



Are the debates on water privatization missing the point? Experiences from Africa, Asia and Latin America

Jessica Budds and Gordon McGranahan

Jessica Budds is a doctoral candidate in the School of Geography and the Environment at the University of Oxford, working on water privatization and water markets in Chile.

Address: School of Geography and the Environment, Mansfield Road, Oxford, OX1 3TB, United Kingdom; e-mail: jessica.budds@geog.ox.ac.uk

Gordon McGranahan is director of the Human Settlements Programme at IIED.

Address: International Institute for Environment and Development, 3 Endsleigh Street, London, WC1H 0DD, United Kingdom; e-mail: gordon.mcgranahan@iied.org

This paper is drawn from a longer IIED Working Paper by Jessica Budds and Gordon McGranahan, "Privatization and the provision of urban water and sanitation in Africa, Asia and Latin America" (July 2003). This paper is or shortly will be available at <http://www.iied.org/urban/index.html>

The authors would like to thank David Johnstone (independent water and sewerage consultant), who generously gave his time to be interviewed for this paper; David Hall (director, Public Services International Research

SUMMARY: *This paper has two principal aims: first, to unravel some of the arguments mobilized in the controversial privatization debate, and second, to review the scale and nature of private sector provision of water and sanitation in Africa, Asia and Latin America. Despite being vigorously promoted in the policy arena and having been implemented in several countries in the South in the 1990s, privatization has achieved neither the scale nor benefits anticipated. In particular, the paper is pessimistic about the role that privatization can play in achieving the Millennium Development Goals of halving the number of people without access to water and sanitation by 2015. This is not because of some inherent contradiction between private profits and the public good, but because neither publicly nor privately operated utilities are well suited to serving the majority of low-income households with inadequate water and sanitation, and because many of the barriers to service provision in poor settlements can persist whether water and sanitation utilities are publicly or privately operated. This is not to say that well-governed localities should not choose to involve private companies in water and sanitation provision, but it does imply that there is no justification for international agencies and agreements to actively promote greater private sector participation on the grounds that it can significantly reduce deficiencies in water and sanitation services in the South.*

I. INTRODUCTION

DURING THE 1990s, private sector participation was vigorously promoted on the water and sanitation policy agenda for the South as a means of achieving greater efficiency and expansion in the water and sanitation sector. It can be broadly situated within the set of "neoliberal" reforms which, in the water sector, have been driven by multilateral financial institutions with the support of bilateral development agencies, even in the face of considerable resistance.

There is general agreement that public utilities have been too slow in extending access to services and that they can be inefficient and corrupt. Increasing private sector involvement to address these problems remains very controversial, however. For many, the question of how water and sanitation should be provided goes to the heart of the appropriate role of government. Moreover, while the debate is ostensibly about matters of high public interest, what makes the conflict between privatization and its alternatives so contentious are the conflicting vested interests of the

key actors within the water sector, such as between private companies pursuing profits and public sector employees protecting their jobs. Unfortunately, the private versus public debate obscures the variety of roles private enterprises can play in water and sanitation utilities, detracts attention from problems that have nothing to do with privatization and, moreover, makes it easy to lose sight of how the process of privatization is actually unfolding.

Under the right circumstances, it may well be possible for private sector participation to improve efficiency and increase the financial resources available for improving water and sanitation services. However, it can also direct finance to urban centres and neighbourhoods that are already comparatively well served, further polarize the politics of water and sanitation (especially when prices increase) and create new regulatory problems. Much depends on the way privatization is developed and the local context.

Despite its prominence in the water sector, the scale and benefits of private sector participation remain limited. Only around 5 per cent of the world's population is currently served by the formal private sector. During the 1990s, the level of private sector participation increased significantly in Africa, Asia and Latin America, but was concentrated in countries with larger economies and populations and higher levels of urbanization. The level of foreign private finance and investment has also been disappointing. Furthermore, problems and conflicts have arisen in a number of cases.

It should be noted at the outset that few of the people identified through the water and sanitation targets are likely to be served in the foreseeable future by the conventional water and sewerage networks operated by either private water companies or most public utilities. The recent *Global Water Supply and Sanitation Assessment* estimated that 1.1 billion poor people still lack reasonable access to improved drinking water supplies and 2.4 billion lack reasonable access to improved sanitation.⁽¹⁾ More than 80 per cent of these "unserved" live in rural areas. As indicated in a recent UN-Habitat book (for which an earlier version of this paper was submitted as a background paper), the number of urban dwellers without adequate water and sanitation services is probably far higher than these figures imply.⁽²⁾ But even the unserved urban dwellers tend to live in the smaller, low-income towns and cities, or low-income neighbourhoods within large cities, which the large water companies have shown little interest in serving.

Following a brief note on definitions, this article reviews the polemic debate surrounding private sector participation in water and sanitation services, critically examining the common arguments mobilized for and against its implementation in the South. It then reviews the trends and issues in the development of privatization in the water and sanitation sector in Africa, Asia and Latin America, with particular attention to private provision to low-income groups. The final section brings together the key points by way of conclusion.

a. A note on definitions

The term "private sector participation" is used in the literature to cover a wide range of arrangements between a government agency and a non-public institution, but usually refers to a contractual agreement involving a public agency and a formal (often multinational) private company.

Unit, University of Greenwich), who assisted with data on the global scale of privatization; and Diana Mitlin (IIED and University of Manchester), who provided materials and background notes. Comments were gratefully received from David Johnstone, David Hall and Andrei Jouravlev (United Nations Economic Commission for Latin America and the Caribbean). The authors would also like to thank UN-Habitat for their support.

1. WHO and UNICEF (2000), *Global Water Supply and Sanitation Assessment 2000 Report*, World Health Organization and UNICEF, Geneva.

2. UN-Habitat (2003), *Water and Sanitation in the World's Cities*, Earthscan, London.

3. Solo, Tova (1999), "Small-scale entrepreneurs in the urban water and sanitation market", *Environment and Urbanization* Vol 11, No 1, pages 117-131; also Bennett, Anthony (1998), "Sustainable public/private partnerships for public service delivery", *Natural Resources Forum* Vol 22, No 3, pages 193-199.

4. Crosslin, Robert, (1991), "Decision-support methodology for planning and evaluating PPPs", *Journal of Urban Planning and Development* Vol 117, No 1, pages 15-31.

5. See reference 3, Bennett (1998).

However, small-scale and/or informal operators are increasingly being recognized and described as private enterprises, as are civil society organizations where they engage in the provision of water and sanitation services, often on a small scale and to low-income settlements.⁽³⁾ These operators are very different types of organizations from large water companies and, typically, play very different roles and operate on very different principles (e.g. on a not-for-profit basis).

The term "privatization" is also widely used but can refer to two rather different things. It is sometimes used as a generic term to refer to increasing private sector involvement, but also specifically to the model of divestiture (see below).

"Public-private partnership" is a common term but is rarely explicitly defined. In the water and sanitation sector, it tends to be used to refer to contractual arrangements in which private companies assume greater responsibility and/or risk, especially through concession contracts.⁽⁴⁾ In such cases, the use of the term "partnership" may be meant to imply that the parties involved have mutually shared objectives and working arrangements that go beyond the fulfilment of any contractual agreement.⁽⁵⁾

For the purposes of this paper, "privatization" refers to processes that increase the participation of formal private enterprises in water and sanitation provision but do not necessarily involve the transfer of assets to the private operator. References to "private sector participation" also refer to formal private enterprises operating for or with water utilities. The term "public-private partnership" is not used, on the grounds that it can imply shared objectives that do not exist. The paper focuses on private provision directly to users and less on private sector involvement in other water-related functions. Although important, small-scale and informal operators and civil society organizations are not considered to be within the private sector scope of this paper.

There are several models of private sector involvement in water and sanitation utilities, with numerous variations, depending on the legal and regulatory frameworks, the nature of the company and the type of contract. The typical forms of private sector are briefly described below, ordered in terms of the extent of private sector responsibility, as summarized in Table 1.

Table 1:	Allocation of key responsibilities for private participation options					
	Service contract	Management contract	Lease / affermage	Concession	BOT-type	Divestiture
Asset ownership	Public	Public	Public	Public	Private / public	Private
Capital investment	Public	Public	Public	Private	Private	Private
Commercial risk	Public	Public	Shared	Private	Private	Private
Operations/maintenance	Private / public	Private	Private	Private	Private	Private
Contract duration	1-2 years	3-5 years	8-15 years	25-30 years	20-30 years	Indefinite

SOURCE: Adapted from Stottman, Walter (2000), "The role of the private sector in the provision of water and wastewater services in urban areas", in Utito, Juha and Asit Biswas, *Water for Urban Areas*, United Nations University Press, Tokyo.

Service contracts are usually short-term agreements whereby a private contractor takes responsibility for a specific task, such as installing meters, repairing pipes or collecting bills for a fixed or per unit fee.

Under a management contract, the government transfers certain operation and maintenance responsibilities to a private company but retains responsibility for investment and expansion. Payment is either fixed or performance related.

Lease and affermage contracts are similar to management contracts, but the private operator takes responsibility for all operation and maintenance functions, including billing and revenue collection. In both cases, the operator collects the tariff revenue but, under an affermage, the contractor is paid an agreed-upon affermage fee for each unit of water produced and distributed; whereas under a lease, the operator pays a lease fee to the public sector and retains the remainder.

Under concession contracts, the private contractor manages the entire utility and is required to invest in the maintenance and expansion of the system at its own commercial risk. Concessions have longer terms, to allow the operator to recoup its investment and, at the end of the contract, the assets either are transferred back to the state or a further concession is granted. The role of the government is predominantly regulatory. BOT (Build–Own–Transfer) type contracts are similar to concession contracts, with the difference that the private contractor is responsible for constructing the infrastructure from scratch.⁽⁶⁾ They are usually used for “green-field” projects, such as water purification and sewage treatment plants. The private partner then manages the infrastructure, with the government purchasing the supply. At the end of the contract, the assets either remain indefinitely with the private company or are transferred back to the government.

Under the divestiture model, the government transfers the water business, including the infrastructure, to the private company on a permanent basis through the sale of some or all of the shares in the company. This model has only been adopted in a small number of cases, such as England and Wales (full divestiture) and Chile (partial divestiture).⁽⁷⁾ In England, privatized water companies are run under strict commercial rules with tight regulation.

