



DIRECTORATE-GENERAL FOR EXTERNAL POLICIES
POLICY DEPARTMENT



**A COMPARATIVE
EVALUATION OF
PUBLIC-PRIVATE AND
PUBLIC-PUBLIC
PARTNERSHIPS FOR
URBAN WATER SERVICES
IN ACP COUNTRIES**

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DIRECTORATE-GENERAL FOR EXTERNAL POLICIES OF THE UNION

DIRECTORATE B

POLICY DEPARTMENT

STUDY

**A COMPARATIVE EVALUATION OF PUBLIC-PRIVATE AND
PUBLIC-PUBLIC PARTNERSHIPS FOR
URBAN WATER SERVICES IN ACP COUNTRIES**

Abstract

This study evaluates the comparative advantages of PPPs and PuPs in urban water services. Based on literature analysis and case studies, past performance of PPPs and PuPs is reviewed against several criteria. Lessons are then identified regarding the barriers and enablers which determine the success of partnerships, and the kind of support donors could usefully provide. The study concludes that while the main determinant of performance is not public or private management but policy, institutions, finance and regulation, there are notable differences between what PPPs and PuPs can offer. In the right circumstances the private sector can improve in efficiency and management, but at high costs. PuPs generally have lower costs and greater focus on capacity building and equity, and have the potential to support more holistic approaches to urban services and the water cycle. Partnerships with local actors can also improve services by allowing more flexible approaches to service provision to meet the needs of different households. The involvement of civil society and community groups in particular often helps to improve services for poor households. A key conclusion is that governments should have a choice of different partnership options and the ability to end failing partnerships.

This study was requested by the European Parliament's Committee on Development.

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TABLE OF CONTENTS

ABBREVIATIONS	V
EXECUTIVE SUMMARY	VII
1 INTRODUCTION	1
1.1 PPPs and PuPs: a brief history	1
1.2 Defining PPPs and PuPs: a typology of partnerships	4
1.3 Approach of the study and structure of the report	5
2 PERFORMANCE OF PPPS AND PUPS: REVIEW OF THE LITERATURE	5
2.1 How have PPPs performed in Africa?	6
2.1.1 Investment and expansion	6
2.1.2 Efficiency and financial performance	7
2.1.3 Service quality and price	8
2.1.4 Provision for low-income households	9
2.1.5 Wider societal impacts: poverty reduction, equity, health and environment	10
2.2 How do PuPs compare?	13
2.2.1 Prospects for sustainability	13
2.2.2 Shared goals and low costs	14
2.2.3 Potential to promote an equitable approach to water services	15
2.2.4 Potential for an integrated approach to urban services	15
2.3 Barriers and enablers for successful partnerships	17
2.3.1 Underlying constraints	17
2.3.2 Financing and external support to partnerships	18
2.3.3 The importance of information	18
2.3.4 Incentives for serving low-income households in commercial partnerships	19
2.3.5 Involvement of civil society to improve services for poor households	21
3 CASE STUDY: GHANA	21
3.1 Context	21
3.2 The Ghana Water/Aqua Vitens Rand Ltd PPP	22
3.2.1 Performance of the GWCL / Aqua Vitens Rand Ltd. PPP	23

3.3	The Savelugu Community PuP arrangement	24
3.3.1	Performance of the Savelugu PuP	24
3.4	Discussion and lessons	25
4	CASE STUDY: SOUTH AFRICA	26
4.1	Context	26
4.2	The Harrismith PuP with Rand Water	26
4.2.1	Achievements	27
4.2.2	Success factors	27
4.2.3	Barriers and challenges	28
4.2.4	Subsequent developments and the legacy of the PuP	28
4.3	The Nelspruit / Mbombela concession	29
4.3.1	Achievements	29
4.3.2	Barriers and challenges	30
4.4	Discussion and lessons	31
5	CONCLUSIONS AND LESSONS	32
5.1	Comparing PPPs and PuPs	33
5.2	Broader Lessons	34
5.3	Past EC development support in water and sanitation: lessons for PPPs and PuPs	35
5.4	Final remarks	36
6	BIBLIOGRAPHY	38
6.1	Interviews conducted	43

ABBREVIATIONS

ACP	Africa, Caribbean and Pacific
AVRL	Aqua Vitens Rand Limited (Ghana)
AWS	Amanziwethu Services (South Africa)
BOOT	Build-Own-Operate-Transfer
CCODE	Centre for Community Organisation and Development (Malawi)
CMU	Compliance Monitoring Unit, Nelspruit (South Africa)
CSO	Civil society organisation
CWS	CityWater Services Ltd (Tanzania)
CWSA	Community Water and Sanitation Agency (Ghana)
DAWASA	Dar es Salaam Water and Sewerage Authority (Tanzania)
DAWASCO	Dar es Salaam Water and Sewerage Corporation (Tanzania)
DBSA	Development Bank of Southern Africa
DMAE	Departamento Municipal de Água e Esgotos (Porto Alegre)
EC	European Commission
FBW	Free basic water (South Africa)
GNUC	Greater Nelspruit Utility Company (South Africa)
GoG	Government of Ghana
GWCL	Ghana Water Company Limited
GWOPA	Global Water Operators' Partnership Alliance
IFI	International financial institution
JEU	Joint Evaluation Unit (European Commission)
MaP	Maluti-a-Phofung Municipality (South Africa)
MDG	Millennium Development Goal
MIIU	Municipal Infrastructure Investment Unit (South Africa)
NGO	Non-governmental organisation
NRW	Non-revenue water
NWSC	National Water and Sewerage Corporation (Uganda)
O&M	Operation and maintenance
ONEP	Office National d'Eau Potable (Morocco)
PPP	Public-private partnership
PSP	Private sector participation

PuP	Public-public partnership
PURC	Public Utilities Regulatory Commission (Ghana)
SDE	Sénégalaise des Eaux (Senegal)
SNDE	Société Nationale Des Eaux (Mauritania)
SSA	Sub-Saharan Africa
SSIP	Small-scale independent water provider
TMA	Tamale Metropolitan Area (Ghana)
UFW	Unaccounted-for water
UWP	Urban Water Project (Ghana)
WOP	Water Operators' Partnership

EXECUTIVE SUMMARY

HISTORY OF PPPS AND PUPS

Since 1990, at least 21 countries in Africa have introduced public-private partnerships (PPPs) of some form for urban water supply. This was usually part of a broader reform effort supported by donors and IFIs to restore the financial status of water providers and improve their performance through the adoption of commercial principles. The performance of PPPs has been widely debated, but PPPs continue to be promoted with the goal of improving efficiency, revenue collection and technical performance. There is growing interest in PPPs involving the local/national private sector.

Public-public partnerships (PuPs) have received increasing attention in recent years as an alternative approach which could improve the performance of struggling utilities. PuPs are not for profit and include both twinning/capacity-building arrangements and operational partnerships where state-owned providers work with trade unions, communities or other non-profit groups to deliver services. At their core is a spirit of public service and solidarity. PuPs are gaining in international recognition and support. A key difference is that PPPs involve take-over of management of services; PuPs may do this in some cases, but are generally more focused on *enabling* better services.

PERFORMANCE OF PPPS: EVIDENCE FROM THE LITERATURE

The performance of PPPs in water services has been very mixed. The clearest benefit of PPPs seems to be efficiency gains and some technical improvements in performance (particularly increasing production and service hours), but it is not clear whether these outweigh the costs of establishing PPPs. Involvement of the private sector at particular times for specific purposes can be useful to boost utility performance, but this depends on adequate capacity to design and manage context-specific relationships.

PPPs to date have on average had a positive effect on efficiency, particularly labour productivity and bill collection. Whether these gains are translated into benefits to consumers depends upon good contract design and regulation.

The introduction of a PPP is also often associated with improvements in hours of service and reductions in water rationing. Involvement of the private sector may introduce performance orientation and “kickstart” public sector performance. At the same time, introduction of a PPP is often associated with tariff increases. This may be justified to improve cost recovery but provisions need to be made to ensure affordability. Where tariff increases are too steep or too sudden, they can lead to a backlash in terms of non-payment or loss of political support.

Some PPPs have dramatically increased service coverage, but in SSA this has largely been dependent on government or donor financing. Recent research found that the average impact of past PPPs on coverage has been neutral. There are some positive examples of private operators extending services to low-income communities. However, there are also many cases where low-income households have suffered from the removal of subsidies for water from standpipes, higher charges, removal of illegal connections and strict penalties for non-payment include disconnection.

Finally, establishing international PPPs is costly. Contract preparation and negotiation is typically a lengthy process, donors spend millions on project design processes, and private operators may

negotiate high management fees. The experience with local private operators in small towns is more positive, and there is evidence that this can be a way to improve services at much lower cost.

PERFORMANCE OF PUPS: EVIDENCE FROM THE LITERATURE

Systematic studies of the performance of PuPs are lacking, but the literature points to a number of benefits. PuPs often have a strong capacity-building element and a focus on long-term sustainability. Because neither partner is taking a profit, revenues can be fully reinvested in services and maintenance. PuPs are characterised by a high degree of trust between partners, because they are not-for-profit and partners generally share the same goals. While it is still necessary to spend time on partnership design and consultations, this process is generally shorter and smoother than for PPPs with less reliance on external consultants and much lower transaction costs. PuPs have the potential to promote more integrated approaches to urban services and water cycle management.

LESSONS FOR PARTNERSHIPS

Neither PPPs nor PuPs in themselves are a cure for the serious underlying constraints affecting service delivery in many ACP countries, such as the lack of finance for investment in infrastructure, weak policy and governance, and the low incomes of many urban residents. These underlying factors play a large part in determining the success of partnerships.

Successful partnerships have typically received some form of external support. The more successful PPPs have mostly been supported intensively by donors during design and at times of tension between partners. The latter is probably less important in PuPs where greater transparency and trust are possible between partners, although tensions can still arise. However, supportive partners in twinning arrangements may need financial support, and facilitation of partnerships is a useful function.

Effective partnership design, particularly where an external operator is required to invest and take on commercial risk, depends on a good information base on both customers and infrastructure. If this information is lacking or inaccurate, targets may not be met and disputes arise between parties. Such information is also crucial for monitoring to ensure both accountability and lesson-learning. Reliable data is often lacking, however, and in the rush to enter into partnerships this may be neglected.

Commercially-oriented partnerships generally have little incentive to serve poor households unless these are specifically designed and included in contracts through performance targets and appropriate subsidy arrangements. Regulation is very important, although it is not a substitute for pro-poor sector policy. Partnerships with CSOs or community groups are often very effective at improving services for poor households, whether management is public or private. Local CSOs sometimes struggle with sustainability and capacity, however, and may require additional support or training

EXPERIENCES IN GHANA AND SOUTH AFRICA: IN BRIEF

In Ghana, a national PPP showed mixed results, with evidence of some improvements in management and production, but little benefit so far to poor households. However the partnership has suffered from the lack of baseline information, which undermines accountability for performance. A PuP between the national water utility and a community-managed water board in Savelugu has had initial great success in improving access to safe and affordable water, including to very poor households. Community

management has strengthened the integrity and accountability of water supply. This success has relied on public funding and arbitration services to support the community and this will remain necessary into the future to ensure the sustainability of the partnership.

In South Africa, a PPP (in Nelspruit) and a PuP (in Harrismith) both turned around service delivery in municipalities struggling with responsibility for townships and rural areas incorporated at the end of apartheid. Both partnerships have brought in skilled staff and improved the quality and reliability of services, demonstrating the value of partnerships to municipalities which have low capacity and/or are overstretched. In both municipalities, cost recovery in low-income areas has been very challenging, although the PuP was quicker to engage flexibly and sympathetically with these communities. The weakness of the concession in this area reflects in part a lack of monitoring capacity in the municipality. Both partnerships required a period of intensive negotiations with politicians and trade unions to build support. This process was shorter and more successful in the case of the PuP.

CONCLUSIONS

The bottom line question in terms of sector performance is not so much whether a PPP or PuP is adopted, but rather whether appropriate institutional arrangements, financing mechanisms, subsidies and policies for pro-poor service provision are in place, and the capacity and willingness of government to take leadership in these areas. Involving a partner with the right expertise and capacity, which includes not just technical aspects but an understanding of customer care and the particular needs of low-income areas and households, may be most important. This expertise may come from the public or private sector, and public sector providers and local private operators may offer a wealth of experience which has not yet been tapped. The important thing is to assess the local context and needs, explore partnership options and take the time to develop an appropriate arrangement for each situation.

It is important that governments are able to exercise choice in partnership development, and retain the flexibility to change arrangements which are not working. Providing effective water and sanitation services for urban areas in developing countries is challenging and there are no easy solutions, so room to experiment with new approaches is key. Support to new PPPs should consider working with the private sector in more flexible ways with lower risk to municipal governments. Opportunities to partner with local private sector organisations and entrepreneurs should be explored, particularly for small towns. There is also a need for better monitoring of partnerships for lesson-learning and also accountability purposes.

This is not to say, however, that it does not matter whether a partnership involves the private or public sector. Involvement of the private sector, particularly in relatively short-term flexible arrangements, can bring improvements in efficiency and management of services, but costs are high. In the ACP context PPPs require strong policies and regulation to ensure benefits reach poor households, so if a PPP is the chosen route governments are likely to require assistance in these areas. PuPs in contrast are likely to offer more capacity building and a greater focus on equity, and are less likely to be beset by tensions in both design and implementation. They can also turn around municipal/utility performance as seen in Harrismith and Dar es Salaam. Because of greater trust and because no profit is sought by either party, they are also cheaper. PuPs also offer the potential for more holistic and integrated approach to services. However, public or community-based partners may struggle with financial sustainability and technical capacity, and require external support.

PuPs are less well tested but given the very mixed experience of PPPs and the initial success of some PuP experiences, this alternative is certainly worthy of support. The primacy which has been given to

PPPs appears somewhat unjustified. Given the existing financing and technical support available from a variety of donors for PPPs, it is recommended that dedicated funds are made available for PuPs – such as currently offered by the EC – both to ensure that PuPs are an accessible option for governments seeking to enter into partnerships, and to enable PuPs to develop so that their potential can be better understood. Forthcoming PuPs should be carefully followed for further lesson-learning.

1 INTRODUCTION

European Commission (EC) water policy under the 10th European Development Fund has shifted its focus away from Public-Private Partnerships (PPPs) in water management in Africa, Caribbean and Pacific (ACP) countries towards Public-Public Partnerships (PuPs). This study aims at providing an evaluation of the comparative advantages of the respective approaches so that the European Parliament Development Committee can develop its own position and approaches regarding the implementation of the ACP-EU Water Facility. The study focuses on the advantages and disadvantages of PPPs and PuPs in urban water services. Due to the vastly greater experience and the focus of the majority of the literature reviewed, the focus is principally on water rather than sanitation services.

