



A Critical Review of Public-Public Partnerships in Water Services

Gemma Boag

School of Geography and the Environment, University of Oxford, UK; gemmaboag@gmail.com

David A. McDonald

Global Development Studies, Queen's University, Kingston, Canada; dm23@queensu.ca

ABSTRACT: There is a profusion of literature on the commercialisation of water services around the world, but relatively little of this research speaks of alternatives to privatisation. The literature that does exist tends to be scattered in its regional and thematic orientation and inconsistent in its analytical frameworks. The writing on public-public partnerships (PUPs) is arguably the best known and most rigorous of this literature, but even this is relatively thin, with a tendency to uncritically celebrate PUP initiatives and to gloss over ambiguous conceptual frameworks. This paper provides a critical review of the PUPs literature, in part to reveal some of these problematic trends, but ultimately in an effort to advance our understanding and practice of public alternatives in the water sector (and beyond). Specifically, it analyses the different partnership arrangements available, discusses the advantages and critiques of the PUP model in both theoretical and practical terms, and considers the recent emergence of Water Operator Partnerships (WOPs).

KEYWORDS: Public-public partnerships (PUPs), water services, alternatives to privatisation, corporatisation, Water Operator Partnerships (WOPs)

INTRODUCTION

The past two decades have seen a dramatic increase in the privatisation and commercialisation of water services around the world. This has been accompanied by an attendant rise in academic and popular literature critical of these developments. From the permanent divestiture of water assets, to short-term public-private partnerships (PPPs), to the internal marketisation of public utilities there has been much discussion of the impact of these market trends on water-services quality, equity, affordability, and sustainability, covering a wide range of themes and regions (see, for example, Petrella, 2001; Finger and Allouche, 2002; Budds and McGranahan, 2003; Prudham, 2004; Bakker, 2005; Davis, 2005; McDonald and Ruiters, 2005; Swyngedouw, 2005; Bouguerra, 2006; Barlow, 2007; Lobina and Hall, 2007).

Much of this literature also speaks of alternatives to privatisation, although, with a few exceptions (e.g. Bakker, 2007, 2008), this commentary tends to be tacked on at the end of an article or book with broad generalisations about the need and potential for non-commercialised forms of water delivery. Efforts to explicitly and singularly investigate non-commercialised water services are few and far between. The literature that does exist tends to be scattered in its regional and thematic orientation and inconsistent in its analytical frameworks – perhaps unavoidably at the early stages of this research agenda.

As a result, reviewing and comparing the 'alternatives' literature is difficult, and somewhat akin to comparing apples and oranges. Authors often use a similar terminology to describe very different phenomena and there is little in the way of consistent research methodology.

Work on PUPs is arguably the best known and most rigorous part of this literature, but it too is relatively thin, with a tendency to uncritically celebrate PUPs initiatives while glossing over problematic

characteristics and ambiguous conceptual frameworks. Moreover, there has yet to be a critical survey of the literature on PUPs itself.

The purpose of this paper is to provide just such a review – in part to reveal some of the more problematic trends in the writing on PUPs, and ultimately in an effort to advance and make more rigorous our understanding of PUPs in the water sector. In so doing the paper also contributes to a broader range of thematic and sectoral debates on alternatives to privatisation.

We begin with a comprehensive survey of the literature on PUPs, identifying and classifying the ways in which these partnerships have been conceptualised in practical and theoretical terms. We also offer a list of the advantages of PUPs as they have been articulated in this literature, such as the promotion of a 'public ethos', a renewed call for investment in public infrastructure, the promotion of more democratic and equitable water services, the building of solidarity amongst water operators, the creation of multi-scalar and cross-sectoral linkages, and the prevention (or slowing) of privatisation initiatives.

We then provide a critical review of this writing, highlighting some of the inconsistencies and contradictions in the literature. We focus on two concerns. The first is a methodological one, in which we highlight the often informal and indeterminate research methods employed in the study of PUPs. This includes the use of normative values to assess the success and failure of PUPs – as compared to privatised water services – but with little indication of how these norms have been determined, or how they might compete with one another.

The second concern is a conceptual one, related to the very essence of what is meant by 'public'. Despite the centrality of the term in 'public-public partnerships', the word is seldom defined and often imbued with competing and problematic assumptions. Related to this is the largely uncritical engagement in the literature on PUPs with neoliberal notions of New Public Management which promote or enforce models of corporatisation or commercialisation that bear many similarities to private-sector participation or ownership. Whether by design or default many PUPs in the water sector are severely compromised by this ideological and institutional development, with some projects using progressive PUPs language as a way to facilitate deeper commercialisation, or even outright privatisation. This trend has not gone unnoticed in the literature on PUPs but we draw attention to its existence and the inherent tensions it brings to notions of 'publicness'.

Also problematic is the recent introduction of Water Operator Partnerships (WOPs) – a concept developed by the United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB) in 2006. We review this literature briefly and compare it to PUPs. Although the two models share many commonalities the key differences are an explicit inclusion of private-sector operators in the WOPs model and unqualified support for corporatisation. For these reasons we suggest that WOPs, as currently promoted, are inimical to the spirit of PUPs and ask why the UN would be promoting such an obfuscatory concept.

Despite these critical tones we believe there are important elements of PUPs (and WOPs) that should be further developed and advanced, including an important role for UN and donor agencies in promoting and supporting them. What is required is a revised conceptual and normative framework that more rigorously captures the institutional and ideological complexities of 'public' partnerships, as well as offering clearer philosophical grounds for determining the pros and cons of PUPs.

The final section of the paper suggests ways in which we might work towards a new analytical framework and research agenda on 'public' alternatives in the water sector, as well as a revised classification scheme for PUPs. This latter discussion is intended to stimulate conversation, and in this sense will need to be evaluated against a larger body of theoretical and empirical material in the future to assess its practical and conceptual value.

REVIEWING THE LITERATURE ON PUPS

To date, research on PUPs in the water sector has been largely confined to a handful of nongovernmental (NGO) and labour organisations – most notably the Public Services International Research Unit (PSIRU), the Transnational Institute (TNI), and Corporate Europe Observatory (CEO). Regionally specific case studies have been conducted as well, covering a growing number of countries and PUP combinations, but the writing is not extensive (Hall, 2000; PSIRU, 2000; Public Citizen, 2002; Balanyá et al., 2005; Hall et al., 2005; TNI and CEO, 2006; Lobina and Hall, 2006a, 2006b, 2007; Warwick and Cann, 2007). There are also a growing number of NGOs, unions, and research groups which endorse the PUP concept (e.g. Food & Water Watch, the Council of Canadians' Blue Planet Project, UNISON) but there is little in the way of additional primary research from these groups.

Writing on PUPs in the formal academic literature is scarce, although three recent articles briefly mention the concepts and invite wider discussion. Bakker (2008), for example, offers an introduction to PUPs but stops short of discussing their nuances and does not differentiate them from the new WOPs' framework. Phumpiu and Gustafsson (2009) discuss PUPs as one aspect of a broader analysis of water sector partnerships in Latin America. They emphasise the importance of institutional frameworks, political leadership, and inclusion of trade unions as success factors for partnerships. Schwartz (2008a) also alludes to the growing interest in PUPs, but stays at the level of generalities: "[Water] partnerships are not only between public and private partners, but also between public and other levels of government, or between public and NGOs. Also, twinning projects, which are more trust-based, between water utilities and other water operators are emerging".

Nonetheless, there has been an increase in the literature on PUPs in general over the past decade. Whilst only two references could be found published in 2000, there were 13 publications in 2007. More recently, in 2008 and early 2009, discussions of Water Operator Partnerships have outpaced those of PUPs.

In some respects, however, the concept is much older. Although the publishing dates suggest PUPs 'began' in the early 2000s, the idea (though not necessarily the terminology) goes back much further, with one of the first partnerships taking place between Lilongwe, Malawi and the United Kingdom's (UK) Severn Trent in the 1980s, before UK water companies were privatised (Hall, 2000; Hall et al., 2005).

We are not aware of a formal historiography of the concept of PUPs, but it appears to have evolved from two main sources. The first is the concept of city 'twinning' which emerged after World War II in an attempt to develop intercultural ties (Hall et al., 2005). These partnerships were not commonly used to improve water services, but the idea of inter-municipal collaboration appears to provide a political foundation for PUPs in the water sector. The second, more antipodal inspiration for water PUPs would appear to derive from a search for alternatives to the privatisation models that swept through the water sector in the 1980s and 1990s. Though not entirely reactionary, many early articles on PUPs appear to have been written with the intent of suggesting that there are alternatives to privatisation (and failed states) rather than capturing an organic expression of non-commercialised innovations on the ground (Hall, 2000).

We have examined as much of this literature on PUPs as we could find for this review – a total of 44 documents which explicitly discuss public-public partnerships in the water sector – and have listed these chronologically in the Appendix.

DEFINING PUPS

Not all of the literature on PUPs explicitly defines what is meant by a PUP in the water sector, whilst some are incomplete and/or imprecise in their attempts at a definition. There are, nonetheless, consistent ideas and norms that run through the writing which allow for a rough definitional framework. Some of these definitional concepts relate to organisational structure, others to objectives, and still others to scale.

In short, PUPs in the water sector have been defined as a water service which fits all of the following four characteristics: involving the matching of two or more partners (domestically or internationally) via a twinning mechanism; being composed of only 'public' partners; working on a not-for-profit (non-profit) basis; involving partnerships which seek to improve and promote public service delivery. We will explore each of these points in greater detail below, but can summarize the definition of water PUPs culled from the writing on the topic as follows: *A twinning arrangement with a stated non-profit motive that aims to improve water services in one or more of the partner regions and which includes only public partners.*

Partnership types

The early literature on PUPs differentiated between 'local' and 'international' partnerships (PSIRU, 2000) but by 2005 had come to include a wider range of 'public' entities, including 'public authority-public authority', 'public authority-community', 'development partnerships' and 'international PUPs' (Hall et al., 2005). TNI and CEO (2006) built on this taxonomy and replaced 'public authority-community' with a more inclusive description of partnership as that between a public authority and any non-government public body.

