Review Paper prepared for: **dplg**
Local Government and Provincial Policy Review: Services Input Paper

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15 October 2007

1. Introduction

This paper seeks to provide a review of the policy context, existing practice and future/alternative directions of service delivery within the wider debates of promoting viable, integrated, sustainable human settlements. Given that sector reports are being provided on each of the basic services by PDG as part of this review process, the paper seeks to provide a complement to that work. As a result, the main thrust of the paper is to explore the relationship between rolling out basic municipal services in a context of widespread poverty and economic exclusion and the policy issues that this unique historical situation presents.

The paper is organised to allow the reader to think about the relationship between the developmental outcomes that is being pursued by local government and the everyday service delivery functions that are performed in order to establish whether we are on the right track or not. Echoing the central thrust of the input paper on sustainable human settlements, the premise of the paper is that we are not on the right track and need to seriously rethink the parameters within which basic service delivery is being pursued. Given this far reaching assertion, the bulk of this paper is focussed on clarifying the argument that leads us to this conclusion with the knowledge that the specific financial, institutional and other practical evidence of dysfunction is readily available in the sector reports and other papers informing this process. Thus, the first section of the paper sets out a policy perspective within which the roles of basic services are assessed. The second part summarises the findings of the sector papers to illustrate the extent of progress in dealing with basic service backlogs and the unanticipated problems that emerged alongside these achievements. The third section deals with the critical issues that arise if one wants to shift course in the future. A range of issues are highlighted but not fully developed. It is assumed that if the central argument of this paper is accepted, that further research work will have to be undertaken to fully address the issues profiled.

2. A Policy Perspective on Developmental Settlement Outcomes

The basic services (water and sanitation, waste, energy) under consideration in this paper are part of the core engineering services that municipalities specialise in. Using a different register, they can also be defined as pivotal sectoral services that contribute to the realisation of sustainable human settlements; a policy idea that implies multi-sectoral coordination, alignment and integration. Table 1 below summarises key sectoral, multi-sectoral, spatial and political institutional services and systems that come into play in the pursuit of sustainable human settlements and inclusive local economies. This tabular summary identifies household services as essentially sectoral in nature but key ingredients for policy frameworks that seek to articulate various

sectoral services towards more holistic development outcomes such as environmental sustainability, resilient local economies and social development (i.e. multi-sectoral frameworks in column 2 of the table). The bottom-end of the table seeks to represent that as one moves from the left of the table listing sectoral priorities, to more integrated issues, the institutional terrain becomes more complex and requires less of a traditional hierarchical system of command-and-control but more of a network-based approach to local development. (In reality it is actually always a finely calibrated combination of hierarchies and networks.[1]) This immediately raises the issue of municipal institutional capacity, which is by and large still in a formative stage outside of the A and B1 municipalities.[2]

Table 1: Dimensions of Municipal Integration Policies

Sectoral	Multi-Sectoral	Spatial	Political-Institutional
• Housing & land • Infrastructure: water, sanitation, waste & electricity • Health • Education • Transport & roads • Community services: libraries, parks, open spaces, recreational & civic spaces • Economic development.	• Local Agenda 21 (environmental) • Local economic development • Integrated human settlements • HIV/AIDS • Service delivery strategy • Spatial planning framework • Social development planning framework • Poverty reduction strategy • (Area-based plans).	• Compact city model (sustainability focus) • Planning and spatial design models on: nodes, corridors, urban edges and open-space systems • Strategic planning: linking scales of land-use planning with sectoral planning and using dialogical processes.	• Integrated development plan (IDP) • City Development strategy (CDS) • Medium-term income and expenditure frameworks • Municipal partnership framework • Human resource development strategy • Work process re-engineering (including IT).
'Traditional' 'Simple' Weberian	←		'Dynamic' 'Complex' Network & Matrix

(Note: These categories are not iron-clad. For instance, IDP, CDS and spatial plans could be regarded as multi-sectoral plans or frameworks.)

(Source: Pieterse 2004)

Returning to the White Paper on Local Government (WPLG), it is obvious that the key objects of developmental local government (DLG) can be boiled down to municipal governance that is pro-poverty reduction, growth oriented, spatially integrative, environmentally sustainable and committed to processes that builds participative citizenship. Development literature suggests that these higher order development aims can only be achieved through multi-sectoral policy frameworks that adopt and pursue multi-dimensional objectives. It is for this reason that we locate the strategic issues surrounding basic services in this broader framework. As soon as one does this, one observation becomes immediately apparent: the rollout of basic household services has

[1] See: Schmidt, D. (2007, in press). "Institutional models for transformation', in van Donk, M., Swilling, M., Pieterse, E. and Parnell, S. (eds). *Consolidating Developmental Local Government: The South African Experience*. Cape Town: UCT Press.

[2] Municipalities are categorised as: A: Metros, 6 in total; B1: Secondary cities: the 21 local municipalities with the largest budgets; B2: Local municipalities with a large town as core (29 in total); B3: Local municipalities with small towns, with relatively small population and significant proportion of urban population but with no large town as core (111 in total); B4: Local municipalities which are mainly rural with communal tenure and with, at most, one or two small towns in their area (70 in total); C1: District municipalities which are not water services providers (22 in total); C2: District municipalities which are water services providers (25 in total).

had significant impact on poverty reduction but very little on the other higher order objects of DLG. This is cause for deep concern. It is important that we understand why it is that basic service rollouts have had such a one-dimensional, even if very important, outcomes thus far.

But before we delve into the drivers of anti-DLG outcomes, it is important to stress the unique challenges that South Africa faces. South Africa is one of the few middle-income countries with unemployment rates above 30% (and closer to 40% if one adopts the expanded definition), marked by acute income inequality, home to a substantial and increasingly wealthy middle-class, and a constitutional democracy that seeks to honour socio-economic rights. This sets up a contradictory and conflictual dynamic from governance and policy points of view. The economy is brittle and extremely exposed to global pressures and dynamics; factors that favour a cautious approach to economic management and fiscal policy. Private capital has a lot of influence in shaping the parameters of macro policy because they are the custodians of our 'vulnerable' (formal) economy that has to support the state (through the tax system) and by extension a very large economically excluded group. As a consequence, in dominant policy discourses it is virtually impossible to contemplate robust market interventions and reforms with regard to technological choices, land markets and minimising negative environmental and social externalities. Furthermore, the concerted public policies on broad-based black economic empowerment (which some feel are still too tame) also make it difficult for the state to be seen as overly interventionist in other domains of regulating capital accumulation.

We raise this because the obstacles to the pursuit of more equitable and sustainable development outcomes can largely be traced back to the logic and functioning of the economic system that is grafted onto a historical situation of systematic dispossession and exclusion of the majority black population. Thus, the best hope for transformative reform is to continue a drive towards universal access to basic services as a basic right (largely to be funded by state revenue), promote sustainable development imperatives (including inclusive economic growth), and against these measures also push business-led initiatives to transform production and exchange value-chains to internalise environmental externalities[3] and respect human rights in all aspects of production and consumption.[4] The last decade has witnessed vital shifts in these business-led domains, which should be borne in mind as we explore more closely the obstacles to DLG outcomes.

