack of money. This same city that will host the finals of the 2010 World Cup and which the rulers are eager to build as a "world class city" (CoJ 2002) and are preoccupied with making attractive for foreign investors cannot provide enough water for its poorest inhabitants. New shopping centres and other tourists attractions are being built in Soweto while people living there go without water and electricity. But the CoJ (2007) concluded:

> The implementation of the project has really transformed the provision of water services in the area in which it has been implemented and its successes are building the foundation for sustainable water use and service delivery in these areas. The monthly progress reports…show the successes achieved by the project. The reduction in unaccounted for water has certainly exceeded expectations. (CoJ 2007:27..3).

There is a stark contrast between the official assessment of both the 6kl and the PPWM project and the contrary evidence of the majority of residents in this study. The problem however is not these big differences but that the serious concerns identified by residents will not be addressed because of these different assessments. This will mean that the identified problems will continue to take their toll on poor households and pose ongoing threats to health and well-being.

Phiri faces a social crisis wrought in part by PPWM. “People go and steal water. They break into schools at night to steal water. I mean, during apartheid, no matter how evil they were, they did not cut our water. I have so many people coming to me for water. It has affected the hygiene standards of people. The water meters is affecting our people very badly” (Mpholo, interview, 22 February 2007, Phiri). We conclude on a point which in fact drove much of the PPWM project in Phiri: the allegation that households have been wasting water. “Jamil Chand and others at JW are lying about wastage of water in Phiri. Nobody is perfect, so you may have one or two households being wasteful, but otherwise it is a lie that we waste water”. Mpholo is the ANC’s former councillor in Phiri.

CHAPTER 8: RESISTANCE TO COMMODIFICATION AND EXPLORING THE PROBLEMS AND PROSPECTS FOR A POLANYIAN COUNTERMOVEMENT IN SOUTH AFRICA.

Introduction

Resistance to the commercialisation and commodification of water and other basic services has been growing over the past few years, particularly since the Municipal Systems Act (2000) was passed. At the national level this Act (RSA 2000a, s 74.2.d) imposed cost recovery and it also made provision for private sector involvement in the delivery of services and its corporatisation and commercialisation (ibid:72-74). At the local Johannesburg level resistance has grown since the iGoli 2002 Plan was adopted in 2000 and specifically since in 2003 OGM was implemented in Phiri.

Since then there has been ongoing, escalating and often violent resistance against "poor service delivery" in South Africa (McKinley and Veriava 2005). This was so violent that a few ANC councillors were killed or their homes burnt down over this period (*Saturday Star*, 28 March 2005). Several more ANC councillors were killed between July-August 2007 (*The Star*, 22 August 2007). "The face of protests in South Africa is changing, they are becoming more violent. Perhaps people are tired of not getting what they have been promised, and perhaps it is time that those who can make a difference pay attention before it is too late" (Robinson, *The Star*, 7 September 2007). Our approach is to regard these largely sporadic and spontaneous outburst of struggles across the country as a continuum of resistance to the social effects of neo-liberalism at municipal level. This resistance may or may not develop into a Polanyian-type "double movement" or "counter-movement" or it may untidily and unevenly represent elements of this theoretical construct, presented for the first time in Karl Polanyi's (1944) path-breaking book, *The Great Transformation*:

> Polanyi showed how society took measures to protect itself against the disruptive impact of unregulated commoditisation. This….he called the 'double movement' whereby ever-wider extensions of free market principles generated counter-movements to protect society. Against an economic system that dislocates the very fabric of society, the social counter-movement, he argued, is based on the 'principle of social protection aiming at the conservation of man and nature as well as productive organisations, relying on the varying support of those most immediately affected by the deleterious action of the market – primarily but not exclusively, the working and the landed classes – and using protective legislation, restricting associations, and other instruments of intervention as its methods (Webster et al. 2008:3).

We have already identified in Chapter 2 some of the weaknesses in Polanyi's work. But interest in his work – with all its theoretical weaknesses – has grown in inverse proportion to the aggressive neo-liberal marketisation of social reproduction and the defensive response to it in poor communities over the past two decades in particular.

The organisations involved in resistance

Because of the alliance of COSATU and the SACP with the ANC - which has prevented their direct involvement and support - this resistance has been led by social and environmental movements and supportive NGOs (Cock 2004; McKinley and Veriava 2005). Besides COSATU, other trade unions, such as the Federated Unions of South Africa (FEDUSA) and the National Council of Trade Union (NACTU), have also not been involved in this resistance. The absence of trade unions – given their pivotal role in the wider economy and the fact that their members live in the townships which have been at the centre of this resistance - has severely circumscribed the reach, influence and achievements of these movements.

The biggest and most active of these organisations have been the Coalition Against Water Privatisation, consisting of the APF; Environmental Justice Network Forum, Jubilee South Africa; IndyMedia (South Africa); Freedom of Expression Institute, Landless Peoples Movement; Orange Farm Water Crisis Committee; Phiri Concerned Residents Committee; Kathlorus Concerned Residents Committee; Evaton Working Class Committee; Soweto Electricity Crisis Committee; Samancor Retrenched Workers Crisis Committee, Mandelaville Crisis Committee; Thembalihle Crisis Committee; Thembisa Crisis Committee; Thembisa Concerned Residents Association; Inner City Forum (Johannesburg); Kanana Community Development Forum; Bophelong Community Service Forum; and Public Citizen (USA) (Public Citizen, APF and the CAWP 2004). The CAWP "brings together and gives support to communities facing the privatisation of water…."(ibid). In turn the biggest and most important of these affiliates is the APF, which consists of 22 community affiliates (APF, CAWP 2006). The APF is rooted in poor black communities spread across Gauteng (APF 2006).

Another important body involved in the resistance against water commodification is the SA Water Caucus (SAWC), which is a "loose umbrella of some 50 organisations" (Cock 2004:16). "The SAWC insists that our rights to water are respected, that the

constitutional provisions on water are upheld and that rights to natural and traditional water sources are protected" (Cited in McDonald and Ruiters 2005:118). Though not a numerically large organisation "It is an important forum for the exchange of information between civil society and the state in the form of monthly meetings with DWAF officials. This interaction with government officials strengthens grassroots participation in decision-making and mentoring and gives voice to affected people on the ground (Cock 2004:16). But the key question which is not asked or answered about the SAWC is this: "What exactly has their monthly interactions with DWAF led to? In what ways has it led to a review of the many policy stances of DWAF that they reject, such as the commercialisation of water and PPWM in particular"? And where is the evidence to show that these interactions "strengthen grassroots participation in decision making and give voice to the affected people on the ground"? The fact is that this interaction has not led to any discernable and tangible shifts by DWAF from policies which lie at the heart of water commodification in townships. The other danger is that when DWAF funds the attendance of representatives of these organisations at world conferences – while important exposure for them - and provides other material support (Personal interview, Jennifer Makoatsane, 12 December 2006, Phiri) this could serve to soften and even compromise resistance. There exists no critical analysis of these relations and in fact upon the efficacy of the work done by the SAWC.

Opposition to the PPWM project in Phiri

> Business at the Johannesburg Water site office in Phiri is steady as residents visit the cashier with wads of past cash clips in hand showing their previous purchases of water. And the buying and selling of water seems to have become a part of life as usual in Phiri (APF, CWAP 2005:2).

Although the next chapter focuses on a Polanyian-type countermovement in more general terms we need to explore resistance to PPWM in Phiri briefly in this case study. The problems and prospects for a local-based countermovement in Phiri and broader Soweto is all the more important because there was initially strong and militant opposition to the project in Phiri, to the extent that it received considerable publicity inside and outside the country (*The Star*, 13 October 2003; APF 2003; Bond 2005). However, since all households – except nine (CoJ 2007) – accepted the meters between 2004-2006 resistance has largely been subdued.

> While large numbers of residents came together to physically resist the installation of the meters in the early days of Operation Gcin'amanzi, leading to the formation of the Phiri Concerned Residents Forum (PCRF), over time, arrests, fines, intimidation and threats have resulted un the decline in resistance. The very threat of being cut of from water completely for refusing to sign onto the system, led to many residents signing onto the system begrudgingly APF and CAWP 2006:21).

The APF and the CAWP go on to state that "activists bemoan the fact that it is difficult to call a successful mass meeting in Phiri, and it's just a small group of activists (no more than ten) that constitute the PCRF" (ibid). But while there is wide agreement that there has been a big setback to the struggle against PPWM in Phiri since 2004 Mpholo – also a leading SANCO member – was confident that there will be a resurgence:

> You might say that the battle against prepaid meters in Phiri has been lost in the short term but as new problems come up and new people come up, and by the time they realise it its too late. Black people don't just fight quickly, they are patient and will give you a chance, but when things build up and they explode you will see something else. Black people are not stupid people, we are just patient, but our patience is not unlimited (Interview, 22 February 2006, Phiri).

But activists will need much more than moral courage or outrage and spontaneous upsurges to build a strong countermovement. Organisation is the key to building any movement, and particularly an anti-neoliberal countermovement, whereas social movements have tended towards spontaneous and ad hoc mobilisation on often single issues and less on building organisation with a broader vision and programme in mind. Furthermore, different organisations will need to form links which have not existed before, for example between social movements and unions, particularly unions which are active and organised in the water sector (such as SAMWU at JW), and the National Education, Health and Allied Workers Union (NEHAWU). The latter have shown no interest at all in the many health implications of PPWM in townships. These unions are key for social movements to build links with, but they may be held back by Cosatu from working with them, as has been the trend on the part of both the federation and its affiliates over the past few years (Naidoo and McKinley 2004).

The APF and the CAWP are forthright about internal divisions within social movements, as another contributing factor to the setbacks suffered in Phiri. Referring to a focus group they had they state that "participants spoke about conflict between the PCRF and the SECC, and the fact that support from organisations such as the SECC, APF and the Coalition, that had been there in the past, was no longer present" (ibid: 23). But nothing is said in the entire research report by the APF/CAWP about the lack of unity

between trade unions and social movements as probably the biggest obstacle to fighting PPWM in Phiri and water commodification. About the reasons for the setback suffered by the PCRF and the APF in Phiri Mpholo argues: “The APF failed because they are not organised. They did not understand the issues. You see they just focused on these meters alone, while people here worry about housing and other issues, they have lots of other problems. Can you call a meeting every week on water? People get tired”. This is an important point because though social movements have largely been issue-based, for a strong anti-neoliberal countermovement they require a much broader approach, linking water to all other burning issues, such as electricity, housing, backyard shacks and so on. But it is the ongoing failure of these movements to appreciate the strategic centrality of organised labour in any anti-commodification movement in South Africa that is among the biggest problems facing the task of unity between them.

George Biya, national organiser for the Azanian People’s Organisation, also expressed confidence of a renewed struggle against the meters and its effects on households: “The PPWM was imposed on us, there was no choice. If things don’t improve you will see an uprising in Phiri. I don’t believe the people of Phiri have been defeated by these meters. We’ll defeat these monsters in good time” Personal interview, October, 2007). Biya tried unsuccessfully to get the SAHRC to intervene when he objected to the installation of a PPWM and instead wanted a conventional meter. The SAHRC ruled that they had no jurisdiction as far as the method of water supply is concerned, because the Constitution does not pronounce on it. What the SAHRC did not consider however was that the PPWM may violate the requirements of the WSA (1997), which demands that procedures for discontinuation of water supply must be “fair and reasonable” and “provides for reasonable notice of intention to limit of discontinue water services and for an opportunity to make representations” (1997, s 4 (3).

However, there are also discursive, ideological and programmatic concerns the setbacks and difficult situation in Phiri has given rise to: “it would seem that activists are unclear about what our demands are as an alternative to the prepaid water system are or should be” (ibid: 24). Furthermore, “in the context in which the logic of payment and ‘saving’ water seems to have been internalised, can we make sense amongst ordinary residents with a demand for free water”?(ibid). This case study showed much evidence precisely of such internalisation but both Mpholo and Biya are optimistic that the movement against

PPWM will be renewed sooner or later. In their research report the APF and the CAWP concluded: “How we use these results to strengthen and rebuild collective action against the prepaid water meters will be significant as they suggest that we need to be thinking in new ways about the new conditions that the prepaid meters have introduced” (ibid).

This is in fact a reflection of organisational, political, programmatic and strategic weaknesses of their struggles in Phiri, much of which is bound up with the inchoate nature of social movements. As a result an opportunity for building a countermovement may have been lost in Phiri, where initially there was a great wave of struggle against the meters. The internecine strife has evidently also weakened the struggle, and it would have been more useful if the report said more of what exactly the basis of the strife was. Mpholo’s criticism of single-issue approach must be borne in mind in contemplating a renewed struggle and building of a countermovement. This is because the PPWM and the 6kl are merely symptomatic of the systemic neo-liberalism which engulfs the lives of poor households and the wider working class.

However, the report refers to “new ways” because there is no doubt at all that very difficult challenges have been thrown up by new realities in Phiri. For example, the ongoing demand by many to go back to the old flat rate fails to realise that it would be more costly than the current tariff structure. As the APF and CAWP (2006) report puts it: “if our demand is to be that of returning to the flat rate of R68, we would be asking residents to start paying more than what they are currently paying under the prepaid system (between R20-R50 per month)” (ibid).

These organisations have also had to learn that it is one thing to have radical slogans, such as “destroy the meter and enjoy the water” and quite another to implement it and live with the repressive reaction of the state. Similarly, the state can easily wear down poor under-resourced social movements with arrests, fines, court appearances and imprisonment, which is what has happened with the APF in particular. There are also serious limits to the tactic of bypassing meters, which has reportedly happened much in Phiri (APF/CAWP 2006: 22), first with electricity and now water meters. The individualised nature of such acts of rebellion has major limitations: “bypassing the water meter is happening at the level of the individual households without it becoming a generalised strategy of resistance at a community level” (ibid). The point is that such

guerillarist tactics can only be temporarily useful and in fact if that becomes the emphasis it could be counterproductive because it could invite more criminal charges, more court cases and fines and thereby drain further very limited resources. The primary aim instead should be not on bypassing the meters– which some could understandably be desperately driven to - but confronting the system behind the meters: neo-liberalism.