Taking these categorisations as a starting point, table 1 classifies these partnership possibilities according to their spatial-geographic location (along the horizontal axis) and according to their organisational-actor character (along the vertical axis). Generic examples of these arrangements are provided in the intersecting boxes.

Table 1. Typology of PUP partnership types.

		<i>Spatial-geographical scale</i>		
		Intra-state (domestic partnerships)	Inter-state (North-North or South- South)	Developmental (North- South)
<i>Organisational Scale</i>	Public authority- public authority	e.g. municipal water provider and national water department	e.g. national water departments from two different countries	e.g. municipal water provider in the South and a municipal water provider in the North
	Public authority- non-state entity	e.g. municipal water provider and a trade union	e.g. national water department and an NGO from another country	e.g. municipal water provider in the South and a union in the North
	Non-state entity- non-state entity	e.g. a water cooperative and an NGO in the same municipality	e.g. unions from two different countries	e.g. an NGO in the North working with a community group in the South
	Beyond twinning: multi- partnerships	e.g. a municipal water provider working with a local union and a local community group	e.g. a regional water utility working with more than one national government	e.g. a municipal water provider in the South working with an international NGO and a municipal government in the North

Along the spatial-geographical scale, PUPs can occur at a local, intra-state level, at a regional South-South or North-North level, and at an international 'developmental' level with North-South partnerships. Intra-state PUPs are typically established because of geographic proximity, ease of communication (including a common language), and the sharing of similar socio-cultural and/or hydrological contexts. These partnerships often form because partners have practical experience with one another's challenges. Similar motivations can drive interstate PUPs between South-South or North-North partners, where partners come from relatively similar economic situations with comparable constraints and challenges (Miranda, 2007).

Whilst the last spatial category is also technically an 'interstate partnership', the 'developmental' PUP is so-named because it involves a partnership between a high-income country in the Global North and a low-income country in the Global South. This often results in a one-way transfer of resources and capacity, although there is potential for knowledge transfer from South to North in the form of cultural exchange, information sharing, etc. Intra-state and regional partnerships can also be a one-way transfer in terms of benefits, but the relationship arguably occurs on more equal terms than in the donor-recipient relationships found in developmental partnerships.

Organisationally, PUPs can be divided into three categories: those between public authorities, those between public authorities and non-state entities, and those between non-state entities. A fourth category comprises multi-partnerships, which may include several types of relationships and authorities. All of these organisational structures can occur along the three different spatial scales described above. As such, 'public authority-public authority' partnerships can occur within the same level of government, between different levels of governments and across national divides. The most common of these in the water sector are inter-municipal partnerships – those which occur between two different municipal partners (e.g. two cities) either at the domestic, international or development level.

Examples of such public authority/public authority partnerships include those run by the Tamil Nadu Water Supply and Drainage Board (TWAD) in India (Suresh and Nayar, 2007) and Phnom Penh Water Supply Authority (PPWSA) in Cambodia (Chea, 2007). North-North partnerships are epitomized by cases in the Baltic region (Lobina and Hall, 2006b), while Uganda's National Water and Sewerage Company (NWSC) has run multiple South-South partnerships in sub-Saharan Africa (Mugisha and Berg, 2007; NWSC, 2008). Developmental partnerships include the example of the Malawian and UK water utility mentioned previously and partnering between French operators and utilities in El Salvador, Palestine, South Africa, and Vietnam (Hall et al., 2005).

The second organisational grouping of PUPs occurs between public water authorities and non-state entities. These are different from 'government PUPs' in that only one partner is a formal public entity and the exchange of capacity and skills often takes place with different objectives, as will be highlighted below. To date, all state/non-state partnerships have taken place at the intra-state level, typically between a municipal authority and a locally based association concerned with improving public water services in their community. State/trade union partnerships are also typically established between local workers and the local utility, but they have a better chance of expanding to a national or international scale with the presence of large, internationally active unions such as the Canadian Union of Public Employees (CUPE) and the British public-sector trade union, UNISON. State/NGO partnerships are analogous to arrangements with trade unions.

Partnerships between non-state entities (e.g. a community water cooperative and a trade union) also tend to be highly localized, although there are international NGOs and unions that can create interstate partnerships. An example of a partnership between a local and an international NGO is the collaboration between Dushtha Shasthya Kendra (DSK) and WaterAid in Dhaka, Bangladesh where the organisations worked together to expand water services to informal settlements (Jinnah, 2007).

Finally, an organisational dimension that is not explicitly described in the literature is that of 'multi-partnerships'. Though a natural extension of the PUP concept it is important to highlight these as a separate category. For example, the Odi municipal water utility in South Africa partnered with the regional water board (Rand Water) as well as with the local and national trade union, South African

Municipal Workers Union (Samwu) (Hall et al., 2005; Smith, 2005). Although this particular example had mixed success, more examples of these multi-partnerships are likely to appear, especially as NGOs and trade unions become more experienced in such initiatives.

Objectives of PUPs

We now turn to a discussion of the objectives behind PUPs, as they have been expressed in the literature – both explicit and implicit. Recalling the definitional elements described earlier – 'public' partners working on a non-profit basis seeking to improve and promote public service delivery – PUP objectives can be divided into broad goals and context-specific goals. Broad goals include the desire to improve water services, to promote 'public goods' aspects of water services, and to engage in non-profit partnerships that build solidarity and shared knowledge rather than profits (Lobina and Hall, 2006b). Water PUPs have also developed in an effort to fight off attempts to privatise water and/or promote public services, though this is not always explicit and some PUPs have been used to segue into privatisation, as we shall see below. Context-specific goals depend on the actors involved and the challenges faced, and can include a wide range of objectives such as introducing new technology, improving managerial skills and accessing finance, among others.

Table 2 builds on a typology of PUP objectives identified by Hall et al. (2005), and expanded by our own survey of the literature. These objectives manifest themselves differently in the various partnership arrangements. The short case studies described below provide examples of how different objectives relate to the partnership arrangement, both in terms of spatial and organisational scales.

Some general observations can be made, particularly the difference between partnerships involving only water service operators and those involving non-operator groups such as NGOs and community-based organisations (CBOs). The former may be more concerned with infrastructural and capacity goals because those are areas where water utilities regularly engage in and where they have the most experience to share. The latter may be oriented more towards financial, social, or political goals. For example, partnerships between a water operator and a CBO are likely to have at least some of their objectives relate to tariff design and making water services more transparent and accountable to the public.

Examples of PUPs

Our survey of the literature found approximately 30 different types of PUPs in the water sector around the world, operating at various scales and involving different sets of actors. While it is impossible to review all existing PUPs in detail – Hall et al. (2009) identify over 130 water PUPs operating in more than 70 countries – the following examples help to illustrate the operational and conceptual parameters of PUPs outlined above.

Our cases are grouped in three clusters, offering brief glimpses into 'actually existing' PUPs operating at the intra-state, interstate, and developmental partnership levels. We focus on partnerships in the Global South to highlight the role of socio-political objectives, with a bias towards partnerships between water utilities, due largely to the fact that most PUPs fall into this category.

Table 2. A typology of objectives of PUPs.

PUP goals	Objectives of PUPs	Examples of operationalisation of objectives
Socio-political	<ul style="list-style-type: none"> Empower and strengthen public utility(ies) and non-governmental partners Protect against privatisation Provide accountability and transparency for citizens Make services more democratic Make services more equitable 	<ul style="list-style-type: none"> Develop recognition that private operators are no more effective than public providers Build solidarity amongst public utilities and/or non-governmental entities Garner increased support from the local community as well as feedback on how to improve services Encourage local community groups to participate in improving water services Expand water service connections to low-income and marginalised communities Design connection and tariff payment plans that are affordable to all
Infra-structure	<ul style="list-style-type: none"> Improve and expand water services quality and/or quantity Introduce new technologies 	<ul style="list-style-type: none"> Increase efficiency by reducing leakage and improving water conservation Strategise about utility response to effects of climate change
Capacity	<ul style="list-style-type: none"> Develop human resources in the utility(ies) and non-governmental bodies Improve operator administration and management 	<ul style="list-style-type: none"> Build knowledge among utility workers and consumers through development workshops Expose utility management to inter-cultural experiences Increase pride and confidence among workers for the delivery of water as an essential service Further develop effective managerial skills Consolidate administrative duties and find new ways to make customer service and general administration more efficient
Financial	<ul style="list-style-type: none"> Improve system financing Determine appropriate cost/revenue structures for water services as a public good 	<ul style="list-style-type: none"> Develop alternative financing mechanisms Use partnerships with other municipal services to achieve economies of scale and offset costs Improve social tariff setting

Intra-state PUPs

The Tamil Nadu Water Supply and Drainage Board (TWAD) is the public utility responsible for serving the population of the State of Tamil Nadu in India. During 2003, following a period of water scarcity, TWAD began a process of reorganisation. This transformation was based on the principles of service democratisation through community participation, decentralisation, extending services to low-income communities, and water conservation. Improved accountability was achieved by having the utility engineers participate in 5-day workshops led by TWAD's Change Management Group. Over 300

engineers were taught how to run the utility according to the following mission: "The priority must be *'reaching the unreached'* in a manner ensuring equity and social justice" (Suresh and Nayar, 2007, emphasis in the original). This reorientation is demonstrated empirically by the fact that, since 2003, 65% of the schemes targetted by TWAD have been in villages where 50% or more of the population lives under the poverty line (Suresh and Nayar, 2007).

