

**Town Water Supply  
and Sanitation Services  
Volume 3**

**Water User Associations**

**Companion Paper B1**

**Jo Smet  
IRC International Water and Sanitation Centre  
March 2003**

**Table B1.1: Key stakeholder roles and responsibilities in the WSC, Morogoro Region, Tanzania**

Stakeholder	roles	responsibilities
Users	<ul style="list-style-type: none"> <li>▪ users of water service</li> <li>▪ active participator in WSC</li> </ul>	<ul style="list-style-type: none"> <li>▪ pay for water used</li> <li>▪ report on problems with quality of water service</li> <li>▪ elect Water User Group Committee</li> </ul>
Water User Group Committee	<ul style="list-style-type: none"> <li>▪ manage public standpost services and arrange for O&amp;M of the system at this level</li> </ul>	<ul style="list-style-type: none"> <li>▪ arrange operations at standpost level</li> <li>▪ arrange maintenance activities at standpost level</li> <li>▪ collect water charges from users and pass these on to the revenue office</li> <li>▪ elect a representative (WSC Member) to the WSC</li> </ul>
Members of WSC	<ul style="list-style-type: none"> <li>▪ constitutionally the actual owners of the WSC</li> <li>▪ represent the Water User Groups in the (quarterly) General Meetings and AGM of the WSC</li> <li>▪ communication link between Board (and management) and Water User Groups</li> </ul>	<ul style="list-style-type: none"> <li>▪ use control function in strategic decision-making in quarterly General Meetings</li> <li>▪ fire and (re-)elect Board members</li> <li>▪ report service successes and problems/complaints from Water User Groups to General meetings</li> <li>▪ report timely and adequately back issues discussed in General meetings</li> </ul>
Board of Directors	<ul style="list-style-type: none"> <li>▪ govern the WSC</li> </ul>	<ul style="list-style-type: none"> <li>▪ use control function in strategic decision-making in monthly Board meetings</li> <li>▪ monitor and evaluate the functioning of the Executive Board and performance of the WSC</li> <li>▪ elect the three Executive Directors</li> <li>▪ attend monthly Board meetings</li> </ul>
Executive Directors (Chairperson, Secretary, Treasurer)	<ul style="list-style-type: none"> <li>▪ govern the WSC</li> </ul>	<ul style="list-style-type: none"> <li>▪ make relevant policies for the functioning of the WSC</li> <li>▪ recruit the professional management team</li> <li>▪ monitor the functioning of the professional management team</li> <li>▪ monitor the technical and financial performance of the WSC</li> <li>▪ develop annual Business Plans</li> <li>▪ prepare proposals for technical and financial adjustments or actions</li> <li>▪ organize monthly meetings for Directors</li> <li>▪ organize quarterly General Meetings and AGM for Members</li> <li>▪ communicate to users via Members</li> </ul>
Management Team (manager, administrative and technical staff)	<ul style="list-style-type: none"> <li>▪ manage the WSC in organizational, technical and financial respect</li> </ul>	<ul style="list-style-type: none"> <li>▪ keep proper accounts on revenues and expenditures</li> <li>▪ carry out operations and maintenance tasks</li> <li>▪ make technical and financial reports on the performance of the WSC (monthly, quarterly and annually)</li> <li>▪ draft proposals and annual Business Plans</li> </ul>
Federation of WSCs	<ul style="list-style-type: none"> <li>▪ protect the interests of the member WSCs</li> <li>▪ support and advice the WSC in their policy, strategies, operations etc.</li> </ul>	<ul style="list-style-type: none"> <li>▪ facilitate contacts, negotiations and contracts between private sector and WSCs</li> <li>▪ discuss WSC interests with national/local government and regulator</li> <li>▪ provide capacity building and training etc.</li> </ul>
Local politicians and leaders	<ul style="list-style-type: none"> <li>▪ enable and support the WSC to provide a quality water service against an affordable tariff for all</li> </ul>	<ul style="list-style-type: none"> <li>▪ support the autonomy, transparency and accountability of the WSC</li> <li>▪ make sure that all groups in society are equitably being served by the WSC</li> <li>▪ promote the productive use of water for socio-economic development of the area</li> </ul>
Local Government staff	<ul style="list-style-type: none"> <li>▪ enable and support the WSC to provide a quality water service against an affordable tariff for all</li> </ul>	<ul style="list-style-type: none"> <li>▪ support the WSC through advice to Board and management</li> <li>▪ act as temporary regulator (monitoring)</li> </ul>
National Government staff	<ul style="list-style-type: none"> <li>▪ establish a regulatory framework</li> </ul>	

*The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.*

# Companion Paper B1: Water User Associations

Jo Smet

IRC International Water and Sanitation Centre

March 2003

## Abbreviations

AGM	Annual General Meeting
CBM	Community-Based Management
FEWASCO	Federation of Water Supply Companies (in Morogoro Region, Tanzania)
GCS-AEP	Groupement de Conseils et de Suivi des Adductions d'Eau Potable (Advice and Monitoring Unit for Piped Drinking Water Service)
O&M	Operation and Maintenance
PSP	Private Sector Participation
WSC	Water Supply Company
WUA	Water User Association
WSDB	Water and Sanitation Development Board

## 1. Introduction

1. This paper gives an overview of the Water User Association (WUA) management model, with specific reference to a Water Supply Company (WSC) case study from Morogoro region in Tanzania (Kanshahu et al, 2002) (DHV, 2001). Reference is also made to experience from other WUAs, drawn mainly from Africa and Latin America.