There are lessons to be drawn from this experience, but one thing is certain: Cosatu and other trade unions have much to learn from social movements which have built up lots of experience and knowledge about social reproduction struggles which they have sorely neglected. Much as organised labour is indispensable for a radical countermovement so is the valuable experience that these movements have accumulated.

Finally, Mpholo's comments indicate that there is the possibility that at branch level the ruling ANC can make radical turns which subvert national neo-liberal trends. Water and sanitation issues within a wider campaign against other aspects of neo-liberalism can indeed provide the stimulus for the growth of a powerful countermovement at local level. No other good or service potentially provides a more powerful basis for such a perspective than water and sanitation issues in black working class townships.

The big ironical question is: can the ANC branches in places like Phiri – which reside at the coalface of water and other commodification – become possible harbingers of a substantive countermovement to challenge the neo-liberal hegemony the ANC in national government largely represents? "The councillors need to take a stand when policies and decisions are against the interests of the community but they don't because they are working for the ANC, not the people" (Personal interview, Jerry Mpholo, 22 February 2007). Though the more radical aspects of earlier ANC policies have been compromised by senior ANC leaders in national government the point by Mpholo is that it is at ANC branch level that indeed it is possible – but only in this sense - that the ANC itself can become a catalyst for a countermovement. Not the ANC in the cabinet or national government which has pulled the party away from its more radical and redistributionist past.

Johannesburg's 'Water Wars'

It is the dramatic, violent and well-publicised (*Mail & Guardian*, 22 August 2004) struggles against the installation of PPWM in Phiri – particularly during 2004 and 2005 - which led to the narrative of "water wars" in South Africa. While the earlier struggles against PPWM in Orange Farm were important it is the intense, highly confrontational, politicised and sustained resistance to PPWM in Phiri which catapulted the problems with these meters in poor communities into the national and international spotlight (*The Star*, 13 October, 2003). The extension of PPWM into other Soweto townships also led to militant resistance there. Violent protests against PPWM also took place in White City Jabavu, Rockville and Molapo (Daily Sun, 10 August 2005, cited in Hansen 2005: 34).

The resistance in Phiri was so serious at the start of the project in August 2003 that in addition to police reinforcements called in to quell it private security companies were also deployed to assist (*The Sowetan*, 29 August 2003). Several protesters who opposed the installation and had damaged the PPWM infrastructure were arrested and charged with malicious damage to property and interference with an approved government project (APF 2003a).

In fact the start of the narrative of the "water wars" began when the APF accused the CoJ and JW of "declaring war on the poor" through OGM (APF 2003b). The aggressive manner in which the authorities tried to break the militant and defiant resistance created a war-like situation, which also led to a contract worker being shot and killed by protesters (*The Star*, 13 October, 2003). There also appears to be a link between the relentless determination with which JW and the CoJ proceeded with OGM and tried to crush resistance and the fact that the previous CEO of JW regarded this project as a "make or break for Johannesburg Water" (Anthony Still, Personal interview, 2003h).

The defiant resistance in Phiri appeared to draw upon the legacy of the earlier struggles against PPWM in Orange Farm, when the local protesters coined the militant phrase, "Destroy the meter and enjoy the water" (APF 2002a). Both the Orange Farm Crisis Committee – which was formed around resistance to PPWM in 2002 – and the local Phiri Concerned Residents were affiliated to the APF. But it was a "water war" – at least in the sense of on-the-ground militant resistance – which by2005 the CoJ and JW appeared

to have won for the moment. This can be seen in the previous section in this chapter, dealing with opposition to PPWM in Phiri, and is roughly corroborated by research the APF itself had undertaken in 2005 to assess the situation (APF 2006). We return to some of these issues at the end of this chapter.

Placing the South African commodification-decommodification theses in perspective.

> Clearly, the failure of the post-apartheid state to achieve social justice is the main determinant of the growth of popular organisations (the 'new social movements') outside the established framework of political representation (Cock 2004:17).

The major neo-liberal policy, ideological and programmatic shifts by the ANC after 1994 – laced however with much progressive and even radical-sounding phraseology – has severely affected the necessary social transformation of our society, which demanded radical redistributive measures in the interests of the black working class. On the basis of the fact that the 1993 political settlement ensured not only the survival but the stabilisation and growth of capitalism, the wave of anti-commodification struggles in the townships have centred on basic services, such as water and electricity, and housing. The struggles for water at these multiple points of reproductive consumption in the townships – probably drawing both on present social injustices and the legacy of past anti-apartheid struggles – is the focus of the anti-neoliberal and decommodification countermovement which has been sporadically and spontaneously but steadily emerging over the past decade. "This 'neo-liberal dispossession' is added to the 'historical dispossession' caused by apartheid and it legacy (Antenas 2006:3).

These protests and the state's repressive reaction (Naidoo and McKinley 2005) highlight the vulnerability of the current regime, which will most likely remain because of the strong empirical linkages between unemployment, poverty, the inability to pay for adequate services and protests (Drakeford 1998). McKinley and Veriava (2005) capture an important dynamic between repression, the constitutional right to protests and the neo-liberal socioeconomic dispensation:

> The growth of state repression of social movement activism brings into stark relief Vally's observation that 'civil and political rights are severely circumscribed by the socioeconomic and political framework within which they exist' (McKinley and Veriava 2005:60).

It has been reported that a study by the Centre for Development and Enterprise, 'Voices of Anger', "shows that there were more than 880 unlawful and nearly 6000 lawful protests

against poor or inadequate delivery…"(*Sunday Independent*, 11/11/2007). In recent months – particularly during August-September 2007 - a spate of services-related violent protests broke out in Orange Farm, Soweto, Alexandra and other townships (*The Star*, 5 September 2007).

Since the 'Vaal Uprisings' in 1984 we have seen a major shift from grand liberationist politics to issues around "basic services" in townships (Hendler 1991). "The urgent political crisis of the mid-1980's prompted radical analysts to focus on reproduction issues and the politics of collective consumption: in the radical paradigm, reproduction thus became the primary analytical category for making sense of the South Africa of the 1970s and 1980s" (Hendler 1991:204). Today with political democracy in place and neo-liberal changes to water and other services after 1994 and the widespread dissatisfaction as a result, it is most likely that these issues will become much more volatile and combustible, as already the militant township protests of the past three years have indicated. In fact we have all the ingredients for a fairly sustained anti-commodification struggle over the next decade, if not by conscious design then by effect. However, today there is little or no doubt that these struggles can indeed be "read off from the logic of accumulation", which Hendler (1991) warned against earlier (1991: 208). In fact it is inconceivable today to both deny that commodification arises from neo-liberalism or that the struggle for decommodification is possible without directly challenging the neo-liberal capitalist hegemony which underpins it. This is because commercialised and commodified social reproduction has become embedded within neo-liberalism to the extent that alternative social relations are inconceivable without its fundamental social transformation.

The persistent socioeconomic legacy of racial capitalism – the result of post-apartheid neo-liberalism – has left still massive infrastructural backlogs (Hemson 2005) and unmet needs. This was due to the fact that "South Africa has never experienced the successful construction of a welfare state through the countermovement of society in response to the market forces of the First Great Transformation" (Webster and von Holdt 2005:34). But it is precisely the pervasive legacy of "racial capitalism" (Alexander 2002) and "racial Fordism" (Gelb 2002) within an era of neo-liberalism - which left the hegemony of white capital intact – that has determined the vulnerability of the ANC-led state to mass struggles for decommodification.

It is therefore extremely difficult or impossible to construct for black working class people the equivalent of the "racial Fordism" the white working class enjoyed under apartheid. To the contrary, we have seen inequalities and unemployment grow after 1994 (Statistics South Africa 2002; Webster and von Holdt 2005), while over this same period business has done very well (Mbeki 2007). Just on the water and sanitation front alone about 8 million people are still without any water connection 13 years since the 1994 elections and millions more daily live with both inadequate and inferior water and sanitation services (*Mail & Guardian*, 22 December 2006). Hence the inability or failure of the state to meet the standards of services for black people which white people took for granted under apartheid has tended to radicalise them, evident by often violent protests over the past few years (Cock 2006).

To reinforce the enormous resource constraints of neo-liberalism 2010 is the target date for the installation in black areas of ventilated improved pit latrines (DWAF 2005), which are inferior, unhealthy and degrading (Bond 2002a). Therefore both struggles for social justice and the accompanying constraints the ANC-led state faces are bound to continue well into the future. In turn this will continue to make the present regime vulnerable to mass struggles. It is this perspective that informs our approach to decommodification and a countermovement in South Africa.

Problems confronting a countermovement

Is a countermovement a revolutionary movement? It appears that any successful countermovement – whose objective is to secure the decommodification of all basic services, let alone the decommodification of labour itself – will necessarily be a revolutionary movement. This is because it is impossible to envisage the decommodification of public services - such as water and electricity - without either the defeat of neo-liberalism or it suffering major setbacks. Besides, since changing social relations is the key objective this can only be secured through the rupturing of neo-liberalism. Immanuel asserts that "to be 'revolutionary' is to stand for fundamental transformation of social relations" (2004:262).

Therefore, faced with the many negative effects of post-1994 cost recovery and commodification of basic services (Bond 2002; Ruiters 2006; McKinley and Veriava 2005) upon already low standards of living in poor black communities it is impossible to envisage a countermovement which does not set as its main longer term goal the defeat of

neo-liberalism. However, faced with the current relationship and balance of socio-class and political forces even an electoral victory of any socialist or working class party will take quite a long time to be achieved, unless the SACP and Cosatu withdrew from the ANC Alliance and combined to contested elections independently.

A countermovement – with both the national and international situation in mind – is necessarily a long term project. On the one hand, it is the fact that South African politics is overwhelmingly dominated by the ANC alliance that presents the biggest problem for the emergence of a powerful countermovement. This is because so big are the policy differences the SACP and Cosatu have with the ruling ANC within this alliance that it is impossible for the alliance itself to constitute the countermovement. On the other hand, the crisis within the alliance has itself served to sharpen the contradictions and further radicalise its leftist partners, which has best been signalled by the recent decision of the Gauteng region of the SACP voting by a majority to independently participate in future elections (*The Star*, 7 June, 2007). And if the ANC alliance as a whole cannot constitute the countermovement then this will apply much more so to the ANC-led state leading or even becoming a major component of it.

How can fundamentally opposing forces be party to the same countermovement? Can the ruling party simultaneously both wage a neo-liberal policy offensive and be a part of a countermovement to it? It is hardly likely or desirable that this is possible or feasible. Hence is it realistic and feasible to in the first place ask the question: "what are the prospects for the state to lead a countermovement against the social destruction wrought by the market"? (Webster and von Holdt 2005: 35). It may be tantamount to the often ridiculous situation the ANC's allies find themselves in: having fundamental policy differences with the ANC, and in fact bearing its brunt, in the case of Cosatu especially, while continuing to not only remain in an alliance with it but urging that it be built and defended (Vavi 2005).

But later Webster and von Holdt (2005) argue: "For such a countermovement to be effective it should link struggles about workplace restructuring to campaigns about the social crisis in communities – in other words uniting the trade union movement and social movements in a broad coalition against the destructive effects of the market" (2005:38). Workplace restructuring – which is in fact a neo-liberal restructuring – and the social crisis in poor communities are a result of policies the *state* has adopted. The "destructive effects of the market" are made possible because of state policies and not because the capitalist class acts on its own. And all efforts by the ANC's allies to challenge and

change its policies have failed after 13 years of ANC power. Furthermore, the ANC policy conference ended in July 2007 without even a reference to PPWM, the limits of the 6kl lifeline and myriad of resultant social problems this study has made evidently clear.

Instead of attempting to conceive of a neo-liberal state leading a countermovement against neo-liberalism, discourse must shift much more strongly towards exploring the working class forces – such as social movements - which have begun in both word and deed to construct a decommodification thesis, however flawed it might be. There can be no doubt that these movements – the natural class allies of trade union members – have been bravely in the forefront of beginning to constitute a countermovement and forge a "new world" in which the working class demands and wins the decommodificarion of all basic services.

And the reason why it will prove much more difficult to achieve decommodification on the existing basis is that water, as basic as it is, is tied by many threads to the rest of marketised capitalist economy, from which it cannot be extricated. Hence decommodification of basic services is ultimately and inextricably linked to the commodification of labour and much more and is therefore profoundly political, striking in a multiplicity of ways at the very heart of neo-liberal capitalism (Harvey 2005; McDonald 2002).

Any political alliance, and specifically a countermovement whose common thrust is anti-neoliberalism, requires fundamental policy agreement (Harvey 2007), which does not exist in the ANC alliance but would be essential for a united front-type countermovement to neo-liberalism. The distinct danger of believing that the ANC can be both defender of a neo-liberal order and a movement to transform it is to delay the fulfilment of such a task, building the forces necessary to carry it out and probably most importantly to invite the risk of disintegration within a countermovement in which there are fundamental ideological, policy and programmatic differences. A striking observation about the post-apartheid characterisation of the ruling ANC is that both black and white political commentators – such as Patrick Lawrence and Vukani Mde - who have never had any distinct leftist leanings before, have often concluded that the ANC is unrecognisable from its past (Lawrence 2005). Besides, "Today's ANC, which defines itself as 'a disciplined force of the left', is nothing of the sort" (Makhanya 2007).

