



Semana temática: Agua y ciudad

Eje temático: Pautas de los gobiernos locales para la sostenibilidad

Título de la ponencia: *Development of sustainable water and sanitation delivery in the cities– the switch Accra learning alliance example. (Desarrollo sostenible del suministro de agua y saneamiento en las ciudades. Accra como ejemplo de Alianza de Aprendizaje en el marco del proyecto Switch)*

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Resumen:

Within the West-African region, Ghana is one of the strongly growing economies. Accra is the administrative, political and commercial capital of Ghana with a population of over 3 million. It is the largest and fastest growing metropolis in Ghana with an annual growth rate of 4.3 % (National Population Census, 2000). Accra, like many parts of the world, faces challenges managing its water. A large part of the population is not connected to the regular water supply network, less than 5% of the households are connected to the city sewerage network, and many areas in Accra are prone to frequent floods. Moreover, water is becoming increasingly scarce and the institutional framework is fragmented and ill-equipped to deal with the ever increasing complexity of managing urban water in Accra (SWITCH Accra City Story, 2008). With the launching of the National water Policy framework in 2008, coordinated by the Water Directorate, it provides leadership and direction towards sustainable water and sanitation plans, policies and programmes. The policy framework also supports the establishment of learning alliance initiatives such as the EU sponsored SWITCH Learning Alliance and other stakeholder collaboration. There has been an increased participation of stakeholder and joint sector reviews.

Palabras clave: Learning Alliance, Stakeholder engagement, sustainability

Introduction

Within the West-African region, Ghana is one of the strongly growing economies. Its population of 23 million people generate a per capita GDP of US\$ 2,700 (PPP). An estimate, 75% of the population has access to water supply whilst only 18% of the population has sustainable access to basic hygienic sanitation¹ (SWITCH Accra City Story, 2008).

Accra is the administrative, political and commercial capital of Ghana with a population of about 2 million. It is the largest and fastest growing metropolis in Ghana with an annual growth rate of 4.3 % (National Population Census, 2000). In addition to its residential population, Accra has large fluctuating migrant population who come to Accra to trade or work during part of the year (SWITCH Accra City Story, 2008).

Accra, like many parts of the world, faces challenges managing its water. A large part of the population is not connected to the regular water supply network, less than 5% of the households are connected to the city sewerage network, and many areas in Accra are prone to frequent floods. Moreover, water is becoming increasingly scarce and the institutional framework is fragmented and ill-equipped to deal with the ever increasing complexity of managing urban water in Accra (SWITCH Accra City Story, 2008).

To give issues affecting water more prominence and to deal with the fragmentation of the sector as well as build capacity, the Government of Ghana, in 2004, renamed the Ministry of Works and Housing as the Ministry of Water Resources, Works and Housing and established the Water Directorate to serve as the co-ordinating unit for issues affecting water in Ghana. These efforts resulted in the consolidation of various sector policies into the National Water Policy for Ghana which was launched in February, 2008.

The policy provides a framework to ensure good governance and encourages the promotion of research and development through interaction and training activities. It also supports the creation of effective partnership among sector stakeholders. One such example is the EU-funded SWITCH Accra Learning Alliance² which supports sustainable options for Integrated Urban Water Management (IUWM) (Darteh, 2008).

SWITCH is an acronym which stands for **Sustainable Water management Improves Tomorrow's Cities' Health**. It looks at a strategic approach to urban water management, storm water management, efficient water supply to all, water use, sanitation and waste management, planning of urban water environment and governance and institutional change. This paradigm shift is a result of global change pressures, escalating costs and other risks inherent in conventional urban water management and the need to satisfy water demand and waste water disposal without creating environmental, social or economic damage is a growing challenge. Accra is the only sub-Saharan African city to be part of this project.