2. The WUA model is perhaps the most viable approach for smaller towns with a population ranging from 2,000-25,000, which have typical rural characteristics, limited local government capacity, and weakly developed economic and institutional environments. The WUA is primarily based on local human resource capacity (the manager and operating staff are hired locally, while management oversight is voluntary) and carries low overheads. Although the WUA model has potential, when left in isolation it is likely to fail. It needs support from higher level organizations which provide guidance, training and access to specialist skills and knowledge.

3. The WSC model from Tanzania (See Table B1.1 opposite) is interesting in that it represents a transition between the rural, community-based management model typical of WUAs, and more formal "Water Boards" in larger towns, which have autonomous legal status and a delegated management structure. The WSCs described here have a formal management structure, and hire professional staff (including a manager). The WSC case study also links the model to higher-level support (in this case a Federation of WSCs).

4. The potential scope of community-based approaches is enormous. In Asia and Africa, for example, about 68% of the people live in rural areas; and in Latin America

it is about 25%<sup>1</sup>. It is estimated that of the remaining urban population, about half live in small and medium-sized towns of less than 50,000 people (although there may be significant regional variations). For these settlements, community-based management (CBM) organized by some form of WUA has become a common approach. There are some shortcomings to the model, especially in towns: governments do not always create the necessary enabling environment, including the legal basis of the WUA and the support mechanisms needed to sustain community-based service provision. As village settlements grow and take on the characteristics of small towns, with increased commercial activity, these deficiencies put long-term sustainability and effectiveness at risk.

5. Technology-wise, water supply systems in these settlements have limited source works and treatment, and vary from water points (standposts) to piped water systems with storage but only minimal distribution, to a limited number of single or multiple-tap house-connections. There may also be a well developed market through independent vendors/providers. It is fair to say that the WUA model is more suitable for smaller and less technically complex water supply systems, but, as with management structures, this may be transitional.

6. The model can also have advantages over more formally structured models in larger towns. The WUA is essentially a cooperative and the concept empowers users. They have control over decision-making in planning, implementation, operation, maintenance, management, and financial arrangements (IRC, 2001). The WUA is a democratic institution allowing direct social pressure to influence management decision making, and as such it supports a process of democratic social development. Where private sector participation (PSP) or municipal management has failed to provide expected services and users have lost confidence, WUAs can restore trust in management and/or governance mechanisms.

## **2. Legal basis**

7. In some countries WUAs are established under Cooperative Law, or as a Trust, Company Limited by Guarantee, or some other form of Voluntary Society, under which local government allows the WUA to oversee the facilities. This confers legal status on the WUA and underpins management stability. However, in many countries water supply and sanitation systems constructed by government, NGOs and others are handed over to a WUA without establishing the legal basis for ownership of assets and management of services.

8. Even where “handing over” is interpreted as transferring O&M responsibilities for the water supply, questions still need to be resolved. For example, what happens to the water system if the WUA is wound-up? And who owns the water source? Clarity on legal ownership makes it easier to resolve disputes at community level – a WUA guilty of malpractice can be sued by users, and a WUA can sue, for instance, a neighboring community over a damaged or polluted water source (Fonseca and Bolt, 2002). Legal authority is also needed to sign contracts, to open bank accounts and to access loans and grants.

---

<sup>1</sup> United Nations Centre for Human Settlements (Habitat) (1995) *Compendium of Human Settlements Statistics*. New York, USA

9. In essence, ownership in East Africa for piped schemes is described as *undertakership*, whereby the state transfers assets to local government, which in turn transfers O&M to local WUAs. In such situations, a performance agreement with conditions and duration needs to be signed between the Local Government and the WUA, as is done in the Kiliwater Ltd case in Tanzania (DHV, 2001).

**Box B1.1 Legal basis for WUAs in South Africa and Tanzania**

The Legal Resource Centre in South Africa suggests a range of legal forms for a Village Water Committee or WUA: Voluntary Association – governed by Common Law; Trust – Trust Property Control Act 57 of 1988; and Section 21 Companies – Companies Act 61/1973 and Communal Property Association Act 28/1996. Any of these can register as a non-profit organization (Act 71 of 1997). Other models are found in Tanzania. The WSC model used in Morogoro Region is a Company Limited by Guarantee and registered with the Registrar of the Ministry of Industry and Trade (See Annex A - Articles of Association). On the other hand, the WUA model found in Southern Tanzania is structured on a Cooperative model registered under the Ministry of Water (DHV, 2001). Finally, the Trust model found in Northern Tanzania is constituted with the approval of the Administrator General under the Trustee's Incorporation Ordinance.

