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**35th WEDC International Conference, Loughborough, UK, 2011****THE FUTURE OF WATER, SANITATION AND HYGIENE:  
INNOVATION, ADAPTATION AND ENGAGEMENT IN A CHANGING WORLD****Abandoning community management  
for 'professionalization' of water supply in rural Benin***A. Le Gouais & J. Webster, UK***REFEREED PAPER 1049**

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*How to achieve sustainability in rural water supply is an ongoing challenge and involvement of the community is often seen as crucial for long term success. However, in Benin community management is generally viewed as a disaster after years of poor management, particularly misuse of funds, which has led to unsustainable systems. As a result, the national strategy has shifted away from community management and towards 'professionalization' and promotion of the private sector in rural and small town water management. This study analyses the attitudes of key stakeholders, particularly decision makers, towards four forms of management which local authorities can chose to impose, involving community Water User Associations (WUAs) and the private sector to varying degrees. It shows a strong preference towards excluding WUAs by the water services, who advise local authorities, as well as by facilitators. However, some areas continue to include WUAs to avoid conflict with communities.*

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**Background**

Benin, West Africa, is undertaking decentralisation, giving responsibility for rural water supply to local authorities. Since the 1980's there has been community management with a demand driven approach, however, there have been numerous difficulties and poor management practices resulting in many boreholes and piped supply networks not having the necessary funds to repair breakages, causing systems to fall into disrepair. In response to this, the national strategy of 2005 – 2015 changed to encouraging 'professionalization' and involvement of the private sector through lease contracts ('affermage'). It is based on the three principals of: 'l'eau paie l'eau' ('water pays for water' – water is sold by volume); delegated management to an operator; and decentralised monitoring to ensure sustainability.

The national strategy involves providing handpumps in sparsely populated areas (one handpump for a population of 250) and piped networks in more densely populated areas which can include multiple hamlets, villages and small towns (one standpost with two taps for 500 people). A piped network includes a borehole with a pump (powered by electricity if connected to the grid, a generator, or less commonly, solar power) which pumps water into a water tower. Distribution is through multiple standposts and private connections which can cover different villages spread over many kilometres. Photograph 1 shows an example of the main components of a piped network.

This study focuses on the management of multi-village piped water supply networks in Mono and Couffo, two (out of 12) of the most densely populated regions in Benin. In Mono the rural population is approximately 386,000 with 48.5% water supply coverage and 9.1% of water points not functioning; in Couffo it is 574,000 with 46.1% coverage and 23.9% not functioning (Sédjamé et al. 2007).



**Photograph 1. Components of a piped network.**  
**Clockwise from bottom left: borehole; water tower; and standpost with water seller and user**

## Methodology

The research was carried out in four stages:

1. Literature review and background understanding of the programme through documents and discussions with water service staff, including a DED/GTZ Technical Advisor who worked with Mono/Couffo water service for 14 months.
2. Attending a 10 day training course for facilitators of rural piped networks of Mono, Couffo and four other regions (the areas supported by GTZ/DED/KfW) to learn about the theory of rural piped water management and the views of key individuals in the water services, ending with a questionnaire for the facilitators.
3. Conducting semi-structured interviews and discussions with key stakeholders for rural piped networks in Mono and Couffo to understand their views about the management. Discussions were also carried out with water sellers and users of different networks and direct observation was done in villages and small towns.
4. Review of findings with NGOs involved in water supply in the focal regions.

Five local authorities and nine villages/small towns were visited within Mono/Couffo and interviews, discussions and observations were carried out in each. The local authorities were chosen following discussion with the regional water service staff of Mono and Couffo, to ensure that a range of piped network management structures were included. The villages were chosen by the facilitators.