1.1 PPPs and PuPs: a brief history

From 1950 to around 1990, water infrastructure and services were primarily regarded as the responsibility of governments, because of their public good aspects and the natural monopoly inherent in water supply infrastructure (Ouyahia). During this time, aid and lending from international financial institutions (IFIs) for water supply was channelled entirely to public authorities (Camdessus et al). The early 1990s, however, saw a shift towards the promotion of private sector participation (PSP) in various forms, as an attempt to overcome inefficiency, intransparency and poor performance among public utilities, and to raise financing for desperately needed investments in rehabilitation and extension of infrastructure in growing towns and cities. In many urban areas in the developing world, state-owned providers were failing to meet the demand of urban populations, especially as these grew rapidly. From 1990 to 2005 the urban population of sub-Saharan Africa (SSA) rose from 147 million to 269 million (UNDESA). Around 98 million urban dwellers gained access to improved water during this period, but coverage rates remained around 83% representing an increase in the unserved population of about 21 million (WHO/UNICEF).

Since 1990, at least 21 countries in Africa have introduced public-private partnerships of some form for urban water supply (see Table 1). The introduction of a PPP was usually part of a broader reform effort supported by donors and IFIs to restore the financial status of water providers and improve their performance through the adoption of commercial principles, including, for example, tariff restructuring, introduction of performance contracts and ring-fencing of utility finances (Bayliss 2003). This often took place in the context of wider structural adjustment and liberalisation programmes. These PPPs range from concessions where the private partner holds full responsibility for investment in infrastructure as well as operations, usually for a term of at least 20 years, to shorter-term management contracts where they handle operations and/or billing and revenue collection. All of the examples shown in Table 1 involve the international private sector, mainly European. At the same time, there was a growing acceptance and promotion of commercialisation of the supply of water, to achieve cost recovery and support investment.

The promotion of PPPs by IFIs has been hotly contested by many civil society organisations and campaigners in both the North and South, who have argued that water services are a public good which should remain in the public domain, and that private sector participation is incompatible with equitable service delivery. The success of PPPs in terms of achieving desired performance improvements has also been much debated; for every PPP hailed as a success story in Africa there are at least as many which failed, while some municipal service providers (such as Uganda's National Water and Sewerage Corporation – NWSC) have become models of good performance without taking the privatisation route. It is now accepted that PPPs have not brought the huge injection of investment which was initially hoped for, largely because the high risks and high upfront costs are off-putting to

investors. However PPPs continue to be promoted with the goal of improving efficiency, revenue collection and technical performance.

There is now growing interest in PPPs involving the local/national private sector, based on the argument that these have more understanding of local context and a better ability to gauge risks and opportunities. However, the presence of local companies with the necessary expertise and financial resources is not guaranteed, especially in least developed contexts. There has been strong growth of private operators from developing countries in Latin America and Asia over the last decade, many of which are now active internationally, but there are very few examples of this from Africa, and none from sub-Saharan Africa (SSA) (Marin).

Table 1. PPPs in Africa from 1989

Country	City	Type of PPP (term)	Partner	Date
Burkina Faso	All urban	Management Contract (5 years)	Veolia ¹ / Mazars & Guerard	2001
Cameroon	All urban	Affermage (10 years)	Office National D l'Eau Potable (Morocco)	2007
Cape Verde	All urban	Concession (50 years)	Aguas de Portugal	1999
C.A. Republic	Bangui	Affermage (15 years)	Saur	1991
Congo	Brazzaville	Management Contract (20 years)	GETRAB / SCT	2002
Cote D'Ivoire	All urban	Affermage (20 years)	Saur	1960, renegotiated 1989
Gabon	Libreville	Concession (20 years)	Veolia	1997
Ghana	All urban	Management Contract (5 years)	Vitens/Rand	2005
Guinea	Conakry & 16 smaller cities	Lease Contract (10 years)	Saur / CGE	1989
Kenya	Malindi	Management contract (5 years)	Gauff	1999
Madagascar	All urban	Management Contract (2 years)	Lahmeyer	2005
Mali	Bamako & 16 urban centres	Concession (20 years)	Saur	2000
Morocco	Casablanca	Concession (30 years)	Ondeo/Suez	1997
Morocco	Rabat-Sale and Tanger Taitouan	Concession (25 years)	Veolia	2001
Mozambique	Maputo, Motola & 3 other towns	Lease contract (15 years for Maputo & Motola: 5 for others)	Saur / Aguas de Portugal	1999
Mozambique	4 small cities	Affermage (5 years)	Aguas de Portugal	2001
Niger	All urban	Affermage (10 years)	Vivendi	2001
Rwanda	All urban	Management Contract (5 years)	Lahmeyer	2003
Sao Tome & Principe	All urban	Management contract	Suez/Dumez	1992
Senegal	All urban	Affermage (10 years)	Saur	1996, renewed 2006
South Africa	Johannesburg	Management contract (5 years)	Ondeo	2001
South Africa	Nelspruit	Concession (30 years)	Biwater	1992
South Africa	Dolphin Coast	Concession (30 years)	Saur	1999
South Africa	Stutterheim	Lease Contract (10 years)	Ondeo/Suez	1993
South Africa	Queenstown	Lease Contract (25 years)	Ondeo/Suez	1992
Tanzania	Dar es Salaam	Lease contract (10 years)	Biwater	2003
Uganda	Kampala	2 Management contracts (3 years, then 2 years)	Gauff, then Ondeo	1998, then 2002
Zambia	Copper Belt	Management Contract (4 years)	Saur	2001

1 Until 2002 Veolia was a fully-owned subsidiary of Vivendi.

Public-public partnerships (PuPs) have received increasing attention in recent years as an alternative approach to privatisation which could improve the performance of struggling utilities, based on public service and solidarity rather than private sector principles. PuPs encompass both twinning/capacity-building arrangements, where a successful public provider provides technical support to a less successful partner, either in the same country or across borders, and operational partnerships where state-owned providers work together with trade unions, communities or other non-private groups to manage and deliver services. At their core is a public sector ethos and spirit of public solidarity. There are already many PuPs around the world, some going under different names such as municipal development partnerships or public utility partnerships. The majority of experience to date is in Eastern and Central Europe, Asia and Latin America, where municipalities from the UK, the Netherlands and Denmark, among others, have entered into partnerships for capacity building. There are, however, a number of interesting cases in Africa which are shown in Table 2. There are probably others which have not been well documented, and new arrangements emerging as the popularity of this approach grows. In particular there are likely to be many more domestic partnerships with CSOs and community groups which are not well documented internationally.

Table 2. Examples of PuPs in Africa

Country	City	Type of PuP	Partners	Date
Ghana	Savelugu	Community-public sector partnership	Savelugu Community, Ghana Water Company Ltd	1999
Kenya	Nairobi	International utility partnership (south-south)	Nairobi City Water & Sewerage Company, NWSC (Uganda)	2004
Malawi	Lilongwe	International utility partnership (north-south)	Severn Trent Water (UK), Lilongwe Water Board	1987
Malawi	Lilongwe	Government-CSO-NGO partnership	Lilongwe Water Board, Centre for Community Organisation & Development, WaterAid	2003
Rwanda	National	International utility partnership (south-south)	NWSC (Uganda), Electrogaz (Rwanda)	2008
Mauritania	National	International utility partnership (multiple partners)	Societe National des Eaux (Mauritania), Office National d'Eau Potable (Morocco), several French and Belgian water operators, Office National de l'Eau et de l'Assainissement (ONEA), Burkina Faso	2008
South Africa	Odi	Utility - trade union partnership	South African Municipal Workers' Union, Rand Water	1999
South Africa	Harrismith	Municipality - utility – community partnership	Harrismith Municipality, Rand Water	2000
Tanzania	Dar es Salaam	International utility partnership (south-south)	NWSC (Uganda), Dar es Salaam Water & Sewerage Authority	2005
Zambia	Lusaka	International utility partnership (south-south)	NWSC (Uganda), Lusaka Water & Sewerage Company	not available

Such approaches are gaining in international recognition and support. The EU Water Facility, for example, is now offering support to capacity building partnerships between public actors in ACP countries (either North-South or South-South) under the 10th European Development Fund. In 2007, UN-HABITAT launched the Global Water Operators' Partnership Alliance (GWOPA), a 'structured programme of cooperation among water operators, based on mutual support and on a not-for-profit basis' (UN-HABITAT: P.4). The majority of members are likely to be public utilities and the emphasis is firmly on capacity building, but the private sector is also included. The Water Operator Partnership (WOP) initiative provides an opportunity for the promotion of PuPs worldwide, although critics fear that the involvement of the private sector risks undermining the public ethos at the heart of PuPs (e.g. Hall et al 2009).

1.2 Defining PPPs and PuPs: a typology of partnerships

Both PPP and PuP are terms which encompass a variety of arrangements. A typology of PPPs is well established in the literature, classifying partnerships according to the degree of responsibility and risk transferred to the private sector. At one extreme is full divestiture of assets into private ownership (as in the UK), and at the other are short-term service contracts under which a private company is brought in to provide specific services such as to develop a billing system or train staff, for example. The range of arrangements is set out in Table 3. In practice, however, there is considerable variation in contract design and some arrangements combine elements of different types (see for example Marin, P.8).

For the purposes of this study, the main focus is on PPPs where the private sector takes some responsibility for service delivery, i.e. a management contract or higher-level PPP.

Table 3. Typology of PPPs

Roles and responsibilities of the private partner		Asset ownership	Capital investment	Operations / maintenance	Commercial Risk
Service contract	Supplies equipment or specific one-off services in return for a fee.	Public	Public	Private/public	Public
Management contract	Supplies management services to the utility in return for a fee. Financial incentives for achievement of targets may be included.	Public	Public	Private	Public
Lease / affermage	<i>Lease</i> : pays a lease fee to the contracting authority; operates infrastructure; retains revenue from customers. <i>Affermage</i> : similar, except revenue from customers is shared with the contracting authority and lease fee may be absent. Financial incentives for achievement of targets may be included in either case.	Public	Public	Private	Shared
Concession	Operates and maintains infrastructure, and makes capital investment in infrastructure improvements and expansion. Pays a concession fee, retains revenue and may also receive payments for meeting specific targets/conditions.	Public	Private	Private	Private
Divestiture	Owns infrastructure, responsible for all investment, operations and maintenance.	Private	Private	Private	Private

Source: Adapted from Budds & McGranahan; definitions adapted from <http://assamppp.gov.in/pppmodels.pdf>

PuP types are less consistently defined in the literature, but can be usefully categorised according to their geographical scale and the type of actors involved. Table 4 follows this approach and is adapted from Boag & McDonald.

This study focuses on PuPs in which at least one partner is a state body, which may be a national government department, public water utility, regional municipal or local government. It excludes any for-profit arrangements between public bodies, for example a public utility from one country holding a management contract to provide water services in another country on a profit-making basis. These arrangements have been termed “false PuPs” (Hall et al, 2005).

Table 4. Typology of PuPs

	Geographical Scale		
	National / intra-state (domestic partnerships)	International / inter-state (north-north or south-south)	International / inter-state <i>developmental</i> (north-south)
Actors	State–state	e.g. Municipal water provider and national water utility	e.g. Two water utilities from different countries
	State–non-state	e.g. Municipal water provider and a trade union	e.g. Municipal water provider in the south and a union in the north
	Non-state– non-state	e.g. Water cooperative and an NGO in the same municipality	e.g. NGO from the north and a community group in the south
	Multi-partnerships	e.g. Municipal water provider working with a trade union and local community group	e.g. A municipal water provider in the south working with an NGO and a water utility from the north.

It is also important to distinguish between PuPs where partners share responsibility for service delivery, and purely capacity building partnerships. International PuPs are typically about capacity building and enabling, rather than taking over responsibility for service provision, in contrast with PPPs.

1.3 Approach of the study and structure of the report

This research draws on a review of literature (journal articles, conference papers, book chapters, research reports, case studies and 'grey' literature), interviews with experts on EC water policy, and in-depth study of two countries where both PPPs and PuPs have been tested: Ghana and South Africa. These case studies included document analysis of published and unpublished material, and where possible telephone interviews with representatives of the main organisations involved in and observing the partnership.

The following Section of the report (section 2) describes findings from the literature on the performance of PPPs and PuPs to date, and discusses the advantages and disadvantages of each approach as well as the barriers and enablers relevant to partnerships of different kinds. Sections 3 and 4 present the case studies of PPPs and PuPs in Ghana and South Africa respectively. Section 5 draws overall conclusions.

2 PERFORMANCE OF PPPS AND PUPS: REVIEW OF THE LITERATURE

No studies were found in the literature which have systematically compared the performance of PPPs and PuPs in urban water services. There is, however, much analysis of the performance of PPPs, including large econometric studies, a small body of research on PuPs, and large volumes of case study material. Indeed PuPs which focus on capacity building are not directly comparable with PPPs, as the former seeks only to enable better service delivery, while the latter seeks to take over responsibility for it.

2.1 How have PPPs performed in Africa?

Evidence was gathered to examine the performance of PPPs in relation to a number of criteria. These are set out in Box 1, alongside how they are commonly interpreted in the literature.

Box 1. Evaluation criteria and interpretations	
Investment & expansion	Extent of investment in the system for rehabilitation, production and coverage extensions.
Efficiency	Including levels of unaccounted for water (UFW) [*] , labour productivity ^{**} and billing/collection efficiency ^{***}
Service quality	Including water quality, reliability, pressure and hours of service; also customer care and responsiveness
Price	Tariff and connection charges, with a dual focus on cost recovery and affordability
Provision for low-income households	Including subsidies and specific service approaches e.g. standposts
Wider societal impacts	Including impacts on growth, poverty reduction, social equity and environment.

^{*} % water produced that is lost either through leakage or unauthorised use

^{**} Number of staff per 1000 connections

^{***} % of billed charges which are collected

N.B. The stated objectives of the partnerships being examined do not necessarily include all of these criteria. The focus is often on service and financial improvements rather than wider societal impacts, though these may be implicit goals.

2.1.1 Investment and expansion

The hoped-for private investments to improve and extend water services in developing countries did not come with the introduction of PPPs, at least not in SSA (Marin). The reasons have been well documented and include the high upfront capital costs of infrastructure, long amortization periods and high risks in terms of cost recovery (Ouyahia; Budds & McGranahan; among others). In many cases private investment failed to materialise, was cut during contract renegotiations or stalled because of low cost recovery (e.g. Cape Verde, Mali, South Africa (Nelspruit and Dolphin Coast) and Uganda). Some PPPs have dramatically improved coverage rates, for example in Senegal 1 million people were connected and in Côte D'Ivoire 90% of households in cities attained access to safe water under PPPs (Jammal & Jones; Marin). However, there are at least as many cases of PPPs failing to achieve substantial increases in coverage (e.g. in Gabon, Guinea and Tanzania).