Figure 1 attempt to visually represent a very long and complicated argument about the obstacles to DLG outcomes at a local level. On the left-hand side, it is proposed that four structural factors shape the reproduction of local territories in either urban or rural settings:

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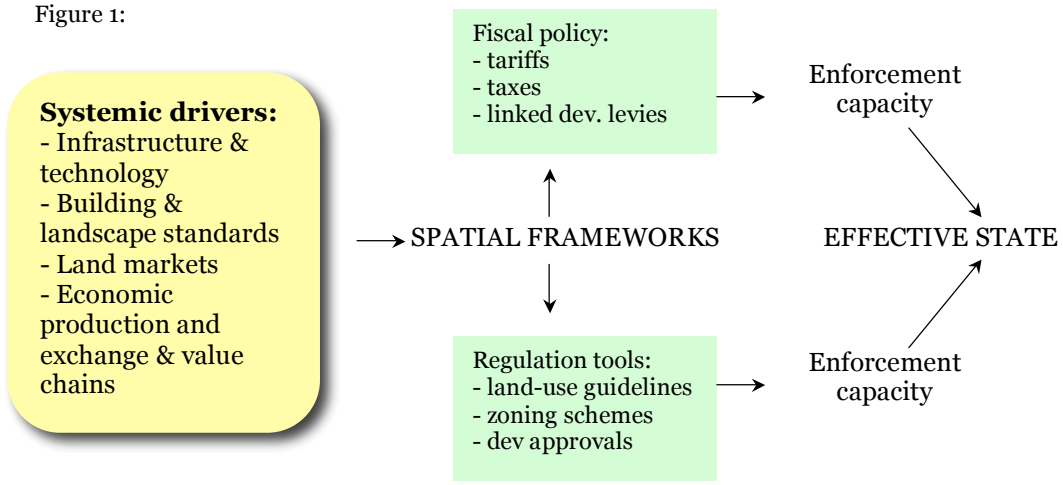
[3] In environmental economics the concept 'externality' means: "that some effects of an activity are not taken into account in its price. For instance, pollution in excess of the socially 'optimal' level may occur if the prices a producer pays do not include the impacts (costs) experienced by those adversely affected." Environmental_economics. (n.d.). *Wikipedia, the free encyclopedia*. Retrieved October 15, 2007, from Reference.com website: http://www.reference.com/browse/wiki/Environmental_economics

[4] See: Porritt, J. (2005). *Capitalism as if the World Matters*. London: Earthscan.

1. Infrastructures and underlying technological choices about the form, function, sometimes location, and cost of the infrastructure;
2. Regulatory standards about what can and cannot be built from visual, heritage, architectural, environmental health, ecological and social perspectives;
3. The nature and practical functioning of land markets which in turn profoundly shape settlement patterns and the accrual of economic value to particular groups in the territory; and
4. Crucially, economic production processes, especially agricultural and industrial, and the value chains that they form a part of or determine.

The National Sustainable Development Framework makes it clear that the current choices we have made with regard to each of these areas do not contribute in any substantial fashion of the protection of our ecological resource base or social integration or a more inclusive economy. The question then arises, who has the power to change these structural factors?

Figure 1:



The power for transformation lies dispersed in society. Of course, as indicated before, the business sector that drives and benefits from the economy has a lot of power to shape (via the elusive mechanism called 'market preference') what is considered possible or not in terms of market reform and regulation. For example, due to the nature of the real estate sector/market it is presently unthinkable that municipalities can expropriate vacant strips of land used as buffer zones in terms of apartheid spatial planning to settle the urban poor to create more rational and economically integrated residential/economic geographies. The effect of such reforms on middle class and business property values are seen as potentially disastrous and by extension detrimental to the tax base of the municipality. However, in theory local governments have the power and authority to use its regulatory muscle through various forms of land taxation and land-use regulation to substantially influence and direct particularly land markets; a power that is seldom deployed because the potential risk of causing property devaluations. Social actors that represent the poor or middle-classes also hold some power to assert their belief in the need for market interventions to advance social integration but tend to regard such struggles as unviable or 'pie-in-the-sky' because the

dominant social consensus seem to be that radical interventions in land markets are simply beyond the realm of the possible. However, in a country such as South Africa where land-use has been so central to the various systems of control and segregation, it is not possible to achieve DLG territorial outcomes without intervening in the shape and functioning of land markets. As Figure 1 above suggests, this will require a clear perspective or policy position on the part of local government on how best the systemic drivers of territorial development can be engaged with and shifted, which in turn finds expression in the spatial vision and development framework for the area. The key to success is to use the spatial development perspective (ideally, a spatial mirror image of the core IDP vision and argument) to shape the two most powerful governance instruments of local government: fiscal policy (taxes, tariffs and development levies) and land-use policy (zoning and land-use rights). But this not enough, local government also needs institutional capacity to ensure the development of such policies up to the required level, and more importantly, to ensure compliance to the regulatory frameworks.

Before we conclude this section, let us briefly rehearse why we took this conceptual detour before we get into the nuts and bolts of municipal household services. The last thirteen years have taught us that it is crucial to get the delivery of basic services right in order to arrest and potentially reverse unacceptably high levels of poverty in our society. However, simply focussing doggedly on delivering basic services to the poor is insufficient to solve the larger developmental crisis – systemic uneven development coupled to environmental degradation – at the local level. Delivering effectively basic services is a good foundation for effective DLG but requires much more. This takes one into the terrain of effectively regulating the inputs into local economies (infrastructure and the built environment) that drive local development; i.e. regulation to achieve more holistic, integrated and sustainable development outcomes even if it means from time to time bucking dominant market expectations. In summary, municipalities must come to an explicit view on how they intend to intervene in the nature and shape of local economic markets, production systems and value chains in order to get their settlements on to a more sustainable footing.

3. Status of key basic services[5]

In light of the importance of persisting with the delivery of basic services to ensure universal coverage, we will now summarise the findings of other papers in this review process on four key household services: water, sanitation, waste and electricity. In each case we offer a summary of the key legislation, progress on addressing the backlogs, and critical institutional issues.

3.1 Water

The key regulatory policies that underpin this service are: the Water Supply and Sanitation Policy White Paper (1994); Water Services Act (1997); National Water Act (1998); and the Strategic Framework for Water Services (2003).

[5] The findings from this section are mainly drawn from the PDG Sector Reports prepared for the dplg local government and provincial policy review. The research support of Firoz Khan is acknowledged in sourcing and summarising the data and information.

Key Achievements and Challenges:

Nationally, the incidence of households without access to piped water has decreased from 20.2% in 1996 to 15% in 2001. More recent modelling which tracks provincial progress from 2001 to 2004 as by municipality type/category and household percentages reveals further progress but the Eastern Cape and Limpopo still performing badly. A profile of shortfalls by municipal category, which is more telling, shows the unevenness in capacities.

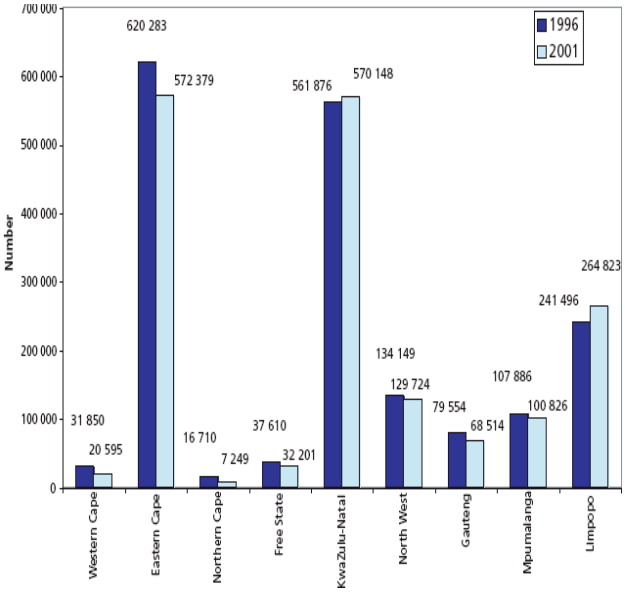


Fig 2: Number of households per province without access to piped water 96-2001

If water backlogs are to be met in 2008, the challenge by municipal category are summarised in Table 2.