Current Challenges in Integrated Urban Water Management in Accra

The water distribution network for the city is limited but existent; the municipal water supply system for Accra obtains water from two main sources: the Weija and Kpong dams of the Ghana Water Company Limited (GWCL). Currently, about 50% of the population does

¹ Source : <http://www.wssinfo.org/en/watquery.html> accessed on January 15, 2008

² A **Learning Alliance** is group of individuals or organisations with a shared interest in innovation and the scaling-up of innovation in a topic of mutual interest. Learning Alliances consist of a series of structured platforms at different institutional levels (national, river basin, city, community etc) designed to break down barriers to both horizontal and vertical information sharing and thus to speed up the process of identification, adaptation and uptake of new innovation.

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not have house or yard connections. They have to rely on secondary sources such as water tank operators. Ironically, these end up paying 10 times the price of water provided by Ghana Water Company Ltd (GWCL), a large percentage are poor. At the same time, GWCL is unable to account for about 50% of its revenue due to leakages and illegal connections. It has become a norm to see people carrying buckets, pans, jerry cans, etc looking for water every day. This issue of inadequate water supply affects productivity as people-especially the urban poor spend long hours to get a bucket of water. There have been a number of efforts to improve the situation and since 2006 the operation and maintenance of the system is being managed by Aqua Vitens Rand Limited (AVRL) through a management contract with GWCL.

AREA	TOTAL DEMAND(m ³ /day)	TOTAL SUPPLY (m ³ /day)	DEFICIT (m ³ /day)
Accra-West	184,545	195,454	-10,909 *
Accra-East	145,909	77,273	68,636
Tema	129,091	95,454	33,637

Source: GWCI (2003)

* The negative sign means there are excess water after serving demand

It is estimated that with the current growth rate, the population of Accra would hit 5 million inhabitants in the next 20 years. The following shows a projection of water demand in the city of Accra as the population increases.

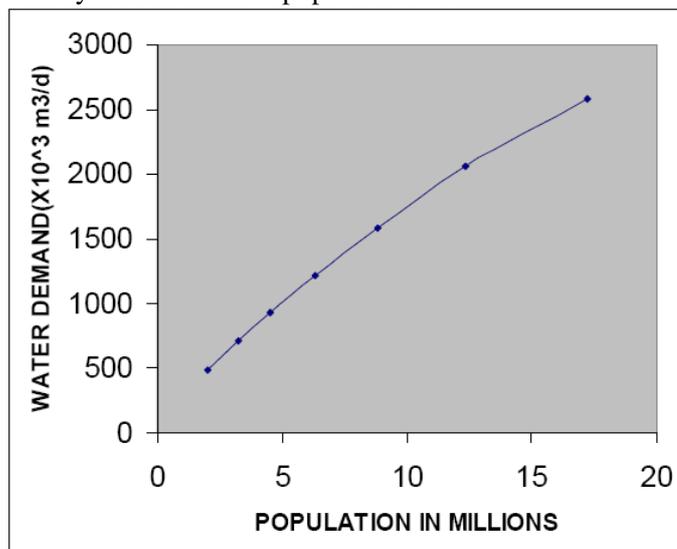


Fig. 3 Water Demand Estimates Against Population Growth in Accra

Wastewater management is the sole responsibility of the Accra Metropolitan Assembly. An estimated 5% of the population is connected to the city sewerage network whilst 21% use storm drains (gutters) as open sewers that ends up in nearby urban water bodies. The rest have septic tanks in their homes. The 2000 population Census showed that one third of all households in Ghana use public toilet due to the absence of toilet facilities in their homes. Most of the drains in the city are not covered and investigation shows that some households without adequate sanitation facilities engage in direct defecation into these drains. The open drains are supposed to serve as storm drains but because of these practices have

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become receptacles for solid, liquid and human waste disposal³ further exacerbating the large-scale pollution of the environment.

Many of the city drains are clogged and as a result many areas get flooded even after moderate rain. It is mostly the poor who live in these low-lying area and who lack the capacity to cope with these floods.

Water has various productive uses in Accra, including the use of waste water for urban agriculture which is important to the livelihoods of many poorer people, but use of polluted water for irrigation poses risks to human health.