TWAD has taken this renewed vision of public water services and applied it to PUPs with two other state water utilities, the Maharashtra Jal Pratisthan and the Jharkand State Water departments. Officials from TWAD's Change Management Group have been visiting these utilities and helping them to reorganise their services using these workshops. UNICEF and the Government of India further supported the partnerships by convening a one-day conference to discuss the outcomes of the PUPs, resulting in the creation of the National Level Change Management Forum. This forum aimed at taking the lessons learned in TWAD to all other Indian states, and perhaps even to other countries (Suresh and Nayar, 2007).

Interstate PUPs

Scaling up to PUPs between different countries, the case of Uganda's National Water and Sewerage Company (NSWC) is an example of a utility in the South partnering with operators in neighbouring countries to share experience and knowledge. As with many African water utilities, Uganda's NSWC was saddled with a colonial legacy of poor urban water infrastructure. Beginning in 1998, NSWC embarked on a wide-ranging reform process aimed primarily at increasing its financial sustainability. Corporatisation of the utility in 2000 gave the operator increased autonomy from the central government. Although owned by the Government of Uganda, NSWC was "mandated to operate on a commercially viable basis" in providing water and sewerage services to 22 urban towns (Mugisha and Berg, 2007). While NSWC has been successful on financial and capacity objectives, it is unclear whether any of the larger socio-political objectives outlined above guided their actions, with at least one observer suggesting that NSWC's commercialisation was carried out with the intention of attracting more private-sector participation (Schwartz, 2008b).

The NSWC is actively sharing these reform experiences with other utilities in Kenya, Tanzania, Rwanda, Zambia, South Africa and Nigeria. The utility has created an External Services Unit through which they run partnerships with other countries on a cost recovery basis (NSWC, 2008). One PUP with the Dar es Salaam Water and Sewerage Corporation (DAWASCO) in 2000 helped implement a 100-Days Operational Rescue Plan in the city which produced a 36% improvement in bill collection, increased the number of water meters and decreased loss due to leakage (Lobina, 2007). The second phase of the partnership worked to improve workers' skills, further develop the utility's administrative capacity and strengthen DAWASCO's customer service (Schwartz, 2008b). Similar partnerships have been implemented with utilities from the other countries listed above, all focussing on similar objectives but with mixed reactions to the market-oriented cost recovery emphasis.

Interstate 'developmental' PUPs

The North-South PUP is perhaps the oldest of the documented twinning models, with partnerships between water utilities in the so-called developed and developing countries initiated long before any academic discussion on PUPs began. In a developmental partnership, operators in the Global South are typically aiming to improve their infrastructure and capacity and look to the northern partner for expertise, and potentially some resources. The northern operator may be pursuing capacity or socio-political objectives such as facilitating intercultural exchange for utility management and attempting to increase the personal benefit that their employees receive from such aid or outreach programmes (TNI and CEO, 2006).

One example is a PUP formed between the municipal Lilongwe Water Board (LWB) in Malawi, and the public operator Severn Trent in the UK (before it became privatised) in 1982. Supported financially

by the World Bank, the primary objectives of the partnership were infrastructural and capacity goals, including developing managerial skills, making services more efficient, reducing leakage and improving customer service. Efforts were also made to extend services to low-income areas through the creation of water kiosks managed by local area committees. There also appears to have been an expansion of services, although it is unclear if the water provided was affordable (Hall et al., 2005).

THE NEXT WAVE OF PUPS? WATER OPERATOR PARTNERSHIPS (WOPs)

Drawing in part on the PUPs' experience, a more recent addition to the literature is that of Water Operator Partnerships (WOPs). The model was initially developed by the United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB) in 2006. Established by Kofi Annan on World Water Day in 2004, the purpose of UNSGAB was to bring together a range of experts on water and sanitation to guide work on the Millennium Development Goals.

The WOP model was included in the Hashimoto Action Plan, launched in 2006 at the 4th World Water Forum, and described as follows (UNSGAB, 2007):

Cooperation between water operators, or Water Operator Partnerships (WOPs), can be useful mechanisms for providing support for capacity building of public water providers. Given the preponderance of public sector undertakings, it is envisaged that most operating partnerships will be between public operators. However, we do not exclude private sector operators, NGOs or those who can contribute to the performance of public water undertakings on a not-for-profit basis.

Despite the fact that WOPs are clearly modelled after PUPs (see Miranda, 2007), there is almost no reference to the original partnership model in any of the UNSGAB literature, including their most extensive report, *Framework for Global Water Operators Partnerships Alliance*, published by UN-Habitat in 2007. Moreover, much of the PUPs literature reviewed for this paper is completely absent from the WOP discussions. The only documented link to the literature on PUPs (that we are aware of) is found in a 2006 record of meeting minutes posted on the UNSGAB website that refer to "Water Operators Partnerships (WOPs), previously called Public-Public Partnerships (PUPs)" (UNSGAB, 2006).

The most obvious difference between the two is the inclusion of private-sector operators in the WOPs model (which are, by definition, absent from discussions regarding PUPs). Why did this happen? The most obvious answer is that the UNSGAB was dominated by individuals who are either in the private sector or have supported private-sector participation in the water sector in the past, including Michel Camdessus (former Director of the IMF), Margaret Catley-Carlson (advisor for the multinational water company Suez Lyonnaise des Eaux), Angel Gurría (former member of the Camdessus Panel on *Financing Water Infrastructure*) and Gerard Payen (former VP at Suez Lyonnaise des Eaux).

There were representatives on the Board from organisations that have opposed privatisation in the past, such as Public Services International (PSI) and the Brazilian Association of Municipal Water and Sanitation Public Operators (ASSEMAE), but it has been suggested that these pro-public members may have conceded to the inclusion of private-sector partners in an effort to create a UN-sponsored database to facilitate the matching of appropriate utility partners (UN-Habitat, 2007) that would help promote PUPs (Hall et al., 2009).

There is also the question as to why private companies would agree to operate on a non-profit basis. Are they participating for altruistic reasons? Will they share their expertise freely? Lobina and Hall (2006b) argue that the presence of private companies could lead to a competitive selection of WOP partners, mimicking commercial contracts and ultimately "prejudicing the dynamics on which the success of PUPs rests".

Hall et al. (2009) note that WOPs have already begun to favour the private sector, noting that

this influence is clear in the structure of initiatives by the Asian Development Bank (ADB), USAID, the Government of the Netherlands, and the regional WOPs in Latin America... [where] 4 out of 8 partnerships

supported so far involve private companies as the 'expert' partner – quite out of proportion in a region where 90% of water services are run by the public sector.

They go on to note that "the USAID initiative in Asia is even more skewed: 7 out of 10 twinning arrangements financed by this programme involve private-sector partners".

The inclusion of private-sector actors in WOPs has not been warmly received by PUP proponents for these reasons. While Miranda (2007) sat on the UNSGAB that created WOPs, and is supportive of the initiative in principle, he is critical of the inclusion of private water companies: "[t]he private sector already has more than enough room to promote its business, and worse still, this inclusion may cause more confusion and problems than real benefits".

There are also concerns about the role of non-state actors in the WOP model. Although a new International Steering Committee for UN-Habitat's Global WOPs Alliance (GWOPA) was established in January 2009, with a diverse membership of public operators, unions and NGOs, we are not aware of a single WOP which centrally involves trade unions or community-based organisations. Moreover, most WOP arrangements appear to emphasise a particular model of public-sector reform, that of corporatisation – a phenomenon found in PUPs as well but apparently more central to the objectives of WOPs.

In the end, therefore, we suggest that WOPs potentially undermine the larger socio-political objectives of PUPs. Although premised on the same general principles as PUPs – and with the potential for significantly improving public-sector capacity and networking around the world, particularly given the resource backing of the UN and other multilateral agencies¹ – the explicit inclusion of the private sector under the WOP rubric contradicts the notion of public-sector solidarity, the promotion of a public-sector delivery ethos and the de-commodification of water services inherent to the PUP concepts outlined above. As Hall et al. (2009) sardonically note, it would appear that private water companies intend to simply "turn [WOPs] into yet another marketing mechanism".

In critiquing WOPs in this way we need not throw out the proverbial baby with the bathwater, however. We can reject WOPs as a political effort to usurp PUPs while at the same time identifying elements of both models which promote the development and improvement of public water services, and as a leverage to obtain support for PUPs in the UN system.

ACTUAL BENEFITS OF PUPs

The actual benefits of PUPs are not as easy to identify in the literature as one might expect. Some of the assumed advantages are only implicit in the writing, some are too context-specific to generalise, and there can be a confusing mix of normative values (e.g. equity), empirical findings (e.g. low transaction costs), and abstract concepts (such as 'public ethos') to draw easy conclusions. Nevertheless, there are a sufficient number of benefits consistently identified in the literature on PUPs to allow them to be clustered into the following categories.

Improving operator capacity at minimal cost

PUPs can improve developing water infrastructure and service delivery capacity at a lower cost than public-private partnerships or a public entity working on its own. The non-profit aspect of the partnership allows PUP partners to share skills with other operators with a focus on knowledge transfer and capacity building rather than on profit taking (Lobina and Hall, 2006b). Each partner is aware of the fact that the other is hoping to extract a benefit from it, but since the partnership is not based on profit, benefits can result from mutual trust and a cooperative relationship. PUPs are also seen to promote the

¹ For example, WOP networks have been established by the Asian Development Bank (ADB), the Global Water Partnership (GWP), UN-Habitat, the World Bank's Water and Sanitation Program (WSP), the African Water Association (AfWA) and the International Water Association (IWA) in Africa.

development of in-country expertise by focussing on municipal workers. Through increasing local technical capacity, utilities and governments can decrease their dependence on expensive international consultants (Wouters, 2005) while at the same time expanding the pool of public-sector entities capable of providing support to others – a virtuous cycle of capacity building.