Fig 3

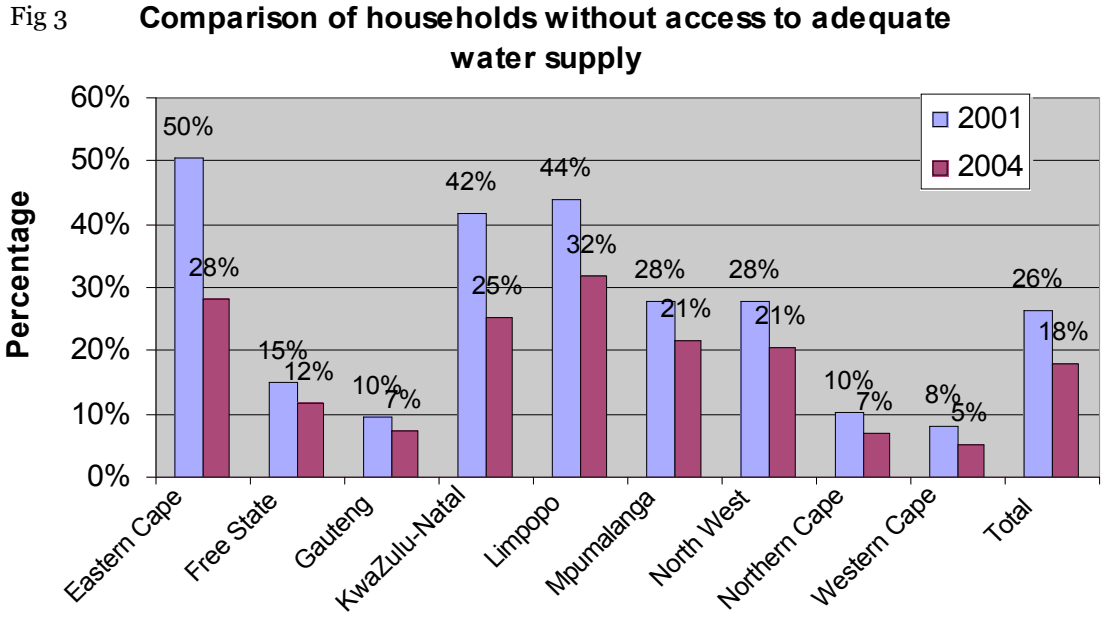


Fig 4

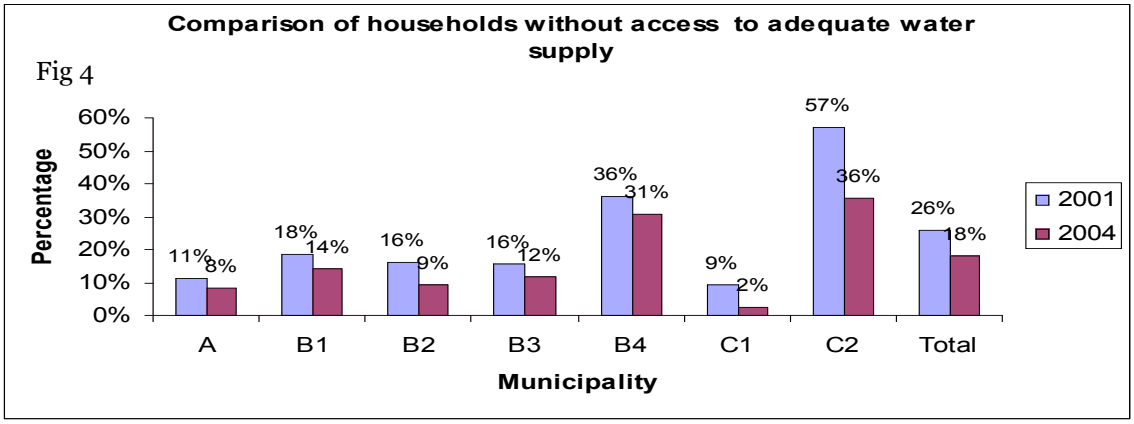


Table 2:

	2004 Backlog	Required reduction pa	Actual reduction pa
A	8.17	2.04	0.98
B1	14.26	3.57	1.38
B2	9.38	2.35	2.23
B3	11.61	2.90	1.40
B4	30.58	7.65	1.77
C2	35.63	8.90	7.12
National	18.00	4.50	2.58

These high level indicators demonstrate that the singular focus on extending basic services such as access to water has indeed been met with impressive achievements. However, when we locate the pace of extension of services against the targets set by national government, it is clear that it seems improbable that the targets will be met. This speaks to questions of institutional capacity, financial resources and coping with the maintenance stresses associated with the new service extensions already made.

Institutional Dimensions

Both municipal water supplies and sanitation services are divided into wholesale or bulk (e.g. dams, treatment works and major service reservoirs) and retail. Most towns arrange their own bulk water services, including dams where necessary, but where there are limited resources and multiple users, it is common for a Water Board to be responsible for the wholesale supply of potable water. In rural areas, extensive schemes serving several communities are the norm. The Water Services Act (Act No. 108 of 1997) formally separates the roles of the Water Services Authority (WSA) (the politically accountable council) and the Water Services Provider (WSP). The latter can be in the form of a number of different entities, including municipal department, municipal entity (wholly-owned utility), Water Board, neighbouring municipality, NGO, CBO or a private sector company. A small number of private sector contracts exist in urban water services, including two 30-year concessions and several management contracts.

Recent determinations in terms of the Municipal Structures Act allocated the powers and functions of the WSA to most local municipalities (category B), but where local capacity was deemed to be inadequate, the authority function was allocated to the district municipality (category C). Of the 284 municipalities (metros, Bs and Cs), 170 are currently functioning as WSAs. It is still too soon to judge how successful this allocation of responsibilities has been. It was a difficult exercise which might have generated some anomalies. Some determinations have been challenged and are currently under review. DWAF is in the process of transferring to municipalities schemes that it inherited from homeland governments in 1994, plus those that it has constructed since 1994. A total of 317 water supply schemes are to be transferred to 55 WSAs. Thirty percent of schemes had been transferred by April 2005 (DWAF, 2005a).

There are also nearly 1 000 rudimentary supplies (e.g. spring protection, boreholes) to be transferred. DWAF, SALGA, DPLG and National Treasury have agreed upon a Joint Transfer Policy to guide implementation. However, the process has been slowed by municipalities' lack of capacity to manage the schemes, as well as reluctance to take over schemes that may have a variety of technical, administrative and financial problems.

A 2004 SALGA document records the following problems with this delivery model:

Water services authorities (WSAs) are faced with numerous challenges, including:

- taking transfer of Department of Water Affairs and Forestry schemes and associated staff; implementing the division of powers and functions;
- undertaking section 78 assessments to determine the most appropriate water services providers; participating and giving direction to institutional reform processes;
- water services development planning;
- implementing free basic water and sanitation policies;
- determining tariff structures and allocation of equitable share;
- ring-fencing the water services provision function where the municipality is fulfilling this function itself;
- planning and implementing water and sanitation capital projects;
- addressing water resource issues; and so on.

Within this broader context water services authorities are also charged with the responsibility of achieving the service delivery targets for water and sanitation as part of accelerating service provision. Many municipalities have limited or practically no WSA capacity. Whilst the Department of Water Affairs and Forestry is responsible for providing support to WSAs, the Department does not have the right type of capacity to provide this support. Municipalities therefore tend to rely on consultants to assist them to address their WSA functions and frequently the municipalities are not able to adequately absorb the consulting support due to insufficient internal capacity. More creative approaches are needed to ensure capacity enhancement if WSAs are to accelerate water and sanitation service provision.