### 3. Ownership, oversight and operations

#### *Ownership*

10. Although water systems are officially handed over to the community, local government typically retains ownership. Where the community has made a substantial contribution towards the costs of construction, or has invested over time, ownership is less clear. If local government remains hesitant or legally unable to transfer full ownership of assets, one option is to formalize shared ownership. The success of this shared ownership depends both upon the trust the user community has in the local government, and in the local government not exploiting its political power.

Shared ownership can ensure technical, legal and financial support from district authorities through their representation or advisory role on the WUA Board of Directors. This involvement of district authorities may increase the legitimacy and authority of the WUA management, as seen by the community/users, local politicians and leaders. Control by users over strategic decisions, and the sense of ownership this provides, are arguably more important than full legal ownership by users. For larger, more mature towns this seems to be less critical. For example, in Senegal there is a trend towards reduced democratic user representation. People appear increasingly content with the level of service they receive from the WUA for the charges they pay, and they are less inclined to demand a high level of direct representation and involvement. At this point delegated management becomes more likely, and regulation (to balance the interests of different stakeholders) more important.

#### *Oversight*

11. WUAs in small towns have a Board of Directors, sometimes also called a Water Board, responsible for management oversight of the WUA. The WUA-Board

represents all users, i.e. from the various ethnic and social groups in the user community. In less formal WUAs, critical weaknesses in organization are apparent, with the result that WUA-Board members lack incentives or direction, lose interest and no longer take an active part. The need to better define tasks and compensation of WUA-Board members becomes apparent as their responsibilities increase and reliance on voluntary work becomes less effective.

12. Under the more formal WSC model, roles and responsibilities are better defined, and qualified personnel are appointed to key posts. The Executive Board (or Team) of the Water Board usually consists of the chairperson, secretary and treasurer. They are responsible for general management oversight and for hiring/firing of professional staff including a manager, or contracting a private operator. Executive Board members may be satisfied with a nominal allowance, provided their function contributes to their status in the community/town as part of a successful community enterprise.

13. The interplay of status/trust in individuals is a characteristic of WUAs. In many countries, trust in the district and town authorities is limited because of past experiences. WUA-Board members on the other hand have their roots in the community, and are democratically elected. Their role calls for good communication skills, commitment and competence in carrying out their duties. Otherwise they are likely to be removed from office and the Board is unable to build corporate experience over time. Under the Uroki Bomang'ombe Water Supply Trust in Tanzania, for example, the Board is selected from respected religious leaders, and male and female educational and technical professionals.

14. One of the positive characteristics of WUAs is that autonomous governance by democratically elected community members creates a sense of ownership. It also underpins informed willingness to pay for a level of water service provision that is affordable to the specific user groups. In contrast, experience has shown that if governance is in the political sphere at local/town government level, users expect a subsidized or free service from the common perception that 'the government will not let us down' or 'the local politicians will guarantee water services'.

### ***Operations***

15. For their operations, WUAs in small rural towns tend to rely on local employees, including an accountant, a clerk and a number of operators/mechanics. Management oversight is not separated from day-to-day management decisions, and decision-making is poorly linked to accountability or to a coherent business plan. Weaker WUAs are characterized by a lack of qualified managers, and professional staff are not paid competitive salaries and often leave their posts.

16. In smaller WUAs, Board members may even take on 'professional' day-to-day tasks, often on a voluntary basis with only a nominal allowance. This voluntarism of the Board is effective for governance functions but less so for daily management and operations that consume much time, require daily commitment and specific professional skills. Hiring professionals pays back in the long term because they are directly accountable for their services and they have the potential to bring in the needed skills and efficiency.

17. In Tanzania, larger WSCs hire professional staff directly, while in smaller WSCs day-to-day operations are looked after by members of the executive board of the WUA with support from trained mechanics working on a voluntary basis. Contracts with employees do not include performance indicators which would help to improve operational efficiency. Performance agreements with Board employees should be mandatory in WUAs, and set a good precedent for potential contracts with a private operator as the town/system expands.

18. In many countries, the availability of professionals is increasing because of retrenchment of government agencies and an influx of young professionals. However, the numbers of experienced managers and operators prepared to work at small town level is often limited. An important role for a supporting Association/Federation is to fill this human resource gap by facilitating/providing training and backstopping – and acting as a conduit to share professional resources.