Promoting democratic and equitable water services

PUPs can democratise water services by providing greater participation in decision-making and delivery on the part of water users, front-line workers, and different layers of government. They can also increase service equity by extending connections to un-serviced areas and ensuring that a base amount of water is affordable to all. Case studies from India and Ghana show how staff education and community participation can make a significant difference in "reaching the unreached" (Suresh and Nayar, 2007; Brennan et al., 2004).

Of course, merely inserting a community into a partnership cannot be seen as a panacea for improving services (Bakker, 2008). Nor is equity always a stated objective of PUPs. However, the public-sector focus reduces the emphasis on (quick) profit-taking and cost-cutting, and service delivery partners are oriented towards longer time horizons and the larger political objectives of equity of access and affordability.

Building solidarity amongst municipal operators

PUPs offer a unique opportunity for building solidarity amongst public-sector managers, workers and the communities served, not only on a local scale but on a global one. PUPs facilitate solidarity building by enabling actors to meet, share knowledge, and come away with a renewed sense of confidence and pride in the ability of public utilities to serve their citizens. Pride in the utility and its purpose are seen to translate into better services (Cann, 2007).

A renewed focus on public-sector utilities

Given that 90% of the world's population with access to water services still depend on public utilities for delivery (UN-Habitat, 2007), meeting Millennium Development Goal targets in the water sector will depend on improving public-sector services (Miranda, 2007). PUPs are seen to help re-focus policy-making attention on the public sector in general, and on ways to improve public-sector water services in particular. In doing so, PUPs take us beyond the false assertion that public-private partnerships are the only mechanism to resolve the stasis of private *versus* public water services.

Equally important is the fact that PUPs open dialogue across hitherto compartmentalised public-sector entities (such as water-services and public-health units), as well as different scales of government, by creating/forcing opportunities for interaction and policy development across the public sector. In doing so, these inter- and intra-state engagements encourage a rethink of what constitutes a public-service provider and mechanisms for policy development.

Beating back privatisation

A final and related point is that PUPs help to deconstruct the myth that the private sector is inherently better at service provision than the public sector. Whether it be an empirical accounting of the monetary savings associated with a PUP versus a PPP, or a more qualitative assessment of accountability and transparency, PUPs provide concrete evidence of the ability of the public sector – in partnership with other 'public' entities – to outperform the private sector. Reinvesting in the public-sector revitalises capacity and pride, allowing public utilities to fight back with tangible results rather than to use mere anti-privatisation rhetoric.

CHALLENGES FOR PUPs

Despite the real (and perceived) benefits of PUPs the literature identifies a host of challenges. Even the most ardent of PUP supporters recognise the logistical and political difficulties inherent in multifaceted partnerships, particularly multi-scalar, international ones. Language barriers, cultural differences, uneven technological skills, dissimilar hydrological contexts, disparate labour-management relations, varied histories of water commodification, different interpretations of equity, and a host of other large and small discrepancies can lead to competing – even contradictory – objectives and tensions in partnership frameworks. Though sometimes glossed over in the enthusiasm to identify and promote alternatives to privatisation, virtually all of the literature on PUPs is cognisant of the difficulties associated with operationalising them.

Particular attention is paid to the challenge of financing PUPs. While the direct costs of creating and managing a partnership can be relatively minor, such as paying for the travel and salary of personnel, infrastructural improvements can be extremely expensive and leave PUPs in the same financial conundrum as other cash-strapped public-sector agencies. Financing remains the Achilles' heel of many PUPs, with the majority of donor funding for water projects still directed towards PPPs (Miranda, 2007).

The literature on PUPs also points to the anti-public-sector rhetoric of neoliberal policy-makers and the largely pro-privatisation media that make the promotion of PUPs an uphill battle. Though perhaps overly optimistic in its characterisation of the general public's understanding of, and interest in, PUPs, the literature is nonetheless alert to the political challenges of convincing governments, funders, and end users of the positive attributes of PUPs in the water sector.

A CRITICAL EVALUATION

Having identified the central objectives and logistics of PUPs, as well as their key benefits and challenges, we now turn to a more critical evaluation of the literature. We focus here on two concerns with the writing. The first is a methodological one, related to the loosely defined array of normative values which inform PUPs research but in the end do as much to complicate our understanding of PUPs as they do to shed light on them. The second relates to the ways in which notions of 'public' are employed (or not) in the literature.

Methodological rigour and normative suppositions

Whilst some research on PUPs is rigorous in its investigative techniques, much of it relies on secondary sources and personal experience. Though useful as snapshots of interesting projects there is little in the way of methodological explanation or contextualization that would allow for follow-up investigation or provide for comparative study across different PUP programmes. Without a clear sense of interview data, survey instruments, sources and reliability of secondary material, it is difficult to draw firm, comparative conclusions from much of the PUPs writing.

Of particular concern is the use of loosely defined normative values to measure the success or failure of PUPs. Case studies utilise an impressive array of ideals for public-public service delivery, e.g. equity, democracy, participation, sustainability, transparency, solidarity, universality, but there is little discussion of what these highly complex ideals mean in practice, how one investigates and measures them or what the implications are for competing norms. Consequently, it is difficult for practitioners to understand how a successful PUP may be organised, implemented and evaluated.

Equity, for example, is a difficult concept to measure (Milanovic, 2005; Burchardt, 2006; Equinet, 2007). For some countries/cases it is about policies that ensure distribution of resources according to need and which *reduce* inequality by treating unequals unequally (vertical equity). In other contexts, it might be couched as a state-provided basic minimum package of benefits ensuring that nobody falls below a certain level (e.g. 'free basic water' in South Africa). Differences between countries reflect different equity goals (Wagstaff et al., 1991). To suggest that PUPs are inherently more 'equitable' than

PPPs, which some of the literature does, avoids the more substantial questions of what we mean by equity and whether equity has been attained at the cost of other equally laudable normative goals such as sustainability or efficiency. Similar trade-offs apply to values of solidarity, universality, transparency, and so on.

The literature on PUPs is hardly unique in its uncritical embedding and celebration of normative concepts, but it is incumbent upon researchers on PUPs to acknowledge and address these shortcomings, if for no other reason than to recognise the inherent tensions within and across normative values and in seeking ways to address them practically.

We must also have a better understanding of what these normative ideals mean if we are to determine the transferability of PUPs from one place to another. Is 'transparency' interpreted the same way in Brazil as it is in Malaysia? Are expectations of 'quality' the same in Accra as they are in Buenos Aires? Are there baseline standards for PUPs that should be met universally, and if so how do we measure and investigate these? As it stands, the literature on PUPs offers us an inspired, and inspiring, set of normative criteria but little indication of how we might compare these ideals across the literature.

What is public?

A second concern with the literature on PUPs is its lack of clarity around the term 'public'. Although central to the description of PUPs, the term is barely interrogated as a concept. While some of the literature is careful to distinguish between state and non-state actors, PUP partners from a wide range of political and organisational clusters are lumped together under the rubric of 'public-public', unnecessarily blurring the lines between public and private spheres of interest and conflating different notions of the public domain.

This is not to suggest a simple or singular definition of public. There are no "naturally given, a priori boundaries" between public and private (Fraser, 1990) and interpretations change with social, political, and economic contexts, putting the concept on a continuum rather than on any fixed point. There are many competing concepts of public and we cannot possibly cover the breadth and depth of the debate in this paper. What we do hope to accomplish here is to identify two particularly problematic ways in which 'public' has been utilized in the literature on PUPs and to highlight the complex conceptual terrain upon which researchers, advocates and practitioners of PUPs must engage in the future if we are to rigorously advance our understanding of alternatives to privatisation in the water sector.

The discussion below focuses on notions of public as a matter of state ownership, followed by questions of public as it relates to citizenship. There are other dimensions to the definitional debate which are not explored here – e.g. scalar/territorial questions of where public space starts and ends, and how one defines public goods – but we hope that this limited discussion will serve to stimulate further debate in the literature on PUPs.

Public as ownership?

The most common characterisation of public in the research on PUPs is one that equates public water services with state ownership of facilities and resources (in contradistinction to private-sector ownership and management). Importantly, this definition often includes ownership by community groups and other non-state actors, as well as concepts of communal ownership (i.e. the commons), serving to expand conventional boundaries of public ownership and disrupting simplistic binaries of state/private that have informed much of the anti-privatisation literature in the water sector in the past.

But the definitional investigation tends to stop here. State/community ownership is celebrated as a positive alternative to private-sector ownership, with little discussion of how these 'public' ownership models are configured, what incentives and constraints they operate under, and how they relate to larger public-service objectives.

Of particular concern is the lack of critical engagement with, and even outright celebration of, the trend towards corporatisation of state-owned water utilities. While the literature on WOPs openly

endorses this trend, there is also explicit support for it in some of the literature on PUPs (e.g. Mugisha and Berg, 2007) and implicit support in much of the rest (for a counter example see Van Rooyen and Hall, 2007). This requires reflection, and correction.

At one level, corporatisation can be seen as a positive development. Faced with the prospect of privatisation, many utilities commercialise their operations to stave off private-sector ownership and/or management, keeping the facility in 'public' hands. These "business units" – as they are often called – are separated from other state entities, including keeping elected officials at arm's length, and running as financially independent divisions; a process known as 'ringfencing' (Stoker, 1989; Pendleton and Winterton, 1993; Dunsire, 1999; Olcay-Unver et al., 2003). While often receiving public funding, the corporatized utility is typically expected to operate on a full cost-recovery basis. User fees and cost reflexive water tariffs are expected to cover operation and maintenance costs as well as replacement costs for future infrastructure (McDonald, 2002; Van Rooyen and Hall, 2007).