The mistake some appear to make is to see a countermovement as a populist front and not a united front-type alliance, in which the latter, unlike the former, is led by working class organisations with clear policies and a programme of action. To draw a clear class line is as necessary in a united front as it will be in a decommodification countermovement because it is the working class which bears the brunt of commodification. In short, there is just no way in which a Polanyian countermovement – as we described in both chapter 2 and at the start of this one - can avoid the question of state power or entertain the dangerous illusion that the ANC can be both foe and friend at the same time.

To reinforce this point a key question is: can a state which introduces and defends neo-liberal policies and aggressively instils market discipline to water supplies in poor black working class townships, takes harsh action to repossess the meagre possessions of defaulters in lieu of arrears, evict poor families from their homes and brings in the police to crush protests against PPWM at the same time be a part of a movement to fight all this? As much as water commodification is fundamentally flawed at its base so is the proposition that the ANC-led state can be a partner in a countermovement. It is inherently an untenable proposition. Even if the key objective of a countermovement was not the long term capturing of state power we would be faced with an untenable alliance from the outset because the state and those opposing commodification are moving in diametrically opposed directions. The APF and the ANC is a perfect example of this.

What hope can there be for the ruling party to partner with the residents of Phiri who have launched the class action against both JW and the local state? This action is directed against the local state basically because JW is itself owned wholly by the local municipality. What prospects can there be for this application to get the support of the state to act against the same state? This is the muddle we end up with when you try to reconcile the irreconcilable, by even in the first place entertaining such a possibility. The more sophisticated nuances others claim this approach lacks (Personal interview, Neva Magketla, 22 February 2007) is not convincing. The mistake the contrary approach makes is that it fails to recognise that all governments and states have historically had internal differences and hardly ever ruled with complete unanimity on all political, policy and strategic issues. Even one-party states can and have had internal differences. Instead, regarding key policy decisions what is most important is not these differences but

whether a fundamental orientation and agreement exists to reach policy and other decisions and execute them.

Such a hegemonic discourse does exist in the ANC and the South African state and it is overwhelming neo-liberal in character (Alexander 2002). Therefore, in accordance with this approach our characterisation of the ANC-controlled state as fundamentally neo-liberal is correct, notwithstanding some policy elements which may or indeed are *not* neo-liberal and more social democratic in nature, such as free hospital treatment and care for children under six and the elderly. Such exceptions can be found in other parts of the world, but it does not however alter the fundamentally neo-liberal character of the state, which is determined by the key macroeconomic fundamentals and socio-public policies. In fact the trajectories of neo-liberalism over the past decade or two has seen vast policy shifts accompanied by retention of partially or even fully decommodified public services in some cases, under pressure from the left (Keil 2002).

The weaknesses of social movements

> Unfortunately, social movement politics appear to bask in the glory of immediate and short term mobilisation gains without addressing the more crucial question of how to link these with political organisation and the struggle for power" (Harvey 2002: 36-38.

From an often distinctly counter-hegemonic perspective social movements which are strongly critical of the ANC and the alliance of the SACP and Cosatu with it have emerged over the past seven years as important players on the socio-political scene (Ballard et al. 2006). But a big problem is that though this is true and they are eager to constitute a strong opposition they are much too small, weak, scattered and disorganised at present to represent a significant force or factor.

Though Ballard et al. (2006:400) correctly dispute the homogeneity of social movements there can be little doubt that those opposing water commodification, such as the APF and CAWP, have a very clear anti-capitalist agenda (APF 2003; McKinley and Veriava 2005). The real problem is that while such an agenda suggests a clear ideological orientation they lack a project, programme, vision and organisation that seeks to organise to fight for state power. The point is that this omission may undermine their counter-hegemonic ideology. Since the state wields the power – together with capital – that denies poor households adequate basic services to not conduct a struggle that seeks to attain political-state power – however that is done - and have a strategy for that purpose could be counterproductive over the medium to longer term. And though Ballard et al. (2006) correctly argue that local and sporadic struggles can develop into broader struggles that

begin to raise more fundamental questions of power relations and that therefore counter-hegemony must be understood in a more dynamic manner that is not the problem of social movements such the APF. Their problem – partly due to their often loose, ad hoc and spontaneous nature – is that they don't have both a clear vision for and the organisational means to win political power which principally resides in the state.

> What is distinctive about the movements in this period is that unlike their anti-apartheid counterparts, they do not collectively share a common counter-hegemonic political project with a focus on state capture (Ballard et al. 2006:400).

Furthermore, Ballard et al. (2006) importantly point out that we cannot simply contrast a "rights-based opposition to a counter-hegemonic opposition" (2006:400). "Rights-based" because most social movements have focused in their agitation on the contrast between constitutionally-enshrined rights to basic services and the depriving impact of neo-liberal social policies. Basically they argue that there is a much more dynamically interactive relationship between what is essentially a discursive and political continuum (Ballard et al. 2006:400). A useful way of approaching the question of this relationship is the notion of "transitional demands", in which there is an explicit and inherent relationship between reform and revolution, based primarily on the inability of the state and capital - particularly during a social crisis - to satisfy basic democratic demands or reforms (Trotsky 1983). There will most likely be a much closer internal relationship in this regard when these revolve around unsatisfied demands for adequate non-substitutable daily essentials, such as water, sanitation and health. And it is the inseparably close relationship between racism and capitalism under apartheid and the legacy of neo-liberalism after 1994 which invests this approach with much relevance.

Besides, social movements face several other major problems which will prevent or inhibit the growth of a countermovement. Buhlungu (2005) notes, for example, that because the Anti-Privatisation Forum is a forum "it limits the ability of the Forum to be decisive" (2005:4). Besides the structural problems the dependence of social movements on external funding and their small membership are further weaknesses "The number of people effectively organised…. is relatively weak. It is possible to consider that they are movements that do not have a mass base, but a mass *orientation*" (added emphasis) (Ngwane 2003, cited in Antenas 2006:4).

Furthermore, "The movements lack any strategy for transforming the growing feelings of exasperation and distrust of neo-liberal dogma into an alternative policy, or at the very least a project…." (Hardt 2004: 259). Other problems concern the fact that

"These different movements have had a fragmentary existence and little mutual coordination" (Antenas 2006:3). But one of their biggest weaknesses in South Africa and elsewhere is the great diversity of positions and approaches they regard as strengths: "The existing and potential strength lies in the diversity of alternatives that they offer as part of the collective act of opposing capitalism" (Naidoo and McKinley 2004:18). This is so because "there is, for the most part, no enforced adherence to one overarching, grand, framing theory nor the foreclosing of possibilities for organisation through defining its nature and programmes" (ibid:14). Klein (2004) earlier argued along similar lines, which we critiqued in Chapter 2.

The problem with the approach of this diverse eclecticism is that it will not be politically and organisationally effective in building a countermovement which requires a much clearer and cohesive ideological and programmatic approach. Any countermovement – if it is to be taken seriously – has to grapple with and define important organisational and strategic issues which will require a common fundamental orientation for substantial unity in action. The approach by Naidoo and McKinley (2004) is too amorphous, wide, fluid and eclectic to be able to build a countermovement in South Africa. So too is the "non-hierarchical, decentralised, horizontal networks and forms of organising with no governing body, official ideology, blueprints or mandated leaders" (Cock 2004:17).

A key task of a countermovement is to build organisational and political capacity and influence in order to advance struggles, which will hardly result from a "let a hundred flowers bloom" approach. While the diversity can be admired what will it help to define programme and strategy and build organisation? This is why "The struggle of the movements have presented moments when the legitimacy of the ruling class's project has been questioned but they have not posed a real threat. The ruling class has used its apparatus to, both through the state and through civil society formations, to portray itself as a caring state that understands the plight of the poor and argues that policies like "free water and electricity" in a market-driven economy…" (Benjamin 2004:79).

The problem is that the decline of leftist political parties over the past two decades and the demise of the former Soviet Union has left a devastating political and ideological legacy which is reflected in much cynicism towards the very idea of a political party. It is for the same reasons that we have seen the mushrooming of autonomous and anti-statist currents around the globe. "The decisive argument….was that the immediate source of

real power was located in the state apparatus and that any attempt to ignore political centrality was doomed to failure" (Immanuel 2004:263). But at a wider level:

> The nation-state, precisely because of its role in pushing through the social engineering required by neo-liberalism, remains an essential instrument for global capital – and hence a key zone of contestation. It is against their own governments that both South Africans and Latin Americans have been mobilising to fight against water and electricity privatisation (Mertes 2004: 239).

In fact to fight against the government should mean a recognition of the centrality of state power not only as political embodiment of neo-liberalism but still the only institution which can be used to serve the interests of a countermovement, not, however in collaboration with it, but against it. The point is that the reality of the state is too strong for any serious potential countermovement to afford to ignore. "Social movements have managed, quite effectively, to create a mass base that is struggling, unashamedly, for an end to the capitalist system" (Benjamin 2004:148). Though it is doubtful that they have a "mass base" (as Ngwane earlier pointed out), to get rid of capitalism or fundamentally transform the present state would require an organisation or party.

> The struggle for access to the prerequisites of survival, such as water and electricity, for inclusion in political and economic systems and the power of collective organisation, requires a vision beyond immediate survivalist struggles. Local demands for an end to water cut-offs or evictions can easily be absorbed by the state without fundamentally altering the economic or social conditions of those involved in articulating these demands (Greenberg and Ndlovu 2004:45).

While it is true that local struggles for water need a political vision that goes beyond basic needs and survivalism it is very unlikely and in fact naïve to think that water-cut offs can be as easily absorbed by the state as they suggest. In fact to stop water-cut offs – either in the form of physical cut-offs or "self-disconnection" through PPWM – is not even seriously considered as an option by the local state or JW. This is because cut-offs are the only mechanisms with which to enforce cost recovery and commodification. To stop cut-offs would completely contradict the ethos of commercialisation water supply is today framed in. In other words to stop cut-offs would to the present regime be practically tantamount to encouraging both non-payment and decommodification.

Furthermore, many among the social movements don't quite realise the centrality of the labour movement in any mass alternative to the ANC. If there were any doubts about trade union strength the powerful public sector strike in 2007 should dispel that.

Most of the criticisms of social movements tend to revolve around the need for cohesion and clearer vision, strategy and programme. "If grassroots alliances are to

emerge as an alternative political force, then the problem of how to construct some sort of alternative hegemonic discourse out of multiple militant particularisms has to be confronted" (Harvey 2001:198). Harvey goes on to state that "Grassroots movements only become interesting to the theorist or advocate of change to the degree that they transcend such particularities" (ibid:193). Hence at this juncture and for the foreseeable future any countermovement will only make small advances at a time and even that is not certain unless a whole range of political, organisational and programmatic issues are dealt with. On their own and no matter how inspiring their struggles often are social movements - as they are presently constituted - won't go far. In fact it is precisely because of the all-encompassing nature of decommodification that what is required is a great deal more than what these movements can presently offer. "Left to themselves, such movements amount to nothing more than minor perturbations on the deeper currents of socio-ecological change" (Harvey 2001:190).

However, the question is: can the social and environmental movements be seen as an alternative possible agency for social (list) transformation, acting in alliance with the labour movement? This appears the only perspective open for the development of a countermovement in South Africa. A countermovement without organised labour will be seriously limited and in fact not be a countermovement in a real sense. This is because the most powerful force in our society is still labour, organised as it is in the most important and strategic sectors of the economy. In fact such support is wholly indispensable for a successful countermovement. Besides, social movements are too weak to dispense with labours' support. But on the other hand as long as labour ignores the necessity for linkages with these movements this will constitute the major fault line afflicting the prospects for the development of a powerful countermovement. Because workers in trade unions have much organisational experience, live in the same townships which have problems with water, electricity and housing, and in fact have to directly or indirectly bear the costs of commodification their involvement with social reproduction issues and the struggles against commodification would considerably strengthen such a countermovement.

But only the mobilisation of the socio-material linkages between the points of production and social reproduction in organisational terms could muster the strength to build an anti-commodification countermovement. Water policies also do not exist on their own but are part of a much broader social policy framework covering public services and

functions, such as electricity, food, health, housing and much more. This requires that any countermovement will have to be broad-based and have a programme that comprehensively includes all these interrelated aspects.

But while social movements often criticise neo-liberalism they don't always declare objectives and strategies which seek its defeat. In fact sometimes their aims are defensively modest, as Dale McKinley (2007) states: "We represent people who are angry and frustrated at waiting and waiting. There has been little response to their grievances and they have been dismissed and attacked" (cited in Shoba 2007). Such defensive resistance is a far cry from a countermovement that seeks to transform commodified social relations through winning state power.

The potential and strengths of social movements

> By locating their critique and struggles at the coalface of life as experienced on a daily basis by those who are most oppressed by capitalism, the social movements (whether consciously/intentionally) are a part of re-writing the story of life itself…even if the collective acts themselves do not yet constitute a coherent and sustained strategic vision of getting rid of capitalism itself (Naidoo and McKinley 2004:16-17).

Naidoo and McKinley accurately capture both the potential and the biggest weakness of social movements. Indeed it is because the issues they have taken up in struggles relate to people's daily lives that they have attracted significant support in townships and possess enormous potential to grow into a powerful political force. They also make very clear – collaborated by many other spokespersons and activists of these movements (Bond 2005; Ngwane 2003) – the anti-capitalist thrust of their struggles. The importance of this is that they correctly place their struggles at the centre of probably the most distinguishing feature of capitalist neo-liberalism: the increasing commodification of water and various other facets of social reproduction. "In writing new story, new social movements strike out against the homogenising realities of neo-liberalism, which amounts to the bringing of all aspects and forms of life under the rule of the capitalist market through increased and new forms of commodification" (ibid:16).