In addition to the above models, further options of private sector participation include joint ventures and cooperatives. A joint venture is an arrangement whereby a private company forms a company with the public sector, with the participation of private investors, which then takes a contract for utility management. Cooperatives are set up as limited companies, and domestic customers are members who elect the administrative board, although these are more common in villages and towns.

II. THE EMERGENCE OF PRIVATE SECTOR PARTICIPATION IN THE WATER SECTOR

DURING THE NINETEENTH century, water and sanitation emerged as a major public issue in the industrializing cities of Europe and North America. The first water and sanitation services were, in fact, provided by the private sector, but restricted to the wealthier social groups who were able and willing to pay for them. Although private participation was also widely debated in the nineteenth century, and the free market viewpoint was prevalent in many of the countries undergoing sanitary reform,

6. Variations include: Build–Own–Operate (BOO), Build–Own–Operate–Train (BOOT) and Build–Own–Train–Transfer (BOTT).

7. The water utility in Wales has since changed status to a non-profit corporation.

governments became convinced that good water and sanitation were important for both public health and national economic development. For these and other reasons, governments increasingly assumed the task of installing and managing piped water and water-borne sewerage systems, with the goal of universal provision.

During the twentieth century, these efforts were institutionalized in countries and cities around the world, and water and sewerage networks came to be managed almost exclusively by the public sector. However, provision in Africa, Asia and Latin America lagged significantly behind progress in the North. The 1980s were designated the International Drinking Water and Sanitation Decade, in an attempt to prioritize and accelerate provision throughout the South. By the end of the decade, while the targets set were still far from met, a new consensus appeared to be emerging among a number of international actors within the water sector that, despite the experiences of the previous century, private sector participation in water and sanitation could address deficiencies in water and sanitation in the South.

The move back towards private provision can be explained as a result of the shift away from statist and towards neoliberal (free market) policies in the North from the late 1970s. While statist ideology holds that society's needs and problems are best addressed by the state through the political process, the neoliberal doctrine believes that social functions and economic development should be undertaken by business within free markets, with the state playing a facilitating and regulatory role without direct engagement. The neoliberal agenda was simultaneously adopted by the North-dominated international financial institutions (primarily the World Bank Group and the International Monetary Fund) which, using their leverage as creditors, aggressively promoted neoliberal reforms to governments of indebted low- and middle-income countries, often through structural adjustment policies that advocated the reduction of state spending and avoidance of substantial state investment.⁽⁸⁾

Neoliberal ideas had a profound influence on international development and policy debates in the water sector in the 1990s. The 1992 Dublin Principles illustrate this new perspective and apply four development dicta of the 1990s to the water sector: care for the environment, increased participation of non-governmental stakeholders, sensitivity to gender issues, and the increased role of markets. The last of these is embodied in the fourth principle:

"Water has an economic value in all its competing uses and should be recognized as an economic good. Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources."⁽⁹⁾

In the wake of Dublin, many international organizations realigned their position in the water sector, and the World Bank came to play a central role in developing and promoting new approaches consistent with its interpretation of the Dublin Principles, in particular the treatment of water as an economic good. International financial institutions packaged reforms in the water sector with wider neoliberal policies, often through structural adjustment programmes. Bilateral development agencies also started to promote private sector participation in their recipient countries, including the United Kingdom Department for International Develop-

8. Gutierrez, Eric (2001), "Framework document: a survey of the theoretical issues on private sector participation in water and sanitation", WaterAid and Tearfund.

9. WMO (1992), *International Conference on Water and the Environment: Development Issues for the 21st Century: The Dublin Statement and Report of the Conference*, World Meteorological Organization, Geneva.

ment (DFID) and the United States Agency for International Development (USAID).⁽¹⁰⁾ The conditions attached to multilateral development finance and the stances taken by bilateral agencies are inevitably perceived by some as a means of pursuing the interests of donor countries' own private sectors rather than those of the recipients.⁽¹¹⁾ The way was thus opened for private sector participation in water utilities in cities in Latin America, Asia and Africa, making privatization a central concern of development policy during the 1990s.

At the Millennium Summit in September 2000, the states of the United Nations agreed on a set of Millennium Development Goals. One of the specific targets identified was to halve the proportion of people without sustainable access to safe drinking water by 2015. At the World Summit on Sustainable Development in 2002, another relevant target was set, namely, halving the proportion of people without access to basic sanitation by 2015.⁽¹²⁾

III. PUBLIC VERSUS PRIVATE PROVISION: CONTINUING DEBATES

IN DEBATING WHETHER water and sanitation should be provided by the public sector, the private sector or through collaborative arrangements, numerous attempts have been made to argue that, given the innate characteristics of water and sanitation systems, one or the other form of provision is inherently superior. However, dwelling on the public-private dichotomy can divert attention from the important roles often played by civil society organizations, and lumps together very diverse actors and agencies in both the private sector (e.g. informal vendors and multinational corporations) and the public sector (e.g. public utilities, regulators, local authorities and national ministries).

In practice, shifting international opinions regarding the appropriate roles of the public and private sectors in water and sanitation provision respond to broad political trends far more closely than they respond to evidence emerging from experiences in the water and sanitation sector. This is unfortunate. Politically driven shifts in international opinion are a poor basis for addressing local water and sanitation problems. Nevertheless, the conceptual debates have thrown up a number of interesting issues. While they may not have come up with any clear guidance on the most appropriate roles for the public and private sectors, they have identified concerns that need to be addressed if water and sanitation provision is to be improved. The arguments mobilized for public sector provision (public goods, natural monopolies, human rights) and for private sector provision (economic goods, state failure) are presented and discussed below.

a. Public goods

A "public good" is defined as something that is:

- non-rivalrous – i.e. one person's use does not deprive others from using it;
- non-excludable – i.e. if one person consumes, it is impossible to restrict others from consuming; and
- non-rejectable – i.e. individuals cannot abstain from consumption even if they wish to.⁽¹³⁾

10. See, for example, DFID (c1999), "Better water services in developing countries, safeguarding the interests of the poor: public-private partnership – the way ahead", Department for International Development, London.

11. Schulpfen, Lau and Peter Gibbon (2002), "Private sector development: policies, practices and problems", *World Development* Vol 30, No 1, pages 1–15; also see reference 8.

12. UNDP (2000), *The Millennium Development Goals: Progress, Reversals and Challenges*, United Nations Development Programme, New York. The United Nations World Summit on Sustainable Development was held in Johannesburg, South Africa, 26 August – 4 September 2002.

13. Bannock, Graham, R E Baxter and Evan Davis (1987), *The Penguin Dictionary of Economics*, Penguin Books, New York.

Private enterprises supplying market demands fail to provide these types of good because, once they are produced, they benefit the public at large and cannot be sold to or used up by individuals. It is often argued that since such goods will not be provided by the private sector, they must be subsidized and provided by the public sector.

Urban water, drainage and sanitation networks are not pure public goods, but they can provide important public benefits, including some public protection from infectious diseases. Such public benefits dominate in the cases of drainage and sanitation. When people dispose of their wastewater or human waste inappropriately, it is others who bear the burden and, once a drainage or sanitation system is in place, it is uneconomic to exclude people who are not willing to pay. Thus, some combination of regulation, subsidized provision or obligatory fees is likely to be necessary to achieve adequate provision. Water provision clearly provides private benefits to the receiving household, and it is technically possible to charge people for water on the basis of how much they choose to use. However, if people are unwilling or unable to purchase enough water (or good enough quality water) to protect their own health, and contract infectious diseases as a result, then the health of others is also put at risk. The public benefits of water provision only really become significant where the private benefits are insufficient to finance adequate provision. This is more likely to arise in low-income areas or when people are unaware of the private health benefits.

The case for public sector management is strengthened by evidence of important public benefits, but it can be very misleading to argue the case for more or less private sector involvement on the basis of abstract arguments about the extent to which water and sanitation provide these. The public benefits of having adequate water and sanitation provision can, at least in principle, be provided through a well-regulated private utility, while the private benefits can be provided by a well-regulated public utility. Moreover, when vested interests guide the assessment of public versus private benefits, it can be very difficult to ascertain their size, although this can be critical to the effectiveness of water and sanitation utilities, whether they are publicly or privately operated.

b. Natural monopolies

In comparison with firms operating in a competitive market, monopolists have an incentive to overprice and underproduce, thereby realizing "excess" profits (i.e. profits greater than the normal rate in competitive markets). In most circumstances, overpricing and underproduction go together, since it is by restricting production that the typical monopolist achieves higher prices. Natural monopolies can be said to exist if total costs are lower when a single enterprise produces the entire output for a given market than when any of two or more enterprises divide the production amongst them. The most common explanation for natural monopolies is increasing returns to scale, that is, the larger the producer, the lower its average costs. Economics suggests that natural monopolies will generally require some form of public regulation to prevent overpricing, and this has at times been used to justify public ownership and operation.

Piped water and sewerage networks approximate natural monopolies. Multiple networks competing for the same consumers will have higher infrastructure costs than a single network. A "natural" outcome of market competition would, therefore, be for one network owner to buy out its

competitors and become a monopolist. For some networked services, such as telecommunications, attempts have been made to “unbundle” the system and develop a regulatory system that promotes competition where feasible. For water and sewerage networks, however, unbundling has proved difficult, and competition is generally restricted to “competition for the market” rather than “competition within the market”.

The extent to which urban water and sanitation provision are natural monopolies should not be exaggerated, since even limited competition within an urban area can be an important means of preventing the abuse of monopoly powers. In particular, purposeful measures designed to create exclusive monopolies should not be confused with the existence of a natural monopoly. With a true natural monopoly, concession contracts would not have to grant exclusivity to the concession holder; it would emerge “naturally”. As early as the mid-nineteenth century, an alternative means of avoiding monopoly pricing, at least in principle, has been to have private operators competing for the right to supply a given market for a specified period and to award this right to the firm offering to sell this water at the lowest price.¹⁴ As this example indicates, while natural monopolies are an issue, public ownership and operation is by no means the only response.

Moreover, while private monopolies raise a number of regulatory issues, so do public sector monopolies. Efficient and equitable regulation may involve different challenges when there is more private sector participation, but regulatory aspects merge with governance issues and are critical, however the urban water and sanitation system is managed.

c. Human rights

The privatization of water has generated much controversy, due to its quality as an essential human need. In such arguments, water and sanitation are often defined as goods to which people have a right, regardless of ability to pay.¹⁵ The right of access to clean water and sanitation at an affordable price is acknowledged in the Dublin Principles, as well as in a number of other international statements in the water sector.