While there are various plans and planning processes relating to various aspects of water management and sanitation within Accra, responsibilities for different aspects of water management and planning is fragmented. The action of the various agencies responsible are not well coordinated, and in many cases planners and operators are hampered by limited access to accurate data on key aspects to inform their planning, decision making and monitoring of progress towards objectives.

SWITCH, through the various research work packages and with the support of its Learning Alliance (LA), provides a number of opportunities to explore options will contribute to these challenges to IUWM in Accra. Learning alliances are about building the structures needed to bring people together to analyse and address problems, facing the challenge of mismatched expectations and interests, and jointly learning how to find solutions. They also aim to bridge the gap between people on the ground, organisations at district or provincial level with responsibility for service provision and support, and national policy makers (Smits et al, 2007).

SWITCH Learning Alliance Activities in Accra

It has been recognised that innovation needs to occur in a system that captures the political and institutional challenges in urban water management as these are frequently the most difficult challenge to the uptake of innovation (Butterworth and Morris, 2007). After the establishment of the Water Directorate in 2004, it institutionalised a platform and extended invitation to all stakeholders in allied ministries, sector agencies, metropolitan, municipal and district assemblies as well as civil society groups, private sector and academia to deliberate and dialogue on issues affecting the institutional and political framework of the water and sanitation sector. This platform known as the Joint Government of Ghana (GoG)/Development Partners Sector Review Conference on Water and Sanitation is held annually. In collaboration with the Ministry of Local Government, Rural Development and Environment, a review of the Sanitation Policy was undertaken to highlight international environmental concerns. There are other thematic stakeholder meetings that deliberate on addressing various issues. Examples are the Water Sector Group, Harmonisation and the National Environmental Sanitation Policy Coordinating Council and the SWITCH Accra Learning Alliance meetings.

Since its establishment in 2007, the SWITCH Accra Learning Alliance members have been part of a number of activities that aims at finding strategic directions for achieving integrated urban water management. At their visioning and scenario planning workshop, they came up with a number of possible future scenarios and the following is the most likely scenario:

³ Analysis of District Data and Implications for Planning, Greater Accra Region, GSS, 2005

Box 1: Most likely scenario (high demand in good operating environment)

“Accra in 2030 is a city facing serious water and sanitation related challenges, but quite confidence in its ability to meet them. Very rapid population growth, fueled in part by strong economic performance based on oil wealth, has led to sharply increased demand for water (10 times what it was in 2007). This demand has been contributed to by the rapid growth in the tourism and manufacturing sectors. However, while rapid, growth has not been chaotic – due in large part to the marked improvement in political culture, and related enforcement of planning laws and other regulations. Climate change (and competition from outside the city) has led to a modest reduction in overall water resource availability, which together with the strong growth in demand presents major challenges. These are compounded by lack of access to finances and land for new infrastructure. However, improved management and capacities within GWCL and AMA, new technological options, and engaged and empowered citizens inspire confidence that solutions will be found.”(SWITCH, Accra, 2007).

Based on the future scenarios, the members of the LA also came up with a vision for the city of the future which is in line with the directions of the National Water Policy for Ghana.

The vision for the city of Accra is to have a sustainable city. In terms of water supply the following were outlined.

Box 2: Vision for the City of the Future (Accra)

- *100% access to uninterrupted water supply*
- *10-15% physical losses and 10% commercial losses in Ghana Water Co. Ltd operations.*
- *Quality of the water at point of use meets approved standards (Ghana Standards Board)*
- *Efficient use of water by consumers*
- *Quality of Surface water meets Ghanaian Standards*
- *Improved productive uses of water for livelihood*

- *Accra should have 50-80% of waste recycled*
- *Accra is a clean city with drainage canals and street free of garbage*
- *80% of citizens follow good sanitation practices (including paying for collection)*
- *Integrated and sustainable waste management system*
- *70 % reduction in the incidence of diseases associated with water and sanitation*
- *100% acceptable level of sanitation facilities (healthy, clean, dignified and safe).*

