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Moving down the ladder: governance and sanitation that works for the urban poor

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The paper argues that the widespread privatisation of basic services in the 1990s has in turn led to a redefinition of the role of an "instrumentalised state", in which the traditional functions of legislation, regulation, direct provision and investment have been significantly redefined, in many cases bringing the role of the state closely aligned with the creation of "new business opportunities for transnational corporations" (Finger, 2005:275). However, neither the public nor the international private sector is filling the gap of meeting the WATSAN needs of the urban and peri-urban poor. The essay contrasts a so-called "rationalist perspective" dominated by the public-private controversy with an empirical perspective concerned with gaining a better grasp of the multiple – and often neglected – practices and arrangements by which the urban poor effectively access sanitation[ii] *on the ground. The concept of service co-production is presented in this context as a means to draw lessons from the ground of sanitation provision to and by the urban poor, and to devise meaningful ways to empower the poor to fully exercise their rights and to become agents of change, fostering a type of governance that is people-centred rather than producer-centred. The discussion then moves to examine how to move down the sanitation ladder (depicted on page 16) in order to acknowledge and to support the actual options by which the urban poor effectively access sanitation, looking in particular at the roles and responsibilities of the different actors involved. Last but not least, the links between sanitation, land, housing, health and livelihoods are briefly examined, calling for the need to go beyond a sectoral approach to sanitation.*

Introduction

This essay has been commissioned by the IRC International Water and Sanitation Centre (IRC) with the purpose of providing a synthesis of the current debate concerned with the governance of urban sanitation for the poor, as well as some discussion teasers to stimulate the debate at the *IRC Symposium on Urban Sanitation* to be held in November 2008. The timing of this discussion could not be better, as it not only coincides with the International Year of Sanitation but provides a great opportunity to reflect on the outcomes of over two decades of debate and experimentation with different and often controversial approaches to the governance of urban sanitation.

The essay starts by looking at the way in which the sanitation challenge has been framed within the Millennium Development Goals (MDGs). The discussion then moves to a brief examination of the urbanisation of poverty, necessary to place the sanitation challenge in the contextual reality of the urban and peri-urban poor. After this, the discussion outlines the contemporary debate on governance, arguing that notions of good governance and good urban management, as advocated by most international donor agencies, partially became conflated during the 1990s with the promotion of private sector participation (PSP). The analysis then examines the main governance propositions referred to in the provision of urban water and sanitation (WATSAN). It is argued here, that although there are many specific differences between water and sanitation, these sectors are bundled together not only in terms of the governance debate

but also in terms of the legal frameworks adopted by national governments with regards to the status of these services as a right or as a commodity.

The empirical literature that supports the discussion through this essay is incipient but fast growing. The paper does not provide an extensive representation of such literature but rather highlights a number of case studies selected with the purpose of aiding the process of rethinking the urban sanitation challenge and its governance implications. The essay concludes by recapitulating the discussion through a number of recommendations or "teasers" aimed at fuelling the debate.

Unpacking the MDG sanitation challenge

The sanitation target was added to the water target under the seventh Millennium Development Goal (MDG) of ensuring environmental sustainability as an outcome of the World Summit on Sustainable Development in Johannesburg in 2002 (Scott et al. 2003). In general, access to water seems to be the priority while sanitation is less of a concern even for the poor; the development of the seventh MDG reflects this.

The concerns addressed by the MDGs in relation to water and sanitation are not new. The 1980s were declared as the water and sanitation decade with the overall aim of water and sanitation for all. That decade saw the recognition of the right to basic services and of the need for legal systems to protect them (Nunan and Sattherthwaite 2001). Efforts failed to meet this ambitious target mainly due to a focus on purely technical and financial aspects. Nevertheless, more progress in this area was achieved than ever before. WHO estimates that during the 1980s an additional 1.3 billion people gained access to safe water and 960 million to basic sanitation (Jolly 2003). Access in urban areas increased from 75% to 95% in the case of water supply and from 53% to 82% in the case of sanitation (ibid.).

Following the realisation that service improvements benefiting the poor would require more accountable and responsive political structures, towards the end of the 1980s donors started to fund capacity building in WATSAN institutions. In the 1990s these efforts shifted towards structural reform, with an emphasis on privatisation of publicly run water and sanitation services. However, many recipient governments were reluctant to respond to external impositions from donors to adopt good governance and the privatisation of services, so that implementation of the concept lagged behind.

The seventh MDG represents an attempt "to place deprived households at the centre of a new water and sanitation agenda, not only challenging the pro-poor credentials of existing reform efforts [such as those pursued throughout the 1990s], but demanding a more coherent and focused approach to addressing the water and sanitation problems of the poor" (McGranahan and Sattherthwaite 2006, 3). Instead of aiming to serve the whole population as in the 1980s, the MDG sanitation target focuses on halving the population without access to basic sanitation by 2014. The challenge to meet this target is much greater than that for water supply, not only because more people need to gain access to sanitation, but also because more funding is needed for sanitation infrastructure, particularly in urban areas. Although estimates show that an additional 1.2 billion people gained access to basic sanitation between 1990 and 2004, it is unlikely that the target will be met, with sub-Saharan Africa and South Asia being the regions where progress is the lowest (UN 2006).

The emphasis of the seventh MDG is on improved access rather than adequate access, thus, the lack of access to adequate facilities is likely to be several times higher than the estimates for lack of improved water and sanitation (McGranahan and Sattherthwaite 2006). The difficulty of collecting information about adequate services might explain why official figures and statistics focus on improved services, despite the risk of excluding people who might have access to a facility that is not suitable (Allen et al. 2006a). It can only be assumed that the situation for the urban poor is even worse than the numbers suggest, as the numbers hide the problems and costs associated with some facilities that are currently considered adequate and therefore fail to reflect the reality of many of the urban poor. For instance, official figures do not distinguish between facilities provided within a household and community or public toilets; access to either of these facilities is regarded as meeting basic sanitation needs. However, high densities in urban informal settlements might restrict access to communal facilities and user charges might not be affordable for

everyone (Calaguas and Roaf 2001). Public latrines/toilets are the most widely applied sanitation option in densely populated low-income areas and play an important role, but they do not necessarily fulfil the needs of poor individual households (SIGUS 2003). While public toilets are important to serve public spaces and amenities, their adequacy as the only sanitation option is particularly questionable when it comes to meeting the hygiene needs of female household members and children. As a consequence, although facilities might be physically available, they currently do not meet the needs of the urban poor for reasons of overcrowding, lack of maintenance and user charges.

In developing countries, 90% of wastewater currently remains uncollected and only 10% of wastewater treatment plants operate successfully (UNEP and Stakeholder Forum 2006). The consequences are particularly felt by low-income communities living in urban areas due to the position and density of the settlements they live in (Calaguas and Roaf 2001). Since their health is affected, this has an immediate impact on their income-generating capacity. This might partly explain why several initiatives have looked at sanitation in relation to hygiene education, particularly focusing on schools (see Joshi and Morgan 2007). Despite this being an important component of sanitation efforts, if facilities for the urban poor are not in place or inadequate, educational efforts are not going to be sufficient to improve the sanitation situation of the poor.

It is now widely acknowledged that privatisation does not work for the poor. However, the public sector seems to lack both the capacity and the funds necessary to solve the problem on its own (Nunan and Sattherthwaite 2001). While on-site sanitation (pit latrines and septic tanks) is the reality for many of the urban poor, and surely the majority in the African context, efforts by policymakers and bureaucrats seem to focus on network sewerage and centralised systems that do little to improve sanitation in urban low-income areas (Schaub-Jones 2006; Calaguas and Roaf 2001). Subsequently the question arises: who will be serving the urban poor? This is above all, a question about the governance of sanitation. Unfortunately the debate in the 1990s focused on the public-private controversy, missing this question almost entirely. A central argument in this paper is that the answer to the above question needs to move beyond such controversy and be examined in the light of the wider and complex emergence of multilevel governance (Eckerberg and Joas 2004) and its impact on the poor.

The urbanisation of poverty and the right to the city

A consideration of the future suggests that the developing world will continue to become increasingly urbanised, with the world population becoming predominantly urban-based in the next 25 years. In this context, the developing world is already facing urban transition. This does not mean a transition to a fully urban status in which urbanisation will spread its influence, transforming the countryside, but rather a process of intensification of mutual rural-urban interactions leading to still poorly understood spatial, socio-cultural, demographic, economic and environmental realities.

Although demographic forecasts should be regarded with caution due to inconsistent definitions of ‘urban’ and ‘rural’ across the world, they are powerful in revealing the magnitude and scale of the urbanisation process. Contemporary trends do not simply imply that most of the world population will be living in cities, but that urbanisation does and will continue to affect the way in which rural and urban households and individuals – who could be referred to as key “demographic decision-makers” (Montgomery et al. 2004) – straddle these two worlds. Decisions about health, fertility, migration, production, service provision and so on are increasingly affected by the diffused power of the urbanisation process, not just spatially but through informational spillover and social networks.

This means that mainstream definitions of what is “urban” – mostly based on population size, population density, economic function or administrative-political boundaries – are increasingly unfit to identify the specific conditions affecting the poor or to inform programmes and policies aimed at improving their access to basic services. Common problems with such definitions include: (a) census time-lag and the great variations among national definitions, making international comparison difficult and often misleading (Satterthwaite 2000); (b) lack of disaggregated data at the local area unit and transpolation of inappropriate

concepts from one context to another; (c) failure of statistic definitions and registration records to keep track of people's mobility between urban and rural areas and the emergence of fluid, fragmented and multi-location households (Rigg 1998); and (d) blurred geographical and spatial expressions in which the urban and rural physical boundaries become interlaced, as in the so-called peri-urban interface (PUI)[iii] (Allen 2003). The PUI often captures a mix of urban and rural jurisdictions and this has important consequences with regards to the provision of services due to significant differences concerning the responsible body and the pricing of services, as shown in the case of metropolitan Chennai below (box 1).

Box 1. Between the urban and the rural: Who is responsible for service provision in peri-urban Chennai?

Since 1978, in the metropolitan areas of Chennai (India), the legal mandate for supplying water and providing sewerage and drainage services at affordable prices has been with the Chennai Metropolitan Water Supply and Sewerage Board (Metrowater). Due to severe policy, technical, financial and functional constraints, Metrowater is far from achieving its mission within the urban core of Chennai City, let alone the nearby peri-urban areas. Only recently has the jurisdiction of Metrowater been extended beyond the city of Chennai to include adjacent urban areas, including several peri-urban localities. As far as water supply is concerned, many peri-urban areas that are not included within Metrowater's jurisdiction fall within the responsibility of the Tamil Nadu Water Supply and Drainage Board and rely on rural schemes. This system is operated and maintained by "rural" local authorities, which generally lack the human and financial resources for effective maintenance and delivery of services. However, in practice there are some incentives for peri-urban dwellers to remain under the jurisdiction of rural local bodies even if their capacity as service providers is inadequate. First, funds from the state Ministry of Rural Development are considerably larger than those available through the programmes administered by the Ministry of Urban Development. Second, under rural jurisdictions some services like water are free and charges for others (like electricity) are lower than in municipal areas. The duplicity of agencies for the provision of WATSAN in the peri-urban areas of Chennai has resulted in confusion, with the poor suffering the most, particularly women and children. With the state government institutions and elected local bodies virtually failing to deliver the most basic services in the PUI, the alternative is to look at community and household initiatives and small independent providers.

Source: Allen et al. 2006a.