In international legislation, surprisingly, until recently the right to water was only specifically articulated in the Convention on the Rights of the Child. However, in 2002, the United Nations Committee on Economic, Cultural and Social Rights issued a General Comment declaring that water is not merely an economic commodity, and that access to water is a human right: “*The human right to water entitles everyone to sufficient, affordable, physically accessible, safe and acceptable water for personal and domestic uses.*”¹⁶

Countries that have ratified the United Nations International Covenant on Economic, Social and Cultural Rights are now required to “...take the necessary steps towards the progressive achievement of the right of everyone to an adequate standard of living, including access to water and sanitation.”

Recognition that adequate water and sanitation are human rights does not in itself imply that the public sector must be the provider of these services and, indeed, the General Comment does not rule out a role for private enterprises. However, the final version of the statement, arising from a debate between representatives of public sector, private sector and independent institutions, omitted opinions on privatization because the members of the Committee agreed “not to politicize the issue”, although it is reported that they were unable to agree because some human rights

14. Chadwick, Edwin (1859), “Results of different principles of legislation and administration in Europe; of competition for the field, as compared with competition within the field of service”, *Journal of the Royal Statistical Society of London* Issue 22.

15. Rogers, Peter, Ramesh Bhatia and Annette Huber (c1998), “Water as a social and economic good: how to put the principle into practice”, Technical Advisory Committee Background Paper No 2, Global Water Partnership, Stockholm.

16. United Nations Economic and Social Council (2002), “Substantive issues arising in the implementation of the international covenant on economic, social and cultural rights”, draft, General Comment No 15, Committee on Economic, Cultural and Social Rights, Geneva, 11–29 November 2002.

17. Capdevila, Gustavo (2002), "UN consecrates water as public good, human right", Inter-Press Service, 27 November.

18. Bond, Patrick (1997), "Privatization, participation and protest in the restructuring of municipal services: grounds for opposing World Bank promotion of 'public-private partnerships'", originally presented at the World Bank/NGO Dialogue on Privatization, Washington DC, reproduced for *The Water Page*, www.thewaterpage.com

19. See reference 13.

20. Bakker, Karen (2003), "From archipelago to network: urbanization and water privatization in the South", *Geographical Journal* (forthcoming).

21. Brocklehurst, Clarissa (editor) (2002), *New Designs for Water and Sanitation Transactions: Making Private Sector Participation Work for the Poor*, PPIAF and Water and Sanitation Programme, Washington DC.

representatives were strongly opposed to privatization.⁽¹⁷⁾

The view that human rights are violated by privatization is often based on the assumption that privatization is accompanied by full cost-recovery through user fees, an interpretation that is consistent with the emphasis given to cost-recovery in many attempts to promote private sector participation, even if it does not coincide with the sort of subsidized privatization many private operators would favour. More generally, private sector operation of water and sanitation services on a profit-making basis is probably the most controversial and sensitive issue in the privatization debate. Many people find it ethically unacceptable for tariffs to be adjusted to cover the profits of private operators when, for part of the population, this interferes with their capacity to meet basic needs. Objections are heightened when the profits accrue to multinational corporations based in the wealthiest countries, while the prices are paid by people living in poor countries.⁽¹⁸⁾

In effect, however, the key issues centre on how privatization is implemented, to what extent, and in what context. There is no inherent conceptual contradiction between private sector participation and the achievement of human rights, but contradictions will arise in particular circumstances. Only a critical examination of private sector participation can determine whether private sector participation is advancing or hindering the realization of a state's obligations to the achievement of human rights. Since human rights have an international dimension, at least some of these obligations extend beyond the boundaries of the countries where there is inadequate access to water and sanitation to, for example, donors that are promoting private sector participation in recipient countries.

d. Economic goods

The Dublin Principles reinforced the re-conceptualization of water as an "economic good", which can be loosely defined as a good that can command a price in a market.⁽¹⁹⁾ Considering water as an economic good to be managed by market forces is deemed to bring efficiency and highest value use. When the public sector provides scarce consumables for free (or at subsidized prices), people have an incentive to overuse them. However, the goods that most economists argue are efficiently supplied by private enterprises operating in a competitive market are not just scarce: their full costs of production are borne by the producer, and their full benefits accrue to the purchaser. Economics suggests that such goods should generally be priced at their "marginal cost": the cost of providing an additional unit of the good, taking into account the opportunity cost of not providing it to another purchaser. This is also the price that economic theory indicates will result given a free and competitive market.

The claim that water is an economic good has been used to justify a shift from treating water as a public service to a good for which users should pay.⁽²⁰⁾ This argument is often extended to support full cost-recovery of water and sanitation infrastructure and services from users, on the grounds that only then will provision be economically sustainable. Cost-recovery is deemed preferable on an individual basis; that is, households should pay the full costs of their water and sanitation provision (i.e. installation, consumption, and operation and maintenance). Subsidies – either from the state or through cross-subsidies between different types of consumer – are opposed because they distort the true cost of service provision.⁽²¹⁾

Politically, however, this can be contentious, as many low-income users are unlikely to be able or willing to pay the full costs. Moreover, urban water and sanitation services are not ideal goods for private provision. Water is clearly prone to overuse. But the economics of water and sanitation pricing are by no means straightforward. Even for water, the “right” economic price is hard to define, estimate and charge, and requires meters, which are expensive and difficult to maintain if water pressure fluctuates. Moreover, as indicated earlier, cost-based pricing ignores the public benefits of water, sanitation and drainage.

In debating the appropriate role of the private and public sectors, recognizing water as an economic good can seem to support a strong private sector role. This is not strictly correct, and depends on how the term “economic good” – which is not widely used in economics – is interpreted. If “economic goods” are taken to mean the sort of goods idealized in economic theories of perfect markets, then the case for private provision of economic goods is strong. But urban water services are not economic goods in this sense any more than they are “pure” public goods (and in any case, water utilities rarely operate in a competitive market). Alternatively, if economic goods are simply taken to be goods that have an economic value, and to which economic principles apply, then this would also apply to public goods, and is largely irrelevant to the case for private provisioning.

In short, while economic issues are central to defining appropriate roles for the public and private sectors, these issues are merely confused by semantic debates over whether or not water is an economic good. Historically, many public water utilities have undoubtedly been under pressure to keep water prices low, even when this is leading to excessive water use among connected households (and, in some cases, removing a potentially important source of finance for expanding the water network to unconnected households). Commercial pressures can undoubtedly play a positive role in driving efficiency improvements. However, privately run utilities also respond to political pressures, and may have little incentive to improve efficiency (it depends on the nature of their contract and how it is regulated). Water provision raises a number of economic and governance issues that cannot simply be resolved by bringing in private operators, any more than they were resolved in the past by bringing in public operators.

Given the debate about whether or not water is an economic good and the case for private provision, one might expect the same arguments to be applied to sanitation. However, in the policy arena, sanitation is still often regarded as a service that is unsuitable for private provision:

“Sanitation is often a municipal function, and reforming service delivery is linked to a wider process of municipal reform [...] many governments decide to omit sanitation from private sector transactions because they feel the sub-sector is not suitable for such a reform.”⁽²²⁾

This presumably reflects the fact that while the private benefits from water are usually sufficient to create a considerable demand for water, the same cannot be said of sanitation. Users are less willing to pay for safe sanitation, yet its provision is highly desirable from a public health perspective.

Various attempts have been made to label as least some parts or types of sanitary facilities private, based on whether users can generally be expected to pay for safe facilities. On the one hand, in the case of on-plot sanitation, households are expected to pay for the infrastructure, although their acquisition of sanitation facilities confers benefits on wider society.⁽²³⁾

22. See reference 21, citation from page vi.

23. Cairncross, Sandy (no date), “Why promote sanitation?”, WELL Briefing Note, London School of Hygiene and Tropical Medicine. “On-plot” refers to non-networked sanitation such as latrines, septic tanks, cesspits and aqua privies.

On the other hand, as noted above, sewerage networks are often treated as a public service that requires subsidization, even though they may provide some private benefits. This distinction is reinforced by an organizational difference: while it is comparatively difficult to organize centralized payments for and quality control of on-plot sanitation, this is comparatively easy for sewerage networks.

As indicated above, whether sanitation approximates a public or an economic good does not really determine the appropriate roles for the private and public sector. In practice, a wide range of interrelated factors come into play, including the public awareness of the benefits of good sanitation, the existence and acceptance of sanitary laws, the ability and willingness of different resident groups to pay for sanitation, the political power of those adversely affected by poor sanitation, the quality of local governance, the state of public finance, and the interests of private operators. Nevertheless, the evidence of public benefits is one reason why the provision of sanitation more often stays in public hands.

e. State failure

The argument for private provision is also often linked to a broader claim that private enterprises are more efficient than public enterprises. In particular during the early 1990s, when privately run utilities were rare in low- and middle-income countries, it was simply assumed that the private sector would be more efficient, due to the commercial incentives that would encourage private operators to seek the highest possible efficiency in order to maximize commercial returns and reduce possible losses from inefficiency and non-paying customers.⁽²⁴⁾ Proponents of this view claim that efficiency gains will benefit all service users and, in particular, the poor, who will be connected to the system as paying customers. However, this argument ignores the fact that not all private operators make profits from being efficient (e.g. they may be able to justify tariff increases on the basis of their inefficiencies, especially if the regulator is poorly informed), while some publicly operated utilities do face commercial incentives.

Furthermore, the position favouring private provision is also supported by the more specific observation that public water and sanitation utilities have failed to supply services of adequate quality and coverage: *"Publicly run utilities in developing countries have been singularly unsuccessful in providing reliable water supply and sanitation"*.⁽²⁵⁾

On the one hand, this failure is often attributed to a lack of government capacity which, when applied to utilities, leads to a "downward spiral" of weak performance and low payment levels for poor services. Despite large amounts of international aid and multilateral loans since the 1950s, public authorities concentrated on central urban areas, leaving peripheries and rural areas unserved.⁽²⁶⁾ It is also argued that government-run utilities are often subject to political "interference" and/or corruption, especially at the local level.