According to a large meta-analysis of past reviews by Marin, the average impact of past PPPs on coverage has been neutral, i.e. there is no evidence of a benefit of PPPs over public provision. This is confirmed by research in Latin America, which found that connections generally increased under PPPs but the increase was no faster than in a control group of publically-managed situations (Clarke et al 2004).

In general, where coverage has been extended in SSA this has been dependent on government or donor financing. This was the case in Senegal, often cited as a very successful PPP (Balance & Trémolet) (see Box 2), while in contrast in Congo-Brazzaville the private operator invested heavily in extension of services but failed to recoup the cost (Bayliss 2003). In the case of Côte D'Ivoire the operator has so far been able to finance investments from revenue because it inherited well-maintained infrastructure and overcapacity in water production, but this situation is not expected to continue much longer as production reaches its limits and public investment is expected to be required for further expansion (Marin et al). The World Development Movement estimates that the private sector has been responsible for only 600,000 new connections worldwide in 15 years (WDM).

Box 2. Coverage expansion under a PPP in Senegal

Since 1996, urban water services in Senegal have been provided under an affermage contract with the private company Sénégalaise des Eaux (SDE), of which the French company Saur is the majority owner. SDE's contract includes performance targets for loss reductions, water quality and customer services, with some limited investment commitments. The PPP helped to leverage donor financing for infrastructure from the World Bank, which was critical to the performance improvements achieved. The contract has widely been deemed a success, with significant improvements made in water production, distribution and quality, financial management and cost recovery.

Coverage also expanded notably, with 1 million connected between 1996 and 2003, representing a 50% in the number of customers. By 2005 coverage of over 80% was achieved. The new connections include subsidised connections and standpipes. The contract was set up so that the government, not SDE, bore the cost of social pricing and subsidies. At the same time, SDE has introduced a stricter disconnection policy and Hall & Lobina report that in 2006, 12% of physical connections in Dakar were not in use. This presents a concern in terms of access to safe water for the poorest households who struggle to pay monthly bills.

Source: Balance & Trémolet; Hall & Lobina

2.1.2 Efficiency and financial performance

The private sector is often expected to bring an increased focus on efficiency and revenue collection, modern management practices and freedom from political interference. There is evidence that the adoption of PPP is typically accompanied by efficiency gains and improved financial management. According to Marin the average impact of PPP on efficiency has been positive. His review found strong evidence that PPPs has, on average, improved labour productivity and bill collection. However, results in terms of unaccounted for water (UFW) are more mixed. Other smaller studies confirm these findings (Gassner et al 2009; Clarke et al 2004). PPP is often accompanied by a reduction in the workforce (Gassner et al) and stronger measures in revenue collection, for example metering, improved customer data systems and billing procedures, regularisation/removal of illegal connections and disconnections for non-payment (Bayliss 2002; Estache & Gomez-Lobo). The private sector, however, is not necessarily immune to political pressure and corruption which can lead to the maintenance of inefficient practices (Budds & McGranahan).

There is some counter-evidence from Asia, where a comparison of 50 utilities found no significant differences in efficiency between public and private management (Estache & Rossi). Bayliss (2003) argues that PPPs seldom transform a utility's financial situation; those which were well-performing before privatisation have tended to keep improving under a PPP (e.g. Senegal and Côte D'Ivoire), while those which were previously poor performers have not seen great improvements (e.g. Gabon, Guinea).

There are also examples of highly efficient public operators, for example in Uganda and Burkina Faso (ibid).

What matters is not just efficiency gains, but whether these are translated into service improvements or lower prices for consumers, or retained as profit (Galiani et al; Gassner et al). This depends upon good contract design and strong regulation, yet the capacity to negotiate contracts and regulate operators is often very weak in low-income countries (Birdsall & Nellis).

Another dimension of efficiency, which is very important to sustainability of services, is the efficiency of maintenance of water production, treatment and distribution facilities. Very little evidence was found in the literature regarding the performance of PPPs in this area, however.

Finally, establishing PPPs is costly. Contract preparation and negotiation is typically a lengthy process, with costs to all partners; donors spend millions on project design processes and transaction advisers (Balance & Trémolet). A special report by the European Court of Auditors found that EC technical assistance projects in ACP countries, which are dominated by private consulting firms, often had lengthy preparation phases of two to three years or more. This was found to negatively affect the success of projects as project designs became outdated by the time agreements were signed (ECA).

The cost also relates to the capacity of governments to negotiate an equitable partnership. In many cases, the municipal government is in a relatively weak position to negotiate, and the resulting contracts offer favourable terms to private sector partners, such as high management fees (Hoedeman, pers. comm.; Balance & Trémolet). Further, private partners have often sought to renegotiate terms following difficulties in achieving the level of cost recovery and investment proposed. Municipalities are then left with the choice of “sweetening the deal” further (for example relieving the private partner of investment commitments or increasing tariffs) or allowing the partnership to collapse – either of which is costly to the municipality and could undermine services. This is likely to be a particular problem in some decentralised situations where the responsibility for service delivery has been transferred to municipalities without an accompanying transfer of expertise and resources.

2.1.3 Service quality and price

The introduction of a PPP is associated with improvements in the hours of service and reductions in water rationing (Marin; Fall et al; Gassner et al). There has been little comparative analysis of other dimensions of service quality in the literature, although several case studies show that PPPs have improved both water quality and customer services.

It has been argued that short term involvement of the private sector may introduce performance orientation and “kickstart” public sector performance – Balance and Trémolet give the example of Uganda where a short term private contract built capacity to specify performance targets and oversee progress. A similar effect has been seen in Asia where various forms of private sector involvement enabled utilities stuck in a cycle of underperformance to achieve a “breakthrough” and improve services (Franceys & Weitz).

There is considerable evidence, however, that the introduction of a PPP is often associated with tariff increases (Marin), although in the most successful cases such as Côte D'Ivoire efficiency gains have allowed tariffs to be reduced in real terms. Water pricing is complex; while too high a tariff might constrain access by poor households, low tariffs which do not allow cost recovery limit the provider's ability to invest in maintaining infrastructure and extending services to unserved areas (UNDP 2006). Tariff increases are therefore not necessarily anti-poor, although provisions need to be made to ensure affordability for the poorest households, including consideration of those who access piped water indirectly (from vendors or by borrowing or buying from neighbours). It has been found, however, that

the private sector requires returns on its investments in low-income countries to be 2-3% higher than in richer developing countries, because of differences in investment risk, which could lead to disproportionately high tariffs in SSA under PPPs (Platz & Schroeder). Where tariff increases are too steep or too sudden, they can lead to problems of affordability and a backlash in terms of non-payment or loss of political support, as in the case of Guinea (Box 3).

Box 3. Water pricing under a lease contract in Guinea

In 1989 the government of Guinea entered into a lease contract with a subsidiary of the French company Saur, in the context of a wider structural adjustment programme. The aim was to turn around a bankrupt, inefficient sector and improve coverage and reliability of services. It was widely agreed that water quality improved significantly after the reform and there was also a positive impact on customer services and a modest increase in coverage. However, tariffs increased dramatically. In 1988 the price of water was US\$0.14/m³, and by 1996 it was almost US\$1, an increase of more than 600% in eight years. All households had to pay a bimonthly fee to cover the first 20m³ of consumption, whether or not the full amount was consumed, and connection fees were around US\$90 in 2006. Prices were raised due to poor collection rates, including from government institutions, and the need to service debt.

The prices charged for water were unaffordable for large numbers of households given living standards in Guinea. This led to high levels of non-payment and disconnection of households, and the resulting continued reliance on unsafe wells caused high incidence of water-related disease. Fifty-eight percent of bills were unpaid in 1996. An assessment of the welfare impacts of the project concluded that “most of the gains might have accrued to middle- and high-income consumers”. In 2002, the government terminated the lease contract, in part because of the unaffordable price of water to consumers.

Source: Clarke et al 2002, Bayliss 2003

2.1.4 Provision for low-income households

There are some positive examples of private operators extending services to low-income communities and offering cross-subsidies, flexible payment systems and other measures to make water affordable to poor households. However, there are also many cases where low-income households have suffered from the removal of subsidies for water from standpipes, higher charges, removal of illegal connections and strict penalties for non-payment including disconnection.

The private sector usually requires specific incentives – including in some cases guarantees on its investment – to extend services into low-income areas where non-payment and illegal connections are expected to be high (Ouyahia). EC officials interviewed confirmed that, in their experience, the private sector has not been interested in service provision to poor peri-urban areas. Further, Bayliss (2002) observes that because of the primary emphasis placed on revenue collection to increase cost recovery, investment in metering and billing systems for existing customers are usually prioritised over network expansion to unserved areas under PPPs.

Marin found, that the private sector is generally better at putting in household connections than other service types (such as standposts) which are often more suitable for rapidly expanding access in low-income areas or for the very poorest households (Fall et al), although there are examples of the private sector developing bulk water schemes for low-income communities, e.g. in Colombia and the Philippines.

Provision for low-income households is probably the weakest area of performance of PPPs. In general, the private sector has to be incentivised to serve low-income households through strong contract

design and regulation, and it is often the government which bears the cost of subsidies. In many cases – even those heralded as success stories – many of the poorest have remained unserved and have lost the informal subsidies which used to be provided through tolerance of illegal connections and non-payment.

The argument is increasingly being made that poor households are paying customers (indeed they usually pay more for services from vendors or other sources than networked water customers pay), and that what is needed is a change of mindset among service providers to recognise this incentive. This kind of mindset change is certainly important, but even if poor households would be paying customers they are likely to be less commercially attractive than higher-volume wealthier users, and specific incentives are still likely to be needed to ensure that low-income households are not the last to be served.

2.1.5 Wider societal impacts: poverty reduction, equity, health and environment

The majority of studies of PPPs focus on changes in utility performance and do not examine wider societal impacts. Birdsall and Nellis found that privatisation (across several sectors, not just water) has tended to worsen equity, but that this is not necessarily the case and the distributional effects of privatisation depend upon policy and regulation. However their study is based on transitional economies, and they note that little is known about impacts in Africa. Focusing on water services, Bayliss (2002) notes that PPP is supposed to lead to growth, which in turn would have an impact on poverty, but that the links between privatisation and growth remain unproven. Estache & Gomez-Lobo report that private providers are less likely to tolerate non-payment or illegal connections, thus removing an implicit subsidy that is usually highly progressive in terms of reaching the poorest households. This is a reflection of the broader concern that a purely commercial focus will lead to neglect of social objectives and particularly the needs of low-income households (see above). This risk can be constrained to some extent by contract design and regulation of private providers, if there is adequate capacity in these areas. Where this capacity is lacking, however, there seems to be a real danger of “cherry-picking” of profitable areas of business by private operators. In Guinea, for example, the private operator made a profit even though there were problems with performance and the contract was eventually terminated by the government, while the state-owned enterprise in the partnership made a loss, according to Bayliss (2003).

Only one study was found which assessed the health impact of PPPs in water services. Comparing privatised with non-privatised services in Argentina during the 1990s, Galiani et al found that privatisation was associated with an 8% reduction in under-five mortality (due to a decrease in mortality from waterborne diseases) and a 26.5% reduction in low-income communities. They could not firmly identify the causal mechanism. Others have suggested that if privatisation leads to an increase in connections or improvements in piped water quality this would be expected to lead to health impacts (Clarke et al 2004), although as discussed earlier there is limited evidence that PPPs perform better in these areas than publicly managed services.

No systematic studies of the effect of PPPs on environmental management have been found. Fall et al argue that in West Africa, PPPs have helped improve water resource management indirectly, by improving reliability and coverage of piped water services thus reducing unregulated exploitation of groundwater. They found no sign that PPPs had improved the protection of water sources, however. It has been argued that given the commercial imperatives facing private providers, externalities such as environmental impact will not be prioritised. Private providers face a commercial incentive to reduce water losses, but evidence on whether this has occurred in practice is mixed as discussed above. Incentives for wastewater treatment are typically low; costs are higher than for water supply and

households' willingness to pay is likely to be lower because benefits accrue more to the city as a whole than to individual households (USAID).

Overall, the performance of PPPs in water services has been very mixed, a finding confirmed by a 2007 thematic evaluation of EC support for water and sanitation (JEU, p. 71)). Comparing private with public provision, results depend more on the policy and institutional context, the design and management of partnerships and the strength of regulation than on ownership *per se*, although there do seem to be some typical features of PPPs. The clearest benefit of PPPs seems to be efficiency gains and some technical improvements in performance (particularly increasing production and service hours). It also appears that involvement of the private sector at particular times for specific purposes can be useful to boost utility performance. However, PPPs often show significant weaknesses in serving the poorest, and have high costs. Successful PPPs depend on adequate capacity in government to design and manage context-specific relationships. The loss of control by local authorities entering into long term contracts is also problematic if the approach taken by the private partner turns out not to be successful and there are severe penalties for breach of contract. Given the many challenges to service provision in ACP cities and towns, flexibility to experiment is important, and long-term leases and concessions are often high risk for municipalities.

An examination of case studies from across SSA and the Caribbean (see Annex 1) confirms this very mixed picture, which is summarised in Table 5. The number of cases for each row is small because readily available data on performance was patchy. This table should therefore not be read as an assessment of performance across the region but as illustrative of the mixed results of PPPs.

Table 5. Mixed performance of PPPs in SSA and Caribbean

Dimension of performance	Number of cases		
	Positive impact	Mixed or no gain	Negative impact
Efficiency / financial performance	4	5	
Service quality	5	2	
Coverage	5	4	1
Affordability to low-income households	1	2	2

Note: based on literature review of case studies (see Annex 1)

It is difficult to isolate the effect of the introduction of the private sector, however, for a number of reasons:

- PPPs have generally been adopted in conjunction with other reforms
- PPPs have often been accompanied with substantial donor financing for infrastructure
- The PPPs in question took different approaches to the financing of investments
- Institutional and policy frameworks vary greatly between the countries
- The state of the sector before the introduction of PPPs varied considerably.

These complications mean that simply comparing statistics on access and performance before and after a PPP, or between two sites, one of which adopted a PPP and one of which did not, does not provide conclusive evidence of the impact of the PPP itself. For these reasons the analysis made above relies mostly on existing econometric studies which have taken measures to overcome these difficulties and ensure that comparisons are as robust as possible. Many of the studies cited above still mention

methodological difficulties in identifying appropriate counterfactuals for the PPPs and designing statistical tests to fully control for confounding factors, however, and this limitation must be borne in mind.