Some argue that corporatisation is a good mix of traditionally-defined public and private sector operating models: government control of a crucial public service to ensure equity, and private-sector techniques to build efficiency (Rouse, 2007). As documented in the case of Uganda's National Water and Sewerage Corporation, cited above, corporatisation can improve the financial sustainability of a utility and provide managerial incentives that work towards meeting infrastructural and capacity objectives (Mugisha, 2007).

But corporatisation can also undermine and replace more traditional public-sector management principles, most problematically placing efficiency objectives ahead of equity. The introduction of market mechanisms and market practices such as competitive bidding, cost-benefit analysis, tariff indexation, performance-targeted salaries, and demand-driven investments tend to displace principles of integrated planning, (cross)subsidisation, supply-driven decision making and so on (keeping in mind that there are no ideal or absolute types here – i.e. commercial principles and more traditional public-sector management practices can run concurrently, to varying degrees).

As a result, corporatisation can lead to an erosion of conventional public-sector objectives such as equity and affordability. This is particularly evident in changes to managerial ethos, with an increasingly narrow focus on short-term financial gain/loss. So complete can this shift in management culture be that water systems which are fully owned and operated by the state (i.e. considered to be fully 'public') can be more commercial than their fully privatised counterparts, with managers aggressively promoting and enforcing cost recovery and other market principles in an effort to demonstrate their ability to operate 'efficiently' (McDonald and Ruiters, 2005).

Corporatisation can also promote outsourcing. The re-regulation of water services that accompanies corporatisation often allows non-public providers to compete for discreet sub-services (e.g. meter reading) while the removal of subsidies often forces state-owned enterprises to compete for finance on an equal basis with private firms or other corporatised entities within and across municipalities. In some cases, the corporatised entity may have to compete with a private firm for the management of an entire water system. While one could argue that this will improve efficiency through competition, it can also have the perverse effect of lowering service quality and service equity.

Corporatisation can even act as a gateway for direct private-sector ownership or control by making public water services more attractive to the private sector (Bakker, 2007). Private companies, after all, are only interested in investing in services with transparent subsidisation structures and relatively independent decision-making procedures. Water systems that have been delineated from other service functions with clearly defined costs and revenue structures, with some form of managerial autonomy from the state, are much more likely to attract interest from private firms. Not all corporatisation efforts are mere preparation for larger privatisation plans, but this is a real – and growing – motivation for municipalities that are adopting the corporatisation model (McDonald and Ruiters, 2005).

In these respects corporatisation can pave the way for commercialisation, either through direct private-sector involvement or the creation of public water systems that behave, for all intents and

purposes, like a private-sector water provider, mimicking business discourses and practices and serving to 'hollow out' the state (Stoker, 1989; Clarke and Newman, 1997; Dunsire, 1999; Taylor-Gooby, 2000).

The same applies to corporatised partners in PUPs. As suggested in the Uganda case study, one of the apparent purposes of that utility's corporatisation was to attract private finance (Schwartz, 2008b). Similar problems have arisen in South Africa, with two large corporatised water boards (Rand Water and Umgeni Water) acting more like private companies than public entities in their relationships with municipal water suppliers (Loftus, 2005; Van Rooyen and Hall, 2007). Rand Water's activities in Ghana have been particularly controversial, with anti-privatisation activists in that country arguing that Rand Water resembles a private multinational company, with its focus on cost recovery and market-based operating principles (Amenga-Etego and Grusky, 2005).

And yet, Rand Water uses the language of PUPs to argue that it is operating in the 'public interest' and should therefore be seen as a preferential partner in Ghana because it is a public entity. Van Rooyen and Hall (2007) see this as "opportunism rather than any real commitment to the ethos and principles of the public sector", with Rand Water using its public-sector credentials as a way to avoid open tender processes on partnerships, while at the same time "forcing the ethos and principles of the private sector in water provision... with enormous consequences for access to water by the poor". As Loftus (2005) argues in the case of Umgeni Water, such commercialised public operators have a "confused identity" and they carry this identity crisis through to their public partners.

It is essential, therefore, that practitioners and analysts of PUPs pay more careful attention to the increasingly corporatised nature of public-sector water providers and incorporate these insights into their evaluation and planning. Just because a water service is publicly owned does not mean it is being run in the larger public interest. Nor does creating a partnership with another public entity negate these concerns. It may simply make this corporate ideology more contagious, raising questions as to whether it is appropriate to call these corporatised entities 'public'. To better engage with these questions in the context of PUPs, there is a need for more research specifically on the experiences of corporatised public water utilities to understand how, and if, they balance the twin goals of equity and efficiency.

Similar concerns can be raised with water services run or owned by NGOs, CBOs, and other non-state, non-profit entities. Though potentially operating in the larger public interest – with regard to equity, sustainability and other non-profit objectives – market ideologies and practices can permeate decision-making in any organisation. NGOs seem particularly susceptible to such operational mandates, either working on their own or in partnership with other organisations (e.g. the Bangladeshi NGO Grameen Bank, which has established a joint venture with French water multinational Veolia). We must ask what sort of 'ethos' informs the operation of these organisations and not simply lump them uncritically under the rubric of 'public' because they do not operate on an explicitly for-profit basis.

Moreover, these non-state entities typically serve a limited subset of private interests, be it in a specific neighbourhood or to members of their organisation, unlike most state entities which have a mandate to service all people in a given territory. These non-state entities are kept necessarily at arm's length from the state and typically have less direct political control and oversight than state-owned and operated service providers (even corporatised ones). In this respect, these organisations may be better seen as 'private' entities, particularly if they are part of a larger private organisation or funded by private companies – a point we return to in the concluding section of the paper.

Public as citizenship?

Another common characterisation of public in the literature on PUPs is to equate it to citizenship – i.e. the notion that people living in a particular water jurisdiction (be it municipal or national) constitute something called 'the public'. The inclusion of citizens (the definition of which may or may not be restricted by formal residency rules) in decision-making is seen to enhance the 'public' nature of water services and to further enhance the validity of public-public 'partnerships'.

Although not unique to the literature on PUPs, the participation of citizens is seen as a positive development, helping to challenge the expertise-legitimated authority which has dominated public water services in most countries and allowed bureaucrats and professionals to determine what they think is best for end users. The participation of residents in decision-making can inject a wider range of voices, increase transparency and accountability, empower end users and develop additional political and technical capacity in the sector (ASSEMAE, 2007; Kumler and Lemos, 2008).

Of course, public participation in water services is not a panacea for improvement. Nor is it inherently democratic. Power and resource differentials across race, class, gender, geography and ethnic lines can continue as before, or even be intensified under the guise of "equal opportunity" (Cooke and Kothari, 2001; Warner, 2006).

It has even been argued that the collectivist basis of public services in (previously) welfare states is being challenged by an increasingly heterogeneous public (Goodhart, 2004; Taylor-Gooby, 2005). This tension between solidarity and diversity is compounded in the Global South, where collectivist, welfarist traditions of public services have not always existed, where rapid urbanisation has made for complex and often transient community formations, and where water services are often being offered for the first time.

The notion of a single or identifiable 'public voice' is therefore misleading. The opening up of social, political and discursive space for public opinion has fundamentally altered the ways in which we can conceive of public water services, but the concept of 'public' remains a profoundly unstable one.

The literature on PUPs has also paid insufficient attention to the discursive and operational shift that is turning citizens into 'customers' (Clarke et al., 2007). At the core of this ideological change is the belief that end users of water services should have more 'choice' – choice in their selection of services, choice in the way they interact with a water provider, and choice over who provides the service. Though not as straightforward as most commodity relationships, the market principles of customer service are increasingly being applied to water as they would to the purchase of a computer.

For some, the introduction of choice is seen as a positive development in the water sector, further unsettling the dependency relationships which see bureaucrats controlling water services. But giving choice can also undermine other positive objectives identified by advocates of PUPs – most notably those of equity and universality in service delivery. One concern is that those who (can) shout the loudest are the most likely to receive their choices, while those most in need – and potentially least able to vocalise their desires – may be further marginalised. Giving power to 'customers' can block bureaucrats from utilising expert information and better allocating resources to address inequitable service delivery.

Finally, and perhaps most importantly, the choice agenda can conceal the construction of needs/wants by the market. There are essential aspects to water consumption that will never change, but the sector is experiencing a dramatic intensification of commodification which shapes user expectations and demands and shifts decision-making on consumption increasingly on to the private sector – e.g. the promotion of bottled water, the advertising of water-intensive appliances, the creation of lifestyle expectations in the form of swimming pools and golf courses.

Citizens, in other words, have also been transformed by the choice agenda, creating a new kind of 'public'. As Clarke et al. (2007) note in their review of public services in the UK context, where New Labour has been aggressively promoting and institutionalising the choice concept across a range of services:

The transformation of citizens into consumers diminish[es] the collective ethos and practices of the public domain (embodied in the figure of the citizen) and both privatises and individualises them (in the body of the consumer)... This shift from citizen to consumer individualises relationships to collective services and depoliticises 'choice' by subjecting the public domain to the logics of the markets and management that constitute 'choice' in the private/market domain.

This consumerist shift has pitted the collectivism of the general public against the individualism of the consumer, effectively blurring the lines between 'public' and 'private'.

TOWARDS A NEW ANALYTICAL FRAMEWORK

The final section of this paper is an attempt to improve on some of the shortcomings identified above. What follows is a specific contribution to our two central concerns: the problematic ways in which the term public is applied in the literature on PUPs (and the related terminology of PUPs), and the fuzzy use of normative criteria in developing and evaluating PUPs.

Our arguments are offered as preliminary suggestions, requiring additional theoretical and empirical work. They are also intended to contribute as much to the broader debate on alternatives to privatisation as they are to suggest changes to the specific discourse around PUPs in the water sector.