On the other hand, the precarious state of public water and sewerage utilities is partly attributed to the public sector's lack of funds and access to finance, which are necessary to carry out improvement and expansion of services. In many low- and middle-income countries, public sectors have been affected by indebtedness and other financial problems, at least since the 1980s. The public sector, especially local and municipal level government, often does not have access to sources of commercial finance, as it lacks such requisites as assets and creditworthiness.⁽²⁷⁾ Over and

24. Bakker, Karen (2003), "A political ecology of water privatization", *Studies in Political Economy* Issue 70, Spring, pages 35–58.

25. See reference 21, citation from page 8.

26. Winpenny, James (2003), *Financing Water for All: Report of the World Panel on Financing Water Infrastructure*, World Water Council, Third World Water Forum and Global Water Partnership, Marseille, France.

27. Haarmeyer, David and Ashoka Mody (1998), "Financing water and sanitation projects – the unique risks", Private Sector Viewpoint Note No 151, PPIAF, World Bank, Washington DC.

above any inherent inefficiencies, so the argument goes, public sector financial crises result in badly managed public utilities.

The limited contribution that development assistance can make in the water and sanitation sector in the South is used as further justification for involving the private sector. The former UK Minister for International Development emphasized that available development assistance is nowhere near enough to meet the amount needed to improve water and sanitation provision in the South, and stressed that the gap in necessary finance could only be filled by the private sector.⁽²⁸⁾ Unfortunately, the fact that public and development assistance resources will not finance the needed improvements does not imply that private finance will. Moreover, when privatization takes place under extreme financial pressures, this is not conducive to well-conceived and consultative processes of privatization.

All these factors are claimed to affect low-income groups most negatively, as it is always these groups that remain unserved. When low-income groups lack adequate water and sanitation provision, they often purchase water from informal vendors, paying per unit prices that are up to 100 times higher than piped water from the utility.⁽²⁹⁾ Some argue that this shows that the ability of the poor to pay is often underestimated, and that they would be able and willing to pay prices charged by the private sector for a much higher quality service.⁽³⁰⁾ In this account, the currently high levels of non-payment for existing public service provision by low-income groups are associated with the fact that the services are poor rather than that the prices are high. A number of willingness-to-pay studies lead to similar conclusions.⁽³¹⁾ In this debate, three points are worth noting. First, although the poor do pay high prices for water in some cases, these high prices are often either for small quantities that are only used for drinking, or only apply for short periods when water is particularly scarce. Second, many informal water and sanitation entrepreneurs provide a fairly efficient and reliable service in difficult circumstances.⁽³²⁾ Third, high water payments can put pressure on already very low incomes, which does not imply that households are not suffering as a result.

IV. THE SCALE AND NATURE OF PRIVATE SECTOR PARTICIPATION IN THE WATER SECTOR IN THE SOUTH

DESPITE PREDICTIONS FROM some within the international development sector, private sector provision has achieved neither the scale nor the benefits anticipated. The amounts of private finance predicted have not been mobilized and, moreover, recent trends suggest that the rate of privatization is slowing in the South. This section reviews issues and trends within the water sector in Africa, Asia and Latin America, including provision to low-income groups.

a. Engaging the private sector

Once a government has made the decision to privatize, it instructs its team of legal, financial and technical consultants to develop the bid documents, prescribing how potential bidders should present their offers. Most contracts are now tendered through competitive bidding, in order to promote transparency. The bid documents need to be delicately balanced in order to satisfy

28. Short, Clare (2000), Keynote Address, presented at Infrastructure for Development: Private Solutions and the Poor, London, 31 May–2 June.

29. See, for example, Collignon, Bernard and Marc Vézina (2000), "Independent water and sanitation providers in African cities: full report of a ten-country study", Water and Sanitation Programme, Washington DC.

30. Gleick, Peter, Gary Wolff, Elizabeth Chalecki and Rachel Reyes (2002), *The New Economy of Water: the Risks and Benefits of Globalization and Privatization of Fresh Water*, Pacific Institute, Oakland, California.

31. See, for example, Serageldin, Ismail (1994), *Water Supply, Sanitation and Environmental Sustainability: The Financing Challenge*, World Bank, Washington DC.

32. See, for example, reference 3, Solo (1999).

the needs of both the government and the users and present an attractive opportunity to the bidder. Due to time constraints, the bid documents usually focus on the core technical, financial and legal issues, with issues specifically related to provision in deprived areas treated secondarily, if at all. Interested private companies fulfilling the required criteria are shortlisted and invited to bid for the contract. The pre-qualifying operators' teams start doing their own assessments of the utility and the local context. If they decide to proceed, they submit bids based on models and estimations of the current situation and expected targets. In line with the bid documents, bids rarely focus on improving services in low-income areas.

Once the private operator is in place, it carries out more detailed assessments of the infrastructure, and may well find that it had underestimated the quality and/or coverage. In such cases, they start to renegotiate relevant terms of the contract. However, companies may also submit bids with a view towards underbidding the competition, even if the financial viability of the bid is doubtful – a practice known as “dive-bidding”. Given the substantial costs to the private company of preparing a bid (US\$ 3–5 million for a large concession), this is an attractive strategy as long as renegotiation is possible at an early stage. This may have been the case in the two concessions in Manila (the Philippines). Manila Water won a bid for East Manila with a tariff roughly half that of the nearest competitor, namely, 26 per cent of existing tariffs as opposed to a 57 per cent bid by Maynilad Water Services, which won the contract for West Manila.⁽³³⁾ Manila Water's tariff should have been flagged by the government's consultants (hired from international institutions, including the International Finance Corporation) as unfeasible, and rejected on that basis. As things transpired, once in operation, neither company was able to provide the service for the tariff level it had quoted. Both set out to renegotiate at an early stage with the regulator and, despite initial resistance, tariff increases were approved, implying that the costs of dive-bidding were ultimately passed on to users.

Instead, with several companies now employing this strategy, some have started to collaborate on projects rather than compete. They do this by agreeing to submit a joint bid for a project, dividing the functions between them (according to expertise and ability), and bidding for the next contract in the same way. Companies are thus content to settle for an acceptable percentage of a project in the knowledge that they will also gain a similar share of the next contract.⁽³⁴⁾ These are all sound financial strategies, but undermine the purpose of competitive bidding and are not necessarily in the best interests of customers.

Such strategies are far more likely to arise when the bidding process is poorly organized, that is, when the privatization process is being rushed, the government is unfamiliar with the sorts of contracts being negotiated, the public utility is poorly run, the companies are unfamiliar with local conditions, and local governance is weak – in short, the sort of conditions likely to hold where water and sanitation services are in greatest need of improvement. The difficulties involved in orchestrating a competitive bidding process also tend to overlook the need for consultation with local stakeholders and the inclusion of mechanisms to promote the interests of deprived groups.

b. Mobilizing finance and investment

Finance is usually the paramount consideration driving governments to

33. Esguerra, Jude (2002), “The corporate muddle of Manila's water concessions: how the world's biggest and most successful privatization turned into a failure”, WaterAid and Tearfund.

34. Johnstone, David (2002), personal communication, Oxford, 5 September.

involve the private sector, even when undertaken by pro-private sector governments. The levels of annual investment needed for financing new water and sanitation infrastructure alone in low- and middle-income countries between 2002 and 2025 have been estimated at over US\$ 13 billion for drinking water supply, US\$ 17 billion for sanitation and US\$ 70 billion for wastewater treatment.⁽³⁵⁾ The contribution from international development finance represents just a fraction of the needed resources. Between 1996 and 2001, the flows of international aid and multilateral development finance to the water sector in low- and middle-income countries were US\$ 3.3 billion and US\$ 1.85 billion per year, respectively. Moreover, only a small share of these resources (about US\$ 125 million) are allocated to countries with severe deficiencies in water and sanitation, and both sources have shown a general decline since the mid-1990s.⁽³⁶⁾

It is clear, therefore, that there is a huge gap in needed investments. Despite the expectations of some that the gap in funding will be filled by foreign private finance, it is difficult to see how this can meet the required investments. The notion that the private sector will provide extensive financing was refuted by the Chief Executive of Saur:

"[The false] belief that any business must be good business and that the private sector has unlimited funds [...] The scale of the need far outreaches the financial and risk taking capacities of the private sector."⁽³⁷⁾

Moreover, the level of private finance has been disappointing, even in projects involving private sector participation. The lack of private interest in investing in the water and sanitation sector in the South is reflected in the extent of privatization both in relation to other utility sectors and within the water sector itself. Private sector participation is concentrated in energy and telecommunications, while the water and sanitation sector has experienced comparatively little privatization, especially in lower-income countries.⁽³⁸⁾ The water sector has been the least attractive to private investment, and the sums invested have been the smallest (representing only 5.4 per cent of all private commitments to infrastructure during the 1990s).⁽³⁹⁾

In the water and sanitation sector in low- and middle-income countries, international private investment and commercial bank lending have never been large and have also generally declined since their peak between 1996 and 1997.⁽⁴⁰⁾ Table 2 shows the pattern of investment in water and sanitation infrastructure projects with private participation.⁽⁴¹⁾ The investment figures in this and subsequent tables are not based on private investment (or private finance) alone, and should not be interpreted as additional to the investment that would have occurred in the absence of private sector participation. Indeed, given the importance often accorded to using private sector participation to attract private finance, it is surprisingly difficult to obtain statistics that distinguish between different sources of finance.⁽⁴²⁾

The majority of finance for investment in water and sewerage services in the cities of low- and middle-income countries therefore continues to come from the public sector (through local and national tax revenue), international development assistance (through grants and loans undertaken by governments) and users (through users' own outlays and water bills).⁽⁴³⁾

User charges (through both consumption and/or connection charges) are the principal source of investment finance in some concession contracts, such as Aguas Argentinas in Buenos Aires. Such measures have been criticized because the costs of borrowing and/or investment are

35. Adapted from GWP (2000), "Towards water security: a framework for action", Global Water Partnership; also Briscoe, John (1999) "The financing of hydropower, irrigation and water supply infrastructure in developing countries", *International Journal of Water Resources Development* Vol 15, No 4, pages 459–491. Figures include 15 per cent allowance for operation and maintenance.

36. International aid refers to soft loans or grants from multilateral and bilateral development agencies and is usually restricted to smaller projects up to US\$ 10,000. Multilateral development finance refers to loans on near-market terms for larger-scale projects from the World Bank, Inter-American Development Bank and Asian Development Bank (calculated from data in Winpenny (2003), see reference 26.