Furthermore, historically PPPs have been given a great deal of financial and political support by important donors in the sector, and it would therefore be surprising if they had not led to any improvements. The important questions are: whether these justify the high costs which are usually involved; in which circumstances successful PPPs can be developed; and whether there are alternatives (such as PuPs) which ought to be given more consideration than they have received to date when designing urban water reforms.

The majority of the literature discussed above focuses on PPPs involving the international private sector, although in some cases the companies are now managed by African nationals and owned by national shareholder, and are perceived as “African companies” by stakeholders, e.g. Senegal and Côte D’Ivoire (Fall et al). There is now growing interest in partnerships with local private operators, which are reported to offer greater flexibility in adapting to local conditions and better understanding of local contexts and risks. This approach has had good results in small towns in Uganda and Mauritania, and local private operators also manage small networks in Ghana, Mali, Mozambique and Senegal (World Bank 2006; Kaufmann & Pérard). A review for WSP found that management by small to medium local private operators is a viable option in small towns, with grouping of towns sometimes desirable to achieve economies of scale (Vezina).

Box 4. Successful PPPs with local operators in small towns in Uganda and Mauritania

From 1995, pumped water supply schemes in 250 communities in Mauritania were brought under private management by new graduates, each working in their own home region. Operations are governed by one-year management contracts, renewable subject to government approval. Some operators have acted as commercial micro-enterprises, investing their own funds into major repairs and renewals of the system. Extensions are financed mainly by individual households or local government, supervised by the operators. This system has been markedly successful, leading to extensions of the systems by an average of 150% and increases in connections. According to Vezina, these operators are regarded as holding legitimacy in their communities.

In Uganda, district governments have contracted water supply for 12 small towns to two local private operators, each responsible for a group of towns. The five towns managed by one operator, Kalebu Ltd, have an average population of 40,000 and between 170 and 250 private connections. The results are very promising, with billing at 98% and collection efficiency of around 90%. The biggest sticking point, however, has been the partnership with the Ministry of Water which has proved bureaucratic and inefficient in some cases, negating some of the benefits of the decision to outsource management to more flexible private operators.

Source: Vezina.

Another approach is to contract and regulate the small-scale independent water providers (SSIPs) on which many poor households in urban areas already depend. By legalising these operators and subjecting them to regulation, it is possible to improve the quality and affordability of the services they provide (Kjellen & McGranahan among others). This approach has been successful in two towns in Paraguay, for example (Dardenne). There are, however, a number of challenges involved in using SSIPs for the delivery of water. The water provided this way is usually more expensive than piped water because of higher costs and the intermediaries involved in the delivery process, and excessive profits are sometimes sought by providers (Dagdeviren & Robertson). Regulation is difficult because of the

often hazy legal status of such providers, which are sometimes illegal yet tolerated by the authorities because of the important role they play in service delivery (ibid).

There is also a growing shift in interest towards smaller, less risky forms of PSP, away from long-term concessions towards shorter-term management contracts or service contracts (outsourcing of specific functions). Under these partnerships the private partner is brought in to improve management and efficiency, but shoulders less – or none – of the commercial risk of service delivery. There is also lower risk for the municipality as arrangements are shorter term and more flexible.

2.2 How do PuPs compare?

There is much less research available on PuPs, because the concept is more recent and there are fewer well documented examples. It is therefore difficult to systematically assess the performance of PuPs against the criteria considered above for PPPs. Although systematic studies are lacking, international experience points to some particular benefits of PuPs. These are discussed below, with distinctions drawn between PuPs focused purely on capacity building (such as twinning arrangements) and PuPs where responsibility for service delivery is shared or transferred (see Table 4 above).

2.2.1 Prospects for sustainability

PuPs often have a strong capacity building element, reflecting their focus on sustainable improvements in service delivery. They also tend to be oriented towards long-term societal objectives rather than short-term cost recovery, and because neither partner is taking a profit, revenues can be fully reinvested in services and maintenance (Hall et al 2009; Boag & McDonald).

Capacity building PuPs (e.g. twinning arrangements) can create new, well-managed and effective utilities who are in turn capable of helping others, establishing a “virtuous cycle of capacity building” (ibid). This is exemplified in the case of the Moroccan utility ONEP (Office National de l’Eau Potable) which has itself benefited from partnerships with Belgium, France and Spain and is now itself involved in a capacity building partnership with the Société Nationale des Eaux (SNDE) of Mauritania, with the support of a network of public operators from France, Belgium and Burkina Faso (IWA/UN-HABITAT). A review of municipal development partnerships undertaken by Great Britain, the Netherlands, Denmark and the European Union found that these tended to have a lasting impact because they “helped municipalities to help themselves”. Whereas consultants might come in to solve a particular problem, municipal staff were able to give their counterparts (who shared a similar role) access to appropriate resources and problem-solving approaches which they could draw on in future (Emminghaus).

Furthermore, PuPs have the potential to support the adoption of a whole water cycle approach, under which service delivery is fully integrated into sustainable management of the water resource, including abstraction of water for urban supply and the treatment and discharge of wastewater (Hoedeman, pers. comm.). Waternet, the public water company of Amsterdam, uses a whole water cycle approach and is involved in PuPs to build the capacity of partners in Asia and Latin America to adopt the same techniques. Its international programme, World Waternet, is supported by the GWOPA (see Box 5). This is something which PPPs could not offer, as water resource management is a public function. Not all PuPs will take this approach, of course, as it requires specific expertise in the supportive partner.

Box 5. World Waternet

Waternet, the public water company operating in Amsterdam, the Netherlands, combines all water services through a whole water cycle approach: drinking water, waste water and surface water. Waternet devotes 1% of its manpower to World Waternet, an international programme of capacity building PuPs in Eastern and Central Europe, Asia, Latin America and North Africa. These partnerships are supported by the GWOPA.

The partnerships are long term and focused on capacity building. Robust and sustainable gains are emphasised over quick wins. They take an integrated approach, working with partners on drinking water supply, sanitation and hygiene, waste water, ground and surface water, solid waste management and even innovative energy generation. The goal is to achieve and sustain the MDGs. The World Waternet website explains that “Our core business is the strengthening of local organisations in a sustainable way. Because in the long run, they have to provide for reliable water supply themselves”.

The partnerships are tailored to the needs of each country, but include assisting with the design of water treatment plans, introducing new techniques, developing sanitary programmes, training and increasing participation of the local population. From 2010, World Waternet is working with experienced water companies and training centres in Egypt and Morocco to develop new partnerships in Africa.

Source: World Waternet website: <http://www.worldwaternet.com>

2.2.2 Shared goals and low costs

PuPs are characterised by a high degree of trust between partners, because they are not-for-profit and partners generally share the same goals (Boag & McDonald). This was the experience of municipal development partnerships involving various European countries; a review found that “cooperation between technical experts from both administrations who have the same function decreases mutual distrust” (Emminghaus). Trust among partners brings several benefits: more cooperative ways of working, including honest information sharing; a smoother partnership design process; a lower risk of disputes; and a greater chance that any tensions will be successfully resolved. This means that projects are more likely to be effective, their design is more likely to be realistic and matched to needs, and that less time will have to be spent on negotiations, relationship-building and managing disputes.

This also means low costs, for partners and for organisations supporting the partnership. An EC official interviewed characterised past Water Utility Partnerships (precursors of PuPs) supported by the EC as ‘good value’. While it is still necessary to spend time on partnership design and consultations this process is generally shorter and smoother than for PPPs, with less reliance on external consultants and much lower transaction costs (Hall et al 2009). Miranda argues that “a fraction of the money used to support PPPs could be used to support many PuPs”. Others have also recommended that less costly alternatives, such as PuPs, should be considered as options alongside PPPs (Balance & Trémolet; Ouyahia).

It is important to distinguish between types of PuP here. Where responsibility for management of services is transferred or shared, there are likely to be higher costs in terms of partnership design and gaining buy-in, compared with capacity building arrangements which are likely to be less controversial and more flexible. In Harrismith partnership preparation took 18 months, for example (see section 4). This represents a significant cost, although it was still much shorter than the preparatory stage of many PPPs.

2.2.3 Potential to promote an equitable approach to water services

It is argued in the literature that PuPs are more likely than PPPs to promote equity in service delivery (e.g. Boag & McDonald), because they tend to be driven more by social rather than commercial goals. There is considerable evidence that domestic PuPs involving civil society organisations (CSOs) strengthen the delivery of WSS to low-income communities, because of their pro-poor motivation and good understanding of the needs of poor users. A partnership between CSOs and government offers opportunities for better resourcing, scaling up and sustainability of CSO activities (Franceys & Weitz). The 2006 Human Development Report states that governments work well in partnerships built “on the energy, drive and innovation at community level” (UNDP).

WaterAid (undated) gives the example of water kiosks in Lilongwe, Malawi, where a partnership between government, a non-governmental organisation (NGO) and a CSO was able to overcome problems of inefficiency and abuse of power in the management of kiosks, and make them work better for the poor (Box 6).

Box 6. Government-NGO-CSO PuP for more effective water kiosks in Lilongwe, Malawi

An innovative PuP was formed between the Lilongwe Water Board, WaterAid and the Centre for Community Organization and Development (CCODE) to improve the management of water kiosks in low-income areas. A combination of inefficient management, poor billing procedures, lack of maintenance of kiosks and abuse of funds by local leaders had led to disconnection of kiosks, high levels of debt among users, and disillusionment with the kiosk system.

Under the PuP the role of the Water Board was to rehabilitate kiosks, establish and co-finance a Kiosk Management Unit to regulate prices, build capacity of community trusts to manage finances, and improve information flow between the Board and communities. The role of CCODE was to mobilise communities and build their capacity to engage with service providers. WaterAid’s role was to provide technical and financial support to the Water Board and CCODE on pro-poor approaches to water supply, sanitation and hygiene including kiosk management.

Significant improvements have been seen in clearing debts, kiosk maintenance, financial management and billing. WaterAid’s experience showed that the CSO was the most effective partner to handle social issues, identify the needs of poor communities and operate kiosks most effectively, while government involvement was crucial for rehabilitation of infrastructure and regulation and training of management organisations.

Source: WaterAid (undated)

2.2.4 Potential for an integrated approach to urban services

An EC official interviewed for this study said that an important lesson learned from past EC support for urban development, particularly for slums, was that support is most effective when urban infrastructure and services are planned in an integrated way (including water and sewerage, electricity, roads and housing). This does not rule out a role for the private sector in water services, but would require that investment decisions and planning are publically controlled.

Capacity building PuPs between municipalities have the potential to go beyond water services and build capacity for more integrated urban planning. According to a review of municipal development partnerships, one lesson from UK-supported partnerships was that a focus on integrated programmes,

including priority setting and involvement of civil society, was beneficial in strengthening municipal structures (Emminghaus).

Domestic partnerships between municipalities and community or citizens' groups can also support a more integrated approach, because the demands expressed by urban dwellers are likely to go beyond water supply. The case of Porto Alegre, Brazil, where a PuP for water service delivery between the municipality, the public water company and a citizens' organisation was underpinned by an integrated development plan and a participatory budget mechanism, illustrates the potential of this alternative model for the reform of public services (see Box 7), although detailed discussion is beyond the scope of review.

Box 7. PuP and participatory budgeting in Porto Alegre, Brazil

Since 1989, Porto Alegre adopted a participatory budgeting process in an attempt to overcome severe inequality in living standards in the city. Residents vote on municipal spending priorities for infrastructure and services through assemblies held across the city. Water services are delivered through a PuP between the municipal government, the independent municipally-owned public water company DMAE (Departamento Municipal de Água e Esgotos) and a citizens' organisation. The municipality delegates responsibility for services to DMAE, and spending decisions are made through citizens' meetings held by DMAE. At the same time, decisions are guided by an integrated plan for urban development.

This approach has increased transparency and accountability, and DMAE is now accountable both upwards to the municipality and downwards to citizens. Decisions made within the framework of participatory budgeting soon showed positive material effects. From 1989 to 1996 the city's basic infrastructure markedly improved. Access to the sewerage network rose from 46% to 84%¹ during this time. From 1989 to 2001, coverage of piped water increased from 80% to 99.5%. Sewage treatment also increased from 2% in 1990 to 27% in 2002, and water leakage fell from 50% in 1991 to 34% in 2001.

Participatory budgeting led to a particular focus on meeting the basic needs of poor populations. This is reflected in the Human Development Index score of Porto Alegre, which is among the highest in Brazilian cities. The participatory budgeting approach has now been copied in over 140 municipalities in Brazil, and others around the world.

Source: Novy & Leubolt; Viero & Cordeiro; Platz & Schroeder; Hall et al, 2002.

When it comes to assessing the performance of PuPs in terms of service delivery and/or extending coverage, there are no systematic studies such as those referred to in the discussion of PPPs above. There are some examples which look to be strong, such as the case of Savelugu in Ghana (see section 3), the twinning of the Lilongwe Water Board with Severn Trent Water during the 1980s, and the support provided by Uganda's NWSC to the utility in Dar es Salaam, Tanzania, from 2006 onwards (Box 8).

However, PuPs face challenges of their own. Although the direct costs of PuPs are small, they may still require external financial support which is not yet widely available from donors (Hoedeman). Where PuPs include a non-state partner, these can struggle with sustainability and capacity (Boag & McDonald). Public institutions may be reluctant to meet the costs of taking part in capacity building partnerships in other cities or countries from their own budgets, because of commitments to their own citizens. In addition, the laws of some countries prohibit the spending of municipal budgets overseas (Hoedeman, pers. comm.) Many PuPs between municipalities or utilities have been financed in-kind by the supportive partner, however, motivated by a spirit of solidarity and also because such partnerships offer new and challenging opportunities for staff (ibid).

In addition there are few dedicated initiatives for the facilitation of PuPs (for example there is no equivalent to the World Bank's Public-Private Infrastructure Advisory Facility which provides technical

assistance for the development of PPPs), and limited opportunities for PuPs to access financing for infrastructure investments, as these are often still directed towards PPPs.

PuPs seem to have high potential to generate improvements in services at lower cost than PPPs, with a focus on equity and sustainability. PuPs are not a panacea and not all PuPs will be successful - there is a need to test different arrangements to find out what works best - but the PuPs merit support to help overcome some of these challenges and explore this promising opportunity.

Box 8. South-south PuP for utility strengthening in Dar es Salaam, Tanzania

NWSC-Uganda has provided a series of capacity building services to the Dar es Salaam Water and Sewerage Authority (public asset holder), and Corporation (public operator) - DAWASA and DAWASCO – since 2006, following the collapse of a PPP in 2005.

