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**ENSURING AVAILABILITY AND SUSTAINABLE MANAGEMENT  
OF WATER AND SANITATION FOR ALL**

**A case for governance and institutional re-alignment for  
small towns piped water services in Africa**

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*Small towns are “settlements that are sufficiently large and dense to benefit from the economies of scale offered by piped water supply systems but too small and dispersed to be efficiently managed by a conventional urban water utility” (World Bank, 2003:1). Pilgrim (2007:1) identified a management gap from the inappropriateness of the traditional ‘community management’ and ‘urban water utility models for small towns. This management gap is linked to institutional gap. Contemporary institutional and governance weaknesses and other sustainability challenges threatening existing services coupled with dwindling grant opportunities for new investments call for a paradigm shift to re-position small towns piped water services as self-reliant utilities. Careful institutional re-alignment will strengthen monitoring oversight and regulation and encourage local private sector participation with a re-orientation for formal management arrangements, professional and business orientation and transparent/accountable governance. The sustainability of existing services will provide the foundation for sustained water supply coverage increases.*

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## **Background**

The water sector reforms, which followed the International Drinking Water Supply and Sanitation Decade (1981 to 1990) resulted in increased prioritisation of rural communities and small towns for safe water supply and related sanitation and hygiene services by developing countries.

The global leadership and coordination provided by the international community especially the World Health Organisation (WHO), UN-Water, UNICEF and UNDP have been consistent and useful. A major unintended outcome however has been a skewed emphasis on service delivery without corresponding deepening of institutional development and service sustainability.

The World Health Organisation in its 2012 Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) report observed that “over the past decades, the pre-occupation of national governments, multi-lateral organisations and External Support Agencies has been to increase coverage levels and targets through significant financing of new infrastructure, given the large number of people who need to gain access in order to meet the MDG target” (WHO, 2012:59). The report, however, emphasised that, “sustaining services to existing users will become increasingly important as country coverage levels increase and targets are attained since waiting too long will mean part of the investment made will go waste” (ibid). This cannot happen without the needed governance and institutional re-alignments or reforms for greater clarity in leadership, responsibility, facilitation, regulation, and oversight of piped water services.

Countries have usually placed both small towns and rural communities under the same institutional arrangements, legal regimes and management strategy. This paper, which draws on the MSc. Research Dissertation work of Nedjoh (2014), makes a case for governance and institutional re-alignment for the sustainability of small towns piped water services using Ghana as Case Study.

## Methodology

The research adopted the case study methodology and combined key informant interviews, direct observation, review of literature and archival records, focus group discussions, and open-ended questionnaires for data collection.

## Definition of small towns in the context of drinking water services

The World Bank has been a global leader in drawing attention to the unique nature, characteristics and needs of small towns. It has put together through a global e-conference a comprehensive and practical definition for small towns referring to them as “settlements that are sufficiently large and dense to benefit from the economies of scale offered by piped water supply systems but too small and dispersed to be efficiently managed by a conventional urban water utility” (World Bank, 2003:1). “They require formal management arrangements; a legal basis for ownership and management; and the ability to expand services to meet the growing demand for water” (ibid).

The Town Water Supply and Sanitation Report from the e-conference organised by WEDC on behalf of the World Bank’s Town Water Supply and Sanitation Initiative from 22<sup>nd</sup> November to 17<sup>th</sup> December, 2004 “suggests population of between 2000 to 20,000 as small towns, distinguishing between medium-size towns: 20,000 to 50,000 and large towns: 50,000 to 200,000” (Sansom and Fisher, 2005:13).

Individual countries use legal provisions and different population thresholds to define small towns for purposes of planning and implementing water supply services (see Caplan and Harvey, 2010:10).

## Significance of small towns in drinking water service delivery

As illustrated by the definitions for small towns, they have larger populations relative to rural communities and hence appropriate for higher service level water supply technologies (i.e. piped schemes with distribution networks) with potential for expansion. Small towns require higher investments and contribute to increased water supply coverage levels of countries, regions and the world at large.

It will be useful to begin measuring the contribution of small towns piped water services to the global progress in water supply.

It has been estimated that, “by the year 2030, 6 out of every 10 people will live in urban areas, and by 2050, this proportion will rise to 7 out of 10 people” (WHO, 2014: 1). Pilgrim *et al* also noted that “for every large town or urban area, there are an estimated ten small towns – and these towns are expected to double within 15 years and double again in 30 years” (Pilgrim *et al*, 2007:6). “Rapid urban growth in developing countries has fuelled the rise in the number and importance of small and medium size towns which currently account for 20 to 40% of the urban population and are the fastest growing urban settlements” (Triche *et al.*, 2006:1).