In this context, the recent and projected population growth in the developing world is underlined not simply by a rural-urban poverty shift (at least in population percentages) but by a significant transformation of the linkages between urban and rural areas and above all, the causes of poverty and the ways out of it. Thus, addressing the MDGs requires an understanding of the changing nature and contemporary dynamics of the urbanisation of poverty. As argued by Satterthwaite (2000, 1), "[w]here you live and work influences whether or not you face deprivation and the nature of that deprivation". In this sense, even when rural-urban interdependencies among the poor are likely to intensify in the urban transition, there are certain characteristics that help differentiate poverty in the urban and peri-urban context. These include: (a) **greater reliance on livelihoods** drawn from labour markets within non-agricultural production or making/selling goods or services; (b) **greater reliance on cash** for access to food, water, sanitation, employment, garbage disposal, and so on; (c) very difficult conditions to **access land for housing** due to highly commercialised housing and land markets; and (d) severe difficulties in **accessing infrastructure and services** because of high prices. In many cases the illegal nature of their dwellings prevents the urban poor from being connected to formal systems of service provision or from using their homes as collateral for loans and credit. A regulatory framework that defines a settlement as illegal or irregular can be used to restrict public supply of basic services to the settlement. The Zero Growth Pact implemented in the metropolitan area of Mexico is a good example of how policies rationally designed to control metropolitan expansion in environmentally protected areas can reinforce unequal access to services, hitting the poorest worst (box 2).

Box 2. The Zero Growth Pact in the peri-urban interface of Mexico

The metropolitan area of Mexico City comprises 38 natural protected areas occupying 76,714 hectares. Urban expansion pressures constantly put at risk these areas, which are strategic for the sustainability of the metropolitan zone. Within this context, Milpa Alta is the most rural district in the metropolitan area of Mexico City

and considered a natural protected area due to the location of strategic environmental resources for the city, particularly its role in the recharge of the aquifers that supply the whole metropolitan area. However, both in physical and socio-economic terms, this area is experiencing high population growth, not least from migrant households relocating there from other parts of the metropolitan area.

The Federal District Government has implemented several mechanisms to control metropolitan expansion over Milpa Alta. First, the territory has been divided into two zones: the towns, and the area outside them, the *parajes*. This creates a stratification of the population on a socio-economic level since a dweller from outside the towns cannot, in theory, have access to water and sanitation networks. Second, a census carried out in the *parajes* in 1997 was used to divide the population into two groups: those recorded in the census and those who settled after the census. The Zero Growth Pact is meant as an agreement between the delegation authorities and the *parajes* dwellers recorded in the census to stop new settlements. The pact establishes that only the registered population can have access to water provided by public tankers and taps. In return, those peri-urban dwellers included in the Pact have to police the area and denounce any new settlers, who are not allowed to receive any public water supply.

A contradictory situation hereby arises: on the one hand, the economic crisis of the former way of peasant subsistence in the area has led long-term settlers to divide land formerly used for cultivation, selling it to individuals or real estate speculators. On the other hand, politicians intervene discretionally to ensure the supply of free water to those they see as their client population who are outside the Zero Growth Pact. Thus the law is not always applied equally. Informal settlements continue to be established in this area and their dwellers forced to resort to accessing water and sanitation through different mechanisms, often involving forms of illegality and at higher unit costs.

Source : Allen et al. 2006a, 41.

Concerning the governance of service provision, the urban poor are likely to be closer to government as regulator and provider of services but this also means that often they are more exposed to practices of bad governance, such as clientelism and corruption. In addition, the urban and peri-urban poor are in many cases unlikely to access water and sanitation services through centralised network systems and instead rely on a wide variety of service providers and alternative methods (discussed in detail later). The right to water and sanitation is, in fact, not just a right to subsidised services but part of the "right of the poor to the city". In other words, a means to ensure that water and sanitation fulfil a social and environmental collective function, and that the most disadvantaged groups in society are effectively empowered to have a say in the decision-making process (Allen et al. 2006b).

Bringing governance into focus

Over time the concept of governance has been given many different meanings and interpretations, but perhaps the most established definition is one that refers to the capacity of a political system to govern efficiently and to provide the necessary political conditions for the public good. In the 1980s, the concept was given a new connotation when it was reassessed in a context characterised by significant transformations. These included the dominance of neo-liberal politics and consequent withdrawal of the welfare state, economic globalisation and the emergence of transnational corporations (TNCs) as agents wielding considerable power and influence at a supra-national scale. Other equally significant developments were a wide recognition of the ecological crisis, the emergence of new social movements acting through local and global networks, and a reappraisal of the role of local authorities in the development process.

In this context, the debate on governance has expanded significantly and the notion has left the academic sphere of public policy analysis to become equally applied by international agencies, national and local governments, transnational corporations and civil society organisations. On the side of the international community, governance has become associated with an increased concern about how to improve the general conditions for policymaking and governing through adopting the values of efficiency, participatory democracy, social justice and environmental sustainability. However, in practice these principles are not always given equal status, as in the case of the notion of good governance, widely promoted by international

institutions like the World Bank, in which efficiency (and implicitly private sector participation) has often taken priority, with good governance becoming a conditionality prescribed in the awarding of loans and grants and in international trading agreements[iv]. It should be highlighted from the outset, that this notion of good governance has been largely influenced by the "new public management" (NPM)[v] school of thought. In basic terms, this school promotes the public sector use of private sector management techniques, arguing that the economic market should be used as a model for political and administrative relationships.

Within the academic and policy-making communities, the current governance debate is dominated by two contrasting definitions and sets of concerns. On the one hand, part of the literature on governance focuses mainly on the institutional capacity and performance of the state and the way it has adapted (and needs to adapt) to recent developments – looking more specifically at the way its traditional functions as legislator, regulator, provider and investor have changed in the light of more private sector and/or civil society participation. On the other hand, governance is also being deployed as a notion that refers to a new process of governing. This perspective pays particular attention to the ways in which contemporary trends are reshaping the relationship between those who govern and those who are governed through more participatory forms of direct democracy. These two approaches are referred to as "state-centric" and "society-centred" respectively (Pierre 2000; Pierre and Peters 2000).

The first approach is concerned with assessing the political and institutional capacity of the state to steer society towards certain goals associated with the public good and also with examining the relationship between the role of the state and the interests of other powerful actors. By contrast, the so-called society-centred approach is primarily concerned with the role of civil society in the governing process and its relation with the state through a variety of institutional arrangements. From this approach, governance refers to emerging governing practices that seek to build greater capacity for collective action through new relations between diverse social actors. Not surprisingly, the focus of this approach is on multi-agency ensembles, such as networks devised for creating synergy among different social actors in the pursuit of public policy goals. More widely, this perspective refers to the notion of multilevel governance mentioned before (Eckerberg and Joas 2004) in which the management and governing of environmental services and infrastructure seems to be moving away from national governments as central actors to a more complex and highly diverse network of agencies.

This essay is particularly concerned with a society-centred approach to governance, as the aim is to contribute to an understanding of the emerging governance arrangements that underlie the provision of sanitation services for the urban and peri-urban poor. A society-centred approach is relevant to this purpose because it allows the examination of alternative modes of governance to those that mainly focus either on the role of hierarchical structures (such as the state) or on the market. These alternative modes are less reliant on top-down policy instruments and are instead concerned with the need to find more accountable, democratic and interactive means of social organisation in which responsibility and accountability for interventions are often – but not always – shared between public, community and private actors. This does not by any means imply that the state has become obsolete or redundant but rather that its current role in the provision of services has been willingly or unwillingly transformed.

Service provision: state, private sector or civil society?

Central to this debate is the question of who should do what: in particular, whether the public sector, the private or the civil sector should deliver these services. During the 1990s the international debate on urban water and sanitation provision became almost exclusively concerned with the question of whether these services were better run by the public or the private sector. As argued by McGranahan and Satterthwaite (2006, 1), "[t]his presented an artificial choice, diverting attention from the real problem of how to reach the poor".

Table 1 presents a summary of the main arguments that characterise the controversy in favour of a significant role by either the state or the private sector. The arguments for private sector involvement are grounded almost exclusively in the principles of efficiency and effectiveness, relegating concerns about social fairness and environmental sustainability to the background. Although the evidence supporting these

arguments remains slim in practice, in the last two decades developing countries have experienced a push towards the increased involvement of the private sector in the delivery of services (Batley 1996). In practical terms, private sector participation (PSP) has become widespread in the running of urban water and sanitation utilities even when the forms of service governance promoted by international agencies have been in many cases locally resisted and unpopular. For instance, in 2004, the Egyptian government abandoned its plans to privatise the WATSAN system in Greater Cairo, due to the negative record of, and reactions against, service privatisation in other parts of the world. Recent sector reforms have focused on the creation of two central government organisations: the Holding Company for Water and Wastewater managing public services (including sanitation) in the governorates and the Central Authority for the Drinking Water and Sanitation Sector, and the Protection of the Consumer, responsible for setting standards for utilities based on the recommendations of a ministerial coordinating committee, and for setting a new tariff structure aimed at improving cost recovery. The prevailing focus of these reforms is on urban areas. However, there is a persistent general lack of recognition of the wide set of actors involved in developing and servicing the urban and peri-urban poor, such as CBOs, local contractors and small (often informal) service providers (Allen et al. 2006a).

Table 1: State intervention or private sector involvement in the provision of basic services?

For state intervention	For private involvement
The public goods argument There are public goods where benefits are collective, for which there are no means of charging consumers (non-payers are non-excludable) and for which consumers do not have to compete (e.g. street lighting).	*The competitive allocation argument* Under non-competitive provision, resources are not used economically to produce a given output or existing resources are not used optimally to maximise outputs.
The market failure argument Private enterprise may fail because (a) the nature of the service leads to monopoly (e.g. water supply); (b) the necessary investments are so large or returns so uncertain that the private sector might not undertake them; (c) positive externalities are likely to reach those who are unwilling or unable to pay; (d) consumers may have too little knowledge to make informed choices.	*The state failure argument* State provision often fails to address consumers' preferences, or leads to charges that do not reflect producers' real costs, therefore making further investments unsustainable. In response to the failure of public services, enterprises and households often find their own market solutions.
The equity or "merit good" argument Everybody should have access to certain goods and services, regardless of their ability and willingness to pay (e.g. education and health). Environmental considerations may not be considered if service provision is left to market mechanisms.	*The poor pay the most anyway* State service provision often benefits the better off and fails to provide for the poor.

Source: Own elaboration, based on Batley (1996).

The arguments in table 1 can only be tested in the light of specific contexts and even within the same context there are significant variations among different services and areas. Within sanitation, piped sewerage systems are frequently located at the public goods end of the services spectrum. They are excludable but non-rival services[vi], monopolistic and typically associated with high positive (health benefits) and negative (pollution) externalities. These characteristics make this service suitable for direct public provision, although private contractors might be involved in specific works. In the case of water supply, given its characteristics as an excludable and a rival good, piped water can be operated as a commercial enterprise. However, its characteristics as a natural monopoly, the large scale of necessary investments, and significant social benefits all make a case for government involvement, either as a direct or indirect provider. The discussion implies that arguments for public or private involvement are contentious and less clear cut than often suggested. On one side of the public-private debate is the view that increased private sector participation would resolve the many failures of public water and sanitation utilities, including their inability to reach the urban poor. At the other extreme of the debate, increased PSP is seen as part of the problem, as it involves withdrawing from the policies and institutions required to achieve universal coverage and adequate provision of water and sanitation (McGranahan and Satterthwaite 2006).

The public-private controversy is clearly aligned with the notion of good governance discussed in the previous section and seems to be somehow locked within the limits of new managerial thinking, assuming the failure of centralised government-led service delivery systems and the need for a more efficient division

of labour, usually under unbundled systems. This perspective often refers in detail to the institutions (state, market and civil society) of Western representative democracies and has mainly been imported to a developing country context through policy prescriptions. This so-called rationalist perspective encompasses various prevailing approaches within public policy analysis, as opposed to an empiricist perspective, concerned with the local-specific analysis of the empirical conditions under which the poor access basic services in the context of the developing world (Joshi and Moore 2002).