The NWSC is a well-functioning commercial public utility which has implemented various pro-poor measures in Uganda including a social connection programme and pre-paid water meters in low-income areas. NWSC has worked with DAWASA and DAWASCO to:

- Improve billing and IT systems
- Design a high-impact “rescue plan” to turn around DAWASCO’s performance
- Advise on institutional strengthening
- Review and advise on plans and management systems
- Assess institutional constraints and assist with training
- Support the development of a social connection policy and implementation framework.

NWSC reports that “with the performance improvement programmes undertaken, DAWASCO has noted tremendous improvements. Notable among these are reduction in unaccounted for water, increase in billing, revenue improvement and staff productivity”. These improvements are confirmed by a recent study which reported significant improvements in DAWASCO’s performance since 2005, albeit from a low baseline (Tucker et al). It is too early to comment on the success of the social connection policy as this is yet to be finalised and implemented.

Source: NWSC External Services website: <http://www.nwsc.co.ug/services04.php>, Tucker et al

2.3 Barriers and enablers for successful partnerships

2.3.1 Underlying constraints

The lack of finance for investment in infrastructure rehabilitation, upgrading and extension is a severe constraint to service delivery across most ACP countries. Neither PPPs nor PuPs in themselves address this fundamental issue, although some PPPs have appeared to because they have been accompanied by injections of donor or public funds. Adam (undated) argues that support for partnership development without attention to these investment needs will have a limited impact, because improving management capacity will not bring benefits unless adequate infrastructure is in place to meet the needs of the population. Furthermore, partnerships alone cannot usually address or compensate for underlying weaknesses in the policy framework, for example a lack of attention to services for low-income households, or problems of weak governance and politicised service delivery (Dardenne; Budds & McGranahan; Bayliss 2003). These underlying factors play a large part in determining the success of partnerships. Domestic PuPs which give urban residents a greater voice in decision making, however, do have the potential to improve transparency and accountability of services as seen in the case of Porto Alegre (see Box 7).

2.3.2 Financing and external support to partnerships

Both PPPs and PuPs are generally more successful when external support is available. Twinning arrangements from the 1980s offer an important lesson for PuPs, namely, that without financial incentives for the supportive partner in a twinning arrangement, they are unlikely to release their best staff to take part, which limits the effectiveness of partnerships (Fall et al; Adam undated). Others agree that international funding mechanisms are needed to support these arrangements such as exist for PPPs (Hoedeman). In the case of PPPs, successful cases have usually received considerable support from donors both in the design stages and in terms of advising and mediating between partners at times of tension, for example in Senegal (Balance & Trémolet). The latter may be less critical in PuPs where greater transparency and trust are possible between partners, due to the absence of commercial confidentiality provisions and greater consistency of goals between partners (Hoedeman). Intermediaries can be important in PuPs too, however, and it would be naive to assume that tensions or disagreements never arise. In the case of Savelugu in Ghana for example (see section 3), UNICEF and other NGOs played a critical role in bringing partners together and mediating when problems arose.

2.3.3 The importance of information

Partnerships for service delivery, especially leases and concessions where the operator takes on some or all commercial risk and has some responsibility for investment, need to be carefully designed to ensure that investment/implementation commitments can be financed (whether from public funds, customer revenues, private equity or donors) and that commercial partners can recover costs. This requires a good base of information on water production and consumption, numbers and types of existing customers, payment rates and the state of infrastructure. There have been several cases, however, of PPPs designed on the basis of poor information, either because of mistrust and a lack of information sharing between the parties, or simply because this data did not exist or was inaccurate or out of date. In this situation there is a risk that cost recovery may turn out to be lower than expected, or investment needs higher, or both, leading to failure to meet targets and disputes between the partners.

Bayliss (2003) observes that the design of PPPs has often been rushed. Governments face powerful incentives to sign off on a PPP when it is attached to donor money, and IFI staff similarly face internal incentives to approve projects and release finance (Pincus). This situation is not conducive to careful preparation of partnerships. Paying attention to basic information to ensure that contracts are appropriately designed should be given high priority, and can help avoid failures such as that in Dar es Salaam (see Box 9). Baseline information on water production and quality, service provision and levels of access is critical for monitoring the achievements of partnerships and ensuring accountability for any failures. Such data is also necessary to assess the performance of partnerships and learn from experience. A thematic evaluation of EC development support to the water sector (JEU) recommended more attention to monitoring and the collection of socio-economic data. The case study of the PPP with AVRIL in Ghana illustrates the difficulty of assessing performance when baseline information is disputed or has not been gathered (see section 3).

Box 9. Failed PPP in Dar es Salaam, Tanzania

In 2003, CityWater Services Ltd (CWS), a subsidiary of Biwater, took over responsibility for water and sewerage operations in Dar es Salaam under a lease-affermage contract with DAWASA, with support from the World Bank under the Dar es Salaam Water Supply and Sewerage Project. There had been decades of underinvestment in infrastructure, service quality was in decline and DAWASA was inefficient and running at a loss. Biwater believed that water services could be turned around in ten years with a 20% annual return on investments. However, during the first year, income from water consumption dropped by 37% and CWS was unable to make contracted payments to DAWASA. Contractual targets for infrastructure upgrading and installation of meters were delayed. Following these failures the contract was terminated by the government in 2005.

CWS has blamed DAWASA for not providing accurate information on the customer base and the state of operations before the contract was signed, yet WaterAid observe that even a brief examination of DAWASA's accounts reveals the very high level of commercial risk. WaterAid attribute the failure to a complex set of factors, but of central importance were the over-optimistic nature of the bid from Biwater, the failure to engage in public debate about options for reform and lack of accountability, the desire to privatise because PPP was attached to World Bank funds, and failure of both government and CWS to tackle serious underlying governance issues in the sector.

Source: WaterAid 2008

2.3.4 Incentives for serving low-income households in commercial partnerships

As noted above, where the private sector has succeeded in extending access to low-income households, this has usually been due to the inclusion of incentives designed to promote pro-poor services in their contracts. Otherwise, the private sector generally has little incentive to serve poor households (Budds & McGranahan). In El Alto, Bolivia, specific performance targets included in the concession contract ensured that the PPP performed fairly well at reaching low-income areas, although the needs of the very poorest were still not met (Box 10).

In SSA the researchers are not aware of any cases where contracts mandate the private operator to serve low-income households; connection targets may be set but the area or type of household to be reached is not usually specified. Yet this must be specified if connections are to reach low-income households, and a financial model has to be developed to finance the extension of services (Estache & Gomez-Lobo). In Senegal, compensation to the private operator was set up so that the government bore the cost of social pricing, with the aim of removing disincentives to serve poor households (Balance & Trémolet).

It is also important to allow sufficient flexibility in the contract for the operator to develop appropriate approaches to serving low-income households, which might include working with local CSOs or private operators, or offering alternative modes of service (see 2.3.5 below). This kind of flexibility enabled two concessions in Manila to achieve significant extensions in coverage, although these contracts later failed as planned levels of cost recovery could not be achieved (Box 11). Indeed the many failed PPPs suggest that a profit-driven model may not be easily compatible with providing affordable services to low-income households in cities where a high proportion of the population is poor.

Box 10. Targets for reaching low-income households through a PPP in La Paz / El Alto, Bolivia

In 1997 a 30 year concession contract was signed with a subsidiary of Suez in La Paz and the suburb El Alto. The contract included the commitment to achieve 100% coverage in La Paz and 70,000 new connections in El Alto within 5 years. Much success was achieved. Low-cost and innovative technologies were adopted for wastewater collection and high numbers of new connections were installed, and the pricing structure includes cross-subsidisation for poor households. However, some areas remain excluded because from services because no financial return can be expected from them. To avoid a negative image the service provider initiated a programme to provide sustainable WSS to low-income areas in peri-urban parts of El Alto, and with the help of international grants necessary infrastructure has been built in areas not previously served. The water price is high enough to cover service and maintenance costs.

This is one of the most successful examples of a contract focusing on coverage extension to low-income areas. Nonetheless, the needs of the poorest households are still not met under these schemes and commentators report that the PPP remains unstable.

Source: Dardenne

As well as providing the right contractual incentives, regulation is important to ensure that commitments are met and that efficiency gains translate into benefits for consumers. Birdsall and Nellis found that the distributional impact of privatisation was highest in countries with independent regulation, in middle-income and transitional economies. Fall et al recommend that regulation by contract has been more effective than independent regulators in West and Central Africa. However it is done, regulation is important. In general it is strongly recommended that more attention needs to be paid to the welfare impacts of new partnerships in the design stage, as distributional impacts are often underestimated or neglected (Estache & Gomez-Lobo). There may, however, be fundamental conflicts between the primacy given to cost recovery in PPPs (and commercialised public provision including some PuPs) and the welfare of the poorest. This is illustrated by the fact that even the most “successful” PPPs are commonly associated with increased disconnection rates of low-income households, e.g. disconnection rates reached 15% in Côte D’Ivoire and 12% in Dakar, Senegal (Marin; Hall & Lobina).

Box 11. Flexible approach to serving low-income households in Manila

In the city of Manila in the Philippines, two concessions were signed for the East and West zones of the city. The aim was to resolve the city’s water crisis, improve the financial position and efficiency of the utility and develop better services. Considerable progress was made in expanding access to poor communities and rapid increases in coverage were achieved, by adopting a flexible set of arrangements including: standpipes; subsidised connections; condominal systems; and partnerships with local private operators. According to the parent company of one of the concessionaires, coverage increased from 58% in 1997 to 84% in 2003, with 144,000 new connections. Key to these improvements was that concessionaires were given flexibility to experiment with approaches to serving low-income areas. However, specified coverage targets were reportedly not fully achieved. Both companies’ bids have been criticised for being unrealistic given the poor state of infrastructure, lack of good baseline information on water demand and existing debts of the utility (which one of the concessionaires had to take on), and both companies sought to renegotiate terms and raise tariffs early in the contracts. One of the concessionaires has withdrawn altogether.

Sources: Esguerra; Dardenne P. 9-10

2.3.5 Involvement of civil society to improve services for poor households

There is evidence that partnerships which include civil society or community groups tend to perform well in terms of serving poor households. These groups tend to have good knowledge of low-income areas and the needs of poor households, good relationships with the community and innovative ideas – based on experience - about how services can better meet their needs. Their involvement can therefore improve provision by a utility or municipal government which may be unfamiliar with these issues and take a less flexible approach. This is illustrated in the case of water kiosks in Lilongwe where CSO involvement greatly improved the service provided by kiosks for poor users (see Box 6 above), and there are numerous similar examples. In Dar es Salaam, the water utility has contracted NGOs to facilitate community water and sanitation projects in areas unserved by the main network, recognising that the NGOs had more expertise in this area, with considerable success (Tucker et al).

The study of Asian cities by Franceys and Weitz discussed earlier (section 2.1.3) found that a notable feature of the most pro-poor PPPs was that they also involved civil society groups as intermediaries with the community. These public-private-community partnerships provided better services at lower cost to low-income households. The authors propose that “a combination of reform through the private operator approach partnered with the flexibility and innovation characteristic of the NGO style is required to serve the poor living in informal housing areas in larger cities”. This looks to be a positive approach, although three-way partnerships are likely to be somewhat challenging in terms of design, management and regulation. There are also risks associated with partnering with NGOs and CSOs, however. On a practical level they may struggle with financial sustainability and technical capacity – particularly if they are expected to take on new roles in a partnership – and politically they may not necessarily be representative of poor households but can have their own agendas. It is therefore important to identify partners carefully and ensure the appropriate support is available to them to sustain their involvement in the partnership.

Various commentators have argued that monolithic entities, whether public or private, are not sufficiently flexible and adaptable to provide services to highly heterogeneous developing cities where different groups have vastly different needs and ability to pay (Dardenne, among others). Entering into partnerships with local actors who are familiar with informal or low-income areas is one way to bridge the gap and allow appropriate service delivery models to be developed for these residents. Involvement of local entrepreneurs with a commitment to serving their communities can bring similar benefits (see Box 4).

3 CASE STUDY: GHANA

3.1 Context

This case study takes a closer look at the developments in water supply in Ghana over the past decade and at implementations of an international PPP for improving urban water supply efficiency and a community PuP for improving peri-urban water distribution in the Northern Region of Ghana, both in progress. The clear difference in scope of these two partnerships is not conducive to direct comparison. The examples can serve to demonstrate particular achievements and failures of the partnerships in their respective environments and to analyse the enablers and barriers to success of each type.

A decentralisation process and reform of institutions and policy for water supply and sanitation in Ghana in the 80's and 90's resulted in a separation of institutional responsibility for urban and rural areas and for water supply and sanitation (Kleemeier). In preparation for opening the market to private involvement, the parastatal Ghana Water Company Limited (GWCL) was established in 1999 to operate

a total of 86 urban water systems with a total daily production of approx. 600,000m³. An independent Public Utilities Regulatory Commission (PURC) was created to monitor the performance and water quality of the GWCL and to set water prices.

Because of definition discrepancies between governmental agencies, statistics on access to WSS vary widely. The latest report from the WHO/UNICEF Joint Monitoring Programme provides the following access statistics for the year 2006 (Table 6).

Table 6. Access to improved water supply and sanitation in Ghana 2006

	Overall Access [%]	Urban [%]	Rural [%]
Improved water source	80	90	71
Improved sanitation	10	15	6

Source: (WHO/UNICEF 2008)

However, according to a multi-donor Africa MDG assessment, only 56 % of the population had access to improved water in 2004, and 61% in urban areas (AMCOW/WSP). Largely as a result of rapid and unplanned urban growth, progress in urban areas is particularly slow (Rooijen et al; Osumanu). According to Rooijen et al, the majority of existing waste water and sludge treatment facilities in metropolitan areas are in a state of disrepair, with most of the collected effluent flowing untreated into the ocean. With little coordinated effort to address sanitation in place, this case study focuses solely upon water supply.

3.2 The Ghana Water/Aqua Vitens Rand Ltd PPP

A first five-year review (1999 - 2003) of the performance of Ghana Water by PURC showed that GWCL was unable to meet performance targets established with the regulatory commission. Rather than reducing non-revenue water (NRW) from 50% to 40% and increasing tariff collection from 77% to 95%, NRW increased and tariff collection remained constant (PURC). GWCL suffered from managerial and technical problems which were aggravated by rising demand (Fuest & Haffner). Substantial loan offers for rehabilitating and extending urban water coverage coming from IFIs, e.g. the World Bank, were linked to a requirement for PSP. Initial plans to tender lease contracts for defined business units, subsequently adjusted to include a build-own-operate-transfer (BOOT) project, failed largely due to the insecure political and economic environment for private investment, a lack of transparency in the tendering process and resulting organised public resistance (Nyarko).