Expanded terminologies and typologies

We have (partially) de-constructed the concepts of public embedded in the literature on PUPs but have done little to reconstruct a new conceptual narrative. But in some respects this new narrative already lies in the critiques themselves – i.e. the need for an expanded and problematised conceptualization of 'public', and new terms and typologies with which to capture this extended framework.

Does this critique negate the use of the term PUPs? Perhaps it does. Confusion already exists when reference is made to "the PUP model", which, by sin of omission, fails to indicate the variety of PUP types that exist and the different objectives and mandates that motivate them. Suggesting so singular a model masks the already recognised differences between PUPs while further discouraging inquest into the deeper and more problematic questions identified above about different meanings of 'public'.

Typologies – like slogans – are only labels, of course. It is the substance of partnership arrangements that we must ultimately concern ourselves with. Nevertheless, titles do shape political debate and can spark (or not) imaginations. 'Public-public' is a useful idiom in this regard, shining positive light on the public sector and signifying the existence of alternatives to privatisation. However, if the term shields us from the reality of creeping commercialisation in the public sector, and the existence of private interests in so-called PUPs, perhaps it has outgrown its analytical value and political efficacy.

As an alternative to using the catch-all phrase 'public-public partnership' we propose to introduce two new first-order names and acronyms that more accurately differentiate between 'public' agencies and those that are better described as 'non-profit private' agencies.

To do so we argue that the use of 'public' be limited to state entities that are publicly owned, managed and financed, and subject to political control and oversight. Examples of this include government bodies and departments (at all levels of state), state utilities and parastatals, and state development agencies (bilateral, multilateral) with a mandate to serve all residents in a given geographic area. This category would include corporatised service entities, though it is complicated by the concerns raised earlier with corporatisation.

A 'non-profit private' entity, by contrast, is any non-state, non-commercial organisation with an identifiable membership base (formal or otherwise) that operates on a non-profit basis, in a limited geographic area and/or with a subset of end users, and willingly plays a role in one or more aspects of water service delivery. Examples of these organisations include community-based organisations, nongovernmental organisations, churches, foundations, social movements, and trade unions. There may also be hybrid cases where the state provides some resource and management support to non-profit entities (e.g. government-organized NGOs [Gongos]). Although some groups in this category can be considered part of a larger 'public domain' they are nonetheless representative of, or provide service to, a particular set of group interests and operate independently of the formal public sector.

This distinction does not resolve the tensions outlined earlier with equating public with territoriality or state ownership but it does draw clearer lines of distinction between public and private and allows for a critical exploration of the impacts of commercialisation on state enterprises.

It is also important to define what is meant by 'partnership'. Here we use the term to refer to any substantial formal contractual collaboration between two or more agencies in the public and/or non-profit sector for the purpose of operating and/or financing the delivery of a water service over an extended period of time. Partnership combinations can include two or more public entities working together (within the same level of government or across levels of government), two or more non-profit entities working together, or combinations thereof. The intent here is to signal formal versus informal links between different public entities and to exclude abstracted notions of the 'general public' from what are in reality formal institutional arrangements.

Table 3 provides a summary of this proposed new typological framework. The names and acronyms are rather ineloquent, and in need of popularisation, but they do help to create an organisational typology that is more objective and consistent in identifying the institutional make-up of water service delivery partnerships that do not include the commercial private sector. The use of these revised categories would force service providers and analysts to more explicitly define partnership agencies and types and help to define the degree of 'publicness' within a partnership arrangement.

Table 3. Expanded typology for non-commercial water service partnerships.

Name / acronym	Description	Example
PUP (public-public partnership)	<ul style="list-style-type: none"> Two or more public-sector agencies working together to deliver a service 	<ul style="list-style-type: none"> Rand Water and Harrismith municipality partnership in South Africa (Smith, 2005)
NPNPP (non-profit/non-profit partnership)	<ul style="list-style-type: none"> Two or more non-profit sector agencies working together to deliver a service (with no significant involvement by the state) 	<ul style="list-style-type: none"> Dushtha Shasthya Kendra (DSK) and WaterAid partnership in Dhaka, Bangladesh* (Jinnah, 2007)
PUNPP (public/non-profit partnership)	<ul style="list-style-type: none"> One or more public-sector agencies working with one or more non-profit sector agencies to deliver a service 	<ul style="list-style-type: none"> Savelugu CBO partnership with Ghana Water Limited Company (TNI and CEO, 2004) Water workers co-operative in Dhaka, Bangladesh (TNI and CEO, 2004; Mannon, 2009)

* This example of an NPNPP eventually went on to include the Dhaka public water utility in an effort to make services more sustainable.

Defining criteria for success

Our second suggestion for improving the implementation and evaluation of non-commercial partnerships in the water sector is to be more explicit about the normative values used to determine success. As noted above, normative criteria are embedded in the PUPs literature but are seldom explicit and rarely problematised. It is widely agreed, for example, that PUPs can and should promote equity, solidarity, empowerment, and a range of other normative goals and objectives which are seen to have been eroded by commercialisation. But without an explicit discussion of what these principles might consist of, and how we might evaluate their attainment (or not), they remain little more than rhetorical devices open to counter-interpretation and evidence.

It is not possible here to provide a comprehensive review of what these normative criteria could be, or how they should be defined and assessed. Nor will there ever be a definitive set of criteria that apply to all non-commercial water service partnerships. There are too many complicating social, economic, and hydrological factors to develop such an all-encompassing normative framework.

What is required is a careful exploration of the criteria currently employed in the literature on PUPs (be they explicit or implicit) in order to develop a more transparent and rigorous set of normative questions which acknowledge the inherent difficulties in managing and identifying potentially competing objectives. Such criteria can push practitioners and analysts to question the assumptions that are made in the creation of non-commercial partnerships and to think carefully about the research models required to test the veracity of claims that PUPs are more successful than commercial alternatives. Analytic transparency of this sort will ultimately yield more positive results in implementing and assessing progressive water partnerships through more rigorous methodologies, though in the short term it will likely result in some conceptual confusion and, potentially, the revealing of blemishes that have been overlooked within PUP initiatives.

These methodological changes will require an iterative process of experiment and evaluation, as well as collaborative efforts to investigate the emergence and development of alternative forms of water service delivery in different parts of the world. The contexts will vary greatly but the stated PUP goals of equity, democracy, participation, sustainability, transparency, solidarity and universality may find common expression in ways that allow us to evaluate and possibly replicate these innovative water systems worldwide.

To illustrate our point, there are a host of questions that must be asked about equity – a normative concept central to most of the literature on PUPs. As noted earlier, it is not an easy concept to measure. Equity can be about reducing inequality by treating unequals unequally (vertical equity) or it can be about basic minimum packages of benefits for everyone (horizontal equity). It is essential therefore to develop a methodological framework that takes into account these different equity objectives and which allows one to explore questions about the scale and quality of equity across a range of categories.

The following questions are indicative of the kinds of normative criteria that researchers and practitioners of non-commercial partnerships must be explicitly asking if we are to more fully assess equity in water delivery: is *availability* of the service equitable (e.g. location, gender, age, race, class, ethnicity, etc)?; is the *quality* of the service equitable (e.g. end product, consumer relations, etc)?; are *quantities* of the service equitable (e.g. amounts of water, flow rates of water)?; is *affordability* equitable?; are pricing systems *fair*?; is equity *formalised*, legalised or institutionalised in some way? These are not intended as an exhaustive, or even mutually consistent, list of questions to evaluate equity. They are, however, examples of queries that must be explicitly examined if we are to better understand the successes and challenges of non-commercial water delivery partnerships as it applies to this and a host of other normative criteria.

CONCLUSION

In conclusion, the literature on PUPs provides us with an inspired set of partnership models in the water sector, with relevance for other non-commercialised models and in other service sectors. The PUPs model is, however, in need of tighter methodological rigour, revised typological categories and closer conceptual scrutiny, particularly with regard to assumptions about the meanings of 'public'.

The critique and suggestions for improvement provided here are intended as a contribution to enhancing both our understanding of non-commercial partnerships and our ability to successfully implement them, not just in the water sector but in a range of service areas that are being eroded by direct and indirect private-sector participation and management systems.

Ultimately, this will require an iterative process of experiment and evaluation, while at the same time keeping an eye on the ever-changing and well-financed activities taking place in the area of public-private partnerships and with other pro-commercialisation activities being promoted by the World Bank,

the private sector, and neoliberal policy makers around the world. It will also require ongoing participation by labour unions, community organisations, NGOs and other non-academic groups associated with PUPs given their intimate knowledge of PUP initiatives and the potential benefits of research capacity building at the grassroots level.

ACKNOWLEDGMENTS

The authors would like to thank the anonymous reviewers of an earlier draft of this paper for their very useful comments.