There are problems with both perspectives. Rationalists often fail to take account of the reality of how services operate on the ground outside Western systems, and their generalisations and policy prescriptions are therefore often impractical or irrelevant to the question of how to reach the poor. On the other hand, the empiricists are able to provide plenty of interesting and relevant insights into the contextual conditions and diversity of practices by which the poor gain access to services, but their findings often remain under-theorised, to the extent that it becomes difficult to extrapolate general lessons in terms of organisational development and governance arrangements. However, this does not need to be the case; as discussed later, it is possible to identify regular patterns across the wealth of organisational arrangements widely found in the urban context of the developing world and to confront rationalist predictions of what works and does not work with these real-world patterns.

The privatisation of governance

International adherence to the definition of water and sanitation as an economic good marks a paradigm shift in the governance of services delivery. Such definition was promoted and reproduced within the international arena by a large number of international agreements and declarations since the early 1990s, including among many others, the Dublin Statement and Rio's Agenda 21 in 1992. The central argument is that "managing water as an economic good … is an important way of addressing urgency [of the crisis of natural resource availability] by achieving efficient and equitable use, and encouraging conservation and protection of natural resources" (Finger 2005, 281). Much has been said on the benefits of bringing a market rational to water management resources, arguing for the benefits of a clear separation between provider and regulator and the adoption of indicators that provide for real costs, water tariffs and demand management. This line of argument foresees a reconciliation of financial and environmental arguments through the treatment of water (and sanitation) as an economic good.

Within the urban camp the above arguments were also aligned in the 1990s with calls for better urban management, in which good management and good governance were often conflated. They presented privatisation as the best response to the sense of urgency distilled out of the sustainable development crisis (seen as both an environmental crisis, but also a crisis of the state) and the best way to bring together commercial principles, professional management and competition.

This paradigm shift rarely explicitly referred to sanitation per se; sanitation became part of the water management package and was therefore dragged to the same destiny in terms of governance recommendations. The packaging of water and sanitation was not rooted in any specific arguments for the privatisation of governance but resulted from previous calls for the integrated management of these services, which eventually translated into numerous national laws that brought them together. Examples of this include the Bolivian Law 2029 on Drinking Water and Sanitation, among many others. In fact, as argued by McGranahan and Satterthwaite (2006), the governance of water and sanitation debate had, in this context, very little to do with water and sanitation per se but was subsumed under a more ideological discussion about the effectiveness of the private sector in comparison to the public sector in almost any policy area. In practice, the arguments for the privatisation of water and sanitation services have been based loosely on the expectation that privatisation would result almost automatically in improved service provision. Very often – as in the case of Argentina (box 3) – this assumption has been part of a more general ideology that sees state ownership of any company as inappropriate and at odds with the principles of efficient and effective management.

Box 3. Private concession of WATSAN in Greater Buenos Aires: uncertainty, missed targets and tariff increases

Aguas Argentinas was the largest and first private concession of WATSAN in Latin America at the time of its introduction, covering the service provision of Greater Buenos Aires. The call for privatisation was justified on the basis of fiscal problems allegedly experienced by Obras Sanitarias de la Nacion (OSN), the state-owned company in charge of WATSAN. In fact, prior to privatisation, OSN was not in debt but actually reporting a surplus. Nevertheless, there were several signs of underperformance, such as lack of investment in new infrastructure, high rates of unaccounted for water, irregular water supply particularly during the summer, and water pollution resulting from too few sewerage connections and inadequate treatment (Artana et al. 1999).
In practice, the call for privatisation was politically legitimate in the sense that the decision was adopted by a democratically elected government. However, alternatives to privatisation were never discussed, nor was the privatisation call open to public consultation. It is argued that the allocation of 10% of the privatised company to OSN former workers effectively bought their consent for the concession and blunted potential opposition from trade union leaders (Artana et al. 1998). The World Bank and Inter-American Development Bank were intimately involved in the privatisation process, both in terms of influencing the drafting of the concession contract and drawing up a short list of candidates.

A private consortium led by Suez Lyonnaise des Eaux and Aguas de Barcelona, Aguas Argentina (AA), offering the lowest tariff, was awarded a 30-year concession contract in 1993, with a commitment to reduce tariffs by 26.9% and connect 100% of the population in the concession area to water and 90% to sewerage. Although no survey had been undertaken to determine precisely the coverage deficit and required investment, it is estimated that at the time, 48% of the population in the outer districts of Greater Buenos Aires had no access to piped water and 72% lacked access to proper sanitation (Hardoy and Schusterman 2000). A newly formed independent regulatory body (ETOSS) was charged with the responsibility of setting tariffs, monitoring, regulating and enforcing the fulfilment of the concession contract. However, decisions by ETOSS were often ignored or overridden, particularly when they threatened private interests – for example, the government excluded ETOSS when it renegotiated the concession with AA in 1997. Uncertainty about what exactly had been agreed meant that Aguas Argentinas soon found itself requesting an increase in the tariffs. This was granted on condition that the concession area was to include the informal settlements initially excluded from the contract. But despite higher tariffs, AA continued to fail to meet new connection targets, despite a sustained increase in net profits over the next three years. In 1997, a universal service and environmental improvement fee (SUMA) was introduced with the purpose of meeting the costs of new connections through a cross-subsidies system, which had neither a significant impact on improving coverage provision, nor on preventing regular requests from AA for further tariff increments. A combination of poor performance and lack of accountability by AA, lack of transparency and public involvement, an ideologically blinkered government and a toothless regulatory body led to the renationalisation of the WWS network in Greater Buenos Aires in 2006.

In practice PSP in water and sanitation has dramatically increased in the most densely populated areas, where maintenance and investment costs are easier to recover. As a result, most large cities in the context of the developing world have some form of contractual arrangement with a TNC provider (in most cases one of three French companies: Suez, Vivendi and Bouiguez). Bakker (2002) identifies three different geographical areas emerging in relation to the privatisation of basic services: (a) larger cities where TNCs are currently the main water and sanitation providers; (b) suburban and small urban areas, where NGOs are seen as the main vehicle for community service provision; and (c) the rest, left to the state to still act as a direct provider. This segregation is not accidental, and it corresponds directly to the potential profitability of service provision in each of these three areas.

In this context TNC-led private sector participation performance has very mixed reviews. Whilst achievements often refer to water provision and PSP improvements in terms of increased bill collection rates and in some cases decreased unaccounted for water, there is little (if any) evidence suggesting that the engagement of large multinational corporations in water and sanitation has improved service provision to the poor. Overall, this is related to the fact that PSP contracts often fail to include the poor, as in Buenos Aires. An additional problem with the involvement of large private sector providers relates to the limited share of risk that characterises most PSP contracts – one of the most commonly advocated reasons for their involvement in the first place. Private sector participation can take place through a wide variety of arrangements, ranging from **service contracts** in which the public sector retains overall responsibility;

management contracts, which often transfer responsibility for overall management to private hands more comprehensively, but often on a short term basis (3-5 years); **lease contracts**, which involve more commercial responsibility and risk for the private sector for a period of about 10 years; and **concession contracts,** which include not just full private sector responsibility for the operation and maintenance of public utility's assets but also investments over a long period (often up to 25 years). These four types of arrangements vary in the degree of involvement, responsibility and risk awarded to the private sector. With few exceptions, like the experience of AA in Buenos Aires and that of Manila, there are few experiences of concession contracts, particularly in Africa (WELL n.d.). In most cases, PSP in water and sanitation has taken place under service, and to a lesser extent, management contracts, both of which involve a lower degree of financial risk for the private sector.

The state under reform

The privatisation of governance is often associated with a reduced state. However, it could be argued that the state has not necessarily become weaker or indeed obsolete but rather *instrumentalised* through the logic of partnership governance in a globalised economy, which advocates a "small but strong state" (World Bank, 1997 – *The State in a Changing World* - cited in Finger 2005). This implies a new global institutional framework in which the state actively facilitates and supports the operation of TNCs in the provision of basic services.

As mentioned before, four traditional functions can be identified with the role of the state in the governance and management of basic services: legislation, regulation, operational provision of services and investment. The privatisation of water and sanitation clearly involves a substantial change in the last two functions. The state is no longer in charge of direct provision; its investment function has also been significantly changed, shifting from being a direct investor to become a guarantor of credits and loans, often to TNCs. But the shift in governance also involves a significant change in the state's increased role as a regulatory body and also a change in the content of its legislative function, which became more focused on regulatory aspects dealing with the enforcement of universal standards and norms. At the legislative level, increased environmental and health standards and norms for WATSAN often imply higher investments in terms of infrastructure development and maintenance. This reinforces the TNCs market – although such investments are in reality made through contracting loans from the World Bank and International Monetary Fund, which reduce the financial risk for TNCs (enabled to make profits without taking risks) and are contracted by national governments.

As the move towards privatisation has run in parallel with calls for increased decentralisation, the changes in the state's functions also need to be examined in the light of the increased role and responsibilities attributed to local governments either as direct providers, as regulators of the private sector or by supporting alternative service providers to fill the capacity gap.

There is a large body of literature discussing the challenges associated with the increased role of municipalities as direct providers of water and sanitation. Authors like Hilda Herzer and Pedro Pirez (1989) have graphically described the processes of municipal decentralisation initiated in the late 1980s, as the "decentralisation of the crisis", making reference to the frequent mismatch between increased responsibilities and decreasing resources. However, decentralisation of service delivery has also played a positive role, bringing public agencies and service users closer to each other. A crucial aspect to enhance the capacity of local governments as direct service providers relies on the possibility of building dialogue, exchange and mutual support among municipalities. In the case of Brazil, cooperation among municipalities has allowed them to develop public-public alternative options to privatisation, reaching economies of scale in the delivery of services, whilst achieving universal access - treating and distributing 100 percent of the water and treating 100 percent of sewage collected - and strengthening participation and social control (box 4). In addition, in many cases municipal operators - such as the Service of Water Supply and Sanitation of Araraquara in São Paulo - have successfully integrated the management of solid wastes and rainwater drainage.

Box 4. Public-public partnerships: building cooperation across municipalities in Brazil

Brazil has about 1,800 municipalities responsible for providing water and 4,000 municipalities for operating sanitation services, with significant variations in terms of population size and local government technical and financial capacity. A recent evaluation by da Costa et al. (2006) examines 20 successful experiences of municipal public utility service of water supply and sanitation, which have met the principles of universal access, equity, integrality of actions, integration across service sectors, and quality of services, social control and municipal responsibility.

The cities of Araraquara and Guairá in São Paulo have achieved universal coverage in water supply and sanitation, even in the light of substantial and sustained population growth. This achievement has been driven by the specific priority given by the municipal administration to basic sanitation both in relation to ambulatory health care and infrastructure development and maintenance. Administrative continuity and planning also have contributed to the city achieving universal service.

A common denominator across all successful experiences has been the emphasis on delivering services with focus on the citizens. In Ituiutaba, 90 out of the 153 workers from the Superintendence of Water and Sewage (SAE) are directly involved in relationship with the service users. Monthly after service surveys show satisfaction rates of over 90%. In Campinas, in 2001, the municipality defeated an attempt to privatise Sanasa – the city's public environmental sanitation company. Sanasa is open to social control and has been nationally recognised as a highly efficient public company for its achievements in reducing water losses and policies of monitoring and use rationalisation. Similarly, Jaboticabal in São Paulo resisted a private concession for wastewater treatment. Instead the municipality created a special fund for the construction of a wastewater treatment plant, interceptor lines and water supply works. The fund is audited by civil society and the treatment plant is being constructed on land donated by the State of São Paulo University (UNESP), under condition that the local public authorities remains in control of WATSAN public management and the development of associated research projects.

In several cases various municipalities have come together in consortia to provide water supply and sanitation services to more than one municipality, serving both rural and urban populations. Similar consortia have been established between municipalities and public bodies at the state/provincial level. The local government of Caxias do Sul – the second largest municipality in the state of Rio Grande do Sul - has established a partnership with the Federal University of the state to develop an integrated solution to sanitation and rainwater drainage, through a combined sewage collecting system that covers 85% of the city. Integration across services and sectors has been achieved in the municipality of Alagoinhas in Bahia through the adoption of a Municipal Plan for Environmental Sanitation, which links sanitation, health and environmental management.