So it is not just a generalised anti-capitalist thrust but more particularly an anti-commodification of social reproduction stance, which is ontologically and discursively linked. Whether of labour or social reproduction capitalism is all about commodification. "The APF regards itself as part of a global anti-globalisation movement fighting against the dominant discourse and practice of neo-liberalism" (cited in Buhlungu 2005:17). But how strong are social movements? "Social movements have become the primary vehicle in the fight for the class interests of the poor" (Benjamin 2004:152). Benjamin is right in

so far as the struggles for social reproduction in the townships are concerned but not more than that. In fact it is their failure – not for lack of trying though – to get the support of trade unions which has seriously limited the impact they might otherwise have had in these struggles. Greenberg (2005) therefore asserts:

> There is no possibility of the social movements, as they are currently constituted, to successfully realise their vision and longer term goals on their own… They have to coalesce or ally with a far wider base of active participants in practical action to be successful. The lack of practical relationships with organised workers is a key weakness of the social movements and the professional intellectuals that shape these movements. This does not mean making a pact with the ANC or Cosatu leadership but rather to identify points of common interest and work out how to engage grassroots members and activists in a common programme of action. This often necessitates engagement with leadership"
> (2005:1).

However, we must be careful not to imply that social movements have not tried to work with, for example, the Cosatu unions. "We have made many attempts to work with Cosatu but these failed. They just frustrate us" (Personal interview, Ahmed Veriava, March 2007, Johannesburg). But it may well be that this is because they have often slammed Cosatu for its alliance with a party that has adopted many neo-liberal policies, such as the commercialisation of water and PPWM. While criticisms of the alliance may be correct by focusing more on the actual issues that could unite them and less on the alliance with the ANC they would not only perhaps stand a better chance of securing support but thereby challenge the nature of this alliance itself, but doing so in joint action on issues of common interest. For example, the following statement could be consciously directed at Cosatu or be interpreted to be an attack on them: "the APF….will not form coalitions with organisations or neo-liberals that support neo-liberalism in any form" (Naidoo and McKinley 2004: 12). But the APF has every right to take such a stand in principle but the tactics is questionable.

It would be difficult to sustain the argument that by virtue of its alliance with the ruling ANC Cosatu "supports neo-liberalism". It is therefore both reckless and provocative when leading activists in the social movements conclude: "As a disciplined member of the Congress Alliance, Cosatu has positioned itself squarely within the policy frameworks that uphold the neo-liberal principles embodied in Gear" (Naidoo 2005:2). Though they did not wage any sustained mass campaigns – a factual and undoubted failure - against Gear they have many times strongly criticised it. It also frustrates any potential that exists to work with Cosatu when more reckless statements are made: "With the majority of our members being forced to struggle for the basic resources necessary for life outside of the

comfort of a stable wage or income or social security net, the struggles of Cosatu have been far removed and largely irrelevant" (ibid:1-2). The claim of the "comfort of a stable wage" is particularly and demonstrably false:

> Not only unemployment has been constantly on the rise but the proliferation of casualised, precarious low-wage jobs, coupled with the growing commodification of everyday life as a result of policies of privatisation and "cost recovery" in national and local services, testify to the existence of wide areas of deprivation and poverty among the formal working class (Barchiesi 2005:2).

Equally false is the accompanying notion of a black labour aristocracy (Harvey 2001a). Instead of the false refrain by Naidoo about wage labour, it is the many material linkages between production and reproduction that should rather be emphasised in order to build relations with Cosatu. This point is so fundamentally important that it also requires Cosatu to programmatically link their struggles in the mainstream economy with those by social movements, waged in the same communities in which their members live, but which they have been uninvolved with. However, it is questionable whether even if Naidoo did not adopt such a stance it would have encouraged Cosatu to work with them, so strongly has the pressure from the ANC been to discourage such a prospect. But Legassick (2007) correctly criticises not just this approach by Naidoo towards COSATU but also of what can be called 'decommodificationism':

> Naidoo wants to struggle purely for 'decommodification' – which means for the right of the unemployed and the poor to have free water, free electricity, free housing, etc. But so long as capitalism exists, how does she imagine these will be paid for? To produce water, electricity, housing, etc, requires labour power, that is, under capitalism work for a wage. The capitalists cannot create goods out of thin air. So it is industrial workers, the people she mocks as the 'only revolutionary subject of history' who will have to bear the burden of providing these 'decommodified' goods (2007:544).

On the other hand so small are social movements that as regards tactical questions of working with COSATU it often appears that they mistake their potential for reality: it may be counterproductive for a small force (say the APF) to lay down and demand compliance with the terms of collaboration with a huge force (COSATU) on issues of mutual interest. Numerical, organisational and social weight does matter when seeking to build alliances, though it is equally true that COSATU may exploit this same strength against these movements but not use it effectively within the ANC alliance. But it is worse when COSATU is seen as the enemy or collaborating with neo-liberalism (Naidoo and McKinley 2004). Sometimes the APF conducts itself as if they were a powerful organisation which could call the shots in potential alliances. "No doubt, we often exaggerate our strengths" (Personal interview, Trevor Ngwane, November 2006).

However, on the other hand, the repeated attacks COSATU has faced by the ANC-led

government through a host of neo-liberal policies does raise serious questions about how beneficial the alliance is. What is the meaning of this "strategic alliance" if COSATU has been at the receiving end of it for years? On the other hand, there can be little or no doubt that COSATU's rejection of attempts by social movements to work with them also reflects the immense pressure from the ANC to keep their distance from such movements. This is evident both from statements made by both the ANC and COSATU officials. "We have resolved to refuse to work with any social movements that are narrow, sectarian and divisive in their overall strategy. This resolution, on our part, extends the hand of cooperation to the social movements but not at all costs" (Mantashe 2003:330. But this is a deeply problematic stance because it could be purely subjective, whimsical and convenient to decide, for example, that the APF fits such a profile, especially when COSATU has been under pressure not to work with these movements. Beside, though COSATU adopted a resolution to work with social movements in 2003 they have failed to make any serious and sustained efforts to put that resolution into practice (Cosatu 2003). As Greenberg and Ndlovu (2004) put it:

> Despite the COSATU resolution to support the struggles of 'progressive social movements' to date COSATU has not only refused to provide open and active support for the grassroots struggle against evictions and water and electricity cut-offs, but has gone as far as advising affiliates against working together with the movements that have grown around these struggles" (ibid:40).

However, Neva Makgetla, former economist for COSATU, has another take on this matter: "No, you see, it is not the official COSATU leadership blocking such support. It is the fact that our members don't see these issues as serious. If they did we would then be orced to take it more seriously. Their main concern is wages, not water and electricity prices" (Personal interview, February 2007, Johannesburg). But even if their focus is wages they would still be using of that money to pay for these services, making the socio-material linkages obviously strong in theory, but not in practice.

> Social movements have been extremely successful in showing that all is not well in this new democracy. They have been able to peel away at the ANC's political discourse to show that it is nothing more than rhetoric and empty slogans and have done so through their activism, their organising and their new (old) forms of ideology. They have once again brought out what most people have forgotten in the past ten years: the essentials of liberation (Benjamin 2004:166).

The "essentials of liberation" is the necessity for a democratically elected state to adequately satisfy the basic needs of the black working class. So powerfully is this thesis that it could be argued that it lies at the very centre of social policy, though this will clash

with the fiscal constraints the ANC has been forced to work within because of the fundamental compromises it has made, against the socio-material interests of this class. The thousands of protests over the past few years in the vital sphere of reproductive consumption have placed these struggles on the top of the national agenda. So strong were they becoming that the ANC itself, though generally disparaging of them, have had to concede: "While such forces are unlikely to constitute a united national platform able to contest the ANC they could potentially challenge the ANC in local government elections where our local structures and councillors are weak" (ANC Gauteng Province, 2005). The concerns the ANC have about the growth and possible threat posed by these movements is clear. Highly significant too is a survey conducted by the ANC itself, which reported that movements such as the APF and the Soweto Electricity Crisis Committee, received a "50% to 59% approval rating" in a survey of all card-carrying members of the ANC's Gauteng region (*The Star*, 14 November, 2006).

"One key informant claimed that 'to some water is simply a means to mobilise people against the government. For them the issue is a socialist revolution, not access to water' (Cock 2004:3). This claim has a big weakness because there are strong linkages between water access and the bigger struggle for social justice or socialism. In fact so powerful is the water narrative – even on its own terms - in poor communities that "Some go further to claim that the demand for decommodification could generate a diverse but united socialist movement" (ibid:27). Furthermore, so important is water and its consumptive linkages to society that no apology is necessary by those activists who consciously use water to advance socialist struggles. It could push millions onto the road of struggle because its life-giving and life-sustaining properties are powerful mobilisational tools:

> At the core of the crisis of social relations in contemporary South Africa is a privatisation of the public sphere which is forcing individuals to seek private remedies to socially produced problems. The way access to clean and adequate water is threatened by both privatisation and pollution illustrates this process. The article argues that resistance to these processes has the potential to 'resocialise' the crisis, and could be strengthened by the involvement of sociologists (Cock 2006: 293).

It is precisely the 'resocialisation' of the crisis that can – once a critical mass has been achieved - drive the emergence and growth of a countermovement to commodification. The 'resocialisation' will probably be strongest with water and sanitation issues because of water's non-substitutable, indispensable 'public good' nature and various positive externalities associated with an adequate and regular supply (Bond 2002a). Though the insidious effects of PPWM, for example, privatises cut-offs, 'self-disconnection' and the accompanying deprivation and its miseries this sooner or later and to a greater or lesser

extent gets ventilated in the public domain through resistance. This could well place such issues at the centre of a decommodification countermovement. Webster and von Holdt (2005) place even greater emphasis on action to resocialise the crisis:

> The significance of social movements located in the community is their potential to resocialise the crisis – which is experienced as private crisis, distress and conflict in households and communities – by building social solidarity around it, projecting it into the public arena, mobilising support and action, and influencing the state and public policy (Webster and von Holdt 2005:38).

But unlike the pervasive and trenchant defensiveness of the entire ANC alliance "There is no attempt to paper over the ideological cracks that are as real as those in the newly constructed 'RDP' houses, no 'right-size' to try and enforce crude efficiencies of appearance. The wide gaps that endure in our understandings of, and approaches to, the state are there for all to see" (ibid:21). This admission of their weaknesses is itself a strength. Finally, it is essential that a *counter*movement go beyond the limits of defensive actions, which is much of what recent social movement activism and township rebellion has been about (Buhlungu 2004; Harloe 1981). To become such a movement requires proactive and even offensive struggles to capture the political space and power with which to transform commoditised social relations, however that is done. To remain defensive may be helpful to stem the tide of commoditisation but it won't be able by itself to construct an alternative hegemony to replace it.

Exploring the potential for unity between COSATU and social movements

> Cosatu's failure to provide leadership, consistent resistance to neo-liberalism and a coherent alternative to capitalism has left working class communities to fight water and electricity cuts and evictions on their own. As a result of Cosatu's paralysis, its own membership and structures have, with few exceptions, failed to throw their weight behind working class community resistance. A vacuum has resulted that is partially being filled by the APF (Hamilton 2002:17, cited in Buhlungu 2005: 8).

The point however is not only that COSATU has not provided leadership to the struggles in townships but that it has actively tried to forbid its affiliates to from working with social movements (Greenberg and Ndlovu 2004). Furthermore, COSATU also strongly fought against ANC councillors who wished to stand as independents against the ANC in the 2006 local government elections:

> We call on ANC and Alliance members who stood as independents to immediately withdraw their candidature and join the democratic movement in mobilising our people for ANC approved candidates. Cosatu will not support any independent candidates no matter how valid their grievances are against the ANC or government. True revolutionaries battle within the ANC and the Alliance to correct problems. They don't run outside and stand in opposition to it and in the process weaken the movement (Cosatu CEC (13-15 February 2006).

The problem is that COSATU cannot see that in fact it is its alliance with the ANC that has weakened it both organisationally and politically. Massive job and membership losses and a steady decline in its political power after 1994 has been the result. Therefore it is evident that so long as COSATU is in the alliance it will be heavily constrained to work with social movements and build a countermovement, whatever organisational form that will take. Besides, a survey by the National Labour and Economic Development Institute indicated that there is great dissatisfaction within COSATU about the delivery record of the ruling ANC and that "60% of workers still indicated a willingness to vote for the ANC, largely because of historical loyalties" (Brown and Musgrave 2006, *Business Day*, 30 August). Workers are clearly not voting ANC *because* of satisfaction with what it has done for them but *in spite* of the lack thereof. The international historical trend of workers remaining faithful to their traditional organisations - even when they are unhappy and disappointed– until and unless a significant mass alternative actually arises, is evident here too (*InqabaYa Basebenzi* 1988).

Furthermore, "Most COSATU workers argue that they vote for the ANC because their family has always supported it (43%). Only 19% said they chose the ANC because it has the best policies for workers and the poor (ibid). Combine this with the unprecedented current crisis in the ANC and its alliance – largely because of its policies and the social effects these have had – and it becomes quite clear that the emergence of a countermovement is urgently required in order to campaign for and secure the decommodification – at least – of water, electricity and housing, the three most important areas of social reproduction the working class needs. The important thing of the survey results is that it should in fact reinforce the existing need for collaboration between COSATU and social movements. About the relationship between COSATU and social movements Makgetla conceded that: "Sometimes I think we treat social movements the way the ANC has treated us" (Personal interview, February 2007, Johannesburg). Buhlungu also makes an important point about another dimension of the contradictions COSATU present and which will bedevil unity with social movements as long as it continues: "Both COSATU and the SACP reject the 'ultra-left' label when it is used against them as a 'blatantly sectarian intervention', but have no qualms about using the term to describe many of the new social movements" (ibid: 11).