Table 1. Local Authorities included in the study		
Region	Local Authority	Management structures in place
Mono	Lokossa	Private Operator only and WUA only
	Houéyogbé	WUA only (to become Private Operator only)
	Grand Popo	Under construction therefore not yet decided. Extension of the urban water network is community management
Couffo	Djakotomy	Production-distribution and Private Operator only
	Aplahoué	Tripartite and Private Operator only

Stakeholder group	Semi-structured interviews	Informal discussion	Training course	Questionnaire	Meeting observation	Total
National water service		3	4			4
Regional water service	3	2	3		1	7
NGO	4	4				4
Local Authority	6				3	9
Head of lowest level administration		2				2
Facilitator	1	8	16 <sup>1</sup>	36 <sup>2</sup>		38
Water User Association (WUA)	2 <sup>3</sup>					8
Private operator			1			
Network technician	1		1			1
Water seller	1	12				12
Village chief					1	1
Community member		7				7
Total	18	38	25	36	5	94

## Findings

### Problems with community management

Community management in Benin was commonly described by people from the water services, local authorities and facilitators in French as ‘une catastrophe’ – a disaster. The problems included a lack of well established structures to support and train communities leading to management problems including insufficient monitoring and advice. This resulted in cases of poor financial management and weak transparency: for example bonuses given; payments not always authorised; loans given which may not be paid back; embezzlement of funds by the management committee; using renewal funds for activities not related to the system; and water not always paid for. Management of breakdowns was also inefficient and technicians poorly equipped. There were no salaries paid which may have led to a lack of incentive for good management. Although some allowances were available for the management committee, these were unclear. There was also commonly a lack of knowledge of roles, procedures and responsibilities and in some cases no functioning management committee. There was also lack of transparency over initial investment contributions and possible subsequent dominance by larger contributors (Taisne and Cissé 2000). Although money was said to have often been stolen by the management committee, people may not have been punished (they may have left the community) and the population may not be aware of the thefts.

There was generally weak involvement of the population in the management with not all levels of the community involved. Instead it was commonly based on existing hierarchies with a particular lack of involvement by women (often a single woman was on the committee as the treasurer, but in practice it was the men of the committee who controlled this role). Some management committees did not act in the interest of users, but were more concerned with profitability.

The demand-led approach had resulted in an unfair distribution of water points which did not meet the needs of the people - some areas have multiple points whilst in others people have to walk for long distances to collect water (DED/NEGO COM, 2008).

Although there were some well managed water systems, problems faced by others led to the general belief that community management failed and sector reform was required. Many stakeholders were led to believe that communities cannot be trusted to manage their own water systems and the national strategy was changed to abandon community management and the demand-led approach, instead aiming for 'professionalization', involvement of the private sector using lease contracts and supply based on local authorities' own development plans.

### **The new approach of 'professionalization' using lease contracts**

Under the new approach, the WUA is no longer owner of the water systems. Instead it is the Local Authority and it is they who choose the form of management for the piped network. The new strategy aims to promote sustainability with mechanisms in place to save money for renewals and extensions of the system, as well as providing a financial incentive for a private operator to manage well since he is able to take a profit (or loss) per cubic metre of water sold.

### **The four forms of management able to be chosen by Local Authorities**

1. **Private Operator only:** The private operator will sign a contract directly with the Local Authority to sell water at a fixed price, ensuring proper operation and maintenance of the system. They pay the Local Authority a bond at the start of the contract and a monthly charge to its renewal and extension account as well as to its general budget. The Local Authority should renew the pump system and provide extensions to the network. Users do not have a direct management role and a WUA is not included in the management contract. If there is a WUA, which is not compulsory, their role is just to monitor the system and question the elected Local Authority if there are any problems.
2. **Tripartite:** The Tripartite option involves a three-way contract, sharing roles between the private operator, users (WUA) and the Local Authority. The private operator's role is the same as for the contract with Private Operator only, however, it must also pay a monthly charge to the WUA. The Local Authority and WUA co-manage the renewal and extension account and decide together the renewal and extension work. The WUA also monitors the private operator's contract.
3. **Production-Distribution:** With 'Production-Distribution' there are two separate contracts for the Local Authority: one with the private operator for production of water, and another with the WUA for its distribution. The private operator does the technical production and maintenance of the pump system up to the borehole meter and then sells the water to the WUA at a fixed price. It also pays a bond to the Local Authority at the start of the contract and a monthly charge for renewals, according to the volume of water sold, which is managed by the Local Authority. It also pays monthly to the Local Authority's general budget. The WUA is responsible for everything beyond the borehole meter, including distribution of water. It pays a monthly charge to the Local Authority's extension account which is managed jointly.
4. **WUA Only:** In this option the WUA acts like a private operator with the same responsibilities as in the contract with Private Operator only, however it does not pay the bond at the start of the contract. It is preferred, but not compulsory, that the WUA also has its own contract with a private company to ensure the specialised maintenance tasks are done for the pump system (DG-Eau, 2008). This is not the same as community management since the WUA signs a contract with the Local Authority and can be replaced if the contract is breached. The Local Authority manages the renewal and extension account.