19. A common arrangement in Southern Africa (e.g. South Africa, Namibia) is that a Private or Municipal Water Authority sells bulk water to communities and towns. In the town/community, a Local Water Committee (the Water Service Provider) is responsible for distribution, routine O&M, billing and collection, and communication with consumers. The WUA model is therefore relevant for multi-village schemes, in combination with alternative management options for bulk supply. The bulk supplier takes care of many activities that would otherwise require specialist support, such as development, expansion and protection of source works, and treatment. In Senegal, there is a trend towards increased delegation of management of O&M for multi-village schemes (Niang, 2002). The government has a strong stake in the arrangements and the Directorate of Operations and Maintenance (DEM) requires that the maintenance of pumping systems is contracted out to a specialized region-based private company pre-selected and accepted by DEM (HydroConseil, 2002)

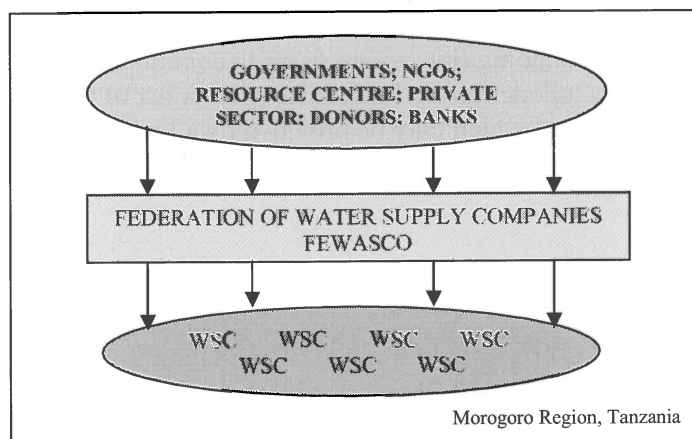
#### **4. Professional support**

20. It is unrealistic to expect that all managerial, technical and financial skills required to effectively maintain and operate a water supply system will be available at the small/rural town level. The oversight Board members and the managing /operating staff need support on an ongoing (but not necessarily continuous) basis. In Tanzania, WSCs are supported by a Federation. Table B1.2 gives a list of typical support and advice that WUAs need and which may be provided by a Federation or other higher level organization. The specific support requirements will vary in different countries/localities.

**Table B1.2: Support services to WUAs**

<b>Immediate:</b>	<b>Capacity building:</b>
<ul style="list-style-type: none"> <li>▪ key service contracts, such as: borehole cleaning/redevelopment and pump maintenance</li> <li>▪ help in instituting water quality tests</li> <li>▪ planning and design of more complex expansion</li> <li>▪ access to and stocking essential spare parts (e.g. meters)</li> <li>▪ billing and collection</li> <li>▪ resolving issues, such as: unreliable power and non payment by public institutions</li> <li>▪ development of funding proposals</li> <li>▪ construction supervision</li> <li>▪ external financial and technical audit</li> </ul>	<ul style="list-style-type: none"> <li>▪ independent advice to support better management and operations</li> <li>▪ training in financial management including tariffs and bookkeeping, and business planning...</li> <li>▪ training in routine O&amp;M, such as: maintenance of moving parts, calibration of meters, disinfection of tanks, UFW and leak detection...</li> <li>▪ training for O&amp;M of treatment works</li> <li>▪ planning activities, such as mapping and recording repairs and pipe breaks, recording customer complaints, managing demand...</li> <li>▪ conflict resolution and arbitration</li> <li>▪ negotiation with service providers (quality, price, payment conditions, etc.)</li> <li>▪ legal issues, such as registration</li> <li>▪ communication with government over policy issues, and support for autonomy</li> </ul>

21. Primarily the Federation is a professional association for all WUAs. It does not need all expertise to be in-house but can act as a reliable and trusted intermediary between the WUAs and other private or public sector service providers. Important parts of this network are national or regional resource centers, technical colleges and universities, who can provide relevant, user-friendly information, enquiry services, training and research. As with all support mechanisms, the financing of a Federation should be borne by users – in this case through WUA membership fees, based on an equitable formula such as water production or number of consumers.



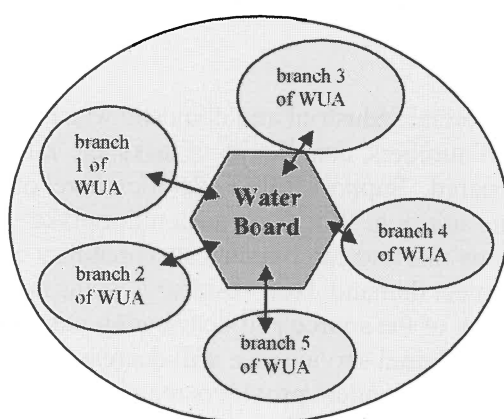
**Figure 1. Proposed relationship between FEWASCO (Federation), supporting institutions and the WSCs (where possible, links between supporting institutions and the WSCs should be direct)**



### ***Cost-sharing arrangements and WUA aggregation***

22. As a WUA gains practical knowledge and expertise, several institutional and organizational changes can be considered at a local level to take advantage of successful experience, and the growth of local capacity:

- A stronger, better organized, WUA can expand its business by taking on new 'commercial' responsibilities. For instance, it could provide specialist skills to less successful nearby small towns/communities. Or it may offer O&M services, or take on day-to-day management responsibilities in addition to O&M. Proximity of WUAs helps to reduce costs and would be an efficient use of resources.
- Another option would be that WUAs of two or more small towns merge to become a larger entity able to attract professional managerial and technical staff, but also to become more efficient in their procurement activities and operations through increased economies of scale. A new Water Board would be elected by members representing the user communities.