The numerous township revolts of the past three years indicates that it is at local level that the best prospects exist for the development of a countermovement, primarily between the trade union and social movements. "To be self-critical the working class and

its formations have directed a lot of mobilisational energies and engaged in social dialogue at national level around our national growth and development strategies, but they have not paid similar attention to local growth and development strategies" (Nzimande 2006:3). But neither have COSATU and the SACP paid any practical attention to the conditions its own members and the wider working class face in the townships, especially since "The working class is the leading motive force for developmental local government" (ibid).

However, it is clearly going to be an uphill battle to construct a countermovement - which in part has already begun with social movement struggles – because of ingrained prejudices against social movements within the ANC alliance. "Others in the Tripartite Alliance often use the 'hijack' thesis to support the argument that the APF is now in the hands of anti-ANC and anti-government elements determined to sow chaos and subvert the national democratic revolution" (Buhlungu 2005:10). Buhlungu goes further to make a telling observation: "the ANC and its Alliance partners are intolerant of new centres of popular mobilisation because they have the potential of exposing its weaknesses and undermining its support. Thus one of its approaches to movements that operate outside its compass is to marginalise and demonise them. In the case of the APF pressure was brought to bear on Alliance activists to distance themselves from the movement" (ibid: 10). It is a fact that the power and achievements of social movements would have been considerably greater was it not for the deliberate strategy by the entire ANC alliance to weaken and deprive it of much-needed support.

The prospects for unity between COSATU, other trade unions and social movements also depend on the latter abandoning the naïve notion that to participate in "bourgeois elections" is forbidden. Participation in elections in "bourgeois democracies" is not a principled but a tactical/strategic question (Smith 1990). Though not all these movements share an abstentionist stance many of their members are "strong adherents of the thesis of non-collaboration with bourgeois state institutions" (Buhlung 2005: 9). In an interview Ngwane stated: "social movements have to fight the state, destroy it and replace it with a workers' state. Today capitalism is neo-liberal, so there is not much room for reform – the capitalist state does not have much to offer the working class" (Ngwane 2003). In reference to Ngwane and as regards participation in elections the *SALB* itself stated: "He does not believe voting will bring workers power – in fact, he believes elections could be used to undermine struggle" ibid: 32).

However, an important change occurred later when in the 2006 local government elections the Soweto Electricity Crisis Committee, of which Ngwane is the leader, did participate but secured just one seat in the Johannesburg municipality. But it was a significant and necessary step because conditions are decidedly not propitious for any form of overt revolutionary struggle, which will most likely remain for the next decade at least. If there is split within the ANC alliance and COSATU and the SACP contest elections independent of and effectively against the ANC this issue will become even more important because then the unity of COSATU, the SACP and these movements will be the next logical step in the vital task of building a countermovement.

A successful decommodification countermovement – even if of only for public services – is impossible within a neo-liberal framework. It is this inability of capitalism - especially it current dispossessing neo-liberal version - to accommodate basic democratic demands that imparts a revolutionary or transitional character to them (Trotsky 1977). The answer to the following question Buhlungu (2005) poses has to be in the affirmative: "Can a movement such as the APF oppose neo-liberalism while at the same time engaging the government through existing democratic institutions" (ibid:20). "In other words, does a rejection of neo-liberalism mean a rejection of democratic institutions?"(ibid: 20). The answer to the latter question is that any "democratic institution" or political space has to be tactically utilised to
defend past gains, make new immediate demands and for wider objectives (Harvey 2004).

There is also the need to go beyond COSATU and social movements and cast a wider lens to the potential forces for building a countermovement. In this regard, "Equally puzzling is the failure of other organisations of the working class (such as
SANCO, NACTU and FEDUSA) to find common cause with the APF and other new movements" (Buhlungu 2006: 9). This is important to note because every effort should be made to rekindle the bonds of political and social solidarity with other unions and civic structures which have declined after 1994 or those, such as FEDUSA, which emerged later. The point is that wherever there are organised workers there exists the potential to mobilise for any cause. Buhlungu (2005) also points to an important consideration which has perhaps influenced the attitude of Cosatu towards social movements: "The emergence of the APF was threatening the 'big brother' role of Cosatu in that the Forum was better placed to claim to be speaking on behalf of communities. Also the Forum had the potential to usurp COSATU's role as the leading organisation fighting against

privatisation and expose its vacillations in its dealings with the ANC government" (ibid:11).

But the healthy anti-commodification stances of parties, such as the Independent Democrats – which we earlier discussed – must be included in potential allies for a countermovement, notwithstanding other questionable policies they may have. The only way a countermovement – which will not be a political party, though it could lead to that later – can be built is to harness the greatest possible unity and solidarity in action. In this regard decommodification of basic public services – such as water and electricity – would be a powerful catalyst to unite the entire working class and therefore likely to constitute the heart of a countermovement. It therefore appears that decommodification – particularly of social reproduction – will be the leitmotif of any countermovement. But Buhlungu (2005) raises an important point: "What is not clear is how meaningful cooperation can be forged at grassroots level without a thoroughgoing reconfiguration of alliance politics among working class organisations in South Africa" (2005:21). Key to such a reconfiguration is the question of COSATU's relations with social movements.

Other resistance to cost recovery and commodification

The only political party that has challenged cost recovery and water commodification seriously is the Independent Democrats (ID), of Patricia de Lille. Though otherwise of liberal persuasion their stance on water has set them apart from other parties:

> Basic services should not be regarded as commodities or expensive but unavoidable state expenditure. Instead free or affordable access to these services must be regarded as essential for development and growth. Their value should not be judged by their profit-generating ability but by their importance to development and beneficial socioeconomic sustainability (2006:7).

The importance of this stance is that though not strongly and openly averse to capitalism the ID considered water important enough to adopt this position. On the other hand the South African Human Rights Commission (SAHRC), which is tasked with ensuring that all levels of government adhere to the letter and spirit of the constitution, now adopted a pro-PPWM stance which appears wholly uninformed by research. In fact the SAHRC went as far as to urge the government to roll-out PPWM, including their installation on communal taps:

> Government should make use of the pre-paid meters either through private pre-paid meters or communal pre-paid meters that work with a token. These prepaid meters must be set to provide 6000 litres free

automatically to each household at the beginning of the month. By doing this government will be able to *control the total amount consumed*…..This should be accompanied by the provision of funds for the installation of these meters to municipalities through the Municipal Infrastructural Grant (emphasis added) (SAHRC 2003:6).

It is interesting to note how the SAHRC captures the likely conceptual and strategic purpose of both FBW and PPWM, by indeed controlling the "total amount consumed". It goes further to advocate that the government make funding available through the Municipal Infrastructure Grant to roll-out these meters (ibid). As with the ANC it is evident that either the SAHRC has not done research into these meters or has and despite the results of such research, particularly in the UK, decided to promote them. However, in an interview, Jody Kollapen, chairperson of the SAHRC, stated: "Then we did not know enough about prepaid water meters" (Personal interview, 22 November 2006, Johannesburg). But he says that they do have serious concerns with the "commodification of water but no in-principle opposition to these meters". But to oppose the commodification of water for poor households and not oppose the use of PPWM does appear to be a contradiction in terms because they are arguably the harshest form of cost recovery and commodification of water ever seen.

Going forward

Faced with the current balance and relationship of socio-class and political forces in South Africa the best the left in the social movements can hope for is an incremental decommodification strategy but a concerted united-type front countermovement – linking them with trade unions - may accelerate this process. "If the emergence of neo-liberalism represented the move of the pendulum towards the right, then the formation of the APF and other social movements suggest that the pendulum could be swinging in the opposite direction and a new counter-hegemony may be emerging" (ibid:20). However, the undoubted decline of social movements since the dramatic successes they scored at the 2002 WSSD (Harvey 2002b) has raised serious questions about how durable they will be without transforming themselves into a more coherent force, with a clearer vision, strategy and programme.

And though the idea of a workers' party should not be scoffed at lightly it is probably far-fetched at the moment because the indispensable presence of Cosatu within such a party is very unlikely to materialise given the very close relations between them and the SACP, which has always rejected such ideas. The movements also have to transcend an issue-based, often spontaneous and ad hoc approach to issues. More permanent and

formalised structures may well be necessary. The APF, for example, has been a forum for seven years. Can it afford to continue as a forum, especially when the tasks facing them demands greater organisational cohesion, unity of purpose, unanimity, discipline and programmatic clarity.

> Very fruitful and efficient struggles can develop according to the conjuncture and to the classes, through ideological instigation. The point is that they are not directly aimed at the transformation of social relations without a political or institutional intermediary. Without these intermediaries struggles are blinded and either become integrated in other projects or crushed by the state apparatus" (Castells 1978:148).

The sooner both the reality of existing state power and the fact that this question cannot not only be avoided by any decommodification countermovement but that participation in elections is therefore accepted as a necessary tactic and an important part of a broader countermovement strategy under current circumstances the better. "Challenges to historic arguments that there is no alternative to the organisation of life by, and under, the state form are being raised within social movements that continue to engage in more contemporary arguments around whether or not their own struggles are about creating a dual/parallel power outside the state, organising to seize power or simply to change the terrain of state accountability and policy formulation" (Naidoo and McKinley 2005:15).

Firstly, other than the state there is no other socio-political form which has organised life in societies for centuries and this will certainly be the reality for long. To suggest otherwise is to succumb to a supra-historical and naïve idealism. Secondly, even a "dual/parallel power" contests existing state power. In fact it is in the first place regarded as "dual/parallel" because it seeks to challenge existing state power, replace it and exercise hegemony, not to occupy an idealised separate and autonomous sphere of justice outside what are always historically evolved state forms, which no amount of radical abstractionism can avoid or replace. The much more important matter is to explore various tactical and strategic options to engage, acquire and exercise state power with which to enact decommodification policies and regimes of governance than to question whether the state is necessary or unrealistically explore alternatives to state forms.

Both Cosatu and the SACP would need to become active in the struggles against commodification in the townships, break out of the constraints their alliance with the ANC has imposed on them - which have hampered their relations with social movements - and in fact give leadership to these struggles. Without such steps there is little possibility of the social movements becoming by themselves a powerful resistance

and particularly countermovement in South Africa. “As a communist party…we commit ourselves to fight side by side with our people and communities to realise sustainable livelihoods and communities” (Nzimande 2006d:3). Though it is a fact that the SACP has not honoured this commitment the ongoing struggles in these communities provides opportunities to do so.

Finally, Esping-Andersen’s (1985) approach, which links social policy and the struggle for socialism is particularly attractive in the South African context because here capitalism and racism – which denied basic services to blacks or provided inferior standards –were inextricably combined. In fact those historical ties is the main reason why today under a deracialised neo-liberal capitalism we still have a combination of poor service levels or the absence of any water services to 8 million people (*Mail & Guardian*, 22 February, 2007). However, he also makes the important point that the social wage “should be granted as a just return on exploited surplus value” (ibid: 146). He emphasises the important role social policy has to play in a decommodification strategy that steadily chips away and subverts marketised social relations (ibid).

The case against the 6kl lifeline and PPWM

> How will prepayment technologies stand up against legislation that enshrines access to clean water as one of a number of constitutional rights, others of which have already been successfully tested in court…..” (Marvin et al. 2001: 5).

This precedent-setting legal challenge will have far-reaching constitutional implications for the whole country, especially if it is won by the applicants. The implications will include not only the substantive issues of the adequacy or otherwise of FBW and the legality or illegality of PPWM but also closely related ones about affordability, unemployment, poverty, health and standards of living. Important too will be how both national and local government take decisions regarding the quantity and quality of basic services. But though there are other broader discursive issues involved in the usage of PPWM and the 6kl lifeline – alienation, reification, subjection to political and technological rationalities and so on – the heart of the present legal and constitutional challenge is the sufficiency of the 6kl lifeline and the severe problems related to the usage of PPWM, as the case study has conclusively shown.

This class action case – launched by five residents of Phiri – is the first of its kind in this country, and will have serious implications for all municipalities and water companies, particularly if the case is won by these residents, who are assisted by the

Centre for Applied Legal Studies, based at Wits University, and the Freedom of Expression Institute. Though a very important case the courts are not disposed or equipped to deal with deeper social, policy and philosophical issues and will probably not deal with the resource and budgetary constraints which are due to the current neo-liberal macroeconomic policy framework. However, the key issues are:

1. In terms of existing water legislation, the Constitution and international experience is the 6kl water per household per month sufficient, especially for larger ones?
2. In terms of the Constitution, the WSA and Promotion of Administrative Justice Act (2000) is the usage of prepaid water meters permissible, both substantively and procedurally?
3. What is appropriate social policy for water supply in townships, such as Soweto, with high rates of poverty, unemployment and numerous social ills, especially against the historical background?

However, the arguments of the applicants rest on the inadequacy of the 6kl lifeline and the inappropriateness of PPWM. In their Founding Affidavit the applicants "challenge the decision to discontinue the unmetered water with which the residents of Phiri used to be supplied at a fixed charge and to install in its place what is known as 'prepayment water meters'. We challenge both the principle of this decision, and the manner in which the decision was taken" (Mlambo et al. 2006:11.1). The "fixed charge" was the flat rate we earlier referred to, which the vast majority did not pay. The other key challenge is "The decision to limit water supply to 6kl per household" (ibid: 11.2). We will not repeat the many-sided problems of PPWM in poor households – which we return to in the case study – but focus here on the prospects and problems of this application and thereafter explore the weaknesses of the defence by the CoJ and JW, the key respondents in this matter.