Moreover, the Department of Water Affairs and Forestry capacity building and support programmes have to date not targeted water services *provision* capacity, however this capacity is critical if services are to be accelerated and improved. Although national government proposes to send 'high calibre' teams to support local government, the type of expertise provided from both national and provincial government tends not to be expertise concerning the efficient and effective *operation of a water services business*. The procedures that local government is required to follow in order to access external capacity for the provision of municipal services are so cumbersome that municipalities are tending to opt for internal solutions. Consequently 'partnerships for delivery' are not being adequately explored, if at all. There is an urgent need to develop support programmes for municipalities as water services providers as well as to communicate the benefits that can be achieved through creative partnerships that can address existing delivery constraints.

3.2 Sanitation

The key regulatory policies that underpin this service are: the Water Supply and Sanitation Policy White Paper (1994); and the National Sanitation Policy White Paper (1996).

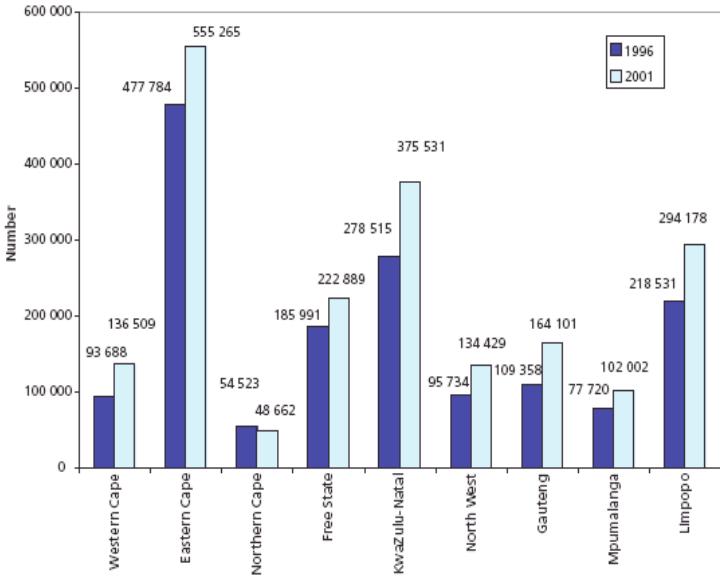


Fig 5: Number of households per province without access to sanitation 96-2001

Key Achievements and Challenges

Nationally, the percentage of households without access to sanitation decreased from 17.5% in 1996 to 17.3% in 2001, which must be considered against a considerable growth in poor households (See fig 5). More recent modelling which tracks provincial progress from 2001 to 2004 as by municipality type/category and household percentages reveals further progress but records considerable backlogs in the Eastern Cape, Limpopo and Mpumalanga (see figure 6). A profile of shortfalls by municipal type/category shows the unevenness in capacities with some correlation between the lagging provinces and the concentration of municipality type/category (see figure 7). If sanitation backlogs are to be met by the 2010 target, the challenge is as summarised by municipal type category in table 3.

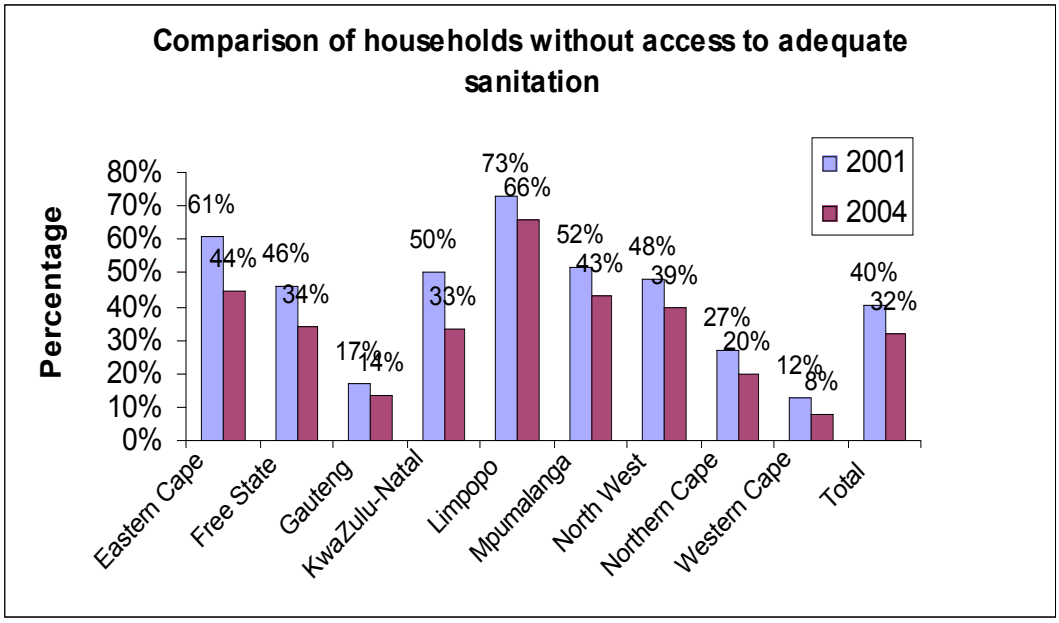


Fig 6

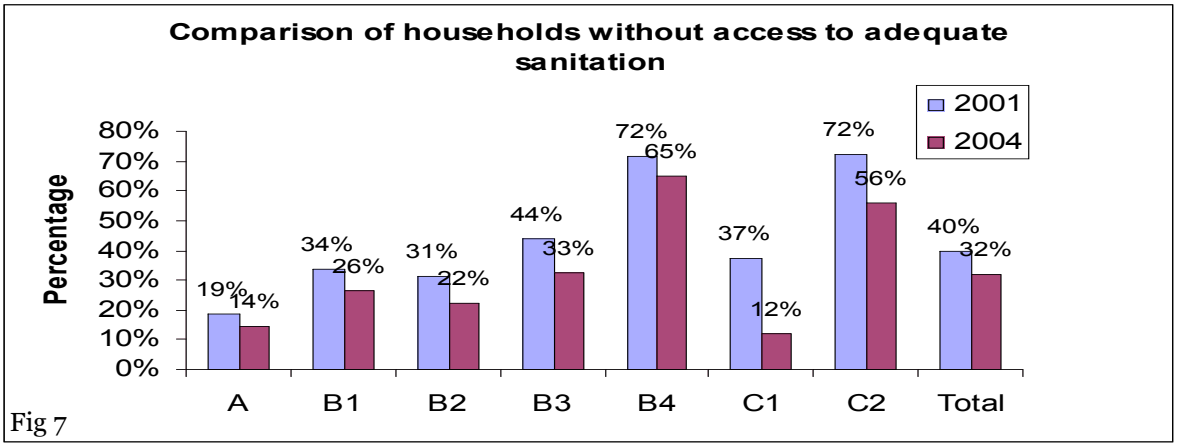


Fig 7

Table 3	*2004 Backlog*	*Required reduction pa*	*Actual reduction pa*
A	14.7	2.36	1.47
B1	26.36	4.39	2.49
B2	22.28	3.71	2.99
B3	32.61	5.44	3.84
B4	65.21	10.87	2.19
C2	56.08	9.3	5.28
National	31.65	5.28	2.7

The conclusion to draw here is similar to the earlier one with regard to water; impressive commitment to rolling out the service but with the concomitant growth in poor households and the rising costs of service maintenance serious long-term viability issues arise. Targets will clearly not be realised but such a focus may obscure more important challenges in terms of DLG outcomes.