This vision is in the long term but in the short to medium term, key strategic directions have been developed together with a number of indicators which will serve as a road map to the city of the future. Some of the sustainability indicators proposed for monitoring and evaluating the progress of the realization of the vision include:

- Health: (number of reported cases of water and sanitation related diseases)
- Access to Water & Sanitation (number of people having good access to water supply and sanitation)
- Water Quality (both treated and raw water including lagoons and marine)
- Cost Recovery
- Recycling (% of waste that is recycled)
- Awareness Level (survey of the level of public awareness)
- Waste Management

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The challenge or threat to developing the strategies is the immediate availability of data and SWITCH is working on putting together various levels of information from the sector to guide implementation strategies.

Some of the key strategic directions outlined by the Learning Alliance members include the following:

Box 3: Some Strategic Directions for the Achievement of the Vision in Accra

1. rainwater harvesting
2. urban agriculture
3. good data on current watsan issues
4. integrated solid waste collection and treatment
5. natural systems/eco approach
6. different approach to sanitation
7. different approach to drinking water
8. awareness campaign
9. stakeholders participation
10. health implication of watsan solutions

The strategic directions have been further grouped under the following areas for further development:

- Data Management, Decision Making and Urban Management
- Sustainable Water Supply Management
- Sustainable Sanitation, Reuse and Urban Agriculture

Lessons Learnt from SWITCH Learning Alliance in Accra

Despite the initial challenges of setting up, the Accra Learning Alliance has made great strides in bringing stakeholders together to discuss issues that affect sustainability in the water and sanitation sector. This was done through a stakeholder analysis exercise which identified the interests and contribution each stakeholder could make. The inclusion of the key stakeholders in the water sector in the Learning Alliance has provided a lot of support for the process and ideas that are being generated. Regular communication and visits to stakeholders have ensured that they are kept informed.

The National Water Policy which also captures the concerns raised by SWITCH LA members provides a point of absorption and this will greatly facilitate the process of developing a strategic plan for the city of the future. The inclusion of stakeholders at policy level has also ensured that all persons who have a stake in water and sanitation (including consumers) feel responsible for the achievement of the vision for Accra. The Stakeholders of the Learning Alliance (LA) include Government ministries and agencies such as the Ministry of Water Resources Works and Housing, the Ministry of Local Government, Rural Development and Environment and the Accra Metropolitan Assembly. It has been necessary to promote cross ministerial collaborations because Water and Sanitation are located in 2 different ministries. At the intermediate level, the utility providers, the regulatory agencies such as the Water Resources Commission, the Public Utilities Regulatory Commission and the Environmental Protection Agency are part of the LA. Community members especially from marginalised areas are also part to ensure the inclusion of all. All these stakeholders are fully committed to activities of SWITCH, Accra. The LA has moved a step further to share

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experiences and build networks across water and sanitation initiatives in Accra. So far, the LA process has had a lot of support from all and the stakeholders are eager to move from the joint discussion stage to joint implementation stage.

Conclusions

The Learning Alliance approach in Accra has shown that there is the potential for progressive dialogue among all players in the water and sanitation sector. This supports the idea of Learning Alliances as a promising approach to problems of scaling up innovations in the water and sanitation sector (Smits et al, 2007). The support of Learning Alliances and other networks by policy is very important to the success of the process. A good understanding of all stakeholders is also a crucial element of the process.

It is hoped that at the end of SWITCH 2011 a strategies and a database for planning in a direction of sustainability will be owned by the stakeholders and will be put into proper use. Capacity building activities in water and sanitation and policies to implement the strategies for urban water supply and sanitation would be in place for replication in other urban centres in Ghana. Currently, there are efforts to join with other projects which have concepts of multi-stakeholder participation on a broader National Level Learning Alliance and the Ministry of Water Resources Works and Housing is playing a leading role in this attempt. Our future direction is to merge the various platforms to achieve a greater impact through the synergies that will be formed by a harmonized sector.

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