**Figure 2: Merged WUAs forming a common Water Board**

23. In Tanzania, WSCs have expressed the opinion that they are too recently established to consider these options. The 'ownership' of their WUA is still strong and they do not want to give up their autonomy, even if the organizational and financial performance is not sound. If the quality of water services were to come to a desperate level in a particular WUA, the sharing of knowledge and expertise may come up for discussion. In such a case, the facilitating role of a trusted body such as the Federation will be beneficial to the process.

### **5. Risk analysis**

24. Poorly functioning WUAs tend to exhibit a lack of risk allocation, with risks ultimately transferred to users. More formal WSCs are better able to allocate risks, particularly when performance contracts are in place and responsibilities clearly assigned. A number of risks deserve specific attention for the WUA model:

- ***Technology and service level.*** Small towns systems under WUA management are often grant financed, with a percentage community contribution, but users take responsibility for O&M. Therefore a balance must be found between affordability of O&M costs and feasibility of O&M activities on the one hand, and preferred service levels on the other, taking into account the domestic and economic requirements of men and women users (Brikké et al., 1997).

- ***Water quality***

In the rural settings that characterize many WUA-managed schemes, new human settlements and agricultural activities in the catchment area can quickly pollute the water source, as well as affecting discharge rates. Where a central water treatment plant is necessary, this will add financial and organizational pressures that may be beyond the WUA (a case of over-design mismatching local financial and maintenance capacity). Water source protection can be addressed at Federation level, because source protection is often beyond the scope and jurisdiction of a single WUA.

- ***Land rights***

Land rights are a risk area that needs further legal attention in many countries. In Tanzania, for example, system assets remain the property of Local (District) Government, while land rights may be vested at town level (in the case of communal land or private land).

- ***Demand***

Taking advantage of increased commercial/industrial and domestic water sales requires growth of the business (staff numbers, complexity of tasks, etc.), for which WUAs are often not well prepared. Support from Federation level or other higher level organization may be one solution. Where expansion does take place, inadequate source capacity is a serious risk and can threaten sustainability of the WUA, or simply limit the ability to meet demand. New residential areas need to be connected, but only where the capacity of the source and distribution network allow, otherwise service levels in the original service area will decrease. Partnerships with existing small-scale independent providers may be a lower-risk way to meet expansion demand for an interim period.

- ***Tariff adjustment and regulation***

One of the great merits of WUAs is their relative independence in setting system-specific water tariffs. But this independence is only effective when there are sufficient and strong advocates within the community and among local political circles or traditional leaders. Water tariffs are generally proposed by the Water Board but need approval first from the Annual General Meeting (AGM) of Members, and second from the Local (District) Government. Transparency in tariff adjustments and advanced discussion with the community are critical (for example to absorb higher costs of electricity before revenues are run down). However, if the Board fails to convince the community of the need to adjust the tariff then revenues may not even cover daily O&M costs, leading to a negative spiral of non-payment for services, loss of revenues and deteriorating service standards.

Most WUAs have a simple water tariff schedule that distinguishes between domestic and commercial users, and between standpost users and those with house connections. Theoretically this results in cross-subsidization by commercial/ industrial users to public standpost users, but care must be taken not to discourage high-volume users, who may then develop their own source.