Source: Based on da Costa et al. (2006).

In some cases newly formed urban sanitation authorities have been created as an interface between central and local government. Box 5 illustrates an innovative approach adopted in the case of Tanzania through the creation of semi-autonomous bodies, an interesting alternative to tackle many of the problems typically associated with the lack of municipal capacity to deliver sanitation. However, the case also shows that a top-down approach to the creation of urban-based sanitation bodies, merely focused on improving technical and financial performance, can lead to socially unequal outcomes, conflicts of competence and approach with existing municipal bodies and, more significantly, miss the opportunity to bring public service providers closer to the citizens.

Box 5: Semi-autonomous urban water and sanitation authorities in Tanzania

To halt the progressive degradation of urban sanitary conditions in Tanzania the government initiated an innovative institutional framework for water and sanitation management in the mid-1990s. This constituted a mix of decentralised initiatives and ministerial control (in this case by the Urban Water and Sewerage Authorities or UWSA), which was based at the urban-local level and operated on a cost recovery basis. In 1994 the government created three experimental semi-autonomous bodies, one of which was in Moshi, a medium-sized town in the foothills of Mt Kilimanjaro. During its experimental phase the Moshi Urban Water and Sewerage

Authority (MUWSA) achieved cost recovery and was therefore viewed a success, although financial aid was given by the International Development Agency (IDA). In 1998 it was scaled up to become a fully autonomous authority with a full Board of Directors, replacing an Advisory Board.

The Moshi case shows some institutional problems related to the semi-autonomous organisation of the MUWSA: confusions developed in relation to divisions of labour, and poor cooperation and latent competition existed between the various stakeholders, particularly the municipality and the MUWSA (which a stakeholder forum to facilitate communication may have resolved). In terms of improving sanitation for the urban poor, it may be hypothesised that due to their more localised position these semi-autonomous UWSA may be more flexible and responsive to meeting community needs, and thus to improve service provision. In Moshi however, such an assumption was shown to be misplaced: during the experimental phase only 30 new connections were recorded and service coverage only reached a total of 10 percent of the population. Nonetheless, the MUWSA did respond to this low service provision; understanding it to be a problem of poor communication. In 2003 it carried out an information campaign to resolve this. The government scaled up their initiative and by 1998 created similar semi-autonomous authorities for WATSAN in 18 Tanzanian towns. Overall, it is not easy to judge the success of this new governance structure in Tanzania due to its relatively short history. At the moment, it is functional. How successful it is in terms of meeting the WATSAN needs of the urban and peri-urban poor needs further evaluation.

Sources: Moshi Urban Water Supply and Sewerage Authority (MUWSA website 2008) and WaterAid and Tearfund (2003).

In relation to the second role (regulation), it should be noticed that typically municipalities have had little experience in working with the private sector in the delivery of basic services. As highlighted by Scott and Sansom (2006, 2): "[t]he results of decentralization have been mixed and can be evaluated in terms of the benefits and costs, in terms of service delivery, of different approaches to decentralization (fiscal, administrative, regulatory, market, and financial), which in turn imply relationships of accountability between different actors in the delivery chain". The case of Aguas Argentinas (AA) in Greater Buenos Aires (box 3) is a good illustration of the problems associated with the creation of toothless regulatory bodies. Although ETOSS was able to bring a pro-poor approach to the contract as signed with AA, it faced multiple difficulties and pressures in terms of playing a significant role as the arbiter between public and private interests. In most cases strict divisions of labour, in which municipalities or newly created bodies have been charged with the role of regulating large international companies responsible for service delivery, have been flawed by a significant power asymmetry between the regulator and those they are regulating.

Given the increasing significance of local non-state actors in the provision of sanitation, particularly for the urban and peri-urban poor, the role of municipalities in supporting their initiatives is crucial. However, two main approaches prevail. On the one hand, small independent private providers are still often demonised rather than supported, with a few exceptions, such as is illustrated in box 8. An underlying problem is the prevailing bias within municipal policy and planning frameworks towards large investments in trunk sewerage, storm water drainage systems and equipment for solid waste collection and disposal. In relation to sanitation, such bias favours conventional centralised systems and ignores what works for the poor. On the other hand, as far as collaboration between local authorities and civil society actors is concerned, new forms of citizen co-production are rapidly emerging – as discussed later. These initiatives can either result in the empowerment of civil society or in a more limited involvement, in which participation is merely conceived as a means. This implies that the global institutional framework resulting from increased PSP has also reshaped the role of other agents, not just the central or local state. As highlighted above, financial institutions play a new function in this system and so do NGOs, which are often charged with raising awareness, increasing financial resources and user contributions, and above all with legitimising PSP in poor urban areas and slums. In many cases, when TNCs do not become engaged in providing services for the urban poor, NGOs also play an increased delivery function.

Recapitulating, under the privatisation of governance, the state still plays four fundamental roles, as suggested by Bakker (2002). First, it performs a fundamental role in financing, although with the twist that this is not just through direct investment but through contracting loans for the development and

rehabilitation of service infrastructure from which TNCs are making a profit. Second, the state acts not only as a guarantor for loans and grants but more generally provides the legal stability and security required to ensure that contracts will be respected and bills will be paid. Third, the state also acts as a guarantor of regular revenues, and fourth, it acts as a crucial risk bearer. In addition, it acts as a legitimate vehicle to enforce internationally agreed norms and standards.

A wider spectrum of service providers: How are basic services actually delivered to the urban poor?

In practice there is a fault line between the idea of the state as guarantor of basic service delivery, which encompasses the notions of social equity and basic rights to resources, and market-based approaches that focus almost exclusively on cost recovery and the financial sustainability of service supply. Figure 1 presents a model set out by the Asian Development Bank, which indicates that very often the poor and moderately poor are best serviced by public/community partnerships. The model suggests that because of pricing issues, public-private partnerships are less effective in serving the poor.

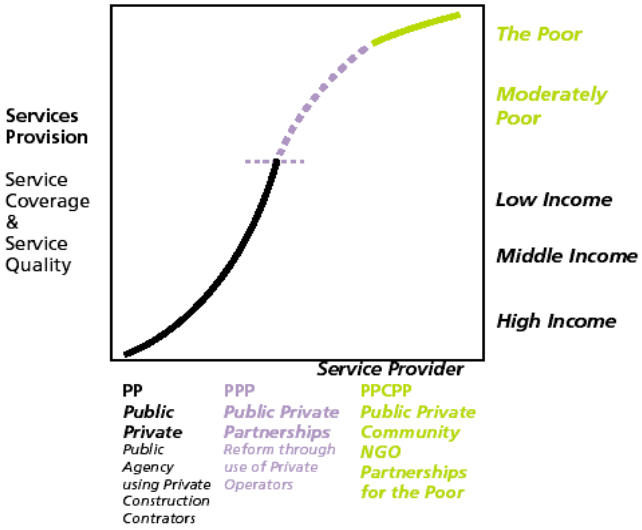

Figure 1. Efficiency and Participatory Developments: partnerships
Source: Banyard (2004, 24).

The discussion above suggests that service provision can involve a variety of different (public-private and civil society) organisational arrangements. For instance, governments might assume different responsibilities in the provision of these services. Direct provision or production of a service involves the physical act of constructing, maintaining and delivering, whilst indirect provision involves the role of ensuring that the service is available through decisions about policy and standards of service. In this case, governments may be responsible for co-ordinating, financing, enabling and regulating producers. Reference is often made to the "regulator-provider-consumer triangle" as a means of explaining the basic roles and relations performed in the delivery of water and sanitation. However, there are significant differences in the configuration of this triangle, particularly between the arrangements prescribed and supported at the policy level and the concrete practices deployed on the ground.

The World Bank, among other institutions, acknowledges five main institutional options for service provision, namely: (i) public ownership and operation (which includes contracting out); (ii) public ownership and private operation; (iii) private ownership and operation; (iv) community or user provision; and (v) mixed (joint ventures between public and beneficiaries or public and private direct providers) (Batley 1996, 731). However, when looking at the specific ways in which the urban and peri-urban poor gain access to water and sanitation services, it is possible to identify a much wider range of practices and arrangements. The five aforementioned options clearly feature within what could be called formal, policy-

driven mechanisms supported by institutional arrangements of the state. Examples of this include, for instance, the operation and management of public toilets contracted out to private operators. The privately run public toilets in Kano, Nigeria are a good example of a successful policy-driven private-public partnership. While private contractors operate and sometimes construct the facilities, the public sector keeps control over defining and enforcing guidelines and standards for the design and maintenance (Ayoti n.d.). But in addition to these options, many other mechanisms can be characterised as being needs-driven and correspond to the arrangements by which the poor gain access to sanitation, often with little or no support from the state, its policies and resources. Informal private pit-emptying services are not uncommon in urban and peri-urban low-income areas and often emerge to complement the shortfalls in the formal sector (see the case of Cairo in Allen et al. 2006a, 80). Box 9 shows the benefits of a service provided by informal operators in Kano but also illustrates the limitations due to its informal status and lack of support by the state.

The sanitation wheel in figure 2 outlines a continuous spectrum of policy and needs-driven practices. It provides a schematic and comprehensive (although not exhaustive) representation of the universe of existing practices in sanitation as found in the urban and peri-urban context. To a certain extent the two sides of the wheel correspond to what are usually referred to as formal and informal practices (respectively on the left and the right of the wheel). However, these terms can be at times misleading, as some of the strategies in the wheel defy this distinction. Whilst policy-driven mechanisms can be clearly identified from the perspective of production and provision, the arrangements identified on the right-hand side of the wheel are best examined and understood from the perspective of access and, in particular, from the viewpoint of highly localised strategies adopted by the poor.

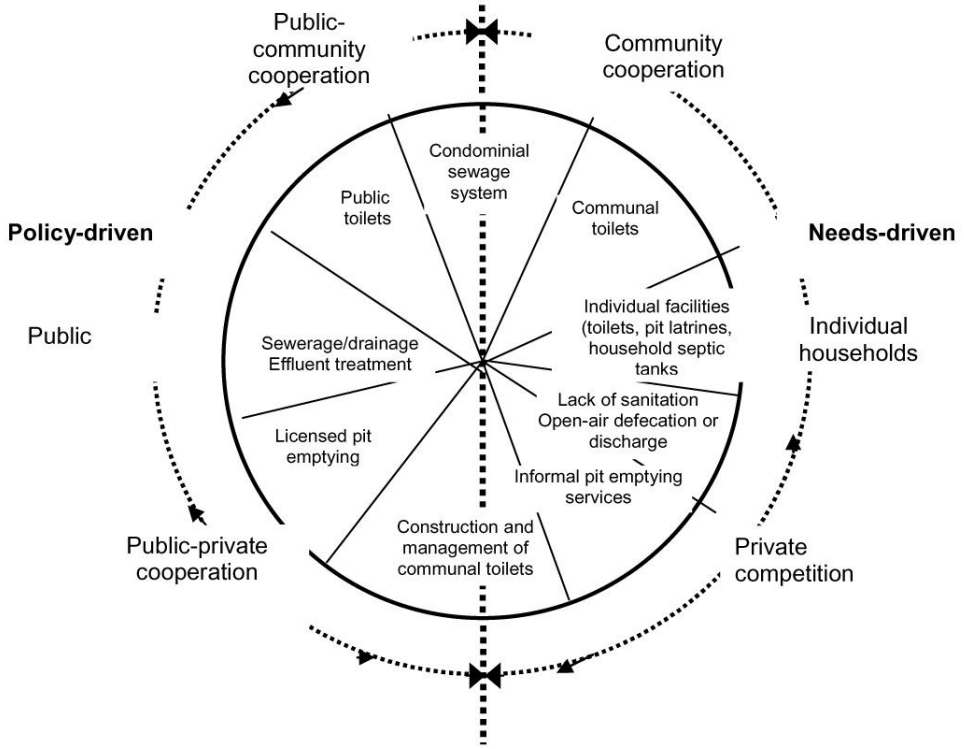

Figure 2. The Sanitation Wheel
Source: Elaborated on the basis of Tayler (2005).