Institutional Dimensions

The White Paper on Basic Household Sanitation requires alignment with the Strategic Framework for Water Services and an implementation strategy for the delivery of basic sanitation needs to be developed. Concerns relating to meeting the sanitation targets are recorded by SALGA as follows:

- MIG allocations together with other funds that municipalities can generate internally for sanitation infrastructure are regarded as insufficient to address the sanitation targets. The financial feasibility of the sanitation targets needs to be assessed and addressed where necessary.

- Whilst the primary focus since 1994 has been on the provision of basic sanitation for rural areas, there is also inadequate sanitation in at least 26 percent of urban households. Accelerating sanitation services is a priority in

both rural and urban areas to ensure that basic health, personal safety and environmental integrity. Current national sanitation policy does not distinguish between sanitation technologies that are appropriate in high-density settlements on the one hand and low-density settlements on the other hand. Whilst the subsidies are sufficient for some technologies, they are not sufficient for all technologies, in particular those technologies that are appropriate for high-density settlements. There is a need to move away from a fixed subsidy approach to an approach which caters for different subsidies for different technologies so that municipalities can achieve appropriate technologies. The acceleration of the delivery of sanitation services cannot be achieved without sufficient grants for both the capital and operating costs of sanitation infrastructure. Implementation strategies for accelerating sanitation delivery need to also address the complexities of servicing areas between urban centres and rural settlements. These areas are often densely populated and because they are close to settlements with flush toilets, there is a high level of expectation for flush toilets. However, these areas tend to lack household connections and income levels tend to be low. The White Paper on Basic Household Sanitation offers municipalities limited guidance on delivering affordable and sustainable basic sanitation services to households with low incomes in more densely settled areas. Although a one-size-fits-all approach may facilitate rapid planning and implementation, it is not appropriate and will result in unsustainable services. Capital plans and operating budgets as required by the Division of Revenue Act for the use of MIG funds need to be calculated according to the most appropriate technology for the areas to be served. While current subsidies from national government are inadequate for some technologies, municipalities are faced with the challenge of covering both capital and operating budget shortfalls. This is a major blockage in terms of accelerating sanitation provision. It needs to be urgently addressed within national sanitation policy and within the MIG and equitable share allocations to municipalities providing sanitation services.

- A further challenge to accelerating sanitation provision is that many difficult issues related to the operation and maintenance of on-site toilets have not been resolved. For example, what happens when a VIP is full, who pays for desludging where this is feasible, and how should this cost be recovered, what happens where pit desludging is not feasible, or where the pit might collapse if it is desludged; are municipalities responsible for replacing a toilet once the pit is full, and if not, how should municipalities plan ahead to ensure that households have an ongoing sanitation service? What are the alternatives that municipalities should be considering, for example urinary diversion toilets? Current approaches tend to focus on providing a permanent top-structure, without resolving how to empty the pit. In many areas, desludging is not feasible (for reasons of access, cost, or health and safety) so these toilets are likely to be abandoned when the pit is full. Urgent attention must be given to using different materials or designs, which allow top-structures to be moved where pit desludging is not a realistic option.

In his State of the Nation address on 21 May 2004, President Mbeki said that by the end of the 2004/05 financial year all schools should have access to clean water and sanitation. Many rural schools have no toilets, and that do have toilets tend to have too few toilets, or toilets that are unsafe. This impacts on the quality of the learning environment and poses health problems for the broader community. Sanitation in schools is the responsibility of the provincial Departments of Education and not the responsibility of local government. Given the extent of the schools infrastructure

backlog the Departments of Education are not prioritising water and sanitation ahead of other infrastructural needs. Sanitation in schools is addressed when a school is built or rehabilitated. This approach will clearly not facilitate the acceleration of school sanitation. A growing number of municipalities are keen to access external funds to address school sanitation in the context of a broader community sanitation programme. However it is unclear where these municipalities should access the funding required for school sanitation. It is also unclear how municipalities should liaise and co-ordinate with education authorities in terms of prioritizing, planning and providing sanitation services. If all schools are to have access to clean water and sanitation by the end of the 2004/05 financial year, municipalities and the provincial education departments need to urgently develop strategies to co-operate and plan for the delivery of school sanitation.

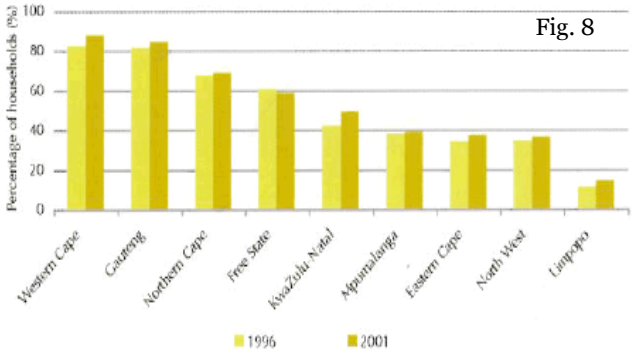
3.3 Waste and Waste Management

The primary policy frameworks that underpin these services are: the Environmental Management Policy (1998); White Paper on Integrated Pollution and Waste Management (1998); National Water Act (1998); and the National Environmental Management Act (1998).

Key Achievements and Challenges

Solid waste includes all residential, mining and industrial waste. As of 2005, the solid waste system managed the disposal of 20 Mt (Mt=1 million metric tonnes or 1 billion kg) of municipal solid waste (MSW), 450 Mt of mining related wastes and 30 Mt of power station ashes. In some cities, the quantity of solid waste from residential sources is rising above the daily average of 2 kg/person, which is 3-4 times the quantity disposed of by the average household in most European cities.

Fig. 8



People who live in informal settlements generate on average 0,16kg per day. MSW quantities are growing faster than the economy in many cities – for example, at 5% per annum in Cape Town. This highlights the need to minimise waste and increase recycling – the 'reduce, re-use and recycle' approach that is central to our integrated waste management policy. The growing minerals and coal-based energy sector immediately translates into increased industrial wastes with limited productive recycling and re-use. This is an issue that needs to be considered in local-level Integrated Development Plans.

Local authorities are mandated to collect, handle and disposal of domestic waste from all households, and to ensure an equitable service to their communities. Gauteng, Western Cape, and KwaZulu-Natal service the greatest number of households, whilst the Western Cape, Gauteng and the Northern Cape service the greatest proportion of households in their provinces. Municipal waste collection has improved countrywide by only 2.7% between 1996 and 2001, and almost 50% of the population is still not receiving a *regular waste collection service* (see provincial profile in figure 8). Figures as per 2001 pertaining to waste management services per municipal type/category reveal gross disparities (see figure 9).