<b>Management contract</b>	<b>Production of water</b>	<b>Distribution and sale of water</b>	<b>Operation and maintenance</b>	<b>Pay bond to Local Authority (LA)</b>	<b>Pay to renewal account</b>	<b>Pay to extension account</b>	<b>Pay to LA's budget</b>	<b>Pay to WUA</b>	<b>Manage renewal account</b>	<b>Manage extension account</b>
Private Operator (PO) only	PO	PO	PO	PO	PO		PO	N/A	LA	LA
Tripartite	PO	PO	PO	PO	PO		PO	PO	LA & WUA	LA & WUA
Production-distribution	PO	WUA	PO & WUA	PO	PO	WUA	PO	N/A	LA	LA & WUA
WUA Only	WUA	WUA	WUA	N/A	WUA		WUA	N/A	LA	LA

### **When each type of contract should be chosen *in theory***

The national water services provide a guide to all local authorities to help them decide which type of management contracts to choose for their rural piped water networks, in line with the national strategy. It states that for new and rehabilitated piped system the Local Authority must choose:

1. Private Operator only;
2. Tripartite; or
3. Production-Distribution.

The final option of 'WUA Only' should only be chosen for existing, well managed networks which do not need rehabilitation. The WUA is then able to take the role of the private operator.

The project monitoring the Growth Strategy for Poverty Reduction in the water and sanitation sector in Benin states that the preferred management option is 'Tripartite' (DED/NEGO COM, 2008).

### **When each type of contract is chosen *in practice***

The water services prefer the contract with a Private Operator only and the local authorities and facilitators are strongly encouraged to use this management structure for all new piped systems. Only in the case where the existing WUA has managed the network well can the other options be considered, and even then these options should only be chosen to avoid conflict and ease tensions (there are cases where communities sabotaged networks including breaking pipes and standposts). The contract with WUA only is generally not recommended and the Production-Distribution contract is also not encouraged. Whilst the contract with a Private Operator only is the most common form of management under the new strategy, local authorities are still deciding which forms of management they want to use depending on the local context.

In one Local Authority, Houéyogbé (Mono), the contract with a Private Operator only was chosen for all systems, including those which had been well managed under the old system of community management. In this case the old WUAs were being forced to become a registered company and compete against private operators for the management contract.

Tripartite was chosen in Aplahoué (Couffo) for the existing networks to involve old WUAs in the management. The contract for a Private Operator only was chosen for all new systems. Production-Distribution and WUA Only contracts are not liked since there is a belief that it will result in the same problems faced under community management.

In the Local Authority of Lokossa (Mono), the council had initially chosen the contract with solely a private operator across all its piped networks, but this had proven to be unpopular with the people. Therefore the four options were explained and the population given the choice as to which they prefer. They all chose the contract with WUA only and so the private operators were to be replaced.