With the main objective of establishing long-term financial viability through increased efficiency and effectiveness, a five-year management contract was finally signed in 2005 between GWCL and Aqua Vitens Rand Ltd (AVRL), a Dutch/South African joint venture, which assumes management of all GWCL operations for a total base fee of US\$ 11m for the years 2006 - 2011 (Lievers pers. comm.; Kotei pers. comm.). The management contract is one element of the World Bank financed Urban Water Project (UWP) for Ghana, which provides a US\$103m loan to the Government of Ghana (GoG) for rehabilitation and expansion of urban water supply services. This stands in comparison to an estimated US\$400m required for rehabilitation and US\$800m for rehabilitation and expansion to meet demand (Lievers pers. comm., Fuest & Haffner). Under the management contract, the GoG retains sole responsibility for capital investment. The private operator is seconded GWCL staff (approx. 3200) except the GWCL Management Board, and is responsible for commercial services, customer care, O&M, minor repair and rehabilitation (with a budget of US\$10m) and staff training (budget of US\$1.5m) (Lievers pers. comm., Nyarko). Profits are handed over to GWCL, which is responsible for developing assets and for monitoring the operator, with the assistance of a technical auditor. GWCL is in turn monitored by PURC. The main responsibilities for AVRL under the contract are:

- Improve output from works (quality, quantity and flow)
- Reduce non-revenue water
- Reduce customer response times
- Customer accounts receivable and collection
- Interruptions and emergency response
- Reduce chemical usage
- Reduce power consumption (Liever pers. comm.; Nyarko; Kotei pers. comm.)

Both bonuses and penalties for AVRL to the extent of around 20% of the base fee provided by the World Bank are provided for in response to compliance or non-compliance with performance targets. Separate development goals were defined for the UWP including the creation of 50,000 new connections or standpipes, the reduction of staff per 1000 connections to below 10, and improvement of salaries of staff members (Lievers pers. comm.).

3.2.1 Performance of the GWCL / Aqua Vitens Rand Ltd. PPP

According to the Customer Care Director of AVRL, Cor Lievers, AVRL has achieved some improvements since 2006:

- The collection rate has increased from a previous 80% to 95%,
- AVRL has developed a system of equitable distribution of water in Accra, where water is rationed.
- The quantity of water produced has increased by 10%
- The process of controlling water quality has been improved and a professional reporting and analysis system has been established
- Implementation of a maintenance programme and staff training on maintenance
- In terms of provision to the poor, where standpipes are available, customers pay the life-line tariff (normally for consumption under 20m³), regardless of the amount actually consumed.
- Under the UWP, around 38,000 new connections serving 100,000 persons have been installed.

However, central performance targets (e.g. NRW reduction, energy consumption) cannot be properly assessed due to a lack of agreement upon baseline values. For example, a technical auditor was not called in to review the system in place until after the contract was signed (Kotei pers. comm.). The inability to measure performance also has a technical element, namely a lack of metering and monitoring equipment. Interviews with involved parties (AVRL, PURC) suggest that a premature contract with unclear delegation of responsibilities lies at the heart of the difficulties (Lievers pers. comm., Kotei pers. comm.). Since the beginning of operations, various memoranda of agreement have been signed between AVRL and the GWCL, and parties attest to an improvement of role understanding and relationships. A framework for evaluation is now coming into place one year before termination of the contract.

Further difficulties for the PPP include unstable management in AVRL (the managing director has been replaced twice to date (Kotei pers. comm.)), a yearly inflation rate of around 20%, to which water tariffs are not regularly adjusted, power shortages and a brain-drain of qualified personnel from GWCL who leave after acquiring training (Lievers pers. comm.). A review of the partnership and a decision regarding a possible extension is pending. The public remains ambivalent. Very poor households in particular do not benefit from the partnership because they remain without access. Social aspects were not explicitly included in the contract, although the GWCL is partnering with peri-urban communities and providing bulk-water supply (e.g. the Savelugu Community PuP below).

3.3 The Savelugu Community PuP arrangement

Savelugu is a rural town on the periphery of the Tamale Metropolitan Area (TMA) in the Northern Region of Ghana, with a present population of approx. 30,000. Prior to 1999, the community was heavily reliant upon unsafe water from dug-outs and dams; few could afford private tanker services, which typically charge considerably more than the public supplier GWCL (Lievers pers. comm.). In 1998, only 9% of the population had affordable access to potable water (Apoya). Guinea worm infection rates were among the highest in Ghana, with women and children accounting for the majority of cases (Adam 2005; Apoya). Acute public health issues and the desire to curb the exorbitant and uncontrolled prices of the informal private supply sector were the primary drivers of the community-driven Savelugu project, which aimed to increase equitable access to improved sources of water.

Lacking sufficiently reliable local sources of water, the Savelugu community perceived the reestablishment of a dilapidated connection to the Tamale public mains system run by the GWCL as the most viable solution. However, as a result of generally low rates of revenue recovery in the poorer peri-urban areas in Ghana, the GWCL was reluctant to make the necessary investments in restoring supply to this area (Apoya). UNICEF in particular, but also World Water Vision, the Guinea Worm Eradication Programme and the local authority (CWSA) provided arbitration services and economic assistance to establish a community partnership between the Savelugu Water Management Board and the GWCL (Abubakari pers. comm.; Adam 2005). In this partnership, responsibilities were delegated such that the GWCL supplies water in bulk daily and also provides maintenance services and technical advice to Savelugu, whereas the Savelugu Water Management Board is responsible for water distribution and retail to community members, recovering tariffs and covering the full costs of the GWCL (Adam 2005). The community, as a liaison between the water supplier and the community members, was able to develop flexible-payment and cross-subsidization rules to protect vulnerable members (Adam 2005; Apoya). Equally-gendered water and sanitation committees, in defined zones, oversee water distribution by agents who are commissioned to control sales and report daily to the committees. Revenues from sales are placed in a project account to cover payments to GWCL, staff salaries, maintenance and repairs (Apoya). A private management consulting firm was hired to develop institutional capacity in the community to manage the system. On a technical level, the project included the replacement of the main pipeline connecting the community to GWCL, the construction of 16 public fountains and the erection of a 20,000 gallon overhead tank provided by the GWCL. Six additional boreholes were constructed to supplement the supply coming from GWCL. However, some of these did not produce the expected quantities and others were capped due to lack of funding. Initial project expenditures accrued to approx. US\$ 650,000, with the community and the district contributing 10 % (Apoya).

3.3.1 Performance of the Savelugu PuP

A survey carried out by the Integrated Social Development Center and Community Partnership for Health and Development, Ghana, concluded that between the years 1999 and 2002, population with access to potable water increased to 74.4% and registered cases of Guinea Worm were reduced radically from above 600 to under 20 cases a year. Nearly full recovery of tariffs was possible over this period, in contrast with the GWCL average of 60% at the time and notwithstanding the GWCL water tariff increase in the year 2001 which caused a reduction of tariff recovery elsewhere in Ghana (ISODEC/CPHD; Adam 2005; PURC). According to the same survey, personnel and maintenance costs and a modest expansion of the system from 16 to 21 standpipes could also be covered by the revenues. Community borne system water losses remained constant at 15%.

Following the first four successful years, the outstanding obstacle for the sustainability of the Savelugu partnership became the increasingly undependable supply of safe water from GWCL, which gives priority to urban water supply, coupled with a quickly growing population (Abubakari pers. comm., Adam pers. comm.). A water crisis which peaked in the years 2007 and 2008 led to a stringent reduction and finally to a near halt of public water supply in Savelugu. With the population again resorting to unsafe local sources of water, Guinea Worm infections increased (Adam pers. comm., Aboagye & Hickling). Relief was provided by the 2009 increase of capacity at the Kpong Water Headworks, which supplies Accra and large parts of Tamale with water and has contributed to alleviating the supply crisis (Adam pers. comm.).

Further concerns regarding the long-term success of the partnership are its dependency upon continuing outside investment for rehabilitation and expansion costs, which cannot be fully covered by revenues, and the ongoing need for local management capacity development (Adam pers. comm., Abubakari pers. comm.). The initial capacity building measures carried out during the conception of the partnership have not been repeated, although personnel changes have taken place, in particular on the Water and Sanitation Committees. This could weaken the community's ability to efficiently maintain its water distribution.

3.4 Discussion and lessons

As with many past PPP experiences, the outcomes of the Ghana PPP to date are mixed. Indeed, they demonstrate similar findings to other cases as described in Chapter 2.1: improved financial management, higher production rates, but slow improvement of UFW. The price of water did increase, but the increases were moderate when inflation is accounted for. Public water remains less expensive than water from private tanker services. Nevertheless, the very poor have not profited noticeably under this partnership but continue to be reliant upon other often unsafe and expensive sources of water.

Some enablers for the PPP can be identified. It seems advantageous that institutional reform took place prior to the involvement of the private sector. The independent and committed Public Utilities Regulatory Commission has been able to provide some measure of price stability, has proven accountable and is in a position to help manage the public-private relationship. In light of the limited risk carried by the private partner, the PPP contract appropriately foresees that proceeds made by the private contractor flow back to the utility for reinvestment purposes. The major barriers to success have been the contract deficiencies coupled with a lack of data, the exclusion of pro-poor provisions and other factors lying outside the range of influence of both partners, e.g. the high rate of urbanisation. One of the key advantages of a PPP, namely the ability to contractually define performance indicators and to link these to economic incentives and penalties, could not come to bear in this partnership.

Four years into the partnership, it is too early to make a conclusive analysis on the success of the Ghana PPP in boosting utility performance. The ongoing review of the PPP performance must provide more factual evidence. At this point, various future outcomes appear possible, including both a continuation with the present partnership, the introduction of a new PPP or a return to sole public responsibility.

The initial great success of the Savelugu PuP (in terms of improving access to safe and affordable water, including to the very poor, and the associated improvements in the health sector) can be attributed to the provision of public funding and arbitration services to secure the commitment of GWCL in conjunction with the community mandate to take full control of utility and distribution (following decentralisation) and the local capacity building measures (Abubakari pers. comm., Adam pers. comm., Apoya). Partner responsibilities were delegated according to the "best-suited-to-do" approach. As manager of the bulk-supplied water, the community proved well equipped to operate efficiently and provide financial security and a high revenue return to the water supplier while ensuring greater equity

of access and low water prices for the poor. In this case, the community-driven, participatory effort contributed to strengthening accountability, integrity and transparency of water supply. This has previously been demonstrated in other parts of the world and very prominently in various Latin-American countries (Platz & Schroeder).

Ongoing, facilitating support (economic, financial management training) will remain necessary over a longer period of time to ensure the sustainability of the partnership (see comparable findings in UNESCO/ECA). Yet the greatest barrier to long-term and stable success has proven to be the low level of commitment on behalf of the public/private supplier, who is absorbed foremost by the challenges of urban supply.

4 CASE STUDY: SOUTH AFRICA

This case study examines a PuP between the local authority and Rand Water in Harrismith (2000-6), and a PPP (concession) between the local authority and BiWater in Nelspruit/ Mbombela (1999 – present).

4.1 Context

Following the end of apartheid, local authorities in South Africa were restructured with the aim of integration and reducing huge inequalities in service delivery. Overnight, many white municipal councils became responsible for neighbouring townships and homelands with low levels of access to basic services, high rates of poverty and unemployment and, in some cases, need for major infrastructure investments. Their existing service delivery models could not handle these new demands, and they were encouraged by national government to enter into partnerships to bring in new capacity and investment. Nelspruit and Harrismith are two such examples where local authorities took different paths.

4.2 The Harrismith PuP with Rand Water

In 2000 a management contract was signed between Harrismith municipality (later part of Maluti-a-Phofung (MaP) following restructuring) and the public water board Rand Water, with the aim of improving water supply services and addressing problems of non-payment, particularly in low-income areas outside Harrismith town (Van der Merwe). The contract established a ring-fenced service delivery unit within the municipal government, Amanziwethu Services (AWS), as a means to ensure financial sustainability. AWS was managed by Rand Water staff and operated by municipal employees. AWS paid the council a monthly contract fee and a contribution to monitoring costs. AWS was responsible for operating water services and revenue collection, and was permitted to retain up to 5% of revenue to recover its costs (a non-profit arrangement), as well as recovering costs related to the transfer and negotiation periods. The contract included a R1million² guarantee to allow the council to provide continuous service delivery in the event of a material breach by Rand Water (HTLC/Rand Water).

A highly consultative negotiation process took place in the 18 months before the contract was signed, and the PuP gained the support of both main labour unions (Van der Merwe). An independent consultant was appointed to monitor the contract, and monthly monitoring reports were submitted to a coordinating committee comprising representatives of AWS, the municipality, Rand Water and trade unions (Mayher & Robbins). The original contract was for three years. In fact the partnership continued for a further three years under a series of short term contracts, before AWS was merged with water supply units for other parts of the municipality into a single unit, MaP Water Ltd (ibid).

² US\$1 = Rand 7.4 on 16 March 2010

4.2.1 Achievements

The PuP dramatically improved management and maintenance efficiency, according to the independent monitor (Gibson pers. comm.). Metering was expanded, the customer database was improved, and billing and collection increased (Mayher & Robbins). Systems for logging of faults, financial management and monitoring were improved (AWS). In the first three years, UFW fell from 30% to 12% (Smith & Fakir). In terms of access, all areas of the municipality were already served with piped water when the PuP started but AWS achieved a steady increase in yard/household connections and reduced dependence on standposts (Mayher & Robbins). In 2000 many areas were dependent on a bucket system of sanitation, but by 2006 all formal households in the contract area were connected to waterborne sewerage (Gibson pers. comm.). Smith & Fakir report that the PuP had a strong focus on equity and was flexible and sympathetic towards customers who struggled to pay bills. Customers perceived both routine maintenance and response to complaints by AWS to be good, and reported that staff were efficient and courteous (Smith & Fakir). Safety improvements were made at treatment works to protect staff (AWS).

Initially the PuP turned around the financial status of the sector, which started with a deficit of R7million, and achieved a surplus of R2million in the second year (ibid). Surpluses were reinvested into maintenance and small capital projects to connect new customers and improve infrastructure (Gibson pers. comm.). AWS made considerable efforts to engage the community and explain the importance of paying water bills, including house to house visits and the establishment of service centres in decentralised areas (Gibson pers. comm.). Together with the fact that consultations during the negotiation phase had built general support for the partnership, this meant that fairly high payment rates were achieved (Smith & Fakir). However, according to monitoring reports, towards the end of the contract non-payment increased and AWS fell back into deficit (Gibson 2004). Flow restrictors were installed in households who consumed more than the free basic water allowance, which in practice restricted their access to water considerably as these restrictors allow only a slow flow of water. The independent monitor, however, believes that revenue is still much higher than it would have been had services been managed by the municipality alone.