The government has as early as 1994 pointed out the inadequacy of 25l PPPD, which was "not considered to be adequate for a full, healthy and productive life which is why it is considered as a minimum" (RSA 1994:15). The applicants demand that 50l PPPD be supplied (ibid:13.1) and "the option of a metered supply…." (13.2). They base their argument on two main legal grounds, namely, the constitution's guarantee of "access to sufficient water" (s 27) and its requirement for "administrative action that is lawful,

reasonable and procedurally fair" (s 33 (1) (ibid: 17). Besides, the *Promotion of Administrative Justice Act* (2000) also requires (s 3) that administrative decision have to comply with fair procedure" (ibid:18). Finally, the WSA clearly requires (s 4 (3) that procedures for disconnection must be fair and equitable. Therefore, the procedural grounds does seem quite strong because in the case of PPWM there is not and cannot be any fair procedure because users are automatically disconnected when they don't have funds to recharge the meter, with any right of recourse to appeal or take any action to prevent cut-offs, rendered impossible. Equally, their demand for 50l PPPD is also strong on the grounds of international literature (Bond 2002a; Gleick 2005:18) and the state's own admission of the inadequacy of 25l PPPD.

But why they argued for 50l PPPD and not more is rather surprising because it is *not* sufficient and remains within a minimal range. Besides it is very likely that the CoJ and JW will argue that because of administrative difficulties they cannot supply water on a per person basis. However, SAMWU indicated from its own research that "63 to 110l PPPD was necessary" (cited in McDonald and Ruiters 2005:73), which however "does not include water used for subsistence gardening or the operation of small business - practices which are often essential for the survival of the poor" (ibid).

Furthermore, the WHO estimates that 50l PPPD is needed to reach a "low" level of concern over health impacts and that 100l PPPD is the minimum needed for "all basic personal and food hygiene" but not including water to grow food (Bartram and Howard 2003). This makes it very clear that 50l PPPD is far less than what would be a better and more reasonable limit of at least 100l PPPD. And as we earlier noted JW itself found that 20kl was a reasonable average for a household in similar conditions to that in Soweto (JW 2002:7). For a 8-member household that would work out to 83l PPPD. Besides, what surprises further is that some of the experts and advisers who provided supporting affidavits know that 50l is at the lower end of the spectrum and furthermore that it is activists from radical social movements driving this application. It is further ironical because the research conducted by Public Citizen, the APF and the CAWP stated: "The WHO goes on to highlight the fact that 100 litres are needed per person per day in order for an individual to lead a healthy life" (Public Citizen et al. 2004). This is compounded by the fact that FBW accounts for just 1% of national water supply (Kasrils 2002) and that water inequalities are worse than income inequalities (Bond 2002:35-36).

But Ruiters (2002) point to some of the pitfalls of a minimalist needs-based defensive action: "Justice is not confined to a minimalist or basic needs approach based on some

sort of a priori calculations about feasibility in the context of 'limited resources'. It is as much about a struggle *for* as *over* justice (Ruiters 2002:123). This is an important point because the 50l PPPD which the applicants argue for in this case is an example of such an approach.

However, in a smart move – probably in anticipation of the possible findings of a court and government's own admission that 6kl was insufficient – the CoJ has indicated in their response to the application that they would be increasing the free amount from 6kl to 10kl as part of their "revised Social Package Policy which will be introduced in July 2008" (CoJ 2007:30.60.5). But this will only be for registered indigents (ibid: 30.61.2). Many water scholars (Bond 2002; Ruiters 2002; Swyngedouw 2004; Esping-Andersen 1985) have pointed out the problems of indignity and shame that stigmatisation brings as a result of means-testing and that it serves to distinguish the poor from the very poor and thereby creates further divisions in working class communities. And yet it is this indignency means-testing which the city regards as its "pro-poor" policy (CoJ 2007). But the courts are very unlikely to delve into these important social and macroeconomic policy issues. In fact it is more likely that it will be guided by two key issues:

One, did the CoJ honoured the constitutional right to "sufficient water"? The problem is that because national government decided to accept the Durban 6kl limit as "sufficient water" it will argue that it has. The applicants will have to prove that 6kl is insufficient, which is reinforced by our case study, and previous studies (APF 2004; Hanson, 2005). But with the severe fiscal constraints municipalities do indeed operate under they will argue that if in particular cases it is not sufficient the additional 4kl – seen as a "buffer" - will provide from "early 2007" for registered indigents and "targeted beneficiaries" should make it sufficient (ibid: 30.68.4). This might compromise the case because the additional 4kl – depending on household size – might work out to 50l PPPD, which is what their demand is for. In fact it appears that this increased amount – but on a strictly indigent basis – was calculated to compromise the case and show that this measure also complies with the constitutional requirement to take "reasonable legislative and other measures, within its available resources, to achieve progressive realisation" of the right to water (RSA 1996: s 27 (2).

Within the serious limits of both constitutional and fiscal constraints – which we earlier pointed out - it will not be easy to rebut such an argument. The CoJ will likely argue that it is the first municipality to provide an additional 4kl. It will also further argue that to

cater for emergency measures, such as sudden fire – it has allocated another 4kl per annum (ibid:30.79.7). “The emergency 4kl allocation can also be redeemed in the event of an emergency (ibid). This need not be an emergency, such as a fire, but the urgent need for water for other purposes, such as illness (ibid). However, this 4kl is for the entire year. Clearly, because this is such an important precedent-setting case the CoJ is eager to give the court the impression that it is truly pro-poor and doing all it can to increase access to water. But contrasted with the requirements to access a more decent minimum of between 63 to 110l PPPD the SAMWU found was necessary these additional measures will do little to improve access. This point is reinforced because 63kl-110kl excluded water necessary for food production. Per capita consumption in other countries are considerably higher. In the UK it was 145-157; Australia, 162; Netherlands, 175; Sweden, 191 and Switzerland 237 (Bertram and Howard 2003).

What is interesting is how the local state is completely enveloped in a neo-liberal mould: every step it takes is guided by minimalist emergency measures to “extend assistance to poorer households” (CoJ 2007:30.61), or for “really indigent situations” (ibid: 25.18) or “special need” (ibid: 28.13.2) or “Social Package Policy” (ibid: 30.60.5). It is not a social policy approach rooted in regarding water and sanitation as public goods with very strong externalities and therefore requiring the adequate provision of water and other basic services and appropriate fiscal allocations, in order to eradicate poverty and substantially raise living standards. It is instead geared to taking limited care of indigents and “targeted beneficiaries”, with all the inherent stigmatisation this entails. This neo-liberal minimalism is furthermore reinforced by the fact that until this case was launched there were no public announcements that these increases would take place.

Similarly, the 6kl FBW was itself motivated by the cholera disaster in 2000 in Kwa-Zulu Natal and the oncoming elections in December 2000, though the RDP was adopted by the ANC way back in 1994. It is very unlikely that we would have had the 6kl FBW were it not for this combination of events in 2000. However, it is also likely that within severe neo-liberal fiscal constraints at both national and particularly local level and corresponding caveats in the constitution the state’s case will prevail, not because the applicant’s arguments are not strong enough.

Of interest is the fact that the CoJ states that increases from 6kl to 10kl “will see the free allocation of wealthier households reduced in order to provide more for poorer households” (ibid:30.61.5). How it intends to implement this distinction is not made clear. Though this is a case of redistributing from richer to poorer households the most

important method for achieving a far better lifeline is much steeper tariff ncreases for really big consumers, which the CoJ has consistently avoided, despite much research pointing to this necessity (Bond 2002: PF 2004; Hansen, 2005). The question is: is this a progressive measure? For reasons already dealt with it is, but it should be combined with targeted tariff increases, especially above the current flat rate from 40kl upwards. This is precisely the point from which heavy consumption occurs and therefore from where much-needed cross-subsidisation for a much better lifeline can be financed.

Two, regarding the use of PPWM and its summary self-disconnection when there is no money to recharge expired meters - and thereby nullifying any appeals and hearings - there may be grounds for a strong argument. “The use of prepaid meters with automatic shut-off valves completely removes protections such as hearings before a cut-off” (McDonald and Ruiters (2005:70) and therefore “radically alters the relationship between the citizen and the state” (ibid). But the CoJ appears to think that the electronic warnings the meter gives when nearing the end of a recharge voucher dispenses with these procedural requirements.

Nowhere is there a cogent rebuttal by the CoJ or JW for the allegation that the PPWM dispenses with fair procedure. The problem the CoJ and JW will have to deal with is that in 1997 when the WSA was passed PPWM was not on the agenda. That is why the procedural requirements for cut-offs it provides for was for conventional metering and cannot apply to PPWM, because the latter makes such requirements redundant. This is the heart of the legally required procedures for cut-offs they are facing in this case. In the UK the case against these meters were partly won on exactly such grounds (OFWAT 1998), because they too have legislation requiring fair procedure. The CoJ attempts to circumvent the inevitable disconnection consequences of PPWM which they authorised installation of – especially with a small lifeline – when they argue: “When a customer with a prepayment meter runs out of their allocation of free basic water this is not a disconnection of the water supply and certainly not a disconnection of their basic supply” (CoJ 2007: 30.61.2).

However, the discursive spin inherent in neo-liberalism is also very evident in the reply of the CoJ in this case. Whereas the applicants argued against the 6kl “limit” – and therefore for a better lifeline - their answer was that it is not a limit but a decision to “*provide* 6kl for free” (added emphasis) (CoJ 2007:421.1) because “Up to that point no amount had been provided free” (ibid). Though they have not spelt it out the applicants

appear to base this claim on the fact that the 6kl amount was derived from informal settlements in Kwa-Zulu Natal and that water demand is higher in urban settings. They also argue that "The Prepayment Meters are specifically designed to ensure access to this amount free each month (or each day if the consumer chooses to have the free basic water dispensed as 200l per day)…" The approach JW has used after the project began in Phiri in 2003 is that the free water cannot be provided unless a PPWM is installed (JW 2003). This was a shrewd manner of linking FBW to the PPWM, so that users would find it harder to refuse the meters because then they won't only go without free water but they will be without the internal infrastructure in their homes (taps), which is removed if a household does not want the meters and opts for a level 2 yard standpipe (JW 2003). The latter also means there is no flush sanitation because the pipes to the toilet are cut off. With a yard standpipe the users have to pour water from the yard into a bucket with which to go and flush the toilet (JW 2003).

So severe are the neo-liberal fiscal constraints the CoJ faces that though it is over a decade since 1994 there are still "105,000 households which do not have access to piped water within 200 meters of that dwelling and approximately 196,000 households do not have access to adequate basic sanitation" (CoJ 2006:21.4). This situation is worsened by the fact that these backlog are not only in the richest city in Africa but it is for pit latrines and for communal taps, not in-house connections and waterborne sanitation. But this is only part of the problem. The other – perhaps bigger problem – is that unless the case is won and PPWM are declared illegal – as in the UK – or abolished by a new government this infrastructure will remain for a long time to come, with all the serious disadvantages and dangers our case study show. World experience shows that once installed municipal infrastructure tend to be permanently embedded. As Harvey (2002) puts the point: "And when a decision is made, it forecloses on other possibilities, at least for a time. Decisions carry their own determinations, their own closure, their own authoritarian freight" (2000:235). In fact it is for a long time because to destroy, remove and replace embedded infrastructure on a massive scale is very expensive (Ruiters 2002). That is probably why in the UK the prepaid water meters which were banned were left in homes and used instead to "monitor consumption and pay on an incremental basis….without the automatic cut-off valves" (McDonald and Ruiters 2005:71).

The distinct historical contrast in capitalist societies between democratic words (promises) and social realities worldwide has clearly repeated itself in post-apartheid South Africa. But what does 50l PPPD – if the demand was acceded to – mean for

decommodification of water? A bit better, but not much in comparison with greater and more desirable consumption figures we have said much of already. Besides, "Commodification is a systematic and comprehensive transformation of people's material lives – price is merely the external appearance" (ibid:23).

The attempts by affected residents to elicit the support of the SA Human Rights Commission – whose job it is to monitor implementation of the socioeconomic rights in the constitution – failed. The Commission ruled that they have no jurisdiction to intervene on the method of water supply – in this case the prepaid meters – and that JW did not deny completely deny a water supply because it did provide the options of either an in-house metered connection or a yard standpipe. "The HRC has found that the constitutional protection of sufficient access to water does not extend to the manner of service delivery" (Molefe, *City Press*, 21 November 2004). But how can we separate the right to water with manner of delivery, especially when this "manner" (PPWM) has the many disadvantages we have tried to show thus far, including denying both an adequate amount of water and the right to a fair hearing before cut-offs which legislation we referred to above demands? JW has used this stance of the SAHRC to argue: "Some people have taken us to the HRC but the commission ruled that JW had provided all forms of water supply" (Cox, *The Star*, 24 August, 2004). However, Colling and Hall (1997) argue that:

> The challenge to local democracy to represent more fully the needs and interests of socially excluded groups could hardly be a more vital one. If democracy cannot do this, it forfeits its main progressive claim to offer something other than the market can deliver (:1997: 217).

Finally, Ruiters (2002) importantly points to the inherent danger and limits of pursuing and emphasising legal remedies to what are deeply socio-class and systemic problems. He refers to a defensive approach "that relies too heavily on juridical definitions of justice and fails to pay adequate attention to the spatial and production sides of environmental inequalities. A deeper approach to environmental justice, however, requires a focus on the production and prevention of injustices" (Ruiters 2002:112). Greenstein (2006) likewise points to the dangers and weakness of pursuing only legal remedies:

> A focus on constitutional rights is not adequate on its own, without social and political mobilisation alongside it, as the lack of follow-up on the Grootboom case demonstrates. An activist approach may result in certain tangible achievements (cancellation of payment arrears for electricity for example, or halting evictions of illegal tenants). However, without embedding these struggles in a framework of rights, achievements may be short lived (Greenstein 2006:432).