- **Water metering**  
 Comprehensive metering programs in smaller towns suffer from lack of availability of new meters and lack of skills to calibrate faulty meters (which can quickly undermine user confidence in volumetric charges). But the advantages of metering over flat rates in terms of increased and equitable revenue collection are clear (CWSA, 2002). The Trusts in North Tanzania,<sup>2</sup> for example, claim that their strong financial and organizational stability is largely due to successful metering of all connections. In other parts of Eastern Africa, a flat-rate system is widely used, with a high risk of water misuse, and with high-volume users paying excessively low rates. The challenge of affordability of connection costs is particularly acute in smaller towns, but with clear regional variations. In summary, it is apparent that with universal metering users expect a more sustainable service with fair water charges, despite problems in calibration and replacement.
- **Tariff affordability**  
 The issue of capital cost contributions and tariff affordability is highly contested in smaller towns, which are often in areas classified as “rural” and “low-income”. Local governments are keen to provide services to their constituent communities, and may subsidize capital cost contributions or defer approving tariff increases. But, when successfully championed, the logic of community-based approaches permits communities to choose a level of service that they can afford to maintain, and within small rural communities, some form of informal cross-subsidization is often found. Even poor families are willing to pay higher tariffs if they are satisfied with the water services they receive, and if more water provides them with new economic opportunities.
- **Operating cost, billing and collection**  
 Most WUAs have a small revenue office where the clerk or accountant issues receipt against payments. A key to improved collection efficiency in small towns is that billing intervals are set to suit customers, who may not have a steady income stream. In WUAs with low collection efficiency, social peer pressure and realistic enforcement actions need to be introduced. In West Africa, a common system is to have kiosk caretakers pay the WUA for bulk water consumed. The caretakers then charge water collectors using a WUA-approved tariff schedule and retain the balance as income. In some countries (e.g. South Africa, Uganda, The Philippines) prepaid water meters or a coin-activated public water dispensing system have been introduced with mixed success (Vermeulen, in IRC, 2001).
- **Financial management**  
 One of the greatest risks faced by WUAs is misappropriation of revenue. The revenues generated by even a small water system are often well beyond the expectations of the community, and the WUA can come under considerable pressure to allocate funds to other community activities, or in the worst-case scenario to hand over control of revenues. WSCs in Tanzania counter misappropriation of funds by establishing a tight two-tier accounting system – accountant and treasurer plus both internal and external auditing. Such an approach improves accountability through financial reporting and builds the trust of users.

---

<sup>2</sup> Uroki Bomang’ombe Water Supply Trust in Hai District

## **6. Autonomy and accountability**

### ***Autonomy***

25. In theory, WUAs should do well in terms of autonomy in relation to such issues as setting tariffs and reinvestment in the water system, because they are dedicated to water supply service provision. In practice, this autonomy can be undermined when the WUA-Board lacks legitimacy within the community, or is subject to manipulation by local political or social units, or traditional leadership.

26. In the case of WSCs in Tanzania, interference from local/central authorities can still have serious effects on the sustainability of the water provision. The possibility of this happening is reduced where management oversight is separated from day-to-day management and operations through contracts with professional staff or a private operator. Such contractual arrangements, together with improved accounting and financial audits, make it more difficult for irregularities to occur or for misappropriation of revenues and savings resulting from political or non-commercial pressures.

27. On the other hand, WUAs need support from local politicians in advocating institutional and legal change, creating an enabling environment for local entrepreneurs, and setting and enforcing appropriate regulations (Moriarty et al., 2002). In this respect, higher level organizations, such as Federations, can play a role in raising awareness amongst user/community members or highlighting cases of abuse by politicians (Fonseca and Bolt, 2002).

### ***Accountability to the users***

28. Accountability and transparency are not always straightforward to institute, and past experience with community organizations justifies a certain level of mistrust on the part of users. WUAs function properly only where the governance and management structure is stable and trust has been established based on performance. Reliable, clearly presented and timely communication is needed between the operator (or managing director) and the governing board, and between the governing board and the community. There must be sufficient opportunity and suitable mechanisms for users from all social groups to react to decisions and reports. This may be achieved via informal channels such as social groups, or simply reliable public announcements or notice boards.

29. In the context of WUAs, building management capacity is often a question of having sufficient time on the job to learn. Governance and management terms of tenure should be long enough to ensure that capacity is built and taken advantage of. A minimum term of three years is generally required to build experience, competence and confidence, with different posts replaced at different times to ensure continuity.

### **Box B1.2 External oversight boosts WUA accountability**

The transparency and accountability of WUAs can be significantly bolstered by regular audits/monitoring undertaken by trusted agencies.

In **Benin**, the Regional Water Office (Services Regionaux de l'Hydraulique) that owns the physical water system assets monitors several functions of the local water committee. Analysis of the monitoring data indicates the 'viability level' of the performance of the committee. If this is too low then the regional office asks the committee to review operations/expenditures and consider whether a tariff adjustment is to be suggested to the consumers (Hartmann, in IRC 2001).

In **Mali**, Management Advice Units (GCS-AEP) make technical and financial audits. Each water point and every 10-20 household connections designate two delegates to the Users Association. They meet twice a year in a General Assembly, when the Management Board is elected and management decisions are made based on external annual or bi-annual technical and financial audits by GCS-AEP.

FEWASCO in **Tanzania** has started to support the accountability of WSCs by collecting monthly financial performance data. These help to benchmark financial performance among WSCs. (Kanshahu et al, 2002)

30. Proper communication procedures between the WUA-Board and all user groups - such as yearly reporting and open meetings - are crucial for accountability and transparency. These Annual Assemblies or General Meetings include a management report (progress, problems, solutions, and plans), a financial report (balance, income/expenditure, tariff adjustments and investment plans), an annual business plan, a vote of confidence, re-elections if needed, and discussions with users and/or members.