37. Talbot, Jean-François (2002), "Is the water business really a business?", World Bank Water and Sanitation Lecture Series, 13 February 2002.

38. Houskamp, Melissa and Nicola Tynan (2000), "Private infrastructure: are the trends in low-income countries different?", Private Sector Viewpoint Note No 216, PPIAF, World Bank, Washington DC.

39. See reference 26.

40. See reference 26.

41. Note that a number of figures are available that purport to represent the amount of foreign private finance in the water sector in developing countries, many of which are drawn from the World Bank Private Participation in Infrastructure (PPI) database. However, such figures are often very inconsistent. Furthermore, a number of World Bank publications and representatives have stated

that the PPI database does not distinguish private finance from total finance.

42. Sader, Frank (1999), *Attracting Foreign Direct Investment into Infrastructure: Why is it So Difficult?*, World Bank, Washington DC.

43. See reference 26.

Year	Number of projects**	Investment (2001 US\$ billions)
1990	0	0
1991	2	0.1
1992	4	2.0
1993	9	7.9
1994	13	0.5
1995	20	1.8
1996	18	1.9
1997	25	9.3
1998	19	2.4
1999	35	6.9
2000	25	4.8
2001	17	2.3

* These figures come from the World Bank Private Participation in Infrastructure (PPI) database. Investment refers to total investment, not private investment alone. Also, many small projects are omitted.

** Figures estimated from graph.

SOURCE: PPIAF (2003), *Private Participation in Infrastructure: Trends in Developing Countries 1990-2001*, Private Participation in Infrastructure Advisory Facility, World Bank, Washington DC

44. See reference 8.

passed on to users, contradicting the rationale of engaging the private sector to invest in the system and then make its return based on that investment.⁽⁴⁴⁾ Additionally, the payment made by the private operator to the government at the start of a contract to take over the utility is not necessarily invested in the water sector and can be used however governments choose. It also implies that private operators recoup this expenditure from users through tariffs over the term of the contract.

45. See reference 8.

46. Hall, David and Emanuele Lobina (2003), "Water privatization in Latin America, 2002", Public Services International Research Unit, University of Greenwich, June.

Given the high levels of uncertainty in water and sewerage ventures, companies are anxious to protect themselves from financial risk. Companies (which usually have their own financial experts) will not commit themselves where they consider the risks to be too high to justify the expected returns. Companies employ four main strategies for avoiding and/or minimizing risk. First, multinational corporations form subsidiaries (usually consortia), partly to relieve the parent company of liability and partly because governments often insist on consortia involving local companies.⁽⁴⁵⁾ Second, private operators may initially take on low-risk contracts in order to "test the water" and see whether it is feasible to undertake investment in the future. Third, companies can take insurance against different types of risk (such as currency risk or political risk), for example, from the Multilateral Investment Guarantee Agency (MIGA), the World Bank's insurance division.⁽⁴⁶⁾ Fourth, when companies do accept some level of risk, they ensure that provisions are written into contracts, and insist on sovereign guarantees to assure these (although these are often not forthcoming as governments also want to assume as little risk as possible for finance and investment).

c. Trends in the water and sanitation sector

Prior to 1990, there were very few large private initiatives in water and sani-

Table 3: Private water and sewerage projects in low- and middle-income regions, 1990–2001*				
Region	Number of countries with private participation	Number of projects	Investment (2001 US\$ billions)	Investment (%)
East Asia and Pacific	7	51	15.3	38
Europe and Central Asia	12	37	3.3	8
Latin America & Caribbean	15	100	20.7	52
Middle East & North Africa	3	4	0.1	0
South Asia	1	1	0.2	1
Sub-Saharan Africa	5	10	0.2	1

* These figures come from the World Bank Private Participation in Infrastructure (PPI) database. Investment refers to total investment, not private investment alone. Also, many small projects are omitted.

SOURCE: PPIAF (2003), *Private Participation in Infrastructure: Trends in Developing Countries 1990–2001*, Private Participation in Infrastructure Advisory Facility, World Bank, Washington DC.

tation infrastructure and services. Privatization accelerated sharply in 1990 and peaked in 1997, after which it started to decline.⁽⁴⁷⁾ Following the Asian financial crisis, and crises in some Latin American economies, investors have been less confident about investing in these regions and the South in general.⁽⁴⁸⁾ In the water sector specifically, lenders and operators alike have realized that the water and sewerage sector is both more complex and less profitable than originally anticipated. Experiences of failed contracts, although generally viewed as isolated events, have also made investors and water companies more cautious. There are also fewer projects available that are “bankable”. Many of the most attractive locations were either privatized during the 1990s or show few signs of preparing to privatize. While there are still many viable locations, especially for concessions, the early expectations of continuous rapid growth in private sector participation are being revised downwards.

The private sector has its own criteria regarding what it considers to be viable commercial opportunities, and these criteria have little to do with water and sanitation targets as defined in the international development community. Companies’ strategies must be consistent with the demands of their funders and market conditions. The most important aspect for private companies and their financial partners is the potential profit or rate of return. A key consideration is scale. Bankers and multinational water companies are looking for large-scale projects, with contract values of US\$ 100 million upwards, in middle- to higher-income cities with at least 1 million inhabitants (for comparison, the usual water project size is between US\$ 10–50 million).⁽⁴⁹⁾ Ideally, these will be investment contracts (i.e. BOT-type or concession contracts), as these provide the highest returns. Smaller urban centres are unlikely to be attractive unless they are high-income areas, or if they can be bundled with other locations or simultaneously served with a number of utility services. Projects must also have acceptable levels of financial and political risk, and the attractiveness of the opportunity will also depend on location-specific factors, including the extent and state of existing infrastructure.

The selection of attractive locations by private operators is termed “cherry-picking”, and occurs at all scales: regions (those with large or growing economies), countries (those with larger economies and popula-

47. Silva, Gisele, Nicola Tynan and Yesim Yilmaz (1998), “Private participation in the water and sanitation sector – recent trends”, Private Sector Viewpoint Note No 147, PPIAF, World Bank, Washington DC.

48. Izaguirre, Ada Karina and Geetha Rao (2000), “Private infrastructure: private activity fell by 30 per cent in 1999”, Private Sector Viewpoint Note No 215, PPIAF, World Bank, Washington DC.

49. See reference 26.

Table 4: Investment in water and sewerage projects in selected low- and middle-income countries, 1990–2001*

	Number of projects	Total investment (2001 US\$ billions)
Argentina	2	9.6
Philippines	2	6.4
Malaysia	6 ^a	6.1
Chile	8 ^b	4.2
Brazil	32	3.1
Mexico	21	0.6 ^a
China	24	0.5 ^a

* These figures come from the World Bank Private Participation in Infrastructure (PPI) database. Investment refers to total investment, not private investment alone. Also, many small projects are omitted.

a These figures are for 1997 (1997 US\$) – see Silva, Gisele, Nicola Tynan and Yesim Yilmaz (1998), “Private participation in the water and sanitation sector – recent trends”, Private Sector Viewpoint Note No 147, PPIAF, World Bank, Washington DC.

b Figures from Hall, David and Emanuele Lobina (2003), “Water privatization in Latin America, 2002”, Public Services International Research Unit, University of Greenwich, June.

SOURCE: PPIAF (2003), *Private Participation in Infrastructure: Trends in Developing Countries 1990–2001*, Private Participation in Infrastructure Advisory Facility, World Bank, Washington DC.

tions), cities (those with larger, denser and wealthier populations), and neighbourhoods (those which are more affluent and preferably already connected to utilities). This is not to say that companies will not engage in poorer countries, cities or neighbourhoods; they will do so, at a price and under conditions that justify the risks. “Cherry-picking” is reflected in the strong regional and national concentrations of private sector participation in the water and sewerage sector, as shown in Table 3. Among low- and middle-income countries, the largest number of projects and the greatest proportion of investments are concentrated in Latin America and East Asia.

In the period 1990 to 1997, seven countries within Latin America and East Asia – Argentina, the Philippines, Malaysia, Chile, Brazil, Mexico and China – dominated in terms of total investment and number of projects (Table 4). Generally speaking, the countries in which investment is concentrated represent those with the largest economies and populations and higher levels of urbanization. As outlined above, these all relate to key attributes that make them attractive to the private sector.

There is only a weak relationship between number of projects and amount of investment, principally because many projects carry no investment obligations.⁽⁵⁰⁾ The private sector is only required to invest in BOT-type, concession and joint venture projects, and not service, management, affermage or lease contracts. Investment trends are reflected in the choice and distribution of different types of contract, as illustrated in Table 5. There is a predominance of concession contracts in Latin America and Southeast Asia, several BOT-type contracts for water/wastewater treatment plants in India, and lease and management contracts in sub-Saharan Africa. With the exception of South Africa, there are almost no investment contracts in sub-Saharan Africa. Therefore, in regions where non-investment contracts dominate, virtually all investment is still coming from the

50. See reference 47.

Table 5: Contract types for water and sewerage projects in low- and middle-income countries, 1990-2001*				
	Projects		Total investment	
	Number	%	2001 US\$ billions	%
Concession	90	44	27.6	69
BOT-type	56	28	6.8	17
Management/ lease/affermage	41	20	n/a	n/a
Divestiture	16	8	5.6	14

* These figures come from the World Bank Private Participation in Infrastructure (PPI) database. Investment refers to total investment, not private investment alone. Also, many small projects are omitted.

SOURCE: PPIAF (2003), *Private Participation in Infrastructure: Trends in Developing Countries 1990-2001*, Private Participation in Infrastructure Advisory Facility, World Bank, Washington DC.

public sector and through international development assistance.

While water provision is comparatively straightforward and cost-effective, sewerage is both more complex and more expensive. User demand is also much higher for water than for sewerage. Therefore, water provision is inherently more attractive to private companies than sewerage provision, unless it is either subsidized or backed up by government regulations that require people to connect and pay specified fees. It is not uncommon for water to be privatized separately from sanitation and for sanitation to remain the responsibility of the public sector, as in Córdoba (Argentina). In some cases, this is because public sewerage systems are highly deficient, as in Jakarta (Indonesia) and Mozambique. Many management and lease contracts are water-only, whereas most of the large concessions comprise water supply and sewerage, usually at the behest of governments. A small number of sanitation-only contracts exist, as in Malaysia, but these are uncommon, unless they are BOT-type projects for wastewater/sewerage treatment plants.