The point however of this case is that it is challenging the failure to implement existing

constitutional rights regarding the right to "sufficient" water and whether the fact that PPWM automatically dispenses with fair procedure - which the WSA requires before water supply is terminated - is fair and reasonable. In regard to the latter the court will have to decide whether the automatic shut off which PPWM results in is fair and reasonable in the light of both the WSA and the requirements for the limitations of rights in Section 36 (1) of the Constitution. Flynn and Chirwa (2005) assert that a "complete water cut-off, or limitation to a certain level below basic needs, may call for exacting scrutiny by a court" (Flynn and Chirwa 2005: 68). They point out that in the case of the UK water limitations were banned because the relevant government department decided that "No person should have to face the prospect of cutting down on essential water use – for washing, cooking and cleaning – because they cannot afford their bill" (ibid).

In this case a similar argument could be made to increase the lifeline beyond 6kl because without it households – as the case study showed – cut down severely on water usage in order for the 6kl to last for the month or as long as possible, because they don't have the money to recharge the expired meter once the 6000th litre is consumed. Therefore probably even more than the negative consequences of PPWM – which are emphasised in inverse proportion to the limits of the 6kl lifeline - the court will have to decide whether 6kl is "sufficient water" for larger households particularly. But in this case very clearly the 6kl lifeline and the PPWM go hand in glove and cannot be separated. Under practical circumstances to argue for separation would be tenuous.

As regards the effects of PPWM in Soweto in the case study it clearly has produced new and reproduced existing racial and socio-class inequalities which a legal fight against them will not be able to deal with systemically. But equally important to note is that without these defensive legal cases challenging aspects of neo-liberalism the situation would get much worse. In fact cases which challenge fundamental tenets of commodification – of which PPWM is probably the most brutal manifestation - are more than just defensive struggles. They also strike at the heart of neo-liberalism today.

One of the major reasons why the battles against PPWM are far from over – despite the major setbacks suffered in Phiri – is because "A fairly active civil society without positive experiences of municipal interventions in the past will meet any new technology on its own terms, and not those of the purveyors of external concepts of development that inevitably go with such technologies" (Marvin et al. 2003:5). They furthermore state "Utility meters are not a neutral technology. Instead the technologies embody important

assumptions about the content and power of the relationships between users and producers of utility services" (ibid:6). It is therefore fair to say that what happens to the ongoing struggles against PPWM – and broader commodification – may well turn out to be the litmus test of resistance in post-apartheid South Africa. No wonder the CAWP asserts:

> The case is of enormous significance for all South Africans (and will be of great interest internationally) in that it has constitutional implications about the right of access to sufficient water (section 27 (b) of the Constitution) as well as the right to administrative justice (section 33 of the Constitution) (Press Release Statement, 31 October 2007).

The case will be heard in the Johannesburg High Court between the 5 – 7th December (CAWP Press release statement, 31 December 2007).

Outcome of court case

In a landmark and precedent-setting judgement on the 30 April 2008 the Johannesburg High Court ruled in favour of the application to have PPWM declared unlawful and for an increase in FBW from 25l PPPD to 50l PPPD (*The Star*, 1 May 2008). Importantly, presiding Judge Moroa Tsoka, stated: "I am unable to understand why this credit control measure (the PPWM) is only suitable in the historically poor black areas and not the historically white areas. Bad payers cannot be described in terms of colour or geographical area" (cited in Bond and Naidoo 2008).

However, ironically, just over a week before this judgement the CoJ took a decision to scrap the monthly FBW supply of 6kl to all houses (*The Star*, 22 March, 2008). Whereas the applicants asked for an increase from 25l PPPD to 50l PPPD the CoJ decided instead to scrap even the very limited and vastly insufficient 25l PPPD, as this case study has conclusively shown.

In place of the FBW of 6kl per household per month to all households the CoJ increased the 6kl FBW to 10kl, but strictly only to those registered as indigents. This was hard to understand because of the low indigent take-up of only 118, 000 the CoJ reported in late 2006 (CoJ 2007: 30.45.2). Besides this, the CoJ itself acknowledged the problem: "…the most vulnerable, who often do not respond to calls to register for benefits……" (CoJ 2007: 30.75).

While we recommended an increase in the FBW supply for poor townships, such as Soweto, and against supplying FBW to rich households which did not need any, the CoJ opted to stop FBW supply to all households: "The 6,000 litres of free water each

month enjoyed by all will fall away to all but those on the City's indigent register" (CoJ 2008).

Furthermore, the CoJ decided to appeal the judgement (*Business Day*, 15 May, 2008). Whether the judgement will be implemented will now depend on the outcome of the appeal. If the appeal is upheld the case will almost certainly proceed to the Constitutional Court, on the strength of this judgement. But unless the CoJ wins their appeal they cannot continue with OGM and until the outcome of the appeal is known they cannot proceed to install any more meters.

CHAPTER 9: SUMMARY OF KEY FINDINGS; POLICY RECOMMENDATIONS; CONCLUSION

Summary of key findings

6kl lifeline

The case study unequivocally shows that the 6kl lifeline is vastly inadequate, even for smaller households, let alone households of more than eight people. It is also clear that despite evident frugality households are struggling to manage with 6kl and are posing risks to their health by resorting to measures which are unhygienic, such as not flushing toilets each time it is used; not washing hands each time toilets are used; sharing bath water, and so on.

The question is: what would be an adequate amount? Though the answer to this question involves a wide variety of factors to consider – such as household size, people who may be sick, children, climate, standards of living and most importantly health and hygienic concerns – it does seem that the CoJ should aim for 20kl as a respectable lifeline. This however should be provided to all households in places like Soweto where there are high levels of homogenisation due to the apartheid past which oppressed and exploited all black people (Swilling 1991; JW 2001). As we have shown 20kl is also what JW itself concluded would be a good average consumption for places like Soweto: "This further confirms that 20kl is a good average monthly water consumption figure to assume for an area like Soweto" (JW 2002:7). In fact Lotte, a former manager at JW, went as far as to say that "If people in Soweto can reduce consumption from high levels to about 20kl we can give them that for free (Personal interview 6/12/03, Johannesburg). The case study has shown at great length not only the adverse consequences of inadequate water but that its effects are going to probably worsen poverty. Hence the public benefits to health and hygiene of 20kl in households in places such as Soweto would be immediately felt and wide-ranging.

Indigents

Quite clearly, increasing the allowance from 6kl to 10kl is, firstly, not enough, and secondly, because it is based on indigency most poor people will be excluded because they are responding in very limited numbers, as is evident by the figure of 118 000

over several years. Increasing the lifeline must not be conditional upon proving indigency, even if the basis for it switches from income-based to property-based assessment, though we have to see whether it will result in a significant increase in the number of registered indigents. Though this switch from income-based to property-based criteria for indigent assessment may be better and *less* stigmatising it won't *eliminate* such stigmatisation, which may require instead the elimination of the notion of indigents in the first place. It is very clear that the low indigent take-up rate over several years shows that poor households – even if it means they forfeit assistance – are not responding for whatever reasons. But it is quite likely that stigma is the main reason though there is no evidence in this regard. However, the fact that the CoJ stated that switching from income-based to property-based indigent assessments may remove possible stigma associated with it is a good indicator that it probably is (CoJ 2007). Underlying such stigma is the indignity of not only having to bear the poverty but having to go through alienating bureaucratic processes to prove poverty.

Prepaid water meters

There is ample evidence in this study that PPWM have caused serious problems in Phiri. It is therefore unhelpful and in fact evasive for the CoJ to try and deflect attention from the meters (CoJ), which is a technology they decided to install and through which the 6kl lifeline is implemented. Hence the 6kl lifeline and the PPWM are inextricably linked. The CoJ may be trying to deflect attention from the meters partly because they were banned in the UK in 1999. As the technological instrument which is programmed to both allow 6kl free water and to restrict consumption only to that amount its fate is inextricably intertwined with the lifeline, whatever amount it might be.

It is implicit that against the background of the embedded notion of a "culture of non-payment" the CoJ and JW were not going to take the risk of installing conventional meters because they suspected that people will still not be compelled to pay at the end of the month and therefore it will do nothing to address this "culture". Instead it is likely that they thought it would exacerbate the problem because the capital outlay for conventional meters would also not be recovered in payments. On the other hand the fact that they were compelled to provide 6kl free to all households meant that they had to find a way of doing so but not incurring further losses. The answer was PPWM, which requires payments

before consumption and thereby dealing a deathblow to this "culture", once and for all. That is probably why the ANC-led CoJ reportedly sent its former head of finances, Kenny Fihla, to Phiri to secure the agreement of a seemingly reluctant ANC branch that the project would unstoppably go ahead.

There is little doubt that this determination to implement the project – expressed mostly by bringing in the police, army and private security firms to crush the resistance in 2003 – was driven by tight-fisted fiscal constraints and demands from central government, derived from the neo-liberal policy framework in both Gear and subsequent water and municipal legislation (MSA 2000). The result was that the CoJ was compelled to commercialise and commodify water and other services and to install PPWM. In fact the former Phiri councillor, Pat Kunene, stated that initially he and other ANC councillors were "reluctant to install PPWM and sell water to poor black people" (Personal interview, 22 September 2003). It may be the reason why senior municipal officials have been highly paid: they – not national government which established the neo-liberal policy framework – are at the coalface of service delivery and in the firing line of township anger and protests. Several ANC councillors have been killed and others had their homes burnt down by angry protesters dissatisfied with "service delivery" since 2004 (Bond 2006).

It is also evident that the CoJ and JW did not study the UK experience with PPWM and particularly the reasons why they were declared illegal in 1999. This is surprising, especially when they state that they have done extensive research (CoJ 2007). The importance of such research is not in the least minimised by the fact that we have a 6kl lifeline. In fact it may even reinforce its importance precisely because it is so little that the bulk of domestic water is dispensed not under the lifeline but under the prepayment system. But there is an ever bigger practical problem the commercialisation of water has presented us with and which we have to confront. Even if the CoJ and JW decided tomorrow to discontinue PPWM how would they then measure free water provided to households and especially if bigger increases in the lifeline became necessary?

This says that in fact the decision to provide free water in 2000 may have been made with this inevitability in mind: metering would have to be made compulsory in order to dispense free water, and that this will be the way of dealing with black townships in which there was no metering and a "culture of non-payment". If this was the thinking the 6kl free water would have been a sop. This however is speculative because we have no evidence to show it, since there is no doubt, on the other hand, that the cholera epidemic

in Kwa-Zulu Natal in 2000 – which claimed over 200 lives – did inject urgency into the government to provide some lifeline. This epidemic directly resulted from installing PPWM onto communal taps. When poor black women had no money for the meters they resorted to water from contaminated nearby rivers (Bond 2002a).

But the problems associated with prepayment metering are set to continue well into the future and probably spread to other parts of the city, the province and the country, because of the numerous advantages it has for cost recovery and commercial profitability. The only alternative may well be going the British route: declare PPWM illegal but retain them in homes to monitor consumption. They would then not be a punitive device which cuts water off to households that don't have money. Instead – as in the UK – arrears will be dealt with through arrangements to pay off debt and if that does not work credit control action could be invoked, including referring cases to court for adjudication. The point is that every effort must be made to avoid PPWM "self-disconnecting" poor households from crucial water supply. It is for this key reason that an otherwise conservative BMA campaigned for these meters to be declared illegal (BMA 1998). We require a similar public consciousness and agency with regard to the most vitally important daily resource in poor households.

Metering in principle is the thorniest issue today, which leftist discourse and the opponents of commodification do not adequately deal with because it is a tough and tricky question. Does a progressive stance on adequate water consumption necessarily preclude all measurement and metering, especially in a water-scarce country, even though we have pointed out the myths of scarcity? The precise reason why the left avoids dealing with this question is because to oppose the commodification of water but support some form of metering would appear contradictory. Our approach differs somewhat because we recognise the necessity for some form of measurement of consumption, otherwise unmetered consumption *can* lead to wasteful abuse. We say "can" because we do not subscribe to the conventional view that it always does.

But we temper the need for access to adequate amounts of water – a genuine lifeline of between 20kl-30kl – with the knowledge that this can take place through conventional metering, to which access is cross-subsidised through tariff restructuring or/and through direct national government subsidisation and taxation, with payments enforced for any consumption beyond 20-30kl. This could happen even if PPWM remained in households, but programmed to increase the lifeline accordingly. Alternatively, as in the UK, the automatic shut-off valve could be

removed but the meter remains in households to monitor consumption and debt is dealt with through the courts, where a proper notice and a hearing would be required and adequate consideration of circumstances take place (McDonald and Ruiters 2005).

Following the High Court judgement against PPWM and for extending the lifeline from 25l PPPD to 50l PPPD the CoJ and JW have postponed further installation of these meters until the outcome of their appeal against that decision is known (www.joburg.org.za/content/view/2457/222/)

Commodification

This study shows that despite the small lifeline – in fact because of it – we have the virtual commodification of water in Soweto. This is because the degree of decommodified water – even less than 25l PPPD for a household bigger than 8 - is dismally inadequate when seen in relation to the 83l PPPD which would result if 20kl was given per month for a family of eight. It is even less when compared to the "63 to 110l PPP, an estimate that does not include water used for subsistence gardening or the operation of small businesses – practices which are often essential for the poor" (Flynn and Chirwa 2005:73). In the latter case it would appear therefore that 150l PPPD would be a more satisfactory lifeline. This means that even if the lifeline increased from 6kl to 20kl it would only amount to 83l PPPD for a family of 8, still far short of the ideal 150l PPPD but it would be a big and positive move in the right direction. Social policy for water must be geared to achieving this goal, which is six times greater than out current "lifeline" of 25l PPPD. Why deprive poor households – who already daily face so many adversities born out of their class position in a capitalist economy – of an amount of water that could adequately and take care of all needs?

We earlier also seen that the discourse of water commodification has to necessarily go far beyond water and embrace all other basic needs and services working class families daily rely on, and which would have to be considered and included in any programme of a socio-political countermovement for decommodification.