The sanitation wheel shows the role of the public, private and civil society in the provision of this service and the extent to which these roles are based on cooperative arrangements across two or three of these sectors and at different scales. The three sectors are far from homogeneous, as the public sector might be present in the form of highly centralised state agencies or of decentralised bodies. In the same way, the private sector might involve large companies operating under the formal sector, medium-sized licensed

operators, or informal small-scale independent providers involved in latrine construction or pit-emptying services. The community sector is not homogeneous either, as it might involve arrangements characterised by a certain degree of formalisation, such as community schemes (e.g. communal toilet facilities) actively supported by the public sector or external NGOs, but also more informal relations of cooperation established among members of the community exclusively on the basis of solidarity ties, which may allow some households to use a neighbour's toilet.

The most common and extended practices by the urban and peri-urban poor are those identified on the right side of the wheel as needs-driven. In other words, the poor rarely have access to formal facilities operated by the public or formal private sector, such as waterborne sewerage or licensed pit-emptying services. A large number of the poor still lack any form of hygienic disposal for human excreta or rely on septic tanks, individual or shared pit latrines and/or public toilet facilities, which often involve a charge and need to be kept in a clean and usable state. A study of the strategies adopted by the peri-urban poor in five metropolitan areas (Chennai, Mexico, Caracas, Dar es Salaam and Cairo) revealed that sanitation is seen as being less of a priority than access to drinkable water, though there are different perceptions between women and men (Allen et al. 2006a). This is confirmed by other studies which found that women often have a better appreciation of the health implications of lack of sanitation than men, who prioritise other services and facilities at the time of making investment decisions (WSP 2004). In some cases the lack of investment in individual facilities is due to the reluctance of landlords to spend money on sanitation, particularly with regards to maintaining facilities after they have been built, or the fear of informal settlers of losing their investment due to the insecurity of land and housing tenure.

Different studies help to understand the potentials and limitations of each of these arrangements to reach the urban poor. Common problems affecting many public utilities and municipal services in developing and transitional countries include poor financial management, low funding priority, political interference, little or no independent regulation and poor engagement with civil society groups, as a WaterAid report argues (Gutierrez et al. 2003; see also WUP 2003). The same report challenges the role of TNCs in contributing towards the achievement of the MDGs and concludes that local private agents, reformed public utilities and community-managed schemes are more likely to reach the poor, although not always with a sustainable service. These arguments are particularly relevant in informal urban settlements and peri-urban areas. As highlighted earlier, the governance of WATSAN in these contexts presents a number of peculiarities, particularly when compared with the provision of the same services in either formal urban settlements or rural areas.

From partnership to service co-production

The wide range of practices identified under the sanitation wheel somehow correspond to five types of arrangements through which the poor access basic services: (a) self-provisioning through collective action; (b) direct social provision through private associations (religious organisations, philanthropic foundations, locally based associations and so on); (c) direct market provision on a commercial basis by formal and informal local providers; (d) direct social provision through state agencies; and (e) indirect state provision through sub-contracting of delivery responsibility to other agencies (CBOs, NGOs, private sector, user groups, etc.) (Joshi and Moore 2004). Multiple hybrid combinations of these five archetypes can be found in the urban context of developing countries, and many manage to do what the more conventional formal public, public-private and private arrangements often fail to achieve: to reach the poor on a sustained basis. Diversity and hybridity are in short what service co-production is about. Co-production in public services is increasingly a reality, not only in the context of the developing world but also in developed countries. It implies the participation of users and communities in the various stages of public services production, from planning and design stages through to service delivery, monitoring and evaluation.

In an attempt to explain why co-production seems to be more widespread and to work effectively in the context of the developing world, Joshi and Moore (2004) advance two hypotheses: First, co-production seems to be the only (or at least the most effective) way to reach a large number of beneficiaries, addressing their different needs and circumstances and making the most of existing local networks. Second, there is a huge diversity in the operational situations in which services are delivered, with different standards, costs,

technologies, and so on, and often rapidly changing conditions that are difficult to address under standardised solutions or responses.

Several arguments highlight the importance of co-production. First, it allows users and communities to supplement government provision in those cases where a particular service is not reaching certain groups or individuals. Second, it can help in the development of an effective interface between public/professional service providers and users/communities by creating a mechanism for interaction and feedback that allows the reformulation of policy design and implementation to meet the particular needs and expectations of beneficiaries. Third, it can empower citizens to fully exercise their rights and to become agents of change, fostering a type of governance that is not producer-centred but people-centred.

Is the diversity of institutional arrangements found under service co-production similar to the eclectic pragmatic arrangements advocated by supporters of new public management? Our answer to this question is no. Although it is possible to identify pragmatic considerations as the driving forces of institutionalised service co-production, there is a fundamental difference in terms of its underlying assumptions. First, NPM advocates would welcome the possibility of citizens' involvement in the delivery of services only to the extent to which the market and the state (and a variety of partnership contractual arrangements between them) do not prove to be enough to reach the poor. Second, this perspective favours the most effective division of labour among various sectors and agents, whilst co-production is concerned with the integration of various inputs and the convergence of resources but also with structural changes in the decision-making process.

Thus, it could be argued that although it has become commonplace among international agencies and national governments to advocate more widely defined governance arrangements for service provision, the notions of public-private community partnerships and government-citizens co-production present two very different sets of assumptions. Although both concepts have been widely discussed within the co-production literature, the former is closely linked with the new public management school and primarily concerned with the principle of efficiency whilst the latter has been advanced from innovations within the public policy school of analysis and is centrally concerned with questions of social equality and political accountability. However, the differences between these two notions and their implicit governance frameworks have hardly been examined. This is relevant because the two notions place people in different positions vis-à-vis the state and the private sector. From the former perspective, individuals, groups and even communities are defined as "clients" – often labelled as the private community sector - with the potential to chip in with various resources and assets in the process of service delivery. Citizen co-production by contrast refers to people's involvement in the process of governing the delivery of services (and other public policies), paying particular attention to the need to reformulate citizens' rights and responsibilities vis-à-vis the state's (box 6).

Box 6. Citizen co-production in Caracas, Venezuela

In the case of Venezuela, the emergence of an institutionalised platform for service co-production has to be examined in the light of the substantial changes introduced by the Chavez administration. In 1999, through the adoption of a new constitution, the country began the reorganization of the State, marking a shift from representative to participatory democracy. Since then, the government policy to overcome poverty has focused on a strategy of social and productive integration through the active participation of the community. Within this framework, the 2001 Organic Drinking Water and Sanitation Service Act introduced a new institutional scheme separating policy, regulation and management functions. This transferred the service to the municipalities and activated the organisation of Technical Water Fora (TWF), designed as a direct channel between grassroots community organizations and Hidrocapital, the public sector regional water supply company responsible for water provision in the Caracas Metropolitan Region (CMR).

The new water regime does not allow private sector participation in the stages of water extraction and production, since water is defined as a public good and these activities are reserved for the State. In this context, WATSAN is regulated through Hidrocapital and the National Superintendence of Water Service by the National Water Office, which in turn reports to the Ministry of the Environment and Natural Resources. Hidrocapital

undertook an organistional change to incorporate community participation into its operating procedures through the creation of the Community Management Office. The Office has been instrumental in expediting the implementation of TWF throughout the CMR, fostering the creation of more than 200 of TWF in the peri-urban areas alone (Cariola and Lacabana 2004).

Local community participation through the TWF takes place throughout the whole planning process, starting from the community water needs assessment and the elaboration of a joint diagnosis with Hidrocapital professionals, through the design of projects for the rehabilitation and/or expansion of the network, to the monitoring of the service provided, the state of the network, and the use of water in a sensible way. The projects engendered differ greatly in technical difficulty, cost, and complexity, ranging from small-scale water distribution systems to large-scale systems. Within this process the project constitutes a key outcome for the community, representing a common vision and allowing the necessary organisation of its implementation. In addition, the TWF are in charge of the financial co-management of the projects in collaboration with various state agencies and are also responsible for regulating the water tariffs agreed within each community. The TWF have helped improve coverage of WATSAN services and strengthened community solidarity ties, while providing examples of participatory democracy where not only rights, but also duties of community members are stressed. Although not easily attributable to the TWF alone, in Venezuela the MDGs of halving the population without access to water and sanitation by 2015 were already met in 2005.

Source: Allen (forthcoming).

Moving down the ladder: the management of sanitation options accessible to the urban poor

Conventional sewer connections by individual households are often presumed to be the prevalent sanitation solution in urban areas, as illustrated in the figure below. Sewers are largely in the care of private or public service providers where the fees for the service are added to people's water supply bills. Research in urban and peri-urban areas of developing countries shows that the poor are seldom connected to an underground sewer system and are unlikely to be connected in future (see, for example, Allen et al. 2006a; Schaub-Jones 2006). It is not only the cost of connection and maintenance fees that prevents the urban poor from gaining access to a sewer network but also the lack of regular water supply on which such a system relies (SIGUS 2003).

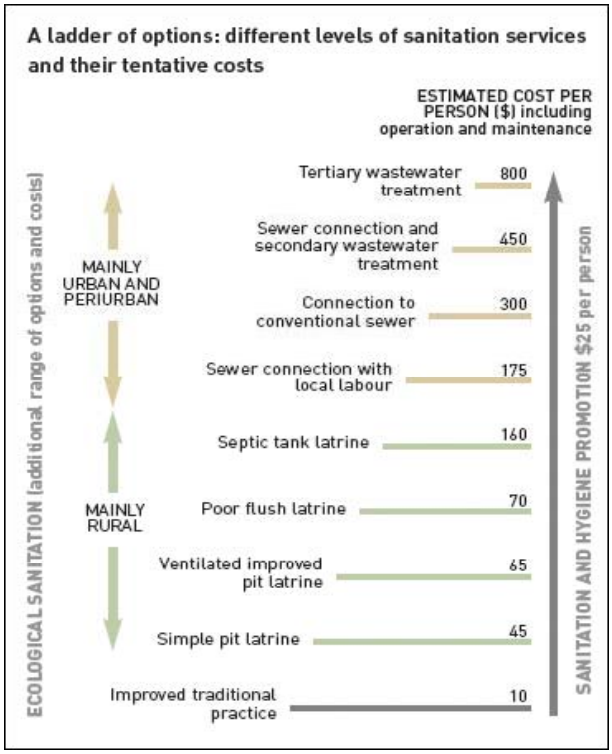

Figure 3. A ladder of options
Source: Van de Guchte and Vandeweerd (2003:20).

The reality for urban low-income households is much more complex than shown in figure 3, and remains largely invisible in official figures and statistics. Many publications looking at sanitation for the poor seem to focus on available options without considering the number of people sharing the same facility (see for example de Bruijne et al. 2007). However, this is important as it has implications on how these facilities are constructed, managed and used. Schaub-Jones (2006) suggests extending the sanitation ladder downwards in order to depict the situation of many urban poor people for whom sanitation is limited to communal or public facilities. This section takes a closer look at the sanitation options accessible to the urban poor, paying particular attention to the roles and responsibilities of the different actors involved.

Condominial sewer systems

There are a few examples of low cost, affordable sewer systems where the community is involved in the construction of sewers with shared management responsibilities with the utility, as in Brazil (box 7), Bolivia and Pakistan (SIGUS 2003). The success of such systems is dependent on collaboration between the community and local government throughout the process, and the community can cut costs further by providing labour during construction. After the new sewers have been built, there are many examples where a management committee that consists of community members is in charge of operation and maintenance of the community-level components, including the collection of user fees. Such a system requires a certain level of community mobilisation and organisation, for example through a CBO or NGO as in the Orangi Pilot Project in Pakistan (see Hasan 2006) or through locally based networks as in AguaTuya in Cochabamba, Bolivia (Viklund and Welander 2007).