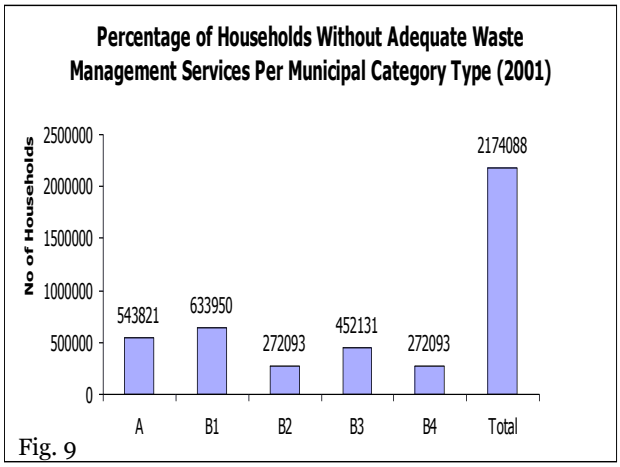
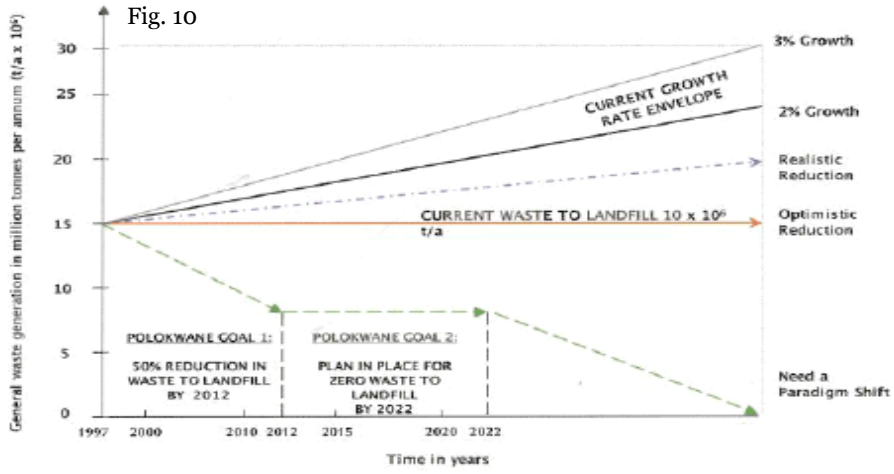


Fig. 9

Although many other countries have for many years now moved away from disposal to landfill as the primary means of solid waste management, the large bulk of MSW in the early 1990s was disposed of in 4000 disposal sites spread out across the country. Of these, only 200 met minimum environmental standards. The current situation is not much different. There are as many as 15 000 unrecorded communal sites in rural areas. More than 300 incineration facilities were operating in 1997, many of which failed to comply with the required emission standards for human health and environmental protection. The Graph in figure 10 below underscores the importance of the need to curb the growth in landfill sites.

Fig. 10



Local authorities are meant to develop Integrated Waste Management Plans (IMWP) to address current shortfalls in service delivery and to improve on environmental compliance. By 2004, 50% of municipal authorities, 31% of district municipalities and 27.5% of local municipalities had completed an IMWP. Although this represents only 28.7% of all municipalities, another 54.5% are in the process of formulating their waste plans.

Institutional Environment/Model

In September 2001, the National Waste Summit gave rise to the Polokwane Declaration, which highlighted the need to reduce, re-use of recycle waste so as to minimise health and environmental risks/effects. The main goal of the Declaration is to stabilise current waste generation, reduce waste disposal by 50% by 2012, and to attain zero waste disposal by 2022. The Declaration represents a paradigm shift in the way that waste delivery is perceived – the emphasis is globally and here is on waste minimisation and reduction at source with the ultimate goal being a National sustainable waste service delivery program.

One of the primary obstacles to achieving these goals is that the present level of waste service delivery and capacity at a local municipal level is not known. The PDG (August 2007) report attempts to answer this by providing an assessment of the current level of service delivery and capacity with regards to solid waste management. With a view to plugging this gap, the report focuses on the continuum of the capacity of the Local Municipalities, institutional arrangements with respect to waste services management, staffing, business structure and integrated waste management planning is provided.

Waste management planning in the six Metros and secondary cities is primarily a Local Municipality function whereas the smaller, predominantly rural towns share the function with the District Municipality. In many instances the waste services function is not accounted for in the small rural towns. As one moves from the Metros to the more rural towns the staffing structure is skewed towards labourers with very little middle and top management, indicating that the type of service provided shifts from a well run service in the Metros to a basically non-existent service in the small rural areas. In most cases the local municipality carries out disposal, collection and recycling, but there is a shift towards outsourcing the recycling function to small community contactors.

It is noteworthy that with the drive towards waste minimisation 87% of municipalities do not have the capacity or infrastructure to pursue waste minimisation as opposed to the core functions. In excess of 80% of the municipalities are initiating recycling activities in some form or another but these projects are struggling to gain momentum due to lack of capacity. In the Metros a waste collection service is typically provided to almost all urban households including informal settlements. However, rural areas within those metros still appear to be poorly serviced. Most of the smaller rural towns are also poorly serviced indicating a discrepancy in services delivered in urban and rural areas. The Metros and secondary cities have the highest percentage of households provided with a weekly waste collection however, together they account for 54 % of the National backlog in waste services.

The obstacles preventing local municipalities from providing a sustainable waste service are numerous. These range from budget restrictions to illegal dumping, service backlogs, lack of effective bylaws and insufficient skills development. In order to provide a sustainable waste service that is based on waste minimisation principles and to address the obstacles being faced by local municipalities a host of interventions can be implemented. These include institutional arrangements, financial, technical and service delivery.

In addition to these obstacles, risks that need to be urgently addressed include the limited number of landfill sites and the lack of planning to establish new ones by the time the old ones reach capacity; the leaching of toxic residues into underground water resources that often happens around landfill sites; and landfill sites that do not have permits or do not conform to legal requirements. Change processes will require the cooperation of the mining sector given that cleaner production approaches require investments; the restructuring of the recycling sector which is dominated by a handful of large recycling businesses that restrict opportunities for the inclusion of (B)BEE operators, community-based non-profit initiatives and informal sector waste pickers; improved incentive frameworks; and a more appropriate legislature to ensure a successful transition away from the current dispose-and-forget approach.

3.4 Electricity

The two key pieces of legislation are: White Paper on Energy Policy (1998); Renewable Energy Policy White Paper (2004).

Key Achievements and Challenges:

There has over the years been considerable growth recorded in the extension of electricity to a diversity of households. Nationally, households not using electricity as an energy source for lighting decreased from 42.3% in 1996 to 29.6% in 2001. More recent modelling which tracks progress from 2001 to 2004 amplifies the not insignificant progress over a three-year period (see figure 11). There are however not insignificant imbalances in access across the municipal types/categories not unrelated to supply and delivery modalities (see figure 12).

If the electricity backlogs have to be met by 2011, the table 4 indicates the magnitude of the challenge per municipality type/category.

Fig. 11 **Comparison of households without access to adequate electricty supply**