It has been noted that “small towns have over the years been neglected by mainstream government policies and development assistance in favour of urban areas or rural settlements” (Caplan and Harvey, 2010: 11).

Recognising the increasing need to direct attention to small towns in planning, development decision making, and resource allocation, Adank (2013:11 and 12) made reference to the following observations:

1. “A new and significant category of human settlement is emerging, being the small town” (Cranfield University; AGUACONSULT and IRC, 2006).
2. “It is generally believed that in the future, small towns will grow in number, population and importance” (Collington, 2002; UN-HABITAT, 2006; Cranfield University; Aguaconsult and IRC, 2006; WSP, 2010; Forster, 2012).

AGUACONSULTA Ghana Country Study by IRC and AGUACONSULT revealed that, “small towns present a bright spot on Ghana’s water supply service delivery landscape in spite of the challenges” (IRC and AGUACONSULT, 2011:24).

## Key findings (institutional)

This section draws on the findings from the dissertation research conducted by the Author into the sustainability of four small towns piped water services in the Central region of Ghana namely: Assin Akropong, Assin Bereku, Twifo Mampong and Aburansa (see Nedjoh, 2014).

In Ghana, the Community Water and Sanitation Agency (CWSA) is the national Agency for WASH in rural communities and small towns. It adopts a decentralised approach to the implementation of the National Community Water and Sanitation Programme (NCWSP) by working through the Metropolitan, Municipal

and District Assemblies (MMDAs) especially the District Water and Sanitation Teams (DWSTs) which are the WASH Departments of the MMDAs. The Water and Sanitation Management Team (WSMT) is the community-level management structure for drinking water supply and sanitation which crystalizes the Community Management Model.

CWSA has done a lot in planning for, and implementing water supply services for small towns and peri-urban communities essentially by applying more or less the same implementation and management principles, approaches and strategies to small towns and rural communities. Consequently, the peculiar needs of small towns water services are not fully met mainly due to the inadequacies of CWSA's mandate, initially as only a facilitator and later a regulator as well. Most of the sustainability assumptions behind the existing legal framework for rural WASH and for that matter the sustainability of small towns water services in Ghana have proved otherwise. A typical example is the assumption that the MMDAs will discharge their mandate for implementation of rural WASH and the sustainability of services. This was found not be true as WASH investments and the institutional support required are not largely not prioritised by the local government authorities who incidentally have other competing executive, bureaucratic, political, and legislative functions to perform resulting in human resource, logistics and financial capacity constraints.

It should be noted that the situation of the 120 small towns, which were transferred from urban water utility management to the MMDAs for community management in 1999 will not be any different from the small towns installed under the National Community Water and Sanitation Programme (NCWSP). It will be helpful to evaluate the outcome of that decision and action, which assumed at the time that MMDA-supported community management model could work for those systems.

A research conducted into "Small Towns Water Supply Services in Ghana: Reality and Challenges" by Delbos in 2006 concluded that "the poor guidance from senior management and the lack of strategic planning at the MMDAs favoured inertia and bureaucracy in the day-to-day work of DWSTs, who ultimately became unaware of or indifferent to the challenges of their work (Delbos, 2006:89). Delbos citing Sansom and Fisher admitted that "it is worth reconsidering the appropriateness of national or regional authorities in the wake of the weaknesses and challenge posed by the decentralisation paradigm to small towns piped service delivery"(Delbos, 2006:20 citing Sansom and Fisher, 2005:5). For a technical area like water and sanitation, a bureaucratic set up may not be the best option.

CWSA does not also have operation and maintenance (O&M) unit within its institutional set-up even though the Technical services Unit and Extension Services Unit try to blend O&M issues into their plans and activities. It is, however, unclear if O&M will get the same level of effort and time as the real implementation issues of facilitating/engaging the private sector to mobilise, animate and build community capacity as well as design and construct new water supply and sanitation infrastructure.

The current situation whereby CWSA 'does not have physical presence' at the MMDAs which will allow direct reporting and support relationship on technical matters is a major weakness in the institutional arrangement. This is compounded by the fact that all the three core members of the DWSTs at the MMDAs (Technician Engineer, Environmental Health Officer and Community Development Officer) are seconded staff who have their mother departments within the MMDAs, and will not be affected too much if there are no resources to carry out WASH activities and community outreach. The Desk Officers for the DWSTs, who double as either the District Planning Officer or District Budget Officer also have their core functions and responsibilities. The question then is why WASH cannot be fully institutionalised at the district level? Clearly, the current situation of making WASH an appendage to existing departments is one of the critical institutional weaknesses identified at the decentralised level (MMDAs).