In a number of cases, water and sanitation projects have been bundled to create larger projects of a scale or scope that are financially viable for the private operator. This can involve either multiple locations or multiple utilities. For instance, in Guinea, a contract was given for the capital, Conakry, and 16 other towns and contracts have been given for a national scale in several African countries (Burkina Faso, Chad, Ghana, the Gambia), and also Paraguay, Puerto Rico and Trinidad and Tobago. In the case of different utilities, water has only been bundled with electricity in several small countries in sub-Saharan Africa (Burundi, Cape Verde, Gabon, the Gambia, Guinea Bissau, Chad and Mali), and also Morocco, but very rarely elsewhere.⁽⁵¹⁾

The water and sanitation sector, both worldwide and in the South, is dominated by a very small number of multinational water companies, namely Suez, Veolia, Thames and Saur. Together, these four companies control over 80 per cent of the privatized water and sewerage market and many water-related subsidiaries.⁽⁵²⁾ Table 6 gives data on the main multinational companies active in the water and sewerage sector.

51. Sommer, Dirk (2001), "Multi-utilities: trends – blurring industry boundaries", Private Sector Viewpoint Note No 227, PPIAF, World Bank, Washington DC.

52. See reference 47.

	Number of projects 1990–2001*	Investment (2001 US\$ billions) 1990–2001*	Water sales (Euros billions) 2002**	Worldwide customers (millions) 2002**
Suez (France) ^a	44	18.1	10.0	115
Veolia (France) ^b	25	3.1	13.6	110
Thames Water (Germany)	13	3.3	2.7	37
Aguas de Barcelona (Spain)	14	10.6	n/a	n/a
Saur International (France) [†]	5	38	2.5	36

* These figures come from the World Bank Private Participation in Infrastructure (PPI) database. Investment refers to total investment, not private investment alone. Also, many small projects are omitted.

** These figures are based on figures from company annual reports.

† These figures are from 1997 – see Silva, Gisele, Nicola Tynan and Yesim Yilmaz (1998), “Private participation in the water and sanitation sector – recent trends”, Private Sector Viewpoint Note No 147, PPIAF, World Bank, Washington DC.

a Formerly known as Suez Lyonnaise des Eaux and Ondeo.

b Formerly known as Générale des Eaux and Vivendi.

53. Etherington, Alan, James Wicken and Dinesh Bajracharya (2002), “Preparing for private sector management of Kathmandu urban water supply”, WaterAid and Tearfund.

54. Haarmeyer, David and Ashoka Mody (1998), “Pooling water projects to move beyond project finance”, Private Sector Viewpoint Note No 152, PPIAF, World Bank, Washington DC.

55. Compiled from data provided by the Public Services International Research Unit, University of Greenwich; also Bayliss, Kate (2002), “Water privatization in SSA: progress, problems and policy implications”, Public Services International Research Unit, University of Greenwich, December; and Hall, David, Kate Bayliss and Emanuele Lobina (2002), “Water privatization in Africa”, Public Services International Research Unit, University of Greenwich, June, based on PSIRU data, unless otherwise indicated.

Local companies in low- and middle-income countries rarely have the capacity to compete except as minority partners in international consortia. In some cases, the local private sector is prevented from participating independently, as in Kathmandu (Nepal), presumably on the grounds that the government was seeking international finance and expertise.⁽⁵³⁾ This is a legitimate concern, as few local operators have the scale, resources and experience to manage a significant-sized utility. Many local operators do not have strong enough balance sheets to raise debt and equity finance, and/or local bond and equity markets are often too weak to attract the scale of investment needed.⁽⁵⁴⁾ This is reflected in the experience of Riberão Preto, a medium-sized city in Brazil, where the local company that won the original bid had an annual turnover that was far too small to secure the loans it needed to execute the contract.

This level of concentration in the industry internationally is a concern. Particularly in countries where the need for improving water provision is the greatest, national and local governments typically have far less experience in negotiating contracts and addressing regulatory issues than the companies with which they must negotiate. This imbalance makes it far more difficult to set in place effective regulatory structures.

d. Regional extent of privatization in Africa, Asia and Latin America

Sub-Saharan Africa⁽⁵⁵⁾

The cities of sub-Saharan Africa typically have very large poor urban populations, most of whom rely on informal water and sanitation provision. Many cities also have small, dilapidated and underfunded public water and sewerage networks, such as Dar es Salaam’s water utility (DAWASA). In a context of debt and poverty, governments lack funds for improvements. Public sectors tend to be characterized by weak institutional (and thus regu-

latory) capacity. Most countries have been under substantial donor pressure to privatize, in order to access loans or debt relief. For example, the privatization in Mozambique was connected to the WB/IMF debt relief for Heavily Indebted Poor Countries (HIPC) initiative. In Tanzania, the World Bank has recommended improvements to DAWASA in order to attract a private sector operator, but is not willing to grant further financial assistance until one is in place. However, without financial assistance, the Tanzanian government is not in a position to provide the resources required to undertake the improvements that would attract a private operator.⁽⁵⁶⁾

Fourteen countries have adopted some form of privatization: Burkina Faso, Cape Verde, Central African Republic, Chad, Côte d'Ivoire, Gabon, Guinea, Mali, Mozambique, Niger, Republic of Congo (Brazzaville), Senegal, South Africa and Uganda; and a further number are proposing it. Most contracts were set up in the late 1990s or early 2000s. Contracts are dominated by French multinational corporations, especially Saur. Francophone countries have implemented more private contracts, possibly due to their links with France and French multinational corporations. The precarious situations of many water utilities and public sectors in sub-Saharan African cities are reflected by the number of cases in which companies and governments have been unable to reach agreements in contract negotiations, such as Nairobi (Kenya) and Gweru (Zimbabwe), and processes of privatization encountering problems, as in Mozambique, or breaking down, as in Fort Beaufort (South Africa).

Sub-Saharan African countries have in general been unable to attract companies that are willing to invest in the region, as it is regarded as too risky. This is reflected by several factors. First, most contracts in the region are short-term, non-investment management and lease contracts. Second, contracts are being drawn up in US dollars to protect companies from local currency devaluation. Third, water utilities are commonly bundled with electricity in order to create more attractive commercial opportunities; in fact most such cases are in this region. Fourth, two multinational companies, Saur and Biwater, have stated that African countries do not represent attractive investments due to the very poor state of water utilities and because most consumers cannot afford tariffs that are high enough to generate adequate returns.

South Africa has a considerably higher per capita income than most other countries in sub-Saharan Africa, and does not reflect the same trends. It has more private sector contracts, and most of these are concessions. There has also been much greater and more successful opposition to water privatization, especially from unions and other civil society organizations. The government has responded with changes in policy, but it has also not taken loans from multilateral financial institutions, and has thus not been subject to the conditions they impose.

The most noteworthy policy response was the declaration of a lifeline of free water for all South Africans in October 2000. This followed a severe cholera epidemic that year in several provinces and cities, including Johannesburg, which was the worst in South Africa's history. It was linked by many to government policies of full cost-recovery for water, and the ensuing lack of access to water of sufficient quantity and quality by the poor, including the residents of the district where cholera first appeared (who were too poor to pay the registration fee to join their local low-cost water scheme). The lifeline is deemed to reflect subsistence needs, and is set at 25 litres per person per day, and provided as 6,000 litres per household per month (regardless of income). This is being enforced despite

56. WaterAid Tanzania (2002), "Water utility reform and private sector participation in Dar-es-Salaam", WaterAid and Tearfund.

57. Compiled from data provided by the Public Services International Research Unit, University of Greenwich; also Hall, David, Kate Bayliss and Emanuele Lobina (2002), "Water in the Middle East and North Africa: trends in investment and privatization", Public Services International Research Unit, University of Greenwich, October, based on PSIRU data.

58. Unless otherwise indicated, compiled from data provided by the Public Services International Research Unit, University of Greenwich; also Orwin, Alexander (1999), "The privatization of water and wastewater utilities: an international survey", Environment Probe, Toronto, Canada; and Brocklehurst, Clarissa and Barbara Evans (2001), "Serving poor consumers in South Asian cities: private sector participation in water and sanitation", Overview Paper, Water and Sanitation Programme South Asia, January.

59. See reference 53.

60. Compiled from data provided by the Public Services International Research Unit, University of Greenwich, unless otherwise indicated.

61. See reference 58, Orwin (1999); also see reference 33.

practical difficulties and opposition from multilateral financial institutions and private operators; for instance, the operator in Nelspruit initially argued that its contract did not include the provision of free water, and continued its policy of disconnection for non-paying households.

The Middle East and North Africa⁽⁵⁷⁾

Privatization in the Middle East and North Africa is limited in comparison with other regions, with privatization having been adopted only in Jordan, Morocco and Palestine from the late 1990s. Public utilities have been criticized by international agencies for using subsidies and not implementing full cost-recovery. There are a number of short-term management contracts in place and only three concessions, all in Morocco. Most greenfield projects are build-only, although there are several BOT contracts (e.g. desalination plants in Israel). The dominant companies are Suez and Veolia. Difficulties have arisen with awarding BOT contracts in Egypt and Oman, and there has been opposition to privatization in Egypt.

South Asia⁽⁵⁸⁾

Private sector participation in the water and sanitation sector in South Asia has been restricted to the sub-contracting of core services under service contracts, with a small number of BOT-type contracts, all in India (e.g. Tirupur), from 1992. There is, however, interest in the major urban centres, especially Chennai and Bangalore (India), Karachi (Pakistan) and Kathmandu (Nepal).

In the region, some privatization plans and processes have run into problems almost before they have started, indicating lack of confidence on the part of the international private sector in operating in South Asia. In India, a contract for Hyderabad was rejected by all bidders as economically unfeasible, and in Kathmandu the bidding process for a proposed ten-year lease was re-scheduled when two of the three shortlisted companies withdrew their bids.⁽⁵⁹⁾ In other cases, the lack of confidence has arisen locally. In Pune (India), in 1998, the municipal corporation cancelled private construction and management contracts due to loss of political support; while in Karachi, local NGOs prevented plans for private sector participation in the water and sewerage board.