Box 7. Condominial sewers in Brazil

The condominial sewer system was first developed in low-income settlements of Natal, a city in the northeast of Brazil, with the aim to extend wastewater collection to unserved areas. Support from the state water company (CAERN) and the World Bank contributed considerably to disseminating this approach across Brazil and legitimising it (Watson 1995).

The condominial sanitation system can provide an affordable sewage system for the poor provided there is regular water supply, ideally with a connection to each plot (Mara 1998). Condominial sewer systems are dependent on a productive partnership between the service provider(s) and the community mediated by the municipal government. The involvement of the community is crucial for what Watson labels a "customized service approach" (1995, 21), which tailors the project to demands and needs of the residents. Consequently, public agencies need to engage with communities throughout the process, which requires a substantial change in their approach to provide services and in some cases necessitates the involvement of consultants who have more experience in working with the urban poor and building condominial systems (ibid.). In many cases the community will participate in the operation and maintenance of the system in the form of condominiums formed throughout the process. Empirical evidence reveals that extensive customer involvement combined with political support from mayors and sewerage agencies are key to the success of the system (ibid.).

There is potential to link agricultural practices into such systems by using the collected and treated effluents for irrigation and fertilisation of agricultural plots. However, creating this synergetic partnership would require collaboration with yet another set of institutions of different jurisdictions and has so far proved difficult (Neder and Nazareth 1998).

Household toilet/latrine

Since sanitation at the household level is regarded as the sole responsibility of each individual household, utility providers and local authorities hardly get involved in the management of these facilities. A study in 10 African cities found that "almost all poor households build their own sanitation facilities or hire others to build facilities for them" (Collingnon and Vézina 2000 cited in Scott and Sansom 2006, 4). Subsequently, the issue of maintenance is of particular importance where the toilet or latrine is not connected to a sewer but to a septic tank that needs emptying. This becomes even more of an issue when the facility is shared by neighbours or relatives. However, the cost of emptying might not be affordable for poorer households, while density of housing restricts households from digging another pit next to the old one. It is particularly in the densely populated areas of the urban poor that negligence in managing these facilities can have serious impacts not only on the respective household but also on its neighbours, as the unsafe treatment of excreta can spread a number of water-related diseases. The latrine centre set up in Dar es Salaam (box 8) has been a potentially useful resource that assisted poor households to choose the appropriate option based on their circumstances and financial resources.

Box 8. Marketing and pooling small-scale independent providers through a latrine centre in Dar es Salaam

In Dar es Salaam, Tanzania a "latrine centre" made the sanitation services supplied by small-scale independent providers (SSIPs) more accessible to the urban poor. A group of informal latrine builders with support from WaterAid and the Water Engineering Development Centre (WEDC) formed a registered CBO and set up the latrine centre. The facility not only displayed sanitation options and their prices but also provided information, offered construction through the various SSIPs and also focused on raising awareness in the community (Scott 2006). This was all part of a marketing strategy to increase the demand for improved latrines by low-income people and enabled participating SSIPs to share resources and equipment. There are currently plans to adopt this approach in the Dar es Salaam Community Infrastructure Upgrading Programme funded by the World Bank and for scaling up in other localities (Fisher 2006). However, despite this innovative idea having the potential to be adopted elsewhere, the latrine centre in Dar es Salaam was surprisingly closed due to what has been reported as "problems in meeting local community's demands" in the area, an issue that deserves further investigation.

The latrine centre was not involved in providing information about or supporting contractors emptying pits and latrines. However, this often neglected sanitation function is crucial wherever a connection to a sewage network is lacking. The task is largely carried out by individual formal and informal small-scale independent providers (SSIPs). In very densely populated low-income areas with poor access roads and insufficient space for emptying trucks the service is carried out by manual cleaners (SIGU 2003). Since many SSIPs largely operate on an informal basis, they do not comply with state regulations and problems of inadequate disposal

emerge. Including these providers in an establishment such as a latrine centre could be a way to formalise and regularise their operation. With the necessary support from the community and local government, SSIPs can play an invaluable role. In Maputo, Mozambique, they successfully provide pit latrine construction and pit-emptying services for the poor through ADASBU, a small community-based association that is formally registered and recognised working in partnership with a number of external support agencies[vii] (ESAs), which facilitated the set-up of the initial project (Scott 2006). The local government helps this initiative by waiving fees for sludge disposal but does not provide any other formal support. In order for the service to be viable in economic terms the customer base has to continue growing. There is a need to evaluate what role ESAs play and how much their support influences the sustainability of such initiatives. Poorer households are not always able to afford having their latrines completely emptied, but when households only pay for partial sewage removal, this limits the viability of the CBO operation, in the absence of external funding (Scott 2006). In many cases the emptying of latrines is left to small independent private operators who lack formal recognition and support. The case of Kano (box 9) shows a practice that, with the necessary collaboration with the formal sector, has potential to be replicated and scaled up.

Box 9. Operation of informal night-soil attendants in Kano, Nigeria

Pit-emptying services in Kano are provided informally by private individuals as well as by organised independent groups. Their services are mainly required by low-income households where building another latrine is not feasible for financial or spatial reasons and where lack of regular water supply inhibits the use of flush toilets. A contractual arrangement is reached between the pit emptier and the individual household before the work starts. The service remains unregulated as the government is generally against the use of latrine systems. At the same time, the local authority has not yet managed to come up with an alternative system, which renders the service provided by informal night-soil attendants essential.

Lack of support from the government currently leads to health risks associated with the operation of the service. Although the emptying of pit latrines helps to prevent the spread of excreta-related diseases in the respective neighbourhoods, the unregulated dumping of excreta in the outskirts of the city poses a serious health threat to peri-urban communities and is evidence of the need for improvements with regards to transportation and evacuation of liquid waste. Collaboration with and support from the government could not only help to improve the service in Kano but would also set a precedent and encourage the model to be scaled up and replicated elsewhere.

Source: Based on Debomy 2000.

Public toilets/latrines

Public latrines/toilets are the most common sanitation option in densely populated low-income areas where lack of space does not allow for facilities at household level (SIGUS 2003). Such facilities are usually built and owned by the government or contracted out to the private sector with little or no interaction with the potential users regarding "…the location, design, construction and provision for maintenance. The agencies responsible for construction and maintenance generally have little accountability to the communities in which they build" (Burra et al. 2003,12). In many cases building and maintenance are the responsibility of different agencies, leading to facilities being constructed without considering how they will be operated and by whom. This is aggravated by a general lack of understanding by the government and other service providers of the circumstances and needs of urban poor communities. The number of seats is often insufficient as in the case of Harare, where 1,300 people are supposed to share 6 seats (Manase et al. 2001). The privately run public conveniences in Kano demonstrate a practice where the public sector has managed to hand over responsibilities to the private sector without losing control over how facilities are designed and maintained. However, since these facilities have been built primarily to serve public areas, more information is needed on their adequacy to serve low-income households in the vicinity that lack private toilets (Ayoti n.d.).

Open defecation is common in close vicinity of inadequate public facilities and this poses a serious health threat, particularly for children. The case of Tiruchirapalli (box 10) shows how through the participation and mobilisation of women, public toilets can be built and operated successfully to meet community needs. Treating poor communities as one homogeneous group, which is the approach frequently taken by formal public and private service providers, neglects the different needs, practices and responsibilities with regards to age, gender, etc. (see Joshi and Morgan 2007). The formation of women's self-help groups (SHGs) was crucial in this case and through their involvement in construction and management many community members have been using and paying for the provided facilities. However, this pay-as-you-go approach means that public toilets might not be affordable for some of the poorer households, no matter how small the charge may be. This means that they still lack access to a sanitation facility, which is a particular concern for women and children (Burra et al. 2003).

Box 10. SHGs managing public toilets in Tiruchirapalli, Tamil Nadu, India

Before the Tiruchirapalli City Corporation (TCC) approached WaterAid to help build communal latrines in several slums, existing latrines built by the TCC were not maintained and consequently not in use. The involvement of WaterAid assured that the project had a major community participation component and developed into "a 3-year integrated sanitation promotion programme for 100 slums" (Calaguas and Roaf 2001, 9). For those slums where WaterAid managed projects, the organisation collaborated with three local NGOs. The role of women in these projects was crucial as they were the first to get mobilised and form self-help groups (SHGs), which eventually federated into a network. Emphasis was placed on meeting the needs of the community and this lead to the construction of child-friendly toilets. Those slums managed by TCC were less successful and soon exchange visits were organised to learn from the SHG approach and extend it to the remaining slums. Now SHGs are managing the public toilet facilities across the targeted slums. The remaining challenge is to get men to use the facilities after they become used to defecating in the open (Ganapathy 2003).

This case shows that the involvement of the local community is crucial to the success and sustainability of sanitation projects for the urban poor. The programme has changed the governance of the city in that the SHG network has been invited to get involved in future developments of the city. However, it also needs to be mentioned that the project took part in regularised settlements and SHGs have only now started to engage with communities of unregularised communities.

Source: Based on Calaguas and Roaf 2001.

Community toilet blocks

Community toilets or latrines can provide a good compromise where individual facilities are not feasible. The difference between public toilets and a community toilet is that the former "serve the needs of whoever happens to be passing by, whether a local or a stranger" whereas the latter "belongs to, and is controlled by, a community" (Burra et al. 2003, 30). Community toilets are primarily used by a defined community and experience shows that NGOs and CBOs can contribute to more successful outcomes when closely collaborating with potential user communities (ibid.). Several experiences with community toilets across India involving the urban poor in the construction and management of community toilets has clearly changed the relationship between the city government and civil society, leading to a redefinition in roles and responsibilities (see box 11).

Box 11. Community toilets as a form of service co-production in Mumbai, India

This initiative came about in response to the inadequacy of public facilities provided by the municipality. The first community toilets in India built and managed by the community were funded by the UK charity Homeless International to set a precedent that would eventually convince the government and donors to collaborate with organisations of the urban poor. Initial efforts of the Alliance (made up of the NGO SPARC, the women' savings group Mahila Milan and the National Slum Dwellers Federation (NSDF)) to gain support from the government and donors for community-driven projects were unsuccessful. The municipal corporation in Mumbai started to appreciate the idea of involving the Alliance in improving sanitation in low-income areas once they had successfully implemented a number of toilet block projects across India.

There are clearly defined roles and responsibilities for the different actors involved in building and managing community toilets. The city government is in charge of setting standards, and for providing the land and capital cost for the construction as well as connections to water and electricity. The community takes part in the selection of the site and subsequently designs, builds and manages the facilities. Although contracts are given to an NGO, the success of community toilets rests upon active community involvement. This helps to integrate the needs of a diverse community into the layout of the facilities and also enhances their capacities and skills. User fees, mainly in the form of monthly family passes, allow a full-time caretaker to be employed and cover any maintenance work.

The experience with small-scale projects resulted in the Alliance's involvement in larger community toilet programmes in Pune and Mumbai and led to a form of service co-production where NGOs and the community are partners with the city government rather than simply with its clients.

Source: Based on Burra et al. (2003).

The constant involvement of civil society from the design stage ensures that maintenance practicalities are considered from the beginning (contrary to many practices for public facilities), and that the needs of different user groups are incorporated into the plans[viii]. Although community toilets built by civil society are often cheaper than the ones constructed by local authorities, users still have to pay in order to cover maintenance costs. An approach promoted by the Alliance in India gives families the opportunity to buy monthly passes, which are considerably cheaper and therefore more affordable compared to single use charges of public facilities, while being sufficient to keep the facilities clean and in working order. As projects grow in size it has proven particularly difficult for civil society organisations to mobilise the necessary financial resources. Box 12 below illustrates an innovative approach to bridge the finance gap in community-led initiatives such as the community toilets that are being used in three different countries of the South.