4.2.2 Success factors

Rand Water brought in skilled personnel, both technically and in customer management, which the municipality alone could not have attracted as employees. It could also call on other experts from the head office if problems were encountered (Gibson pers. comm.). Rand Water was willing to put in more than they got out of the partnership, because they wanted to gain experience in the retail sector and were not bound by a commercial agreement (ibid). The establishment of a ring-fenced unit dealing with water services was also said to be critical because it ensured that dedicated staff were in place and had control of their own budget. Previously, the town engineer reportedly had to wait up to 6 months to gain approval for purchases of equipment because the budgets were controlled by the municipality (ibid). The presence of a dedicated unit with skilled staff also meant that municipal infrastructure grants were spent efficiently and the quality of new facilities was ensured. In contrast, many municipalities reportedly struggle to spend the grants they receive (ibid).

A dramatic improvement in the culture of performance in the sector has been reported, as new leadership brought in procedures to hold staff accountable for their performance, leading to reduced absenteeism and improved morale (Smith & Fakir). Commentators also report that there was high willingness to learn in the partnership, and that the coordination committee played an effective role in terms of reviewing achievements and adjusting plans when needed (Mayher & Robbins). The presence

of an experienced independent monitor was also said to be very important, especially as the council's own monitoring capacity was quite low in terms of both staffing and skills (Smith & Fakir).

Another success factor was the consultative process which built support for the partnership within the council, communities and trade unions. Job security was assured and workers' benefits and pay remained intact (ibid). Concerns of the municipality about loss of revenue were addressed by the inclusion in the contract of annual payments to the municipality to finance other services such as libraries.

4.2.3 Barriers and challenges

The most significant challenge was high levels of non-payment. The government's free basic water (FBW) policy meant that households could not be disconnected for non-payment, but flow restrictors were installed in households which exceeded 6kl consumption per month (the FBW allowance) and persistently failed to pay bills. The independent monitor reported that non-payment was in large part due to a lack of understanding of both the free basic water policy (some believed that it meant that *all* water would be free) and the costs of water production (previously, tariffs had been far below cost recovery levels) (Gibson pers. comm.). While good communication had built fairly broad acceptance of the partnership, some communities still felt that their views had not been taken up and many low-income households did not understand the formal processes for participation. In spite of efforts, AWS struggled to communicate and engage effectively with all types of households (Smith & Fakir).

The negotiation process to establish the partnership was also difficult at times. The council was divided and there was considerable resistance to bringing in any outsiders whether public or private. There were intensive negotiations including an intervention by the Ministry (national policy favoured partnerships). Trade unions were initially opposed but after many meetings they were brought into the process. Although their support had to be won, this is in contrast with many PPPs in South Africa; the South African Municipal Workers Union (SAMWU) has opposed private sector involvement in all cases. This negotiation period was quite costly for both partners. However, commentators felt that it was justified in terms of the improvements which resulted in Harrismith (Gibson pers. comm.) and also in terms of generating lessons and developing innovative partnership arrangements as one of the first PuPs (Van der Merwe).

Finally, although the partnership between the council and Rand Water was generally smooth once the contract was signed, there was some conflict over the use of flow restrictors after customers complained to the council about their use (Gibson pers. comm.). It has also been reported towards the end of the contract that some municipal officials resented Rand Water taking charge and were keen to assert their independence and control (Mayher & Robbins).

4.2.4 Subsequent developments and the legacy of the PuP

Many municipal staff who had worked for AWS benefited from skill development and have since continued working for MaP Water Ltd. Initially skill transfer seems to have been mainly to administrative staff (Smith & Fakir), but later it is reported that considerable capacity building also took place at managerial levels (Gibson pers. comm.). The current management unit is said to be performing well technically, however it still faces difficulties with cost recovery. The council has also sought to reassert some control (and to benefit more from revenue from water) and the unit is no longer ring-fenced. This means that some of the old bureaucratic procedures have returned, which are likely to adversely affect the efficiency of water provision (ibid).

4.3 The Nelspruit / Mbombela concession

In 1994 the municipality of Nelspruit was restructured and became responsible for large homeland areas and townships. The population of the municipality rose almost tenfold (from 24,000 to 230,000) but due to high levels of poverty and unemployment outside Nelspruit town, the total income of the municipality increased by just 38% (Kotze et al). Water infrastructure outside Nelspruit was severely neglected and many households relied on standposts. At this time it was estimated that over half the water produced was lost in the system (Brown). In the face of huge investment needs, but with a small revenue base to draw on and low borrowing capacity, the council approached provincial and national government for financing, but was unsuccessful. It was then decided to enter into a concession in the hope that the private sector could attract investment finance (Kotze et al). In fact private banks were unwilling to lend due to concerns about the risk of political influence being brought to bear on the PPP, but the state-owned Development Bank of Southern Africa (DBSA) eventually agreed to provide financing (Brown). There was significant opposition from communities and trade unions and the council was divided (with privatisation a highly political issue), but in 1999, after four years of negotiation, a 30 year concession was signed with the Greater Nelspruit Utility Company (GNUC) (partly owned by Biwater³) to serve the renamed Greater Nelspruit Area. The municipality received financial and technical support from the Municipal Infrastructure Investment Unit (MIIU), a national body set up to assist local authorities entering into PPPs.

Under the terms of the contract, GNUC was to spend R190m on capital investment in the first 5 years, of which at least 25% had to come from their own equity (Brown). GNUC was responsible for investments, O&M, billing and revenue collection. The concession fee was used in part to fund a Compliance Monitoring Unit within the council. The council reportedly stated from the start that commercial risk was to be borne by the concessionaire, and that they would not bail out the GNUC with state funds or permit tariff increases (ibid).

Following the signing of the agreement, a further restructuring of local authorities took place and the municipality was renamed Mbombela. The concession area remained unchanged.

4.3.1 Achievements

Some investments were made, focusing on extending services and improving infrastructure in townships and rural areas. By 2003 most townships received a 24 hour supply of water, of better quality than previously (Smith). According to a commentator in 2005, at that time access targets were being met (Brown). Access to a basic level of water service in the concession area has increased from 56% in 1999 to 88% in 2009 (Silulumanzi), even though the population doubled during this period. According to the concessionaire, in spite of this population growth, water production has kept pace with demand and there has never been a shortage of water (Jele pers. comm.). The tariff includes a cross subsidy for low volume water users. Water services are said to be well-managed and efficiently run, with skilled staff in place (Gibson pers. comm.). As in Harrismith, it is said that having a dedicated unit for water services and expert staff has made a huge difference to the quality of service delivery (ibid). The majority of investment, however, has not come from the concessionaire's own funds. Following the introduction of the free basic water policy, the concessionaire invoked a clause in their contract which allowed investment commitments to be cut (ibid). Investments have mainly come from Municipal Infrastructure Grants, which have reportedly been efficiently and effectively spent by the concessionaire, but these have not entirely filled the financing gap (ibid). In addition the financing from the DBSA came mainly from South African taxpayers, rather than bringing in external investment (Wellmer).

3 Following mergers and changes of ownership, Biwater is now Cascal.

Problems remain, however, in serving the poorest townships. In response to high levels of non-payment in the first years of the contract, the concessionaire adopted strict credit control measures, which in turn created a backlash in the form of increased illegal connections and the intimidation of workers by community members (Smith). Hall et al (2006) report that 6000 new connections were removed due to non-payment, including during a cholera epidemic in 2000. Following the introduction of the FBW policy in 2001, non-payment has been penalised by the installation of flow restrictors rather than disconnection, but these are still unpopular. In 2001 the concessionaire put investments in the townships on hold until payment rates increased (Wellmer). The concessionaire also negotiated tariff increases of 10% when FBW was introduced, followed by a further 10% six months later (Brown), and sought to reduce lease payments and access a reduced electricity tariff (SADOCC).

In recent years collection has started to improve; in the townships of Matsulu and Kanyamazane collection has risen from 3% to 10% and from 13% to 28% respectively between 2004/5 and 2008/9 (Silulumanzi). This has been attributed to increased efforts in recent years to communicate with these communities, and attention to complaints about the clarity and accuracy of bills as well as penalties (Brown; Gibson pers. comm.). Efforts have also been made to develop a customer database to help determine ability to pay, so that credit control efforts can be focused on those who could afford to pay (Brown). GNUC was renamed Silulumanzi in order to communicate more clearly that the concessionaire was not part of the council. Some of the townships still do not receive 24 hours of water service, reportedly due to a combination of shortages in water supply from a treatment plant operated by a public water board (Jele pers. comm.) and failure of the concessionaire to adequately tackle the problem of illegal connections on supply lines which fill the storage reservoirs (Gibson pers. comm.). Some attribute these problems to weak monitoring by an overstretched council and the lack of incentives for the concessionaire to work in areas where payment rates are low.

The concessionaire reported that all their projects are carried out by local contractors in order to promote local economic development, as long as capacity is available (Jele pers. comm.). Where contractors have to be brought in from outside, these must employ local labour. Meanwhile Silulumanzi has offered training in literacy and numeracy for many of its staff who were inherited from the municipality, and external training opportunities in areas such as small-scale farming and business (ibid). It also operates a "learnership" programme to train young people in water and sewerage services, with an eye to its future staffing (ibid).

4.3.2 Barriers and challenges

The major barrier to the success of this concession has been high levels of non-payment in the townships. In 2001, employment in Mbombela was 23%, and more than half of the employed earned a wage below the poverty line. Yet little attention was paid to the question of affordability of services for poor households in the preparation of the concession, by either the concessionaire or the municipality. The latter were primarily focused on obtaining capital investment (Wellmer). The concessionaire had limited experience of serving poor customers, and the council had limited monitoring capacity (ibid). An independent observer suggested that while the concessionaire had greatly improved water services as a whole, not enough attention had been paid to the needs of poor communities (Gibson pers. comm.). However, there is evidence of some lesson-learning and renewed efforts to communicate more effectively with low-income customers.

The negotiation of the concession contract took around four years, and so was very costly to all partners. Kotze et al note that some officials have concluded that the cost of the project far outweighed the benefits, and suggests some reasons why the negotiations were so protracted. Strong ideological opposition to the PPP by trade unions meant that the process was at one point suspended for six

months. The capacity of the municipality to negotiate a complex contract was weak and external support was needed (which came from the MIIU). No asset inventory or survey of procedures and systems was in place as a starting point for negotiations, so each partner conducted their own assessments. This took time and there was still disagreement over the results. Kotze et al suggest that this lengthy negotiation period worked in the favour of the private sector partner, as the bargaining power of the municipality declined and the private partner started to perceive the situation as risky and so demanded more favourable contract terms.

4.4 Discussion and lessons

Both the cases of Harrismith and Nelspruit illustrate the benefits which partnership with a skilled and experienced operator can bring. In both cases, service delivery improved dramatically, because of the expertise which was brought in and also the focus which comes from having a dedicated unit for water services. This was achieved with a public partner in one case and a private concessionaire in the other. While investment was predominantly public in both cases, the partners were able to spend this money more efficiently and effectively than most municipalities, putting in place high quality infrastructure.

Both partnerships faced similar challenges in terms of high levels of non-payment from townships and rural areas where incomes are low and there is a history of non-payment for public services for political reasons. Both partnerships sought to operate commercially and employed credit control measures to tackle the problem, including the installation of flow restrictors which have been heavily criticised for providing a slow trickle of water which makes daily life challenging and hygiene difficult to maintain. The PuP in Harrismith seems to have had more success in terms of engaging with the community, responding to complaints and concerns from customers and educating households, although Silulumanzi has started to make efforts in this direction.

An important difference between the cases was their political acceptability and the cost of developing and maintaining the partnership. While in both cases it was a struggle to convince opposing councillors and trade unions of the need to bring in an external partner, in Harrismith, where a public-public option was pursued, it was possible to build greater consensus of support for the partnership. Trade unions in particular are vehemently opposed to private sector participation in public services across South Africa, and political parties opposed to privatisation fuel the problem of non-payment by encouraging boycotts. All partnerships come at a cost, as negotiations have to be made and disputes may have to be resolved, but this was notably smoother and less costly in Harrismith than Nelspruit. This may be in part due to the larger size of the service area in Nelspruit and its larger investment needs, but it also seems to have been in part due to the fact that Rand Water was a public body which was not bound purely by commercial imperatives and which suffered less political opposition. In both cases, municipalities benefited from external expert support during negotiations, as they were inexperienced compared with the partners with whom they were negotiating.

Another difference was also the focus on capacity building of the PuP in Harrismith, where municipal staff have gained skills and technical knowledge through on-the-job learning. This left the municipality in a stronger position to manage services when it decided to end the partnership with Rand Water.

Both of these cases illustrate the importance of the performance of the local authority in partnerships. In both cases, the municipalities have been criticised for being too hands-off and not supporting the service providers enough in terms of communicating with communities and encouraging payment of bills. Municipalities also have an important role, alongside their partners, in thinking through affordability and the needs of low-income households, and also in regulation. These case studies suggest that while municipalities may hope to reduce their workload by entering into partnerships, they retain important roles and may need support and capacity building to carry these out effectively.

Comparing the two cases from South Africa, regulation was said to be more effective in Harrismith where an experienced independent monitor was brought in than in Nelspruit where an overstretched council was fully responsible for regulation.

5 CONCLUSIONS AND LESSONS

EC water policy under the 10th European Development Fund has shifted its focus away from PPPs in water management in ACP countries towards PuPs. This study aims at providing an evaluation of the comparative advantages of the respective approaches in urban water services so that the European Parliament Development Committee can develop its own position and approaches.

The following conclusions are drawn based on a literature review of published and unpublished research (econometric analyses, case studies and review papers), interviews with EC officials and other experts, and an in-depth examination of PPPs and PuPs in Ghana and South Africa involving review of available documents and telephone interviews with key actors. In this section, consideration is also given to the recommendations of a recent evaluation of EC development cooperation in the water sector and what these might imply for future support to PPPs and PuPs.

There is an important caveat to make regarding availability and comparability of information. Data on the performance of partnerships is patchy; most studies reviewed examined only a subset of the evaluation criteria which this study focused on; and indicators used are not always consistent. In particular, there is a dearth of hard data on the performance of PuPs. Econometric studies reviewed all note the difficulty of drawing true comparisons between a private and public situation, because of the lack of true counterfactuals, the wide variation in circumstances in which PPPs have been adopted in terms of initial levels of service, policy environment and socio-economic conditions, and the fact that PPPs have generally been accompanied by donor financing and other sector reforms. PPPs have also benefited from much greater financial and political support than PuPs, making an equal comparison difficult.