REFERENCES

- Amenga-Etego, R. and Grusky, S. 2005. The new face of conditionalities: The World Bank and water privatisation in Ghana. In McDonald, D.A. and Ruiters, G. (Eds), *The age of commodity: Water privatisation in Southern Africa*, pp. 275-290. London: Earthscan.
- ASSEMAE. 2007. Successful experiences in municipal public water and sanitation services from Brazil. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 40-51. London: World Development Movement.
- Bakker, K. 2005. Neoliberalizing nature? Market environmentalism in water supply in England and Wales. *Annals of the Association of American Geographers* 95(3): 542-565.
- Bakker, K. 2007. The "commons" versus the "commodity": Alter-globalization, anti-privatisation and the human right to water in the global south. *Antipode* 39(3): 430-455.
- Bakker, K. 2008. The ambiguity of community: Debating alternatives to private-sector provision of urban water supply. *Water Alternatives* 1(2): 236-252.
- Balanyá, B.; Brennan, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. (Eds). 2005. *Reclaiming public water: Achievements, struggles and visions from around the world*. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- Barlow, M. 2007. *Blue covenant: The global water crisis and the coming battle for the right to water*. Toronto: McClelland & Stewart Ltd.
- Bouguerra, L. 2006. *Water under threat*. London: Zed Books.
- Brennan, B.; Hack, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. 2004. *Reclaiming public water! Participatory alternatives to privatisation*. TNI Briefing Series 7. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- Budds, J. and McGranahan, G. 2003. Are the debates on water privatisation missing the point? Experiences from Africa, Asia and Latin America. *Environment & Urbanization* 15(2): 87-113.
- Burchardt, T. 2006. Foundations for measuring equality: A discussion paper for the Equalities Review. Centre for Analysis of Social Exclusion, London School of Economics.
- Cann, V. 2007. Introduction. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 7-14. London: World Development Movement.
- Chea, V. 2007. From bad service to outstanding water utility: Phnom Penh's experience. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 52-62. London: World Development Movement.
- Clarke, J. and Newman, J. 1997. *The managerial state*. London: Sage.
- Clarke, J.; Newman, J.; Smith, N.; Vidler, E. and Westmarland, L. 2007. *Creating citizen-consumers: Changing publics and changing public services*. London: Sage Publications.
- Cooke, B. and Kothari, U. 2001. *Participation: The new tyranny?* London: Zed Books.
- Davis, J. 2005. Private sector participation in the water and sanitation sector. *Annual Review of Environment and Resources* 30: 145-183.
- Dunsire, A. 1999. Then and now: Public administration, 1953-1999. *Political Studies* 47(2): 360-378
- Equinet. 2007. *Reclaiming the resources for health: A regional analysis of equity in health in east and southern Africa*. Weaver Press, Uganda: Fountain Publishers.
- Finger, M. and Allouche, J. 2002. *Water privatisation: Transnational corporations and the re-regulation of the water industry*. London: Spon Press.

- Fraser, N. 1990. Rethinking the public sphere: A contribution to the critique of actually existing democracy. *Social Text* 25/26: 56-80.
- Goodhart, D. 2004. Is Britain too diverse? *Prospect*, February, 95.
- Hall, D. 2000. Water partnerships – Public-public partnerships and 'twinning' in water and sanitation. Public Services International Research Unit (PSIRU). www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Hall, D.; Lethbridge, J. and Lobina, E. 2005. Public-public partnerships in health and essential services. Municipal Services Project: Occasional Papers Series, No. 9. www.queensu.ca/msp/ (accessed 3 November 2007)
- Hall, D.; Lobina, E.; Corral, V.; Hoedeman, O.; Terhorst, P.; Pigeon, M. and Kishimoto, S. 2009. Public-public partnerships (PUPs) in water. PSIRU and TNI. www.psir.org/reports/2009-03-W-PUPS.doc (accessed 15 April 2009)
- Jinnah, S.I.A. 2007. *Rights of water connections for urban slum dwellers in Bangladesh: A study on DSK's experience in three slums of Mirpur, Dhaka*. London: WaterAid.
- Kumler, L.M. and Lemos, M.C. 2008. Managing waters of the Paraíba do Sul River Basin, Brazil: A case study in institutional change and social learning. *Ecology and Society* 13(2): 22.
- Lobina, E. 2007. Public-public partnerships and the United Nations Water Operator Partnerships initiative. Presented at 'Alternatives to PPIAF' at the International Civil Society Forum. www.wdm.org.uk/resources/briefings/listbydate.htm (accessed 5 March 2008)
- Lobina, E. and Hall, D. 2006a. Water as a public service. Report commissioned by Public Services International. www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Lobina, E. and Hall, D. 2006b. Public-public partnerships as a catalyst for capacity building and institutional development: Lessons from Stockholm Vatten's experience in the Baltic region. Public Services International Research Unit (PSIRU). www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Lobina, E. and Hall, D. 2007. Water privatisation and restructuring in Latin America, 2007. Report commissioned by Public Services International. www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Loftus, A. 2005. Free water as commodity: The paradoxes of Durban's water service transformation. In McDonald, D.A. and Ruiters, G. (Eds), *The age of commodity: Water privatisation in Southern Africa*, pp. 189-203. London: Earthscan.
- Mannon, I. 2009. Corporatizing Dhaka Water Supply and Sewerage Authority, Bangladesh. MSc thesis. Queen's University, Kingston, Canada.
- McDonald, D. 2002. The theory and practice of cost-recovery in South Africa. In McDonald, D.A. and Pape, J. (Eds), *Cost recovery and the crisis of service delivery in South Africa*, pp. 17-40. Pretoria: HSRC Pretoria.
- McDonald, D.A. and Ruiters, G. 2005. *The age of commodity: Water privatisation in Southern Africa*. London: Earthscan.
- Milanovic, B. 2005. *Worlds apart: Measuring international and global inequality*. Princeton: Princeton University Press.
- Miranda, A. 2007. Developing public-public partnerships: Why and how not-for-profit partnerships can improve water and sanitation services worldwide. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 63-70. London: World Development Movement.
- Mugisha, S. 2007. Effects of incentive applications on technical efficiencies: Empirical evidence from Ugandan water utilities. *Utilities Policy* 15(4): 225-233.
- Mugisha, S. and Berg, S.V. 2007. Turning around struggling state-owned enterprises in developing countries: The case of NWSC-Uganda. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 15-25. London: World Development Movement.
- NWSC (National Water and Sewerage Company). 2008. External Services. www.nwsc.co.ug/services06.php (accessed 15 January 2009)
- Olçay-Unver, I.H.; Gupta, R.K. and Kibaroglu, A. (Eds). 2003. *Water development and poverty reduction*. London: Kluwer Academic.
- Pendleton, A. and Winterton, J. (Eds). 1993. *Public enterprise in transition: Industrial relations in state and privatized corporations*. New York: Routledge.
- Petrella, R. 2001. *The water manifesto: Arguments for a world water contract*. London: Zed Books.
- Phumpiu, P. and Gustafsson, J.E. 2009. When are partnerships a viable tool for development? Institutions and partnerships for water and sanitation service in Latin America. *Water Resources Management* 23(1): 19-38.
- Prudham, W.S. 2004. Poisoning the well: Neoliberalism and the contamination of municipal water in Walkerton, Ontario. *Geoforum* 35(3): 343-359.

- PSIRU (Public Services International Research Unit). 2000. The way forward: Public sector water and sanitation. www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Public Citizen. 2002. Public-public partnerships: A backgrounder on successful water/wastewater reengineering programs. Prepared by Public Citizen's Critical Mass Energy and Environment Program. www.citizen.org/documents/waterreengineering.pdf (accessed 12 March 2008)
- Rouse, M. 2007. *Institutional governance and regulation of water services: The essential elements*. London: IWA Publishing.
- Schwartz, K. 2008a. Different faces of private sector involvement in the water supply and sanitation sector. *International Journal of Water* 4(3/4): 304-310.
- Schwartz, K. 2008b. The new public management: The future for reforms in the African water supply and sanitation sector? *Utilities Policy* 16(1): 49-58.
- Smith, L. 2005. South Africa: Testing the waters of public-public partnerships. In Balanyá, B.; Brennan, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. (Eds), *Reclaiming public water: Achievements, struggles and visions from around the world*. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- Stoker, G. 1989. Local government for a post Fordist society. In Stewart, J. and Stoker, G. (Eds). *The future of local government*. Basingstoke, Hampshire: Macmillan.
- Suresh, V. and Nayar, V. 2007. The Tamil Nadu experiment with governance reform. In Warwick, H. and Cann, V. (Eds), *Going public: Southern solutions to the global water crisis*, pp. 26-39. London: World Development Movement.
- Swyngedouw, E. 2005. Dispossessing H₂O? The contested terrain of water privatisation. *Capitalism Nature Socialism* 16(1): 81-98.
- Taylor-Gooby, P. 2000. *Risk, trust and welfare*. Houndsmill: Macmillan.
- Taylor-Gooby, P. 2005. Is the future America? Or, can Left politics preserve European welfare states from erosion through growing 'racial' diversity?, *Journal of Social Policy*, 34(4): 661-72.
- TNI and CEO (Transnational Institute and Corporate Europe Observatory). 2004. Reclaiming public water! Participatory alternatives to privatisation. TNI Briefing Series. Amsterdam: Transnational Institute and Corporate Europe Observatory.
- TNI and CEO. 2006. Public water for all: The role of public-public partnerships. A 'Reclaiming Public Water' discussion paper. Amsterdam: Transnational Institute and Corporate Europe Observatory. www.tni.org (accessed 1 December 2007)
- UN-Habitat. 2007. Framework for Global Water Operators Partnerships alliance. Water, Sanitation and Infrastructure Branch. www.unhabitat.org/downloads/docs/5377_74541_frame.pdf (accessed 14 March 2008)
- UNSGAB (United Nations Secretary General's Advisory Board on Water and Sanitation). 2006. Meeting summary for the 4th meeting of the Secretary-General's Advisory Board on Water and Sanitation, February 20-21, 2006, Berlin. www.unsgab.org/history/4th_meeting.htm (accessed 13 March 2008)
- UNSGAB. 2007. Water operator partnerships. www.unsgab.org/hapi/wops/index.htm (accessed 1 December 2007)
- Van Rooyen, C. and Hall, D. 2007. Public is as private does: The confused case of Rand Water in South Africa. Municipal Services Project: Occasional Papers Series, No. 15. www.queensu.ca/msp/ (accessed 3 November 2007)
- Wagstaff, A.; Doorslaer, E. and Pierrella, P. 1991. Equity in finance and delivery of health care: Some tentative cross country comparisons. In Maquire, A.; Fen, P. and Mayhew, K. (Eds), *Providing health care: The economics of alternative systems*, pp. 141-171. Oxford: Oxford University Press.
- Warner, J. 2006. More sustainable participation? Multi-stakeholder platforms for integrated catchment management. *Water Resources Development* 22(1): 15-35.
- Warwick, H. and Cann, V. 2007. *Going public: Southern solutions to the global water crisis*. London: World Development Movement.
- Wouters, P. 2005. Water security: What role for international water law? In Dodds, F. and Pippard, T. (Eds), *Human and environmental security: An agenda for change*, pp. 166-181. London: Earthscan.