Policy recommendations

This study has made it evidently clear that we require a major review of existing water and sanitation policies. The CoJ and JW need to give serious consideration to the following policy recommendations:

1. Extend the 6kl to at least 20kl in Soweto and other poor black working class townships.
2. Extend the increase to 20kl to all households in these areas and not confine increases only to registered indigents.
3. For reasons discussed in this study move away from a universal provision of free water to a focus on the water needs of black working class areas as the top priority. If this was done 20kl could easily be afforded. This entails excluding middle and upper class areas which do not need free water. The cumulative and logical consequence of providing free water to these areas is to deepen and widen existing socioeconomic inequalities, which still overwhelmingly assume racial forms. As we earlier stated unequals cannot be treated equally. The Water Services Act makes provision for geographically determined variation in tariffs, for purposes of equity.
4. Explore further increases to 30kl per household per month in poor black townships – so that we move at least towards the 100l PPPD the WHO strongly recommends as more ideal for health purposes, which however does not include water for growing food (Bartram and Howard 2003). This could be subsidised not only by ending the provision of free water for upper and middle class households who do not need it, but by also extending current block tariffs beyond 40kl, as we discussed earlier in Chapter 5, with much steeper increases, following a concave trajectory, instead of a convex one (Bond 2006).
5. Review entire indigent policy in black townships with a view to finding out the poor take-up by poor households and to perhaps scrap it entirely.
6. Review PPWM in Phiri and other Soweto townships on the basis of both the empirical results in this study and the compelling reasons why a decision to ban them in the UK was taken, presented in the court judgement.
7. Explore – as has been done in the UK since PPWM were banned – alternative methods of securing payments for water, including arrangements to pay off water debt and/or assistance from social security to pay such debt, as exists in the UK. So vital is an uninterrupted supply of water to poor households that every effort must be made to avoid cut-offs.
8. Encourage all ward committees to form water subcommittees – which should include representation from social movements, even if they do not participate in elections - to ensure the democratisation these issues so urgently require.

It is therefore unacceptable and misleading for President Mbeki to conclude: "The policies we require are firmly in place…The task we will face during the decade ahead will be to ensure the vigorous implementation of these policies" (Mbeki 2004). "It is patently wrong to assert that appropriate policies are in place" (Butler 2007). Butler went further to criticise Mbeki's "mechanistic distinction between policy making and implementation" (ibid). It is a fact that water, sanitation and electricity services – beyond tiny 'lifelines' – are commercialised and commodified and therefore beyond the reach of the poor majority. Problematic social-public policies therefore are at the root of the ongoing protests in townships.

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Appendix A

Household Matrix

At the start I would like to ask you some questions about the people who live in this house.

PLEASE WRITE THE NAME OF THE MOST SENIOR PERSON IN ROW 1 AND THEN LIST THE REST OF THE HOUSEHOLD MEMBERS IN ORDER FROM OLDEST TO YOUNGEST.

	Name	**Age**	**Sex**	**Employment Status**
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Phiri Water Services Survey

Questionnaire

Introduction

My name is……. and I am a resident of Phiri. I am a research assistant for Ebrahim Harvey, a doctoral student in the sociology department at Wits University. My job is to help conduct a survey by visiting 200 houses in Phiri and asking residents to answer some questions about their households and water services in the township. The interview will take about one hour. Your answers are confidential. So please feel free to say whatever you feel or think. If you do not understand a question please tell me.

The main reasons for this survey is to be able to see if people can afford to pay for water, if the free 6000 litres is sufficient or if it should be increased to help those households too poor to pay for any water and also to find out what their experiences with prepaid water meters have been. We thank you for giving us some of your time to answer these questions.

Biographical

In this section I would like to ask you some questions about you and your family.

1. Sex

Male	1
Female	2

2. Please tell me how old you are?

   ----

3. Who is the head of this household? Interviewer – Code according to number of household
   member in Household Matrix.

   ----

4. How long have you lived in this house?

1 – 2 years	1
3 – 5 years	2
6 - 10 years	3
11 – 20 years	4
20 plus years	5

5. Do you own it or do you pay rent?

Own it	1
Pay rent	2

6. If unemployed, did you do any work (formal or informal) for pay, profit or family gain during
   the past year? IF ANSWER IS NO, PROBE FURTHER AND INCLUDE THE FOLLOWING EXAMPLES:
   - Note: Work also includes:
   - Car wash, parking indicator
   - Car repairs at home, typing at home, pottery, dressmaking at home, etc
   - Making baskets, carpets and mats
   - Recycling, hawking or spaza shop
   - Collecting, cutting or sawing firewood for sale
   - Woodwork

Yes	1
No	2

7. What type of work do you or others do?
   WRITE IN AND THEN CODE.

Manager	1
Professional	2
Technical	3
Clerk	4
Sales/service	5
Artisan or craftsperson	6
Operator	7
Self-employed/informal sector	8
Domestic	9
Other (specify)	10

8. What is your current employment status?

Working full-time	1
Working part-time	2
Casual/piece jobs	3
Unemployed	4
Pensioner (i.e. old age pension, disabled, etc.)	5
Housewife/taking care of home full-time	6
Student	7
Other (specify)	8

9. If unemployed, did you work previously?

Yes	1
No	2

10. If unemployed, for how long?

Less than 6 months	1
Between 6 months and 1 year	2
Between 1 and 2 years	3
Over 2 years	4

11. If unemployed are you looking for work for pay?

Yes	1
No	2

12. If not, (i.e. not working and not looking for work) what is the main reason

Already have a job but have not started working	1
Have a job but was ill or on leave in the last seven days	2
No jobs available	3
Lack of suitable jobs	4
Spouse/partner will not allow me to work	5
Children still young	6
Studying full-time	7
Illness/disability	8
Parent/guardian will not allow me to work	9
Other persons in the house make sufficient money	10
Do not want to work	11
Do not have the necessary skills	12
Retired/pensioner	13
Taking care of home on full-time basis	14
Others (specify)	15

13. How much on average do you spend on food (i.e. groceries, meat, etc) a month?

R100-R200	1
R200-R300	2
R300-R400	3
R400-R500	4
R500-R600	5
R600-R700	6
More than R700	7

14. If you have children at school estimate more or less how much a month does it cost

in total for school fees, stationary, transport and meals.

R200-R300	1
R300-R400	2
R400-R500	3
R500-R600	4
R600-R700	5
R700-R800	6

15. If you or others are working, approximately how much in total per month does the household spend on transport, to get to and from work?

R50	1
R50 – R100	2
R 100 – R200	3
R200 - R300	4
R300 – R 500	5
More than R500	6

Basic Services (electricity and water).

In this section I would like to ask you a few questions about electricity and water services.

16. How much on average do you spend on electricity per month?

R20 – R30	1
R30 – R40	2
R40 – R50	3
R50 - R60	4
R60 – R70	5

17. Are you using prepaid electricity?

Yes	1
No	2

18. Are there times that you don't have electricity because you don't have money for recharge vouchers?

Yes	1
No	2

19. In 2003 (August) the City of Johannesburg started the Operation Gcin'amanzi Project in Phiri.
Compared to the earlier flat rate system how will you rate the new system of prepaid water meters?

Better	1
Worse	3

20. Briefly explain why you provided the rating you have in question 19 above.

---

21. Were you informed and consulted about the Operation Gcin'amanzi project before it started?

Yes	1
No	2

22. How would you describe the information and consultation?

Good	1
Very good	2
Little	3
Bad	4
None	5

23. Do you need to buy more water every month?

Yes	1
No	2

24 If yes, how much do you spend more or less?

R 5 – R10	1
R10 - R20	2
R20 - R30	3
R30 – R40	4
R40 - R50	5
R50 - R60	6
R60 - R70	7

25. On average how many litres of water do you buy after the 6000 litres has been used up?

2 000 - 3000	1
3 000 - 4 000	2
4 000 - 5 000	3
5 000 - 6 000	4
More than 6 000	5

26. Who mostly goes to buy the coupons or vouchers for the water?

Husband or male partner	1
Wife or female partner	2
Daughter	3

Son	4

27. How far is the nearest dispensing unit where you buy the coupons?

Under 1 km	1
1 – 2 km	2
2- 3 km	3

28. How do you go and buy the recharge coupons?

Walk	1
Use taxi	2
Ride a bicycle	3
Other (specify)	4

29. Have you experienced technical problems with the meters?

Yes	1
No	2

30. If yes, how often?

Often - once a week	1
Once a forth night	2
Once a month	3
Seldom	4

31. If you had technical problems what kind was it?

Baterry problems	1
Meter recharged but details not reflected	2
Incorrect details shown on meter	3
Meter shows credit but no water supply	4
Other (specify)	5

32. What do you do when you have technical problems and as a result no water?

Go without water	1
Company provides water tankers	2
Ask neighbour or friends	3
Get water from schools/churches	4
Other (specify)	5

33. If you have problems within the household what kind of problems do you have?

Arguments about how much water each person uses.	1

Arguments about who will pay to buy more water	2
Arguments about who will go and buy the coupons	3
Arguments that have led to violence in the family	4
Other (specify)	5

34. If you don't have enough money to buy water what do you do?

Borrow money from relatives or friends	1
Use pension or disability money	2
Use money meant for other essentials, such as foods, etc.	3
If other sources, specify.	4

35. If you don't have enough money for more water what do you do to try to manage with the 6000 litres?

Reuse water for other purposes	1
Cut down on drinking water	2
Cut down on water used for washing bodies, dishes and clothing	3
Use dirty water to flush toilet	4
Reuse dirty bath water	5
Flush toilets only after two or three people have used it	6
Bath less	7
Not allow children to play games with water	8
Stop vegetable gardening	9
Other (specify)	10

36. Are there any people with special needs, such as sickness, who have to use more water as a result?

Yes	1
No	2

37. Are there any good things about the prepaid water system, compared to the flat rate system?

Yes	1
No	2

38. If there are, please briefly list them.

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39. Have the prepaid water meters helped people to reduce consumption and save water, as Johannesburg Water states?

Yes	1
No	2

40. If prepaid water has disadvantages briefly list the ones that most negatively affect your family.

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41. Was there any pressure put on you to install prepaid water meters?

Yes	1
No	2

42. If yes, what pressures?

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43. Do you think that water should be freely supplied to poor communities?

Yes	1
No	2

44. If yes or no, say why.

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45. If yes, how much of it per month per household? Presently, you receive 6000 litres freely.

10 000 litres	1
12 000 litres	2
15 000 litres	3
20 000 litres	4
25 000 litres	5

Other (specify)	6

46. Who must pay so that poor people can get more free water?

The government	1
The private sector	2
Big consumers who are rich	3
Poor people who want enough water	4
I don't know	5

47. Do you think it is true that many people were wasting water in Soweto before Operation Gcin'amanzi started in August 2003?

No	1
Yes	2
Sometimes/partly true	3

48. Has Johannesburg Water fixed all water leaks inside and outside your home?

Yes	1
No	2
Some fixed, others not	3

49. How long does the free 6000 litres last your family?

One week	1
Two weeks	2
Three weeks	3
Four weeks	4

50. If you have backyard shacks do those people also share the 6000 litres per month with you?

Yes	1
No	2

51. What arrangement with backyard shacks do you have for sharing the 6000 litres?

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52. And what arrangement do you have with people staying in the backyard shacks when you buy and use prepaid water?

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53. Do you know about the indigent system for poor people?

Yes	1
No	2

54. If you are registered as an indigent do you get more free water, above the 6000 litres?

Yes	1
No	2

55. If yes, how much extra water do you get?

2000 litres	1
3000 litres	2
4000 litres	3
5000 litres	4
6000 litres	5

56. How do you feel about the indigent system?

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57. If you don't have money but you are desperate for water where do you get it from?

Neighbours	1
Friends	2
Relatives	3
Schools	4
Churches	5
Other (specify)	6

58. Have you ever been without water after using up the free 6000 litres?

Yes	1

No	2

59. If sometimes you go without water what is the longest period you have been without it?

1-2 days	1
2-3 days	2
3-4 days	3
4-5 days	4
More than 5 days	5

60. How often has this happened?

Once a month	1
Twice a month	2
Thrice a month	3
More often	4
Not sure	5

61. Did you pay the flat rate under the old system, before the Gcin'amanzi project started?

Yes	1
No	2
Sometimes	3
Seldom	4

62. If you are not happy with the new prepaid water system what do you think should be done to improve or change it?

Get rid of the prepaid meters	1
Replace it with conventional meters and pay at the end of the month	2
Go back to the flat rate system	3
Leave the meters but increase the free basic water amount	4
Don't want any meters	5
Don't know	7
Other (specify)	8

63. If you had arrears on your water account how much was it by the time the Operation
Gcin'amanzi project started?

R1000	1
R2000 – R3000	2
R3000 – R4000	3
R4000 – R5000	4
R5000 - R6000	5
R6000 - R7000	6
R7000 - R8000	7
R8000 - R9 000	8

R10 000 and more	9

64. Did Johannesburg Water scrap all the arrears, as they promised if people signed up for prepaid
meters.

Yes	1
No	2

65. If not, how much do you still owe?

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66. If you were you not paying your water account under the flat rate system, state why.

No money: unemployed	1
Dissatisfied with services	2
Problems with billing	3
Refuse to pay without good reason	4
Other (specify)	5

Household Income

67. What is the total monthly household income?

Up to R500	1
R 500 - R 1000	2
R 1000 – R 2000	3
R 2000 – R 3000	4
R 3000 – R 4000	5
R 4000 – R 5000	6
R 5000 Plus	7
Refused to answer	8
Don’t know	9

Address of Respondent:

Signed: ---

Date: ---

Time Completed: ---