Data on the wider welfare impacts of partnerships is lacking in most cases, and this is also a complex area of assessment because these impacts may be indirect as well as direct, and may play out over long time horizons. Even less reference was found to environmental sustainability in the literature and this seems to be a neglected aspect of both partnership design and assessments.

Finally, it should be noted that the evaluation criteria employed in this study are not necessarily the same as the stated goals or objectives of the partnerships being reviewed. Very few partnerships have explicit objectives relating to growth, poverty reduction or environmental sustainability in particular. This means that it is possible that there are partnerships which performed well on their own terms, for example by improving financial management of a utility, but with little attention to these wider goals. PPPs are typically oriented towards securing investment, improving sector financial performance and service quality, and expanding coverage through new connections. PuPs may also be oriented to these goals in order to enhance the sustainability of water providers (many public sector providers take a highly commercialised approach to service delivery), but tend to also focus on capacity building and equity and welfare outcomes than commercial performance alone.

Responsibility for ensuring that partnerships contribute to – or at least do not undermine – wider societal goals, and in particular equity, lies mainly with governments, but also with donors who support and assist governments in partnership design and management. For this reason, it is important that a range of partnership options are open to governments or municipalities seeking to improve the performance of public water providers, as well as sound information about their comparative advantages, costs and risks, so that partnerships can be developed which meet the needs and priorities

of each context. It is important that governments are able to exercise choice in terms of the kind of partnerships that they undertake, with support from donors that is not tied exclusively to a particular model.

In many African countries, municipal governments have taken on responsibility for service delivery under decentralisation policies. Decentralisation creates opportunities for greater engagement with communities leading to more responsive services, and for new partnerships with local entrepreneurs and civil society groups (see for example the case of Savelugu in section 3). However, it also presents challenges as municipalities may lack the skills and/or resources to fulfil their new roles.

5.1 Comparing PPPs and PuPs

The performance of PPPs has been very mixed. There are some success stories but also many examples where targets have not been met.

The main benefit of PPPs seems to be efficiency gains and improvement in hours of service. Good contract design and regulation are needed to ensure that efficiency gains are passed on to consumers. On other aspects of service improvement, the results of PPP have been mixed. Short-term involvement of the private sector can boost utility performance by bringing in new approaches such as performance management.

Where PPPs have successfully extended coverage this has been primarily through the use of public/donor funds as well as revenue from users. The prospects for attracting private investment in urban water provision in ACP countries are very limited, owing to the high costs and risks. Private partners often lack an incentive to provide services to poor households unless specific targets are included in contracts and enforced through regulation. Service to low-income households has been the weakest aspect of PPPs.

Tariffs often rise under PPPs. This may often be justified in order to move towards cost recovery, but provision needs to be made to ensure affordability for low-income households.

PPPs are often costly as they require complex negotiations and are often highly contested by politicians and civil society. Renegotiations and disputes often happen during PPPs as the private partner seeks to adjust the contract terms in response to changes in the external policy environment or the reality of cost recovery prospects on the ground. Costs are also linked to the capacity of governments to negotiate and manage an equitable partnership agreement.

PPPs are most likely to be successful, and to generate more equitable social outcomes, where the underlying policy framework and capacity for regulation are strong. Flexible arrangements allowing collaboration with civil society groups and existing local providers are likely to be most effective at serving low-income households appropriately.

In small towns, partnerships with small-medium local entrepreneurs may offer a positive way forward in terms of improving services, especially if the operators are based in the region. The costs are much lower than for PPPs in large cities with international companies.

In contrast, PuPs are likely to be less costly as goals are broadly shared between the partners, there is likely to be a higher degree of trust due to the non-profit motive of both parties, and opposition is usually less. However, time still needs to be invested in partnership design and tensions may still occur, as seen in the case of Harrismith, South Africa.

PuPs tend to be more oriented towards capacity building rather than cost recovery alone. However, PuPs may struggle with sustainability and financing unless external support is made available. Without the right incentives, supportive partners might not be able to release their best staff.

PuPs can bring accountability benefits through greater transparency and engagement with communities, in contrast with PPPs where contracts and reports are often hidden due to commercial confidentiality (see the case of Ghana).

PuPs with experienced municipalities and water boards have the potential to build capacity for a more integrated approach to (a) urban services and infrastructure, and (b) the water cycle. This would increase partnership impact and sustainability.

Innovative partnerships including communities, civil society and/or local private operators can bring benefits of flexibility, good contextual understanding and a commitment to the local community and can complement traditional municipal or utility provision.

Both PPPs and PuPs encompass a range of different partnership types, so the choice is not simply between a public or private partner, but also about who the partner should be and what type of arrangement should be entered into, and for how long. The choice should depend on the aims of the partnership and also contextual factors such as the capacity of the municipality or government. Long-term PPPs are risky unless there is high capacity for negotiation and regulation.

5.2 Broader Lessons

Entering into partnership with either a private or public actor can help to increase capacity for service provision by bringing in new expertise, and thus improve both efficiency and the quality of service (as seen in South Africa). The key is to select a partner with the necessary experience and skills, based on a sound assessment of existing capacity and needs. As all case studies illustrate, however, partnerships cannot necessarily overcome severe underlying constraints such as shortfalls in investment finance and high levels of poverty which limit prospects for cost recovery. A sustainable impact is more likely where transfer of skills is part of the arrangement, rather than just contracting out management.

As discussed above, PuPs have the potential to offer different benefits from PPPs. Each type of partnership also has its own challenges. Partnerships should be tailored to the local context and needs, including the selection of partners. Governments entering into partnerships need to have good information on the options available, their advantages, costs and risks.

Engaging with local CSOs, NGOs and community organisations is likely to be an effective way to improve services for low-income areas, e.g. peri-urban areas, because of the innovative approaches, local knowledge and pro-poor motivation of these groups. This is recommended whether services are publically or privately provided, although it is important to remember that these groups may have their own challenges and agendas.

The behaviour of *both* partners is critical to the success of partnerships. If local authorities or governments are not fully on board or committed, this can undermine the success of partnerships. Where governments have sought to 'wash their hands' of responsibility for water services by bringing in partners, this has sometimes resulted in weaknesses in monitoring and also in communication with the public. This means that capacity building within government is important, whatever kind of partnership is planned. PuPs could therefore be useful to build capacity in a municipality which plans to engage the private sector in certain aspects of its work. This said, PuPs should not be seen simply as a tool to prepare the ground for PPPs as they can also offer a potential alternative.

External support is also important to the success of partnerships, both financial and advisory. In the case of PPPs this is particularly important during contract design, in the area of regulatory capacity, and to mediate any disputes between partners. In the case of PuPs, matching of partners, financial incentives for supportive partners in capacity building arrangements, and support to the formalisation of contracts

and monitoring arrangements are more important. PuPs in general are likely to require a 'lighter touch', particularly where there is no transfer of responsibility for management of services.

Governments need to retain the flexibility to end a failing partnership without incurring crippling costs. Service contracts where the private sector is brought in to improve specific aspects of management offer more flexibility and lower risk for government partners than long-term concessions or leases. Management contracts fall in between these options in terms of risk, though where the operator is public it may be possible to develop more low-risk agreements, as in Harrismith.

Baseline data on infrastructure, customers and their water use is important to ensure the right contract design and allocation of risks and responsibilities for operational partnerships, gain a realistic understanding of where subsidies are needed and prospects for cost recovery, reduce the chances of disputes later on and ensure affordability and appropriate provision for low-income households. This information is also necessary for monitoring and learning, and to hold providers accountable for targets not met.

Establishing baseline information and systems for monitoring and regulation should be a priority and given a binding timescale. Providers of economic and development assistance need to be aware that this is necessary to avoid setting up partnerships which fail because they are based on false assumptions, particularly for PPPs and particularly where partners share the risks and responsibilities of service delivery

More attention needs to be paid to the wider welfare and equity impacts of partnerships during both preparation/planning phases and in assessments of performance. These wider impacts depend strongly on the overall policy framework, but effective design of partnership targets and incentives followed by good regulation can ensure that partnerships contribute to these goals and that benefits accrue to consumers, including low-income groups. A lack of attention to equity in design and weak regulation can result in the opposite effect.

Further research is needed on how best to design and support PuPs. This should include lesson-learning from new initiatives such as GWOPA and current EU Water Facility Financing for PuPs. The use of incentives to support goal achievement and increase partner motivation should be considered. A stronger support of African-African PuPs and possibly local PPPs (along the model of South American PuPs) could be advantageous for overcoming acceptance problems through better cultural understanding.

Bulk schemes similar to the Savelugu model (see Ghana case study) should be considered in support of pro-poor provision, perhaps in partnership with local community organisations, if local institutional and governance arrangements are sufficient for management. This can lead to greater and more stable revenue return and reduce insecurity for investment. Here again, commitment of partners is critical and supply must be dependable for such schemes to function.

Donors interested in supporting services in small towns should seek to learn lessons from both experiences with local private operators and capacity building partnerships between municipalities, as both of these approaches have the potential to improve services where municipalities lack the necessary know-how. Resources are often a severe constraint to local government, however, so partnerships may be of limited effect without accompanying financing from government or donors.

5.3 Past EC development support in water and sanitation: lessons for PPPs and PuPs

A 2006 thematic evaluation of EC development support to the water and sanitation sector (JEU) offer a number of lessons when it comes to supporting partnerships in urban water. The evaluation highlighted the important of cost recovery for sustainable services (JEU, p. 90). This is an area where

private sector involvement could be beneficial. However, the evaluation also recommends that greater focus is needed on capacity building and on linking service delivery with resource management to ensure sustainability (ibid, p. 91). These are areas where PuPs probably have more to offer. The evaluation further recommended that better targeting of different service levels to households of different income would promote both access and sustainability (JEU, p.90). As discussed earlier, the private sector has often struggled to provide differentiated services for low-income households (Marin).

The evaluation further recommends that the EC should make “more creative use... of the opportunities provided by PPPs” to ensure that the needs of different beneficiaries are met, in particular by working with CBOs and NGOs (ibid, p. 96). These accords with findings from the literature, which suggest that PPPs are more likely to effectively serve the poor where community-based or civil society groups are also involved in the partnership. However the evaluation also notes that there is to some extent a trade-off between cost recovery and affordable services for the poor, and that inadequate attention has often been given to ensuring that pro-poor services are delivered (ibid, p.6).

A special report by the Court of Auditors on EC technical assistance recommended that “more options should be considered regarding procurement possibilities to allow the best possible choice of technical expertise, *including expertise from public institutions and expertise available in the beneficiary country or the region*” (ECA, p. 15, emphasis added). The report also notes that procurement arrangements have been geared towards international consulting firms, but that more suitable experts may be found in public institutions or the local/regional private sector. Altogether, these documents provide evidence in favour of opening up EC support for partnerships to include PuPs.

5.4 Final remarks

Overall, the bottom line question in terms of improving services is not so much whether a PPP or PuP is adopted, but rather whether appropriate institutional arrangements, financing mechanisms, subsidies and policies for pro-poor service provision are in place, and the capacity and willingness of government to take leadership in these areas when needed. Donors can work through policy dialogue to support reform in these areas in parallel with supporting partnerships. Involving a partner with the right expertise and capacity, which includes not just technical aspects but an understanding of customer care and the particular needs of low-income areas and households, may be most important. This expertise may come from the public or private sector, and public sector providers and local private operators may offer a wealth of experience which has not yet been tapped. The important thing is to assess the local context and needs, explore partnership options and take the time to develop an appropriate arrangement for each situation.

It is important that governments are able to exercise choice in partnership development, and retain the flexibility to change arrangements which are not working. Providing effective water and sanitation services for urban areas in developing countries is challenging and there are no easy solutions, so room to experiment with new approaches is key. Support to new PPPs should consider working with the private sector in more flexible ways with lower risk to municipal governments. Opportunities to partner with local private sector organisations and entrepreneurs should be explored, particularly for small towns. Partnerships with NGOs or CBOs – whether the service provider is public or private – are recommended where there is a need for new approaches to serve low-income households, although these partnerships may need capacity support. There is also a need for better monitoring of partnerships for lesson-learning and also accountability purposes.

This is not to say, however, that it does not matter whether a partnership involves the private or public sector. Involvement of the private sector, particularly in relatively short-term flexible arrangements, can

bring improvements in efficiency and management of services, but costs are high. In the ACP context PPPs require strong policies and regulation to ensure benefits reach poor households, so if a PPP is the chosen route governments are likely to require assistance in these areas. PuPs in contrast are likely to offer more capacity building and a greater focus on equity, and are less likely to be beset by tensions in both design and implementation. They can also turn around municipal/utility performance, including in financial terms, as seen in Harrismith and Dar es Salaam. Because of greater trust and because no profit is sought by either party, they are also cheaper. PuPs also offer the potential for more holistic and integrated approach to services. However, public or community-based partners may struggle with financial sustainability and technical capacity, and require external support.

PuPs are less well tested but given the very mixed experience of PPPs and the initial success of some PuP experiences, this alternative is certainly worthy of support. The primacy which has been given to PPPs appears somewhat unjustified. Given the existing financing and technical support available from a variety of donors for PPPs, it is recommended that dedicated funds are made available for PuPs – such as currently offered by the EC – both to ensure that PuPs are an accessible option for governments seeking to enter into partnerships, and to enable PuPs to develop so that their potential can be better understood. Forthcoming PuPs should be carefully followed for further lesson-learning.

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6.1 Interviews conducted

Alhassan Abubakari	Savelugu Management Board, Ghana	18 February 2010
Al-Hassan Adam	Coordinator, Africa Water Network (NGO), Ghana	28 February 2010
Daniel Bampoh	Director, Project Management Unit, GWCL, Ghana	8 March 2010
Efstathios Dalamangas	EuropeAid	19 April 2010
Lutz Deeken	Director, International Activities, Fichtner Water & Transportation GmbH	4 March 2010
Stewart Gibson	Independent consultant, South Africa	12 March 2010
Olivier Hoedeman	CEO, Corporate European Observatory, Brussels	18 April 2010
Richmond Jele	Public Relations Manager, Silulumanzi, South Africa	12 March 2010
Nii Kotei	Director of Water, PURC, Ghana	5 March 2010
Andre Liebaert	DG Development, European Commission	18 April 2010
Cor Lievers	Director, Customer Care, AVRILtd, Ghana	25 February 2010
Eduardo Sorribes-Manzana	DG Development, European Commission	18 April 2010

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