APPENDIX: DOCUMENTS ON PUPS REVIEWED

2000

Hall, D. 2000. Water partnerships – public-public partnerships and 'twinning' in water and sanitation. Public Services International Research Unit (PSIRU). www.psiru.org/publicationsindex.asp (accessed 1 December 2007)

PSIRU. 2000. The way forward: Public sector water and sanitation. www.psiru.org/publicationsindex.asp (accessed 1 December 2007)

2001

Pape, J. 2001. Poised to succeed or set up to fail? A case study of South Africa's first public-public partnership in water delivery. Municipal Services Project: Occasional Papers Series, No. 1. www.queensu.ca/msp/ (accessed 3 November 2007)

2002

Faruqui, N. 2002. Balancing between the eternal yesterday and the eternal tomorrow: Economic globalization, water, and equity. In *Next generation of water issues*. Ottawa: Earthscan, International Development Research Centre.

Hall, D.; Bayliss, K. and Lobina, E. 2002. Water privatization in Africa. Public Services International Research Unit (PSIRU) presented at Municipal Services Project Conference, Witswatersrand University, Johannesburg. www.psiru.org/publicationsindex.asp (accessed 1 December 2007)

Public Citizen. 2002. Public-public partnerships: A backgrounder on successful water/wastewater reengineering programs. Prepared by Public Citizen's Critical Mass Energy and Environment Program. www.citizen.org/documents/waterreengineering.pdf (accessed 12 March 2008)

2003

Hall, D. and Lobina, E. 2003. International solidarity in water: Public-public partnerships in north-east Europe. Report commissioned by Public Services International. www.psiru.org/publicationsindex.asp (Accessed 1 December 2007)

International Development Research Centre (IDRC) (2003). Social and economic policy – public-public partnerships. www.idrc.ca/en/ev-32271-201-1-DO_TOPIC.html (accessed 1 December 2007)

Kitchen, F. and Xaba, M. 2003. Public-public partnerships. Knowledge Sharing Program Newsletter No. 14 (South African Local Government Association (SALGA) and the Department of Provincial and Local Government (DPLG)). www.ksp.org.za/holon15.htm (accessed 10 December 2007)

2004

Brennan, B.; Hack, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. 2004. *Reclaiming public water! Participatory alternatives to privatisation*. TNI Briefing Series No. 7. Amsterdam: Transnational Institute and Corporate Europe Observatory. www.tni.org/detail_pub.phtml?know_id=78&username=guest@tni.org&password=9999&publish=Y (accessed 13 December 2007)

P3 Advisors. 2004. Public-private partnerships in rural and northern Canada study – Final report. Prepared for Rural Secretariat for Agriculture and Agri-Food Canada. www.rural.gc.ca/ruralreports/partnerships_d_e.phtml (accessed 3 March 2007)

UK Office of the Deputy Prime Minister. 2004. Rethinking service delivery volume three: Public/public partnerships. www.communities.gov.uk/publications/localgovernment/rethinkingserviceledelivery3 (accessed 2 February 2008)

Yi, B.L. 2004. Public-public partnership for water management proposed. Malaysiakini newspaper. www.waterjustice.org/campaign.php?componentID=6&articleID=67 (accessed 1 December 2007)

2005

Hall, D.; Lethbridge, J. and Lobina, E. 2005. Public-public partnerships in health and essential services. Municipal Services Project: Occasional Papers Series, No. 9. www.queensu.ca/msp/ (accessed 3 November 2007)

Smith, L. 2005. South Africa: Testing the waters of public-public partnerships. In Balanyá, B.; Brennan, B.; Hoedeman, O.; Kishimoto, S. and Terhorst, P. (Eds), *Reclaiming public water: Achievements, struggles and visions from around the world*. Transnational Institute and Corporate Europe Observatory. www.tni.org/detail_page.phtml?page=books_publicwater (accessed 17 December 2007)

2006

CUPE (Canadian Union of Public Employees). 2006. Achieving success through public services: Ownership, operation, management and delivery in municipal services. CUPE website.

- www.cupe.ca/updir/Achieving_Success_through_Public_Services.pdf (accessed 3 November 2007)
- da Costa, S. 2006. Successful municipal experiences in Brazil: Public utility service in water and sanitation. www.tni.org/water-docs/dacosta.pdf (accessed 1 December 2007)
- Kishimoto, S. 2006. Public-public partnerships in Indonesia. www.waterjustice.org/uploads/attachments/104pdf.pdf (accessed 1 December 2007)
- Lobina, E. and Hall, D. 2006a. Water as a public service. Report commissioned by Public Services International. www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Lobina, E. and Hall, D. 2006b. Public-public partnerships as a catalyst for capacity building and institutional development: Lessons from Stockholm Vatten's experience in the Baltic region. Public Services International Research Unit (PSIRU). www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Mugisha, S. 2006. Developing Water Operator Partnerships (WOPs): A case of NWSC-Uganda. www.cepis.opsoms.org/bvsacg/e/foro4/19%20marzo/Public2/developing.pdf (accessed 1 December 2007)
- TNI and CEO. 2006. Public water for all: The role of public-public partnerships. A 'Reclaiming Public Water' discussion paper. www.tni.org (accessed 1 December 2007)

2007

- Bakker, K. 2007. The "commons" versus the "commodity": Alter-globalization, anti-privatization and the human right to water in the global south. *Antipode* 39(3): 430-455.
- Barlow, M. 2007. *Blue covenant: The global water crisis and the coming battle for the right to water*. Toronto: McClelland & Stewart Ltd.
- Bloomfield, S. 2007. Presentation on public public partnerships and GWOPS to the Africa Water Network. www.africawaternetwork.org/unison%20wops%20awn%20presentation.doc (accessed 1 December 2007)
- Esteban, A. 2007. Interview with Luis Padron about the public-public partnership for improving water supply in Huancayo, Peru. Transnational Institute. www.tni.org/detail_page.phtml?act_id=17228 (accessed 19 February 2008)
- Hukka, J.J. and Vinnari, E.M. 2007. Public-public partnerships in the Finnish water services sector. *Utilities Policy* 15(2): 86-92.
- Lobina, E. 2007. Public-public partnerships and the United Nations Water Operator Partnerships initiative. Presented at 'Alternatives to PPIAF' at the International Civil Society Forum. www.wdm.org.uk/resources/briefings/listbydate.htm (accessed 5 March 2008)
- Lobina, E. and Hall, D. 2007. Water privatization and restructuring in Latin America, 2007. Report commissioned by Public Services International. www.psir.org/publicationsindex.asp (accessed 1 December 2007)
- Mugisha, S. 2007. Effects of incentive applications on technical efficiencies: Empirical evidence from Ugandan water utilities. *Utilities Policy* 15(4): 225-233
- Ramakrishnan, T. 2007. The Hindu. www.hindu.com/2007/04/23/stories/2007042307290400.htm (accessed 13 March 2009)
- UNSGAB. 2007. Water Operator Partnerships. www.unsgab.org/hapi/wops/index.htm (accessed 1 December 2007)
- Van Rooyen, C. and Hall, D. 2007. Public is as private does: The confused case of Rand Water in South Africa. Municipal Services Project: Occasional Papers Series, No. 15. www.queensu.ca/msp/ (accessed 3 November 2007)
- Warwick, H. and Cann, V. 2007. *Going public: Southern solutions to the global water crisis*. London: World Development Movement. www.wdm.me.uk/resources/reports/index.htm (accessed 25 November 2007)
- World Development Movement and UNISON. 2007. *Down the drain: How UK aid is still being wasted on water privatization*. London: World Development Movement. www.wdm.me.uk/resources/briefings/index.htm (accessed 21 January 2008)

2008

- Bakker, K. 2008. The ambiguity of community: Debating alternatives to private-sector provision of urban water supply. *Water Alternatives* 1(2): 236-252.
- Greasely, K.; Paul, J.; Watson, P. J. and Patel, S. 2008. The formation of public-public partnerships: A case study examination of collaboration on a "back to work" initiative. *International Journal of Public Sector Management* 21(3): 305-313.
- Schwartz, K. 2008a. Different faces of private-sector involvement in the water supply and sanitation sector. *International Journal of Water* 4(3/4): 304-310.

2009

- Bontenbal, M.C. 2009a. Strengthening urban governance in the South through city-to-city cooperation: Towards an analytical framework. *Habitat International* 33: 181-189.
- Bontenbal, M.C. 2009b. Understanding North-South municipal partnership conditions for capacity development: A Dutch-Peruvian example. *Habitat International* 33(1): 100-105.
- Hall, D; Lobina, E.; Corral, V; Hoedeman, O.; Terhorst, P.; Pigeon, M. and Kishimoto, S. 2009. Public-public partnerships (PUPs) in water. PSIRU and TNI. www.psir.org/reports/2009-03-W-PUPS.doc (accessed 15 April 2009)
- Lee, B. 2009. Public-public partnership for improving municipal water supply in South Korea: Experience of Nonsan Municipality. Korea Water Resources Corporation. www.kwater.or.kr (accessed 13 April 2009)
- Phumpiu, P. and Gustafsson, J.E. 2009. When are partnerships a viable tool for development? Institutions and partnerships for water and sanitation service in Latin America. *Water Resources Management* 23(1): 19-38.