Box 12. Scaling up sanitation in India through the community-led infrastructure finance facility (CLIFF)

CLIFF is a finance facility at macro level that provides funding directly to organisations of the urban poor to support community-led projects that work in partnership with local governments (Jack and Morris 2005) and has been used among other things for the construction of community toilet blocks. CLIFF is managed by Homeless International (HI) and administered by Cities Alliance with funds from DFID and Sida. It provides a revolving fund to bridge the finance gap in order to construct facilities until revenues can be realised and further helps to "leverage and blend financial and other resources", with guarantees provided by the UK housing sector through the involvement of HI (ibid., 5). It has further been used to fund knowledge exchange visits within and between countries of the South to build capacity, not only of the urban poor but also of government officials and engineers.

Certain criteria need to be met in order to be eligible for CLIFF funding, including the need to "[b]uild on established local organisation by communities of the urban poor and their existing relationships with local authority and municipal officials, and have the potential to strengthen such city-community relationships" (Jack and Morris 2005' 4). So far it has proven particularly useful for the replication and scaling up of small-scale solutions. By the end of 2006 CLIFF helped to finance sanitation programmes in Pune and Mumbai, India benefiting around 260,000 families (Morris and Jack 2007). Since 2005 CLIFF has also been operating in Kenya and has started to run in the Philippines.

Table 2 presents the wealth of operators involved in the different sanitation systems discussed above. Overall, problems with inadequate sanitation facilities for the urban poor are in most cases associated with a supply-led approach adopted by the government and other service providers that fail to engage with target communities in low-income areas. Experience shows that an approach that pursues the active involvement of urban poor communities in the selection, construction and management of sanitation facilities has better and long-lasting results. It would be ideal to provide every urban poor household with an individual toilet or latrine, however, in very densely-populated low-income settlements this has proven to be unattainable and

therefore other solutions need to be sought. Consequently there is a difference in scope for scaling up. The community toilet approach of the Alliance in India started small but was scaled up across India, and by now more than 500,000 urban dwellers across eight cities in India benefit from the facilities (Burra et al. 2003). In order to sustain and scale up initiatives where services are largely provided informally, collaboration with the local government is needed.

Table 2. Actors in the urban sanitation sector

Sanitation System	Roles and Responsibilities
On-site sanitation	
On-site sanitation (private facilities) This includes facilities that are shared by a small number of households	**CSOs**: stimulate demand for improved sanitation using marketing techniques, in collaboration with the media and marketing agencies in association with builders overall assuming the role of enabler (see box 8) **Individual households**: provision of labour **ESAs**: financial and technical support **Public or private utility**: provision of trunk sewer infrastructure and user charges through water bills
Pit latrines	Small-scale, informal private providers: often work in groups to dig and empty pits, construct latrine structures and supply component parts through local sanitary marts
Pour-flush latrines with septic tank	Small-scale, informal private providers: usually work in groups to desludge septic tanks, often with disposal to drains, sewers, wastewater treatment sites or the local environment
Shared facilities	
Communal toilet blocks *Often provided where space and/or financial constraints make household provision impractical*	**CSOs**: often contracted by the local authority, from construction to operation and maintenance Different **private providers** often contracted by the local authority for construction **or** managing operation and maintenance **Community**: provision of labour **ESAs**: financial and technical support **Local government**: regulator, co-funder, provision of additional services (e.g. water, electricity)
Public toilet blocks	Different **private providers** often contracted by the local authority for construction or managing operation and maintenance **Local government**: regulator, funder
Off-site sanitation	
Conventional sewerage	Concession contracts to large-scale **private providers** (through PPPs), usually for the provision of combined water and sewage services
Non-conventional sewerage (e.g. condominial sewerage system)	**Community-based CSOs**: responsible for operation, maintenance and repair of community-level components (e.g. house connections and small collector sewers), sometimes with involvement in design and construction. **Community**: provision of labour **Public or private utility**: provision of trunk infrastructure, possible share in management

Source: Own elaboration based on Scott and Sansom (2006, 3).

Each of the alternative options explored above has clear governance implications with regards to legislative function, regulation, operational provision of services and investment. The first two functions are either absent in cases where services are provided by the informal sector (many of the informal latrine constructions and emptying services) or are executed by the public sector clearly moving from provider of services to facilitator and regulator (e.g. communal toilets). The provision of services to the urban poor is either done through SSIPs or civil society, often with support from a registered CBO or NGO. With regards to funding, individual households would provide this for private facilities, e.g. for the services of the latrine centre, while ESAs get involved in projects reaching a larger target population, sometimes with co-funding from the government.

Beyond sectoral approaches

Many cross-sectoral efforts focus on sanitation in relation to hygiene (see, for example, WSSCC and WHO 2005) because of the widespread diseases associated with the lack or inadequacy of sanitation facilities that contribute to high morbidity and mortality rates among low-income groups. Such diseases spread especially quickly in very dense settlements and can considerably increase the health costs of poor households, which in turn puts a serious strain on their financial resources. This is exacerbated where illness affecting the main income earners of a household cuts the income even further. Simple sanitation solutions, e.g. maintaining existing facilities, can often prevent this from happening and consequently help to stabilise livelihoods. At

the same time, the expenses needed to access and use certain sanitation facilities (e.g. user fees for public toilets, construction costs for a household latrine and charges to empty pit latrines) can also take up large amounts of a household income and prevent them from using the money for other purposes such as food, children's education, etc. Informal services might often be more expensive but are frequently the only ones available to the poor. The community toilets in Mumbai (box 11) illustrate how sanitation solutions can be developed to improve the quality of life of low-income people in an affordable way.

Apart from the quality of life and livelihoods, sanitation is clearly linked to many other issues of concern to the urban poor, such as housing, other basic services and employment. Nevertheless, strategies that combine sanitation with these issues are infrequent. Many initiatives have demonstrated that improvements in sanitation impact positively on a number of other MDGs such as poverty, education, gender equality, etc. (see box 2 in Swann and Cotton 2005). This calls for cross-sectoral approaches and solutions that can create synergies and combine efforts in these areas through broader programmes and projects that use available resources more wisely.

The community toilet blocks in India are part of a larger programme of work that the Alliance is involved in, including community-managed resettlement and slum rehabilitation (Burra et al. 2003). This allows for sanitation options to be incorporated into the overall planning of settlements rather than coming as an add-on afterwards. According to MDG calculations it is cheaper and more sustainable to provide new affordable housing (US$ 25 per person – EUR 16) than to upgrade slums (US$ 42 per person – EUR 27) (Sheuya et al. 2007). However, such a statement needs to be treated with caution. In cases where relocation of slum communities is considered, their existing livelihoods and social networks need to be taken into account as they might be at risk when moving to a new location. The resettlement of the pavement dwellers in Mumbai, where in-situ upgrading was not an option, demonstrates how the involvement of the community can make such projects more appropriate. The participation of pavement dwellers, particularly females, in the planning of the buildings resulted in the design and construction of shared toilet facilities on each floor in order to sustain a communal meeting place that they were used to from living on the streets, and also to rule out gentrification. Excluding these women from the process would probably have resulted in the design of units with en-suite facilities based on the assumption that this is what everybody prefers. Other research shows that the involvement of poor communities in water and sanitation projects can subsequently be used to expand their influence on other development activities as illustrated in the case of SHGs in Tiruchirapalli (box 10).

It needs to be recognised that improvements in sanitation not only impact positively on people living in the area but also on those working there, such as the SSIPs providing pit-emptying services in various locations and others engaged in the informal economy (Nunan and Satterthwaite 2001). The provision of sanitation services represents an important, if not the only, source of income for some of the poor. Their employment would be seriously threatened if they were to be excluded from future sanitation solutions. Apart from activities directly linked to the provision of sanitation services, other productive activities carried out by the poor are linked informally to sanitation. As a consequence, cross-sectoral approaches further need to acknowledge the increasing rural-urban interdependencies of the urban poor in order to tackle the sanitation challenge. Many peri-urban poor dwellers in Mexico City reuse water for multiple purposes (e.g. toilet flushing, plant watering, etc.) and consequently contribute to a more sustainable management of greywater (Allen et al. 2006a). Formal support could widen the scope and benefits of such water-preserving practices considerably.

Furthermore, reusing wastewater for agricultural purposes can be a cost effective way to reduce the amount of sewage that needs to be discharged while at the same time providing an important input into productive processes (Hofmann 2005). The livelihoods of many urban and peri-urban farmers depend on sewage irrigation, but the informal nature of this activity brings with it a number of problems in terms of health and safety and regularity of supply. It would be a big step forward if the initial intentions in Brazil to link the transportation and treatment of sewage to agricultural practices were implemented in practice (see Neder and Nazareth 1998). In governance terms this presents a challenge to unite actors from two processes that are currently operating separately from each other: wastewater management and agricultural production. Furthermore, these practices of urban and peri-urban farmers need to be recognised and embedded into the

formal system, similar to what ADASBU has achieved in Maputo for the operation of SSIPs with regards to pit-emptying services. This could be achieved through the involvement of CBOs and NGOs.

Concluding remarks

This essay has presented an overview of the current trends and approaches adopted in meeting the governance challenge of urban sanitation. The significance of sanitation for the improvement of the quality of life of the urban and peri-urban poor and the impacts on their livelihoods is often overlooked and might partly explain the greater international focus on water. Nevertheless, these issues are closely linked and need to be considered in order to successfully reach the poor. The first and most obvious conclusion is that the governance of urban sanitation remains under-analysed in comparison to water and this means that propositions for new governance arrangements appear to be thought out mainly in relation to water and applied to sanitation by default. Despite the importance of holistic and articulated approaches to the provision of water and sanitation, the above implies that organisational arrangements (and their social, economic and technical details) need to be examined in the light of the specific benefits and challenges posed by sanitation.

Without claiming to be comprehensive – either in terms of revealing the full complexity of the challenges faced or in offering a full representation of the many experiences under way – we have aimed at presenting a reconnaissance of the issues/trends emerging from the articulation of what has been characterised in the introduction as a rational and an empirical perspective. The central argument built throughout this essay is that any efforts to make the governance of sanitation work for the urban poor inevitably requires moving down the sanitation ladder to support and build upon the unconventional but widespread practices found at the lower spectrum of the ladder. Bearing this in mind, the following paragraphs are intended as teasers to fuel current thinking and doing in the field.

Reaching the urban poor: beyond trade offs

Most interventions aimed at improving urban sanitation are driven by one or more of the following principles: equity and justice (service for all), environmental sustainability (solutions to local problems that do not cause deterioration of the wider environment or use resources that cannot be replaced) and service delivery sustainability (sustained capacity to address needs or to meet the demand over time), not just in terms of provision but also subsequent operation and maintenance. Overall, a preoccupation with making providers more efficient – particularly in terms of cost recovery – seems to dominate current approaches to policy-driven responses. Thus, as shown in the case of the urban water and sanitation authorities in Tanzania (box 5), it is common to find not just private but increasingly public providers following this principle at the expense of others. But this does not need to be the case; reaching the urban poor in a more equitable and just fashion does not mean that the other two principles should be overlooked; otherwise pro-poor approaches are likely to be confined to one-off and short-term solutions, with limited scope for scaling up. Neither does this mean that there are magic or instant solutions to the simultaneous attainment of these three principles. Answers to this conundrum seem to lie in integrated changes at various levels: policy, regulation, planning and design, financing, delivery and monitoring, as discussed below.

From one orthodoxy to another? Moving beyond the private-public dichotomy

This analysis suggests that policy-oriented and action-oriented approaches to the governance of urban sanitation need to be urgently relinked. Of paramount importance to this purpose is to unlock those approaches from the boundaries of prevailing orthodoxies. As shown throughout the paper, the public-private controversy dominating the debate since the 1990s has done little for advancing the cause of better sanitation for the urban poor. It is now perhaps more widely accepted that to be efficient it is not sufficient to be private, and to be equitable it is not sufficient to be public. Throughout the paper we have identified a wide range of possible actions and types of organisation and management with potential to support the quest for universal access to urban sanitation, in ways that ensure equity, quality and social control. The spectrum of hybrid combinations emerging with regards to sanitation is less varied than in the case of water – partly due to technical reasons (Allen et al. 2006a). Nonetheless, such a spectrum is more complex than suggested

by the policy-driven categories identified on the left-hand side of the sanitation wheel (figure 2). The crucial challenge ahead lies in rethinking the governance of urban sanitation from the perspective of the action-oriented approaches outlined on the wheel as "needs-driven". Moreover, this implies that there needs to be a change from the usual route of policy-based evidence to evidence-based policymaking, in which the latter acknowledges the lessons learnt from the reality on the ground.