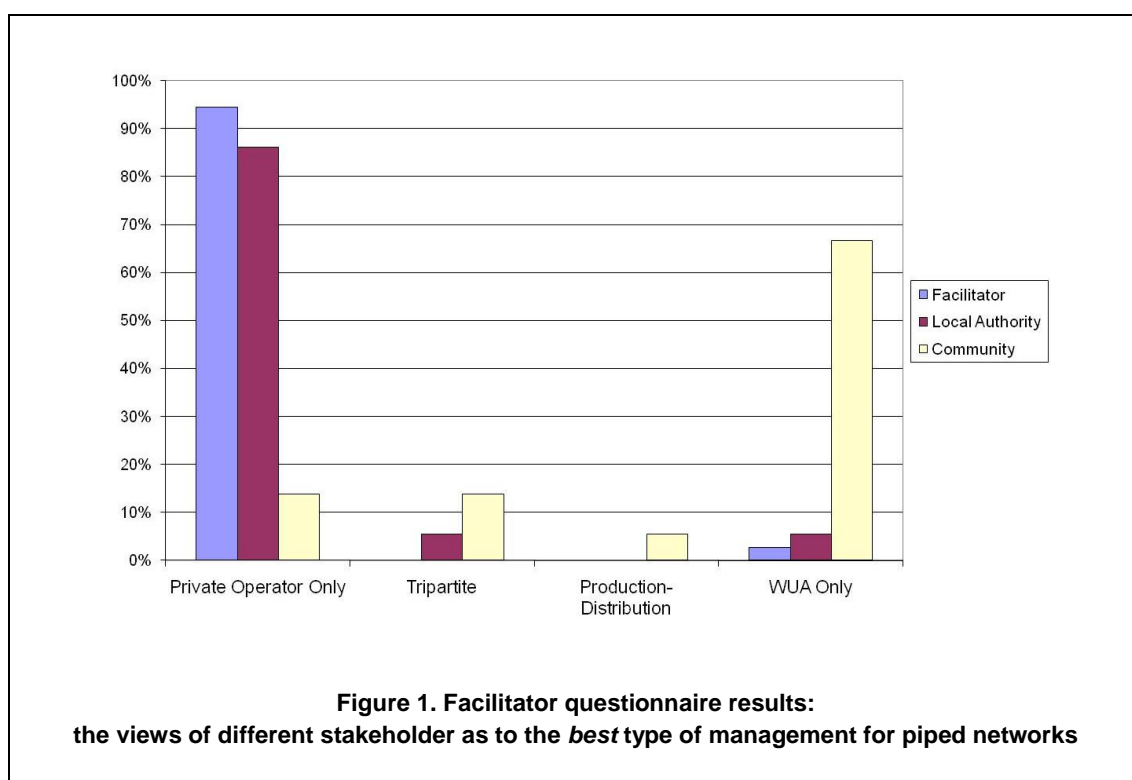
In Djakotomey (Couffo), there are four existing piped networks. Of these, Production-Distribution was chosen for the two systems which had few problems under community management, and Private Operator only chosen for the other two which had had more problems in the past, such as money stolen. New