It is becoming increasingly clear that "once a water facility is installed, its sustainability depends to a large extent on the institutional arrangements and management systems put in place" (Asimah, 2009:30). More than that, is how well those institutional arrangements and management systems which have been put in place to ensure sustainability are actually functioning.

### **The management/institutional gap in small towns piped water services**

It appears thorough analysis and preparations did not go into the decisions which located small towns within the Rural WASH institutional set-up. Whilst it is convenient for urban water utilities to off-load small towns to the rural water sub-sector in their quest to improve operational efficiency and profitability, the Rural WASH institutions, some of which were newly created at the time as part of the water sector reforms did not adapt very well to respond adequately to the challenges of small towns. The fallout of this has been the success achieved in the area of investment through construction of piped schemes without

corresponding levels of achievement in the governance and sustainability of these small towns piped water services.

In Ghana for instance, the community management approach, which is generally more appropriate for informal settings was largely used for small towns piped water services even though few small towns benefited from a pilot private operator management model in the early 2000s.

Uganda, on the other hand, provides an example of having adopted private sector participation in the management of small towns piped water services right from the beginning of their reforms in the early 1990s and contrasted this with the community management model for point source (rural) communities. Whilst the Ugandan example provides a relatively better formal management arrangement and legal basis for ownership and management, it lacked the ability to expand the services to meet growing demand for water (see World Bank 2003:1) due mainly to a combination of sustainability challenges.

“Small towns are seen as the grey segment of society, which fall between the rural and urban classifications but outside the well-established community management and urban utility management approaches hence characterised by a management gap” (Pilgrim et al., 2007:1). This management gap partly reflects institutional gap with respect to small towns water services over the years, which needs to be addressed.

### **Comparing and contrasting small towns with urban water utilities**

A public utility (or a utility) is generally described as an organisation, which maintains the infrastructure for a public service such as drinking water supply.

Whilst this term is used to describe the organisation managing urban drinking water services, it remains to be made clear that small towns piped water services are also public utilities in their own right deserving of long-term perspective and more professional and commercial approach to planning, design, investment, and management functions.

There are, however, some differences between the conventional urban water utility and the “small towns water utilities”. Conventional urban water utilities have scale and potential for cross-subsidisation and lower tariffs. Another feature of the urban water utility is its management model which is more professional, mostly government-led (in Ghana), and supply-driven with limited or no opportunity for local government and community participation. There is clear and non-fragmented hierarchy of technical leadership. The urban water utility is ultimately responsible for the sustainability of the piped drinking water services as well as its expansion and extension in response to growing demands.

Apart from its capacity to generate enough revenue and raise private and public capital for rehabilitation and expansion, government sometimes invest in the services directly or indirectly. There is usually conscious effort to avert any backlash from the consumer public that may arise from extended service disruptions and/or declining service levels/quality. Urban water utilities also submit to structured regulatory authorities such as the Public Utilities Regulatory Commission (PURC), which provide oversight.

Small towns water services on the other hand are numerous and without scale in some cases, have weak or no oversight, have fragmented governance and institutional arrangements, usually adopts community-based approaches (largely informal) with intermediary agencies (including local government authorities and CWSA) playing facilitative and regulatory roles. The responsibility for operation and maintenance and sustainability of the small towns piped water services largely rests on the small towns themselves which are often not in the position to fully anticipate the gravity of obligations imposed by the need for future major repairs, rehabilitation, extensions and expansion (especially beyond the design life of the water supply systems) and therefore lack the capacity to meet increasing demand for services resulting from rapid population growth.

Unlike the urban water utilities, the local government authorities and rural water agencies usually do not experience any backlash from the public or government over the failure of small towns piped water services. Also, individual small towns experiencing disruptions in piped water services as a result of system breakdowns, long down-times, or complete collapse of the service may not be able to produce the same mass effect as the numerous consumers of an urban water utility whose complaints about poor services are usually massive, loud and resonate with government sometimes with dire consequences for those at the helm of affairs. This explains why even a total collapse of a small town piped water service does not make waves nor cause any panic in officialdom, a situation, which can partly be attributed to the ‘indemnity’ provided for formal sector institutions by the community management model.