Rethinking the relationships among agents

Overcoming the public-private controversy alone is not enough. It is now widely accepted that addressing the MDGs sanitation challenge in urban areas will require a combination of provision modes, and therefore a combination of agents. The latter is clearly exemplified in the arguments presented by the advocates of unbundling approaches to service delivery as the most appropriate (often only) route to meet targets. This is because of the perceived advantages of dividing responsibilities between the public, private and civil sectors, in order to combine their resources and inputs either under hierarchical or horizontal structures. Whilst hierarchical structures have received ample attention, little has been said about how to go about the creation of sustainable horizontal structures beyond the few case studies that have successfully pursued this route. Furthermore, the emphasis on unbundling has somehow focused on an apparently more efficient or viable division of labour in which "partnerships" often refer to the coexistence of different agents within service provision, with little discussion of the relationships between them. The state still plays a crucial role in shaping these relationships through legislation and policymaking, regulation and enforcement, planning and design, operational provision of services and investment.

Regulation and enforcement: from command & control and economic incentives to citizens steering

The issue of regulation needs to be re-examined in the light of the increased involvement of multinational companies in WATSAN and also the intimate involvement of multilateral lending agencies in the privatisation process. It is obvious that this map of powerful stakeholders creates new challenges for regulatory bodies in terms of ensuring accountability and transparency. In this context, it is commonly argued that current approaches to regulation and enforcement need to shift from a command & control perspective to an incentive approach. In other words, it is assumed that economic incentives should be used to reward good performance and penalise harmful actions or failure to meet addressed targets (as shown in box 3, the latter is already common practice in most PSP initiatives). A common problem with the design and application of incentives is that they are usually centrally decided and enforced, often failing to establish positive links between regulators, regulated and users. By contrast, informed, organised and empowered citizens allied with public organisations can play an effective role in monitoring the quality of service delivery (as shown in the case of Caracas – see box 6). The problems of highly asymmetric power relations should not be underestimated here, and this requires a new approach to socially legitimate and strong regulating bodies, in order to increase transparency and constructive dialogue and to avoid corruption. This also points to the need to design incentive structures in line with less narrowly-defined efficiency criteria and with an explicit pro-poor focus. Furthermore, there is a need to acknowledge and support, through formal regulation, the role played by SSIPs and their practices (such as the pit-emptying service) in the lowest ranks of the sanitation ladder. Some current practices might not be the first choice of city governments, but they are often the only viable solution in relation to high density low-income areas.

Planning and design: From master plans to strategic action

In overall terms, the effective municipalisation of service provision requires not only technical and financial capacities and the ability to engage with local users, but also a fundamental shift in the way municipal planning operates. The master planning approach typically adopted in the past has meant that efforts to improve sanitation have tended to focus on the construction of large and centralised solutions, demanding high investments in trunk sewerage, wastewater treatment and disposal. Such plans have given little consideration to limitations in financial and institutional terms and usually neglect user needs and their ability to pay (WELL n.d.). The shortcomings associated with this approach are well documented, not only resulting in facilities that do not work for urban and peri-urban informal settlements, but also in chronic problems in the operation and maintenance of these facilities.

By contrast, many authors argue that master planning needs to be replaced by a Strategic Sanitation Approach (SSA) (Wright 1997; Saywell and Cotton 1998) that starts from grounding plans for improved sanitation in context-specific existing situations, leading to long-term actions and programmes that are designed in the light of the knowledge and experience acquired through short-term initiatives. This approach is strategic in the sense that rather than embarking on comprehensive solutions that are subsequently difficult to implement, planning should be both adaptive and incremental. The municipal initiatives reviewed in box 4 provide some examples of this approach.

The involvement of the users in the planning and design of sanitation facilities is crucial for two reasons. First, it opens the possibility for more locally appropriate technologies, with the potential of cutting costs and therefore making the service more affordable for the poor. Second, it leads to more adequate facilities, as the urban poor know best what they need and understand the actual problems and deficiencies of current sanitation facilities.

Service delivery: from supply-driven to demand driven solutions?

There seems to be general consensus on the need to move from supply-driven to demand-driven solutions. This implies that approaches to improved urban sanitation should focus on what users want and are willing to pay, rather than on what professionals think is best. Clearly, involving poor communities in the delivery of services can create ownership and increase the capacities and skills of the urban poor. However, an exclusively demand-driven approach has its own limitations: it can become over-reliant on the knowledge and expectations of service users, limiting the scope for change and innovation. It can lead to a short-term perspective driven by immediate concerns at the expense of a wider, longer-term perspective. It can, and often does, conflate demand with willingness to pay, and it might pay insufficient attention to the effective capacity of service providers to respond to demand (WELL n.d., 9).

The obvious conclusion here is that both demand and supply – and indeed their articulation – need to be carefully considered in order to address the principles outlined above in an integrated fashion, whilst allowing scope for innovation and change. As shown in the many initiatives underway in Brazil (box 4), there is ample scope for municipalities to enhance responsiveness to users, while reaching the goals of universal provision and service systems that are environmentally, technically and financially sound through the integrated planning of environmental sanitation actions. Service delivery through inter-municipal consortia (where a group of municipalities provide sanitation services for more than one municipality) can be an effective way of reaching economies of scale, whilst spreading and sharing improvements in sanitation services among various urban and rural areas.

From TNCs to small-scale independent providers

As argued throughout the paper, in overall terms there is no evidence that increased formal PSP has helped – as intended – to bridge the financing gap in benefit of the poor. To a large extent, this seems to have been prompted by the lack of pro-poor conditions clearly established in the contracts, but also by the fact that the predominant forms of PSP arrangements applied do not attract substantial private capital investment.

PSP has been largely encouraged and examined in relation to TNCs. The picture differs significantly when considering other types of private operators than international companies. Whilst there is very little documented evidence of the outcomes of involving the national private sector, the literature on small service enterprises is incipient but fast growing. There is overwhelming evidence of the crucial role that small-scale enterprises and independent providers play in servicing the poor. Although the cost of their provision is higher than that of public utilities, which typically undercharge the real costs of service production, there is no conclusive evidence that small independent providers are profiteering from the poor; rather, they are simply trying to survive in a very competitive market environment (WELL n.d.). The conditions shaping the relationship between small independent providers and users (in terms of cost, price, financial capacity, technologies used, quality and frequency of service and so on) need to be explored in detail and the scope for their engagement in local public-private sector partnerships needs to be fully realised. Ignoring their input not only means that the main source of actual provision to the urban poor remains unsupported, but

also that the livelihoods derived from service provision for many among the poor continues to be limited and obstructed by policies and planning regulations that view small independent providers as illegal.

From profit to value-driven provision

The major finance question is how to meet the costs of urban sanitation in terms of infrastructure construction, operation and maintenance. Currently this question is predominantly approached by considering the willingness to pay of users (or rather, consumers). This tends to ignore the obvious fact that the poor often have limited capacity to pay for services delivery, let alone construction and maintenance. From a policy-driven perspective, the finance question is at worst commonly addressed by increasing consumer tariffs – typically excluding those who cannot pay – or at best, from a combination of increased tariffs and cross-subsidies to the poor (box 4). As argued above, an alternative perspective is to examine how to enhance the role played by SSIPs but also to look at how to reduce the costs of sanitation services and therefore adopt a more equitable and financially viable approach. Costs can be reduced through a number of options, including the use of affordable technology (favouring for instance on-plot or local sanitation facilities instead of centralised sewerage) and the adaptation of design standards to local situations. Much can be learnt here from the know-how and practices adopted by SSIPs and community-led initiatives. The latter in particular are typically value-driven rather than profit-driven (Scott and Sansom 2006). This implies that the question of finance is addressed in terms of best value rather than lowest cost and therefore approached from a broader perspective that explicitly or implicitly links sanitation improvements with other less tangible development outcomes, such as those resulting from community mobilisation (ibid.).

Moving down the ladder through citizen co-production

It could be argued that confining the role of citizens (and in particular of the urban poor) in service co-production merely to their self provision is hardly progressive. Yet, this approach still dominates much of the current experimentation with multi-agent partnerships. This is often based on the pragmatic acceptance that given the funding limitations of public agencies or the profit-seeking orientation of private providers the poor are better off by providing services for themselves, with some form of support from the state. Therefore, the discussion needs to move on from how best to use their inputs (time, money, labour, and so on) to fill the gap, to how to empower them to exert their full rights and responsibilities as citizens. Many of the successful cases that currently provide sanitation services to the urban poor explored in this paper represent a form of citizen co-production whereby community members participate in the provision of sanitation by taking clear responsibilities at various stages of the process. The capacity in the community is subsequently strengthened and the newly acquired skills can be crucial in the poor's quest for better income earning opportunities. Furthermore, as shown in the cases of Caracas, Mumbai and Tiruchirapalli, citizen co-production has potential to change the perception of the poor within the city and to redefine their position in the system.

In short, citizen service co-production can bring about a significant transformation to the governance of sanitation, acknowledging that the state has a crucial role to play asdo citizens. However, its capacity for transformation depends on the extent to which citizens – and in particular poor women and men – are engaged as political constituencies in their own right and not just valued in terms of their potential material contributions (time, money and labour) to the provision of sanitation.

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ii The definition of sanitation adopted for the purpose of this paper focuses on the effective and safe management and disposal of human excreta and wastewater. Solid waste management is not included here.

iii The notion of "peri-urban interface" makes reference not just to the fringe of the city but to a context where both rural and urban features tend to co-exist, in physical, environmental, social, economic and institutional terms. Environmentally, it is a heterogeneous mosaic of "agroecosystems" and "urban" ecosystems, affected by material and energy flows demanded by urban and rural systems. It tends to be socially and economically heterogeneous and subject to rapid changes over time. In institutional terms, it is characterized by the convergence of sectoral and overlapping institutions with different spatial and physical remits.

iv The General Agreement on Trade in Services (GATS) includes the provision of environmental services as one of the twelve sectors explicitly considered. Signatory countries agreeing to liberalisation also agree to remove any barrier protecting national enterprises against foreign competition. Although water and sanitation are not explicitly included among the listed environmental services, GATS has significant and controversial consequences in relation to the rights of TNCs involved in basic services provision vis-à-vis national enterprises and signing states (McGranahan and Satterthwaite, 2006).

v NPM emerged as a response to the context of the economic and fiscal crises which afflicted a number of Western states in the late 1970s, which were largely attributed to the bureaucratic failures of the Keynesian welfare state. Over the time, the pinciples of this school of thought were spread throughout the developing world, through the promotion of civil-service reform, privatization, management decentralization and a host of other measures focusing on the rolling-back of the state. This paper does not have the scope to address such reforms fully but there is a significant body of literature dedicated to examine both the arguments underlying NPM and their critique (Minogue et al. (1998); Therkildsen (2001), among others.

vi A "rival" or service is one that is consumed or fully occupied when used, so that it cannot be used by someone else, as in the case of drinking water. A " non-rival" good or service can be used without excluding other users – for example a television signal or, as in this case, a sewerage system.

vii ADASBU, which focuses on water, sanitation, hygiene education, drainage and solid waste was initially supported by Médecins sans Frontières and is now supported by WaterAid.

viii Women and children in particular have specific needs with regards to the design of shared facilities. Women are in need of privacy, while small children may find adult facilities too difficult or intimidating to use (Burra et al. 2003).