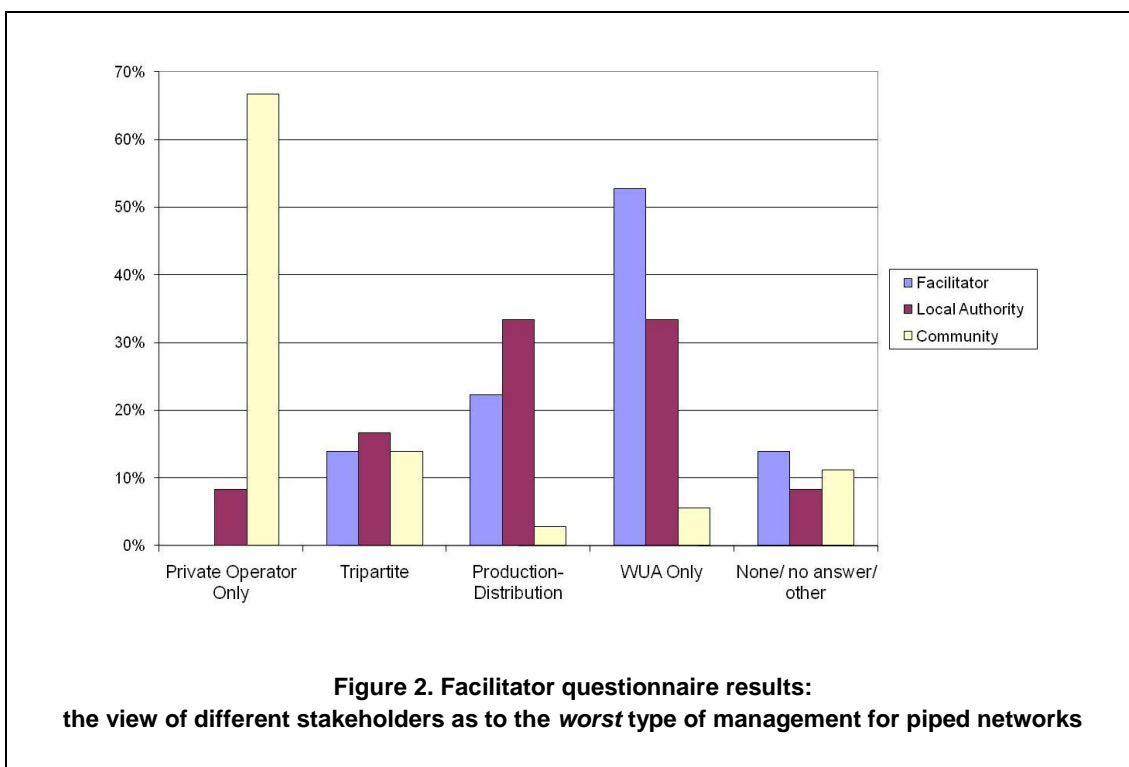
networks are due to be managed with the contract Private Operator only, but there were problems in one village where a completed new network has never been used since there is dissatisfaction by the community about the proposed private operator managing the system.

In Grand Popo (Mono) there were no completed rural piped networks at the time of research, but construction was underway. The Local Authority had not decided between any of the four options for the new networks at that time. In one coastal area there were standposts from an extension of the urban water network which were under community management.

**Stakeholder views on the choice of management contract**

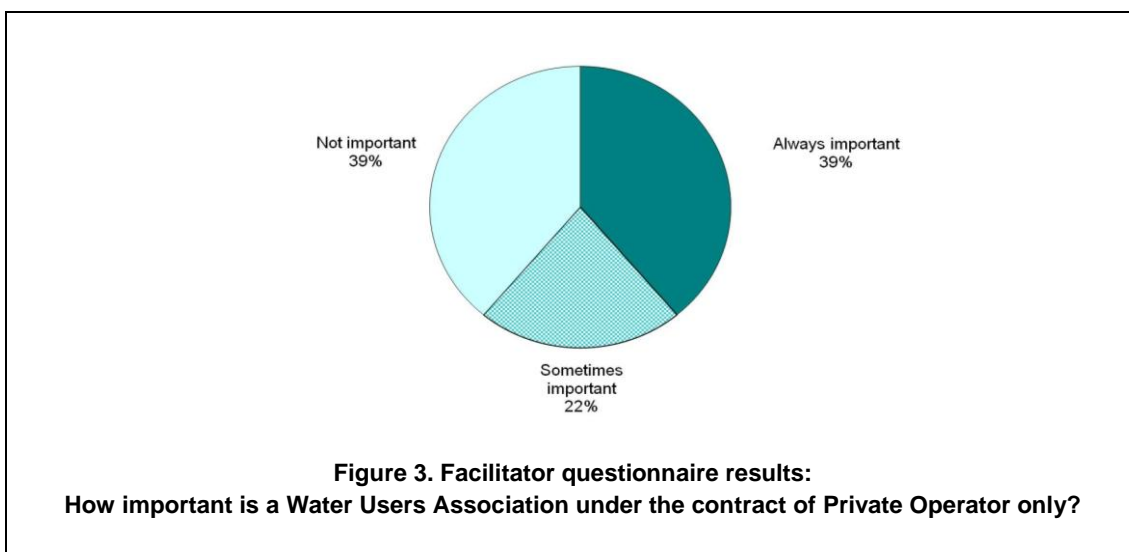
A questionnaire was conducted amongst the facilitators, a group who work with all major stakeholders, about their views on the management of piped networks. The facilitators were from local NGOs and employed by local authorities to liaise with communities about the piped networks and provide them with information about the management structure chosen for them. They were used to help overcome a lack of capacity of the local authorities. The questionnaire was conducted at the end of the 10 day training course on social intermediation and piped water networks, run by the water services, for all piped network facilitators of Mono, Couffo, Plateau, Donga, Ouémé and Atacora regions (half of the regions in Benin). 36 out of the 38 facilitators from these six regions returned their questionnaires (95% response rate). The facilitators were asked what they thought the best and worst types of management were for piped networks, as well as their views on what the local authorities and the communities would think. Many had held similar jobs before (69% had been facilitators for at least one year and 31% for at least five years) and some even lived in affected communities, therefore they were believed to have an awareness of the general attitudes towards the new management options. The results are shown in Figure 1 and Figure 2. It is clear that they expect there to be a significant difference between the views of the local authorities (who make the decision about what type of management structure is used) and those of the communities who use the networks (and may have previously managed them).