Southeast Asia and China⁽⁶⁰⁾

Southeast Asia and China has been one of the regions with the greatest concentration of private sector participation and investment in the water and sanitation sector, including in China (including Macao and Hong Kong), Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam, and with a greater concentration of contracts in the Philippines, Malaysia and China. Most contracts date from the mid- to late-1990s. China is experiencing rapidly growing private sector participation and is seen as a good market opportunity. The region has attracted a large number of BOT-type and concession contracts.

Attempts have been made to introduce competition by dividing cities into more than one zone, as in Jakarta and Manila which were both divided into two zones and contracts given to different operators. Both these projects have been criticized for lack of transparency and/or corruption in the bidding process.⁽⁶¹⁾ Indonesia, Malaysia and Thailand have privatized water separately from sewerage in at least some instances.

Latin America and the Caribbean⁽⁶²⁾

Latin America has awarded more privatization contracts in the water and sanitation sector than any other region. Private sector contracts have been implemented in Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, Honduras, Mexico, Puerto Rico, Uruguay and Venezuela, with several contracts in Argentina, Brazil, Chile, Colombia and Mexico. Contracts date from the early 1990s onwards. The extent of privatization in the region can be attributed to three main factors. First, Latin America has many cities with sufficiently large populations, and sufficiently large middle classes, to attract private operators. Second, the indebtedness, precarious public finances and poor conditions of many public water utilities provide the justification for change. Third, neoliberal policies have been adopted to a greater extent than in other regions, in part because of conditions imposed by international financial institutions. Most large concessions in Latin American cities have been financed at least in part by multilateral loans.

Latin America is characterized by a relatively large number of concessions. The market is dominated by Suez first and then Veolia, but with the participation of a wider range of international companies than in other regions. The local private sector also appears to be more consolidated than in other regions, either within consortia with multinational companies or, less commonly, independently (e.g. Latin Aguas, Argentina). Another particular feature is that the region has several innovative contractual arrangements, such as joint ventures and cooperatives. It also has some well-run public water utilities (e.g. Porto Alegre and São Paulo, Brazil, Cali, Colombia and the cooperative in Santa Cruz, Bolivia).

Latin America has also seen a number of initiatives to improve services for low-income groups through private sector participation (e.g. Buenos Aires, Argentina, La Paz, Bolivia, and Cartagena, Colombia). The La Paz concession was specifically designed to expand services to the poor and contains a number of innovative contractual obligations designed to achieve this.⁽⁶³⁾ These include contract stipulations that all new connections must be in-house, defined quality parameters, low-cost technology (e.g. "condominial" sewerage), training and access to microcredit for installing connections, and a participatory approach that involves liaison with neighbourhood organizations and sanitary education.⁽⁶⁴⁾

A number of private contracts in Latin America have experienced problems. Argentina's financial crisis of December 2001 had significant implications for the water concessions underway in the country. In the contracts, prices were indexed to the US dollar to protect the multinational companies against local currency devaluation. However, this became untenable when the Argentine peso devalued by about 70 per cent, and the situation remains unresolved.

Four large contracts in Latin America have been terminated prematurely: Buenos Aires Province and Tucumán (Argentina), Cochabamba (Bolivia), and Trinidad and Tobago. In all cases, governments terminated the operators' contracts due to poor performance, and service provision has reverted to the public sector. The most notable privatization failure was the termination in 1999 of the concession in Cochabamba. Primarily motivated by tariff increases of up to 200 per cent, the imposition of an exclusivity clause on water resources, and the involvement of the World Bank and a multinational company, the situation provoked violent protests that resulted in the termination of the contract.⁽⁶⁵⁾

62. Unless otherwise indicated, compiled from data provided by the Public Services International Research Unit, University of Greenwich; also Hall, David and Emanuele Lobina (2003), "Water privatization in Latin America, 2002", Public Services International Research Unit, University of Greenwich, June; and Hall, David (1999), "Water and privatization in Latin America, 1999", Public Services International Research Unit, University of Greenwich, September, based on PSIRU data.

63. Komives, Kristin and Penelope Brook Cowen (1998), "Expanding water and sanitation services to low-income households: the case of the La Paz-El Alto Concession", Private Sector Viewpoint Note No 178, World Bank, Washington DC. The La Paz concession also includes the neighbouring settlement of El Alto.

64. Condominial sewerage is a low-cost sewerage system developed in Brazil that comprises a branch system with one sub-branch per block and individual connections to each plot, using small diameter plastic pipes set at least 30–40 centimetres deep.

65. Nickson, Andrew and Claudia Vargas (2002), "The limitations of water regulation: the failure of the Cochabamba concession in Bolivia", *Bulletin of Latin American Research* Vol 21, No 1, pages 99–120.

e. Private provision to low-income areas

66. See, for example, reference 21.

67. See reference 37.

68. Bourbigot, Marie-Marguerite and Yves Picaud (2001), "Public-private partnership (PPP) for municipal water services", Regional Conference on the Reform of the Water Supply and Sanitation Sector in Africa, Kampala, Uganda, February.

69. Whiting, Richard (1999), quoted in *Zimbabwe Independent*, 10 December.

70. Carbonel, Alain (2000), "Supply of water and sanitation to low-income households in La Paz under the Aguas del Illimani Concession", presented at Infrastructure for Development: Private Solutions and the Poor, London, 31 May-2 June.

71. Cockburn, Mark, Michael Dyson and Neil Kenward (2000), "Assessing finance for the supply and purchase of infrastructure services", presented at Infrastructure for Development: Private Solutions and the Poor, London, 31 May-2 June; also Hay, Winston (2000), "The regulator's perspective", presented at Infrastructure for Development: Private Solutions and the Poor, London, 31 May-2 June; and see reference 26.

72. Foster, Vivien, Andrés Gómez Lobo and Jonathan Halpern (2000), "Designing direct subsidies for the poor - a water and sanitation case study", Private Sector Viewpoint Note No 211, PPIAF, World Bank, Washington DC.

73. Johnstone, Nick and Libby Wood (editors) (2001), *Private Firms and Public Water: Realizing Social and Environmental Objectives in Developing Countries*, Edward Elgar, Cheltenham.

Much attention has been paid to serving low-income groups under private sector operation of water and sanitation services. Much policy literature suggests that the private sector, through external funding, greater efficiency and customer service, will extend and improve services to low-income groups.⁽⁶⁶⁾ According to this argument, unserved groups represent a large and untapped market for the private sector, as they are willing to pay for better services (household connections, more reliable and better quality supply). Practical experiences, however, provide little evidence to support either of these claims. Indeed, there is little evidence either that the private sector is interested in serving low-income groups, or that they are any better off under private provision.

A number of multinational water companies have asserted that low-income populations do not represent an attractive market because they are too poor to be profitable and represent too great a financial risk. The chief executive of Saur said that there was little scope for users in the South to be able to pay prices that represent the levels of investment needed, that the goal of connections for all users was "unrealistic", and that public sector subsidies and soft loans were essential for meeting these needs.⁽⁶⁷⁾ Representatives of Veolia stated that profits depend on "sufficient and assured revenues from the users of the service", which are unlikely to include poor groups.⁽⁶⁸⁾ Biwater's general manager, referring to Zimbabwe, also claimed that: "From a social point of view these kinds of projects are viable but, unfortunately, from a private sector point of view they are not."⁽⁶⁹⁾

Indeed, attempts by the private operator to serve low-income groups have seldom been successful from a commercial perspective. The La Paz concession, which was designed to be pro-poor, was operating at a loss only three years into the contract, principally due to a lack of demand for new connections and low domestic water consumption.⁽⁷⁰⁾

This represents, at base, an argument for subsidies. In practice, many accept that services for low-income users need to be subsidized, either directly through payments to the utility for providing the services or indirectly through welfare payments to the low-income users themselves.⁽⁷¹⁾ Water subsidies and cross-subsidies are commonly incorporated into water tariff structures, through rising block tariffs (lower tariff for the first designated volume), social or welfare tariffs (lower charges for low-income households, often at a flat rate), banded charges (lower tariffs for lower-income neighbourhoods) or lifeline tariffs (designated volume provided free of charge). Less commonly, direct means-tested subsidies are given to low-income households, as in Chile.⁽⁷²⁾ Where regulators are responsible for pricing, they can decide how best to ensure access for low-income groups without compromising operators' required returns. Where cross-subsidies are not feasible, some alternative means of financing the subsidies must be found.

Connection charges are also often unaffordable for low-income groups, especially if they are based on cost-recovery, in which case they are likely to be significantly higher where networks are being extended into unplanned and peripheral settlements.⁽⁷³⁾ Connection charges also place the cost of network expansion on unserved households, while those which obtained connections before privatization usually paid nothing. Connection charges often need to be cross-subsidized with other users, as occurred in Buenos Aires. The charges for new connections (approximately US\$ 400 for water and US\$ 600 for sewerage) were unaffordable to

lower-income households, and for this reason were completely restructured to a Universal Service and Environmental Improvement fee, applicable to all users, that represents the costs of extending the system and meeting environmental standards.⁽⁷⁴⁾

Moreover, evidence suggests that private operators are reluctant to extend services to low-income settlements. Often, the least profitable areas are excluded from the service area in the contract. In both Cartagena and La Paz, low-income settlements on the periphery were excluded as they were defined as being outside the cities' limits, and sparsely populated rural areas were excluded from the renegotiated contract in Côte d'Ivoire.⁽⁷⁵⁾ Operators may also exclude poor households that are within the contract area on the grounds that they do not have legal land tenure. This was the case in Córdoba and Buenos Aires city and province, despite the contracts stipulating almost universal coverage in the service areas.⁽⁷⁶⁾ An assessment of the Buenos Aires contracts and local land laws called into question the legal grounds on which untenured households were being excluded, noting that both the contracts and the laws contained clauses that could be taken to guarantee the rights of informal settlers to services.⁽⁷⁷⁾

In order to avoid or overcome such issues, some development agencies, and reports funded by them, argue that private sector participation must be made more "pro-poor". Suggested proposals to help ensure this include consultation and participation throughout the privatization process; providing more information relating to conditions in low-income areas; giving more weight to pro-poor measures when drawing up tender documents and evaluating bids; addressing tenure problems in low-income areas; reducing connection costs (even if this requires higher unit rates); and building indicators of coverage (or lack of access, such as the price charged by vendors) into the contract, so that the operator's profit depends on them.⁽⁷⁸⁾

In some cases, private operators are implementing specific measures to improve provision to unserved low-income areas. These are based on mechanisms that "make more of the poor profitable", through voluntary labour, collective provision of materials, cross-subsidies, appropriate technology and alternative payment arrangements.⁽⁷⁹⁾ Such cases are used to exemplify successful pro-poor approaches by private operators. However, such initiatives are not common practice, and most of the locations that follow are pilot projects within a multi-agency initiative ("Business Partners for Development") to develop provision to low-income settlements through public-private-civil society partnerships.