### **7. Regulation**

31. WUAs arise in a decentralized context, but some regulatory functions must be centralized or require support from a higher-level organization including external auditing and benchmarking, and regulation of tariffs and water quality, as well as contracts. However, under a formal WSC structure many activities contribute towards better governance such as a higher level of professionalism leading to improved data management, and open communication and consultation. Other areas are poorly regulated at small town level such as sanitation and customer coverage.

### **8. Competition**

32. In a decentralized context, WUAs face potential competition at a number of levels. In the first place, their status is often subject to performance agreements with Local Government who could in theory take over service provision through direct municipal management, or delegate the role directly to the private sector, or private operators under contract to other autonomous Water Boards may compete simply by showing success in neighboring towns. In small, rural towns there may be competition with alternative service providers (water vendors) or traditional sources of water particularly during rainy seasons. However, in most countries, water provision remains a relatively new area for the private sector, young mid-level professionals have limited experience and prefer to stay in larger towns/cities with better career prospects, and many retrenched staff from government departments lack

business-skills needed to enter this job market. This picture will gradually change over time.

33. Private operators are not interested in contracts with informal WUAs in individual towns, and in any case WUAs often lack the legal basis to contract an operator. But the more formal WSC model may be attractive to them, especially when small towns are aggregated for procurement purposes then have individual contracts with the operator, or where a number of WUAs have chosen to merge their service provision. However, private companies from outside small rural towns are not always trusted by WUAs in terms of integrity (fees, quality of product...), and their costs may exceed the affordability of small WUAs. A Federation may be able to help in contracting and control of product quality.

## **9. Financing**

34. On their own, WUAs cannot raise the funds to build a new system or to rehabilitate an old one. Most community-managed systems are financed from a combination of community contributions, local government grant, central government (project) grant, and perhaps private investors. WUAs may also need help to finance expansion or renewal and replacement. Subsidies, grants, soft loans, and credit guarantees are common mechanisms.

35. In principle, water tariffs should cover the major repairs, renewal and replacement, upgrading and expansion of the water system. But it may not be wise to build up large financial reserves that may not be used for some years. This is especially so in a relatively poor economic environment with high inflation and risks of devaluation. Large reserves also inspire misappropriation, and so WUAs are better advised to take loans and factor repayment back into the tariff. However, one of the major challenges that small towns face is in securing loans. They need coherent business plans to establish credit-worthiness, which may also require stable legal status, possibly ownership, (limited) guarantee by local or national government, and evidence of good WUA governance/management from external audits over some years.

36. In South Africa, communities can apply for funding from national/international sources through financing intermediaries such as the Mvula Trust. In Namibia, Zambia (see Box B1.3) and Tanzania, water and sanitation trust funds are under discussion, or are being established.

### **Box B1.3 The Zambian Devolution Trust Fund**

In Zambia, the National Water Supply and Sanitation Council is considering establishment of a Devolution Trust Fund - Water Supply and Sanitation Act No. 28 of 1997. This Trust Fund will make funds available to Commercial Utilities (which can include WUAs) that have taken over the responsibility of water supply service provision from local authorities. The Trust Fund will (co-)finance the rehabilitation, expansion and extension of piped water supply systems. The National Water Supply and Sanitation Council will manage the Trust Fund (personal communication O. Chanda, Director NWSSC, 2003).

37. Access by WUAs to credit from development or commercial banks is quite difficult and therefore exceptional. Banks do not yet interpret WUAs as creditworthy. On the other hand, loans against affordable interest rates would help WUAs improve financial management through the lenders' control systems and reporting requirements.

38. One option to expand the network and make water services available to new quarters of a town is to sell the right to develop and manage the water supply to a private company. At a later date, the additional water supply (typically through boreholes) can be integrated into the main distribution network, and the private company paid for the assets (Vezina, 2000).

### **10. Limitations**

39. The WUA model has great potential for serving small rural towns with a population in the 2,000-20,000 range. In its development towards a more formally structured organization (such as the WSCs of Tanzania), it represents a transition model from smaller, rural towns to larger, more urbanized towns. Its great strength is the close involvement of users, which creates trust in management decision-making and ensures willingness to pay for services, with the autonomy to set tariffs. WUAs have a clear responsibility towards all groups within the society, including low-volume, low-income users, as stipulated in their Articles of Association. Through the AGM, everyone has a say in strategic decision-making such as tariff adjustments and new extensions.

40. As towns grow, this direct participation becomes more difficult to manage effectively, and a more formal management organization is required as well as contract-based responsibilities. In any case, once a town reaches a certain size and takes on a more commercial nature, direct user involvement becomes less important, and most customers just want a good reliable service at an acceptable price. At this point, delegated management under a fully autonomous Water Board model becomes more likely, and more formal regulation is required to ensure equitable service.