The contract with a Private Operator only was preferred because it was believed that they were better able to manage than WUAs. It was thought this would avoid problems (which had occurred during community management), it was the easiest contract to monitor, transparent and had clearly defined responsibilities. It was also viewed as profitable for the local authorities. It also was suggested during the course of the research that some staff of the water services had a vested interest in promoting private operators. This is also possible within the local authorities.

The facilitators thought a contract with a Private Operator only would be least preferred by the communities, who would favour a WUA Only contract since they would want to be involved in the management of what they view as their water network. They would not like a single person profiting from them and they could not obtain profits themselves. This view was found in interviews with WUAs and an example was seen in one village where the chief was blocking the use of a new piped system since he was unhappy with having an external person run it.



Many facilitators did not see community involvement in the form of an informal WUA alongside a Private Operator only contract as important, as seen in Figure 3.

The contract with WUA only was least preferred by the water services, local authorities and facilitators since it was seen as the same as community management which had numerous problems. It was thought that the Local Authority would not be able to control the WUA, funds would be diverted and the Local Authority would not receive the charges due.

The contract 'Production-Distribution' was not supported since it was thought that the multiple contracts would be difficult to manage and roles and responsibilities were not clear. There was also the risk of conflict between the WUA and the private operator as failure of one would affect the other.

Complaints against 'Tripartite' were that there were too many actors and the actions of one would harm others. There were also concerns that the private operator would be required to pay too many charges.

## Conclusion

Involvement of the private sector is being encouraged to avoid previous problems with community management, most notably that of financial mismanagement. The advising water services are promoting contracts between private operators and local authorities to manage rural piped water networks as a way to bring in new skills and improve sustainability. However, the local context is crucial in determining whether a WUA should also be included to monitor a private operator and avoid conflict from communities who see the water network as their own. In some instances, mainly for well managed existing networks, community involvement in the management contract occurs, albeit with limited representation of the general population, especially women, and possibly through conversion from a WUA to a business. In all contracts monitoring and technical support is still needed to avoid the same problems experienced during the period of community management.

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## Notes

<sup>1</sup> Observation focussed on one of the two classes, including accompanying them during two field visits.

<sup>2</sup> 36 out of 38 facilitators at the training course completed the questionnaire.

<sup>3</sup> One WUA interview involved 8 committee members. The other was only with the WUA president.

Some terminology has been changed from the original: piped networks are 'Adduction d'Eau Villageoise' (AEV). During community management WUAs were 'Association des Usagers d'Eau' (AUE). In the new system they are 'Association Consommateurs d'Eau Potable' (ACEP). The contract 'Private Operator only' is 'commune-fermier'. The contract 'WUA Only' is 'commune-ACEP'.

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