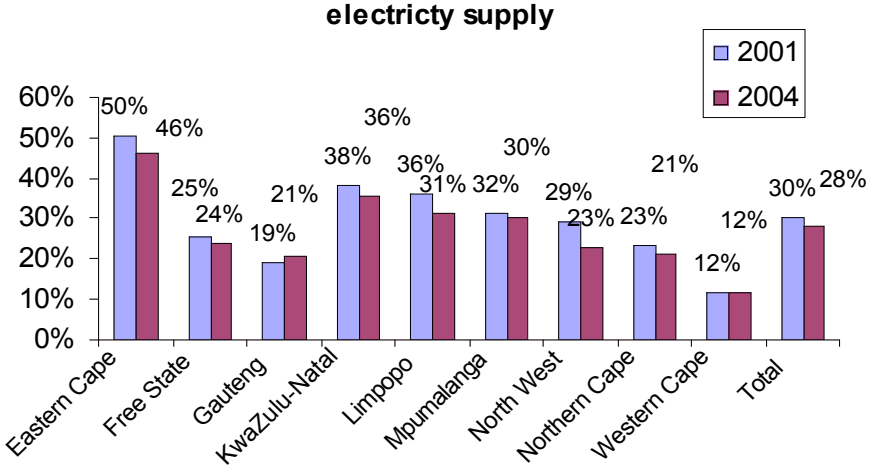


Fig. 12

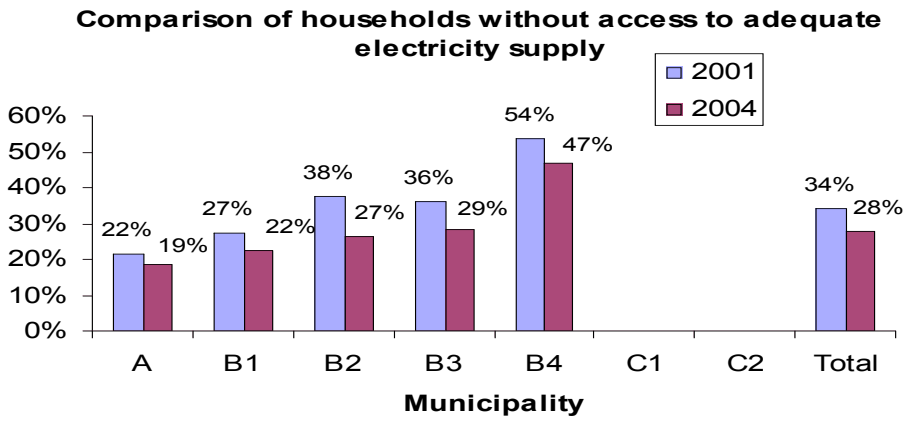


Table 4

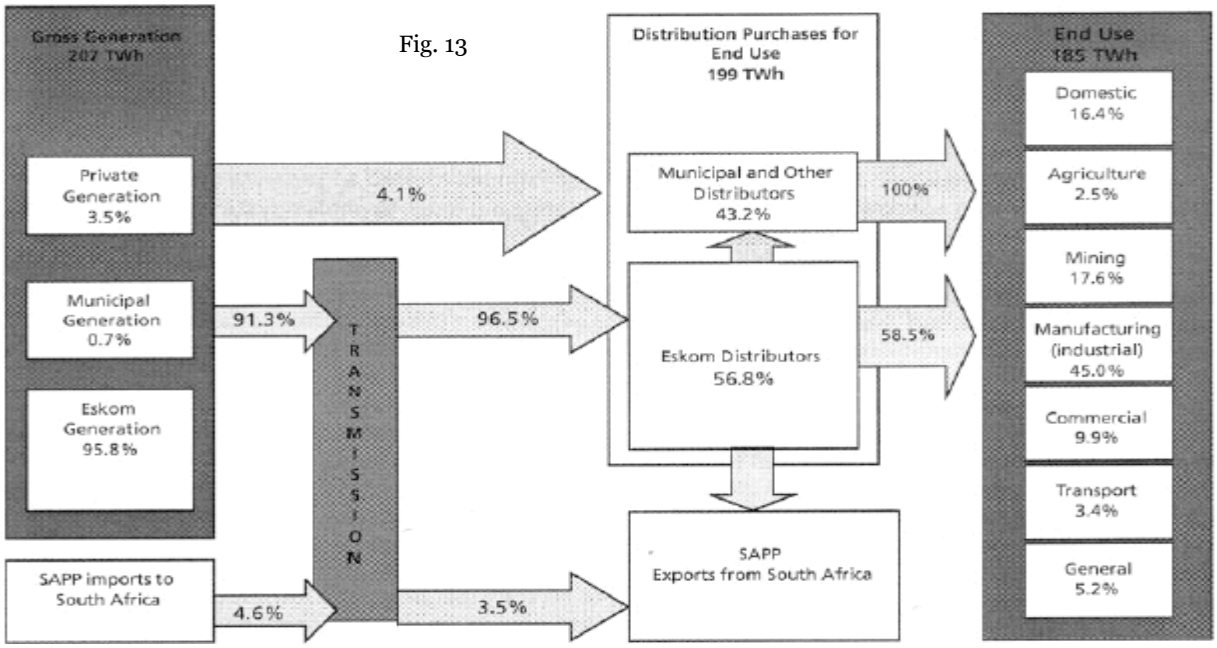
	2004 Backlog	*Required reduction pa*	*Actual reduction pa*
A	18.74	2.68	0.98
B1	22.23	3.18	1.66
B2	26.54	3.79	3.71
B3	28.52	4.07	2.57
B4	48.82	6.97	2.36
National	28.00	4.00	1.87

Institutional Model/Environment

A schematic representation of the electricity system is given in Figure 13. It indicates the three main components of the system: generation, high voltage transmission and distribution to end-consumers.[6]

[6] See page 74 of DBSA Infrastructure Barometer Report for figures

Fig. 13



Eskom is responsible for most (96 percent) of all electricity generated, all of its transmission and about half of its distribution in South Africa. Eskom's reserve generating capacity is nearing minimum safe proportions and three mothballed power stations are being recommissioned. Approximately 3 500 MW of generation capacity will be recovered through de-mothballing. In addition, government in 2004 advertised for expressions of interest from independent power producers (IPP) for two 500 MW open-cycle gas power stations for peak load power production.

In terms of Part B of Schedule 4 of the Constitution of the Republic of South Africa, local governments are responsible for "electricity and gas reticulation" within their boundaries. Electricity reticulation refers to the distribution of about 43 percent of national electricity use to mainly smaller consumers. In 2002, there were 188 licensed distributors which were mainly owned and operated by the constituent local governments. The distribution of electricity by the large number of relatively small local government distributors has been extensively debated since the early 1980s. The lack of scale and specialisation has been seen as obstacles to efficiency and effectiveness. Since 1997, Cabinet has made a number of decisions designed to restructure the distribution sector to form a small number of regional distribution systems. Regional Electricity Distributors (RED), registered companies in terms of the Companies Act, would be formed and would absorb the distribution functions of local governments and of Eskom. A national restructuring company, EDI Holdings, was created in 2003 with the task of managing the restructuring process, which has since then run into serious problems. Progress has been slow and many problems have had to be addressed, the main ones being the narrow interpretation of the constitutional requirement that only local governments may reticulate electricity within their boundaries, and the understandable fear by local governments of the consequences of the loss of the surplus income that they earn on electricity sales, and that they use to cross-subsidise some of

their other services. Further problems bedevilling the rapid roll out of electricity include affordability and the limits to cross-subsidisation, high capital expenditure and maintenance costs, community-service provider contestations around cost recovery and life-line quantum.

4. Critical issues for the future of basic services in terms of DLG

In this final section we explore the critical issues that arise if we want basic services to not only contribute to poverty reduction but also other dimensions of DLG. The WPLG took the following approach to the role of basic household infrastructure:

> "Local government is responsible for the provision of household infrastructure and services, an essential component of social and economic development. This includes services such as water, sanitation, local roads, stormwater drainage, refuse collection and electricity. Good basic services, apart from being a constitutional right, are essential to enable people to support family life, find employment, develop their skills or establish their own small businesses" (White Paper on Local Government, 1998)

As we intimated at the outset, this starting point of the WPLG on the social and economic significance of basic services remains valid. The role of basic services in advancing the higher order developmental objectives such as poverty reduction, economic growth, environmental sustainability and spatial integration are also important and relevant. In as far as the South African government has managed to drive a systematic programme of basic service delivery and extension, it is clear that an enormous amount has been achieved in a relatively short space of time and amidst profound institutional volatility as local government consolidated itself into a fully fledged non-racial and democratic system. It is clear that the rollout of basic services (water and sanitation, waste, electricity) have just about kept up with population growth reflected in a modest decline of the backlog as opposed to further growth of the backlog as we saw in the previous section. However, if one reflects on the four higher order aims of developmental local government, it is clear that the approach to basic service delivery has mainly had an impact in terms of poverty reduction or alleviation but not with regard to growth, spatial integration and environmental sustainability. This is cause for concern and requires a response.