**Table B1.3: Analysis of WUA model against key ingredients for success**

	WSC (Tanzania model)	Reasons
Ingredient for success	Rating from 0-5 (5 is the highest rating)	
Financial and management autonomy	4	Risk of interference from local politicians/leaders and local government, especially when the legal basis of WUAs has not been formalized.
Competition	2	Hired or delegated management capacities for WUAs are not commonly available as yet.
Demand responsiveness (including service to low income households and gender-specific demands)	4	Technology and service level are linked to affordability and sustainability; also poor users have control in strategic decisions of WUAs
Incentives for expansion	3	Social mission is important Article of Association; if new residents demand then WUA must react. Limited accessibility to funds may be hindering factor.
Professional support	2	In most countries not well organized although options available. Many WUAs try to solve the problems on their own!
Regulation	2	Often no regulatory framework by national/local government; WUA and users regulate through AGM with some pressure from local politicians.
Transparency and accountability	4	Governors report back to 'owners', the members/users in AGM. Reporting procedures and systems not always adequately developed.
Enabling Environment	3	Legal framework required for autonomy of WUA; and financial support structures etc.
Capacity building	3	Only if a Federation/Association (against payment) or the government can provide this required service



## REFERENCES

- Brikké, F., Bredero, M., de Veer, T., and Smet, J. (1997) *Linking Technology Choice with O&M* Publication of WHO, WSSCC and IRC, Geneva/Delft (new version expected soon)
- Collignon, B. (2002) *Key Ingredients for success in Small Town Water Supply*. Paper presented at the Water and Sanitation Services in Small Town and Multi-Village Schemes Conference, Addis Ababa, June 2002. The World Bank, Washington, DC, USA
- CWSA and Pilgrim, N. (2002) *Ghana Small Towns Water Supply System Performance Assessment - Field Visit Findings, Data Report and Recommendations for TA*. April 2002. The World Bank, Washington DC, USA.
- CWSA and Pilgrim, N. (2000) *Ghana Small Towns Water Supply System Tariff Design - Field Visit Findings, Data Report and Recommendations for Next Steps*. December 2000. The World Bank, Washington DC, USA.
- DHV Consultants (2001) *Enhanced Sustainability of Piped Water Supplies in Rural Tanzania*. Consultancy report of J. Smet for DHV Domestic Water Supply Programme and for the Royal Netherlands Embassy, Tanzania. DHV Apeldoorn, The Netherlands
- Fonseca, C. and Bolt, E. (2002) *How to Support Community Management of Water Supplies. Guidelines for managers*. Technical Paper 37. IRC International Water and Sanitation Centre, Delft, The Netherlands
- HydroConseil (2002) *Multi-Village Systems in Senegal. Case Study*. Direction de l'Exploitation et de la Maintenance and Water and Sanitation Program Africa Region. Abijan, Ivory Coast
- IRC (2001) *From System to Service – Scaling up Community Management* Report of a Conference 12-13 December 2001. IRC International Water and Sanitation Centre, Delft, The Netherlands
- Kanshahu, A., Madundo, I., Shaaban, K. and Smet, J. (2002) *Rural Water Supply Companies and their Supporting Federation in Morogoro Region, Tanzania*. Paper presented at the Community Water Supply and Sanitation Conference, May 5-8, 1998, The World Bank, Washington, D.C., USA
- Minatullah, K. (1998) *Community-based Water Systems in Small Towns in Sri Lanka*. Paper presented at the Community Water Supply and Sanitation Conference, May 5-8, 1998, The World Bank, Washington, D.C., USA
- Moriarty, P.B., Patricot, G., Bastemeijer, T., Smet, J. and van der Voorden, C. (2002) *Between Rural and Urban. Towards sustainable management of water supply systems in small towns in Africa*. Working Paper. IRC International Water and Sanitation Centre, Delft, The Netherlands
- Niang, M. (2002) *The Development and Management of rural multi-village schemes. Main findings of the case study in Senegal*. Paper presented at the Water and Sanitation Services in Small Town and Multi-Village Schemes Conference, Addis Ababa, June 2002. The World Bank, Washington, DC, USA
- Sarpong Manu, K. (2002) . *Addressing the issues and challenges in the supply of water in small towns in Ghana*. Paper presented at the Water and Sanitation Services in Small Town and Multi-Village Schemes Conference, Addis Ababa, June 2002. The World Bank, Washington, DC, USA
- Sussens, H. and Vermeulen, A. (2001) *Providing free basic water in South Africa* Proceedings 27<sup>th</sup> WEDC Conference Lusaka 2001. WEDC, Loughborough, UK.
- Wegelin-Schuringa, M.H.A. (1998) *Community management models for small scale water supply systems*. Discussion paper prepared for the Management Options for Small-Scale Water Supply Systems in Africa Workshop, held in Kakamega, Kenya, 7-10 December 1998. IRC International Water and Sanitation Centre, Delft, The Netherlands

Figure 3: Organization