Community provision of unpaid labour was used to reduce connection costs in Buenos Aires province and in La Paz, although in the latter case concerns have been raised about the amount of free labour required.⁽⁸⁰⁾ Also in La Paz, low cost condominial sewerage and yard connections were provided for poor households; however, the narrow diameter pipes frequently become blocked and the shallowly laid pipes often resurface and break, leading to criticism that this infrastructure is "a poor quality solution for poor people".⁽⁸¹⁾ Similarly, in South Africa, historical disparities between racial groups make it politically unacceptable to provide inferior services to low-income black communities. Therefore, opposition arose to the installation of standpipes in such areas, despite research that shows that the health benefits are greatest from yard or household connections, and also to a sanitation plan based on pit latrines for low-income areas of Johannesburg, despite inappropriate physical conditions and

74. Loftus, Alexander and David McDonald (2001), "Of liquid dreams: a political ecology of water privatization in Buenos Aires", *Environment and Urbanization* Vol 13, No 2, pages 179–199.

75. Nickson, Andrew (2001), "Establishing and implementing a joint venture: water and sanitation services in Cartagena, Colombia", GHK Working Paper No 442 03; also see reference 70; and Trémolet, Sophie (2002), "Rural water service: is a private national operator a viable business model?", Private Sector Viewpoint Note No 249, PPIAF, World Bank, Washington DC.

76. Nickson, Andrew (2001), "The Córdoba water concession in Argentina", GHK Working Paper No 442 05.

77. Almansi, Florencia, Ana Hardoy, Gustavo Pandiella, Ricardo Schusterman and Gastón Urquiza (2002), "Everyday water struggles in Buenos Aires: the problem of land tenure in the expansion of potable water and sanitation service to informal settlements", WaterAid and Tearfund.

78. See, for example, reference 21; also Halcrow Management Sciences (2002), "Public-private partnerships and the poor strategy, implementation, regulation", WEDC, Loughborough University.

79. Hall, David (2002), "The water multinationals 2002 – financial and other problems", Public Services International Research Unit, University of Greenwich, August.

80. See reference 77; also Crespo, Carlos (2001), "La concesión de La Paz a los cinco años: elementos para una evaluación" ["The La Paz concession after five years: towards an evaluation"], unpublished paper, University of Newcastle.

81. Crespo, Carlos (2001), "Solución para pobres con calidad para pobres" (unpublished paper), University of Newcastle, citation from page 6.

82. See reference 18; also see reference 55, Hall et al. (2002).

83. See reference 75, Nickson (2001); also Schusterman, Ricardo, Florencia Almansi, Ana Hardoy, Gordon McGranahan, Iris Oliverio, Ruth Rozensztejn and Gastón Urquiza (2002), "Experiences with water provision in four low-income *barrios* in Buenos Aires", WEDC, Loughborough University; and see reference 77.

potential health risks.⁽⁸²⁾

In at least two cases, Buenos Aires and Cartagena, private operators have sought innovative ways of providing formal connections to low-income residents, in part to address the problems posed by illegal connections. However, in these locations, operators have installed collective meters as opposed to individual connections, and have not resolved all of the payment issues.⁽⁸³⁾ In South Africa, pre-payment cards were introduced for standpipes, which was a controversial measure as it secured payment to the operator without addressing affordability.

While it is encouraging that some private operators are using innovative measures to address the needs of lower-income users, there are few such projects. Moreover, some of the initiatives have been location specific and difficult to replicate. The experiences outlined above suggest that the private sector has little incentive to expand services to the poor, is rarely able to provide them with good services and is unlikely to play a major role in addressing water and sanitation deficiencies in poor settlements.

V. CONCLUSIONS

DESPITE ITS PROMINENCE in current and recent debates and policies within the water sector, only around 5 per cent of the world's population is served by the private sector. The extent of privatization has been limited in Africa, Asia and Latin America, although experiences in these regions have been mixed, with outcomes greatly depending on local factors. Recent trends indicate that the rate of privatization has been slowing since the late 1990s, due to a combination of underestimation of risks, overestimation of profits and problems with contracts in some cases. Despite continuing encouragement and financial support from multilateral financial institutions, companies are now more careful about engaging in the water and sanitation sector in low- and even middle-income countries. Indeed, in a number of instances, private operators have withdrawn from projects or have had their contracts terminated.

The role of privatization in meeting the Millennium water and sanitation targets, and the global challenge of ensuring that people have adequate access to affordable water and sanitation services, is clearly limited, especially in those areas where water and sanitation provision is most deficient. The settlements most in need of improvements in water and sanitation provision tend to be those least attractive to private operators. Peri-urban and rural areas are almost always excluded from private contracts. This is reflected in the distinct regional, national and sectoral trends, which indicate that formal private sector participation is concentrated in wealthier, more populous and more urbanized regions, countries, cities and neighbourhoods, while low-income contexts are avoided.

It would be a serious mistake to assume that private sector participation will attract sufficient finance to play a major role in providing adequate water and sanitation to deprived neighbourhoods. Despite the forecasts of some actors in the international development arena, substantial private finance mobilized by the private sector has simply not materialized. The scale of attention to privatization in recent years somewhat obscures the fact that the majority of the population in the South continues to be served by the public sector or small-scale or informal providers, and also that the majority of the funding from the water sector – at least at present and in the foreseeable future – will continue to come from the

public sector. Moreover, over-optimistic forecasts of private sector finance can reduce pressure on the public sector to develop more sustainable public sector financing systems.

The polemic debate surrounding privatization has attracted much attention, but is something of a red herring. Many of the arguments mobilized to support the purported innate superiorities and/or benefits of the public or private sectors and/or provision are based on misconceptions. This is further complicated by the classification of very different types of institution under the labels of public or private, and the disregard of those that are not neatly classified as either. These aspects have, to a certain extent, helped to detract attention from problems that do not necessarily arise whether services are provided by the public or private sectors, and overlook important issues that are arising from the privatization process.

What is less obvious from the debates themselves, however, is that the promotion of privatization is not grounded in experiences from the water and sanitation sector itself. The timing of privatization has mirrored that in other infrastructure sectors, where the levels of investment have been far larger. The driving force has been international political changes and policy shifts in the international development arena, in particular those of international financial institutions from the late 1970s onwards. Despite failed experiences of private sector provision of water and sanitation services in the nineteenth century, such institutions have presented private provision as a new solution for failing public utilities and deficiencies in provision, without practical substantiation that such policies were effective. Similarly, the positions taken regarding privatization are also closely aligned with the underlying interests of some of the actors directly involved or affected, including the market expansion of multinational water companies and the jobs of public sector workers.

More generally, a number of issues addressed in this paper have relevance beyond the narrow question of whether or not increasing private sector participation is a good thing. Many of the problems that have been encountered with privatization can also arise with public utilities, while many of the strengths of private sector participation can also be achieved by reforming public sector utilities. Privatization has done little to address many of the most critical obstacles to improved provision, as these often have little to do with whether the water and sanitation networks are owned or operated by private companies. Barriers to provision, such as land tenure, still impede service provision in informal settlements, even when these are officially within the service area of the private operator. Private sector involvement does not eliminate, and can heighten, the politicization of water and sanitation provision as well as corruption; indeed, it can provide the basis for new forms of corruption.

Making privatization more pro-poor is based on the notion that privatization can benefit low-income groups as long as it includes mechanisms to facilitate access to private services. The measures proposed tend to focus on low-cost technology, flexible payment systems and participation. Such measures, while relevant to private as well as public utilities, do not address the more fundamental reasons for which poor groups in low-income countries lack access to basic water and sanitation services – including not just the economics but also the politics of service provision. The public-private divide also runs the risk of obscuring the important role of small-scale private providers, community-level organizations and non-governmental organizations, whose roles are particularly relevant in countries like Tanzania, where the public sector has been withdrawing

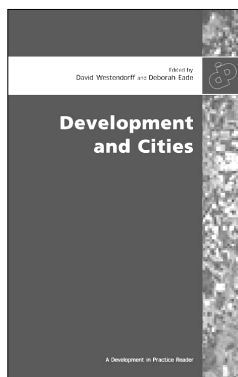
84. Semboja, Joseph and Ole Therkildsen (editors) (1995), *Service Provision under Stress in East Africa*, Centre for Development Research, Copenhagen; also Kjellén, Marianne (2002), "Water provisioning in Dar-es-Salaam, Tanzania: from public pipes to private hands", *Urban Water* (submitted).

from service provision but formal private sector participation has not been introduced.⁽⁸⁴⁾

In the 1990s, proponents of privatization often considered rapid transitions necessary, so as to avoid protracted periods of uncertainty and institutional conflict, during which the opportunity to implement radical reforms might be lost. Rapid transitions involving radical shifts in responsibilities are inherently risky, however. There is little time for consultation and stakeholder engagement. If radical reforms do not actually address the underlying problems, they can make matters worse. More specifically, if the failings of a public utility reflect governance problems, and these problems are not addressed directly, they are likely to persist and undermine water and sanitation provision, regardless of whether more responsibilities are given to the private sector. Similarly, where the public sector lacks the will or capacity to provide urban water and sanitation it often also lacks the will or capacity to regulate private provision effectively.

There is also a danger that the international promotion of private sector participation, particularly when conditional on development assistance finance, is undermining both democracy and the capacity of local polities to resolve their own water and sanitation issues. While it may be a problem when water and sanitation utilities are manipulated to serve short-term political interests, it is also a problem when the regulation of utilities (public or private) is not grounded in sound long-term political agreements. Moreover, there is a serious imbalance of power when indebted governments are negotiating with international financial institutions and multinational water companies. This imbalance not only makes it difficult for the local government to negotiate a "fair deal", but effectively overrides local political processes. Whether or not the local political processes are considered equitable or efficient, the decision to circumvent these is not one that international agencies should take lightly, as it may have negative repercussions well beyond the water and sanitation sector. In any case, given the limited scale and the elusive benefits to lower-income groups, there is no justification for the continued promotion of private sector participation as a means of achieving the international water and sanitation targets.

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