With the benefit of hindsight, we would argue that one of most important assumptions we held in 1998 was that poverty was transient and a sustained infrastructure rollout programme would largely solve the problem. What we know today is that due to the structural drivers of the economy, the human capital crisis confronting the country (including the impact of HIV/AIDS), and the punitive global economic environment, extraordinary levels of unemployment will remain with us for at least the next two generations. Given the correlation between unemployment and income poverty, this suggests that the share of the population that will require access to free basic services will remain very large and difficult to service effectively in a context of limited fiscal resources and tight fiscal policy.

Moreover, the very process of connecting poor people to the basic services system creates new, often poorly understood, imperatives for local government in the infrastructure domain. Once infrastructure is laid out and services are provided a host of challenging municipal management issues arise with regard to operating costs, maintenance imperatives, household consumption and spill-over effects in the spatial dynamics of a locality and the broader space-economy territory it is embedded in. Specifically, what we mean to say here is that as services get provided in areas where new subsidized housing is provided or informal settlements, the spatial disconnect of the poor from mainstream economic nodes often gets reinforced due to the apartheid geography that persists.

In light of these pernicious dynamics, we identify four categories of challenges: fiscal, spatial, technological, institutional coordination and forward planning.[7]

Fiscal

- In essence, the balance between cost-recovery and redistribution has never been optimally defined, linked into a larger political-institutional problem, viz., mechanisms to negotiate such a balance remains absent, poorly defined or ad hoc. These factors play into the capability to deal with backlogs within designated time-frames, which in turn has a bearing on the legitimacy of municipalities. Thus, we think that the rise in service delivery related protests is not unconnected to a loss of legitimacy in the eyes of poor communities.
- Another critical aspect of the fiscal dimension of basic services is the question of service standards. The obvious issue is at what level basic service requirements are defined. The existing minimum levels of universal access to services are currently heavily contested by certain civil society interest groups and is in fact also before the High Court of the Witwatersrand. It is important that the modeling that underpins this work stands up to international norms and jurisprudence on socio-economic rights.
- More fundamentally, even in the existing situation, the full costs of services subsidies remain unknown which is particularly problematic since household service levels apply as a one-size-fits-all standard even though affordability and service demands may vary quite dramatically in different contexts. Furthermore, service codes and regulations should explicitly contribute to shared growth and sustainable development by ensuring affordability and appropriate technology.
- To improve the fiscal efficiency of service delivery expenditure it is crucial to align the equitable share, MIG and other infrastructure grants with the National Spatial Development Perspective. However, this is also premised on an acknowledgement that the NSDP must be extended and done at a finer grain of territorial analysis and complemented by fine-grained socio-economic profiles that reflect differential dimensions of poverty. This corrective would also mean that targeted resources for basic services in fact reach poor people and not simply places assumed to be poor. A common error that gets committed in targeting is that wealthier places on aggregate in urban areas may have much larger numbers of poor even if the proportions of poor people are not as extreme in semi-urban or rural areas.

[7] Sue Parnell has been instrumental in assisting with the scoping of this section.

Spatial:

- The principal problem is that the infrastructure implications of the NSDP have yet to be grasped across government, let alone implemented. Decision-making about packages of services, location of such services and sequencing of rollout is often taken without much regard for spatial implications for growth and social integration.
- This problem is compounded by the uncoupling of infrastructure investment from integrated planning manifested in a legacy of continued spatial inequality and segregation. Put differently, service-led development has not been tied to land-use planning and has resulted in fiscally and environmentally expensive settlement patterns. The high level remedy is of course to figure out how to practically ensure that service delivery, municipal finances and land-use planning are closely linked and coordinated in pursuance of the four higher order objects (i.e. poverty reduction, growth, environmental sustainability and spatial integration) of DLG.
- A more effective approach to spatial development frameworks need to be designed and implemented so that these frameworks can drive spatial integration through municipal services (the full gamut) implemented within the parameters of the fiscal and land-use regulatory arms of local government. This issue is particularly urgent given the stalled reform processes in the domains of planning and land reform.

Technological:

- The potential of digital and cellular technology to improve the quality of services and access is greatly under-explored. There seems to be little connection between the work on e-governance in DPSA and the Department of Communications and the potential of service delivery improvements for the poor. Greater levels of efficiency and reach can be achieved by using more effective services technologies.
- In a different sense, it is also striking how little use is made of alternative environmentally sound technologies with regard to services that impact on ecological resources, e.g. water, sanitation, waste and energy. The NSDF is crammed with ideas in this regard. It is unclear to the author how ready these technologies are for immediate rollout but it seems irrefutable that the potential need to be defined and where possible technological switches must be pursued as soon as possible. (See the input paper on Sustainable Human Settlements for more detail.)

Coordination and Institutions:

- Powers and functions contradictions are expressed through tensions around infrastructure and service delivery (e.g. energy, transport, land-use planning, early childhood development, health, requires resolution). However, we do not think that this problem is simply about locating economic functions at one sphere (e.g. metro's and strong locals and possibly some districts) and social services at another. The drivers of sustainable human settlements and resilient regional economies are inter-related in many complicated ways which must be understood before one can come to a view on how to coordinate and relate various kinds of infrastructure. Put differently, we think that the powers and functions issue and its fiscal

underpinnings must be addressed with a view on how to achieve not only poverty alleviation, but also growth, and incrementally, on a more sustainable basis.

- On a more pragmatic note, one of the immediate priorities is to ensure that implementation and coordination agencies of basic services engage in full service lifecycle costing and management. At the moment it is mainly capital cost and not necessarily operating, maintenance or decommissioning costs that get calculated in the planning of services. This is compounded by the fact that environmental externalities are also ignored. Ways need to be found to make full service lifecycle costing the norm linked to funding incentives that reward good practice in this regard.
- KPIs related to basic services are too input focused and insufficiently attuned to outcomes and impact over different periods of time. This problem is compounded by, often, weak local information bases that relies mainly on outdated census data. In contradistinction, an effective monitoring and evaluation system would track not only performance of service providers but also service need, consumption, environmental impact, affordability, satisfaction, economic multipliers, and so on.
- Presently many of the service regulators appear toothless and more worryingly, also poor integrated into the political and administrative systems of local government. It is crucial that we develop effective regulators which are deemed legitimate and effective by citizens, especially in cases where municipal services are corporatised or outsourced.
- Institutional effectiveness hinges on the capacity of service providers and regulators to enforce service standards and norms uniformly and effectively. The enforcement capacity and systems for services that must clearly understood and strengthened.
- Finally, there are a variety of political dimensions to service delivery, e.g. participatory mechanisms to allow citizens to engage on service delivery plans and/or become involved directly with the process of delivery; the political charge that service issues carry which make them prone to protest oriented political expression; the opportunities for corruption given the nature of procurement and size of contracts in this domain; the potential of service delivery processes and outputs to be manipulated by Councillors (especially at ward level); and most importantly, the potential for empowerment of very poor citizens who can learn a variety of issues with regard to their relation with their neighbours (social capital) and the state. It is therefore important to make the political dimensions of basic services explicit and ensure that there are adequate democratic oversight and accountability measures to underpin service delivery design, implementation and monitoring.

A final point must be made with regard to coordination and institutional design issues; forward planning based on rigorous ongoing research and development on service levels, infrastructure options linked to technological informants and sustainability criteria must by institutionalized. This does not have to be at a municipal level but can be driven by dplg.