### **Unclear and/or inappropriate leadership responsibility**

A Ghana Country Study conducted by IRC and AGUACONSULT summarised the institutional challenge facing the WASH sector in Ghana as follows:

“The multiplicity of service providers, their overlapping mandates, and the lack of provision for oversight and regulation leads to problems in terms of coordination and control” (IRC and AGUACONSULT, 2011:IV). “Progress in achieving improved sustainability can be made only if there is greater clarity in terms of roles and responsibilities for the entire service delivery cycle”(ibid).

IRC/AGUACONSULT further noted that “confusion of mandates for small towns is not the only area of lack of clarity in terms of institutional responsibilities” (ibid). “The definition of peri-urban areas also falls between the urban-rural definitions thus creating a challenge for the sector where many of these areas are similar to small towns but are not formally defined as such” (ibid).

Also, institutional commitment in terms of planning, funding, implementation, and monitoring and evaluation is skewed in favour of service delivery as against sustainability of the piped water services.

### **Functionality monitoring of small towns piped water services in Ghana**

Currently, systematic and regular functionality monitoring is not carried out on the small towns piped water services. This adversely affects service sustainability as problems are not identified and resolved in a timely manner. Besides human resource logistics and financial capacity gaps which do not allow the MMDAs and CWSA to implement regular functionality monitoring and technical support activities, the sheer numbers of rural communities and small towns combined makes it a daunting task. For instance, per the 2013 coverage statistics from CWSA, there were over 22,000 settlements in Ghana (both rural communities and small towns), which have been covered by WASH interventions. Meanwhile, there were 331 small towns piped water schemes in addition to 134 small community piped schemes as at December, 2013. 465 piped water schemes (small towns and rural communities piped schemes combined) is a manageable number for the 10 Regional Offices of CWSA to work with in terms of periodic functionality monitoring data collection, provision of technical support, oversight and regulatory services. For this to happen there will be the need to decouple small towns from rural communities.

### **Justifications for institutional re-alignment and re-orientation for small towns**

The increasing importance of small towns in terms of their population, number and unique characteristics as a segment of society with peculiar needs requiring innovative approaches for sustainable potable water service delivery is enough justification for institutional reforms, re-alignment and re-orientation in Ghana and other developing countries.

In addition, small towns water services investments over the years have been financed largely by grants mainly from bilateral and multilateral donor agencies. However, with the dwindling grant opportunities for the rural WASH sector in Ghana and other developing countries especially those, which have transitioned into lower middle income brackets, accessing funding for water, sanitation and hygiene projects and programmes is becoming more and more difficult. Ghana provides a typical example of this scarcity of donor funds (especially grants) in recent times as reliance on loans for WASH projects is becoming more common.

It is crucially important to always bear in mind that the small towns of today will most likely become the urban settlements of tomorrow, hence the need to begin managing their piped water services like decentralised and highly professional water utilities more or less.

### **The proposed institutional re-alignment and re-orientation for small towns piped drinking water services**

The scale, coverage potential, high investment costs, technological complexity, and the cost of poor sustainability of small towns piped water services are far reaching. Hence, small towns piped water services cannot be treated in the same way as the basic service level water supply technologies

The following options present an opportunity for a transformational change, which will re-position small towns piped water services as water utilities in their own right instead of being seen as just another rural development project, which will be used till it collapses:

1. Create small towns and peri-urban piped drinking water services unit or department within the existing centralised Rural WASH Agency (i.e. CWSA) to take full responsibility for small towns and adopt a

more harmonised and nationally coordinated approach to planning, implementation, sustainability, monitoring and evaluation, oversight and regulation of a private sector-led ‘small towns and peri-urban water utilities management model’.

2. The second option is to create a unit or division for small towns and peri-urban piped water services within the existing urban water utility to take full responsibility for small towns and adopt a more harmonised and nationally coordinated approach to planning, implementation, sustainability, monitoring and evaluation, oversight and regulation of a private sector-led ‘small towns and peri-urban water utilities management model’.

The ‘small towns water utilities’ will be guided by formal management arrangements with enhanced professional and business orientation; with a long-term planning and investment horizon and within a strong regulatory framework which is based on technical competence, professional organisational culture, and transparent/accountable governance environment.

The adoption and implementation of any of the two proposed options will go a long way to protect the credibility of the huge investments made in small towns piped water services and build the needed capacity for the services to be able to expand and even replace themselves to meet growing demand.

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