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41st WEDC International Conference, Egerton University, Nakuru, Kenya, 2018**TRANSFORMATION TOWARDS SUSTAINABLE
AND RESILIENT WASH SERVICES****International review of institutional models to support the
development of the National Sanitation Authority in Ghana***J. N. Parkinson, F.M. Dotse, N.O. Laryea, & P. Salian***PAPER 3050**

The Ministry of Sanitation and Water Resources in Ghana has stated the Government of Ghana's intention to establish a National Sanitation Authority (NSA) to provide the institutional home for sanitation sector development. The NSA aims to accommodate various functional attributes related to planning/programming, financing, implementation and monitoring of infrastructure and service delivery for improved sanitation. However, the details of how these will be formulated and how these fit within the current institutional arrangement in Ghana have yet to be discussed or agreed. This paper describes the process of stakeholder engagement and consultation and how the results from an international study of institutional models from fifteen countries in Africa and Asia were used to support the consultation.

Rationale for the national sanitation authority

The coverage of household sanitation in urban areas of Ghana is very low with only 20% of residents have individual improved facilities. The use of shared sanitation facilities is very high (54%) while open defecation is ranked on the highest in the sub-region at 20%. Collection and disposal of wastewater, septage and faecal sludge is very poor; in Accra and Kumasi, an estimated 72% and 43% respectively of the sludge produced ends up untreated in the environment or the sea (Mansour & Esseku, 2017).

The problems that constrain the growth of the sanitation sector and delivery of efficient services have persisted over the past three decades, including limited sector capacity, weak institutional and regulatory framework for supporting monitoring, evaluation and reporting, lack of effective financing and cost recovery to make services self-sustaining.

To counter this deficit, the Government of Ghana has expressed its intention to establish a National Sanitation Authority (NSA) to mobilise and direct funding, regulate sanitation services, and promote capacity strengthening as part of Ghana's commitment to Goal 6 of the Sustainable Development Goals (SDGs). The rationale for the establishment of the NSA is emphasised by the failure of earlier attempts in the sector to tackle sanitation issues from the national through to the grassroots levels. Thus, the Goal of NSA is to work towards incremental but rapid improvement in delivery of services aimed at improving the quality of life of the population. The establishment of the NSA will also provide an effective platform for collaboration and coordination of the sector which is currently lacking.

Objective of the research

As part of the Urban Sanitation Research Initiative in Ghana - a research programme managed by the Water and Sanitation for the Urban Poor (WSUP), IMC Worldwide and Maple Consult set out to assist the MSWR to make informed decision on the organisational model and mandates for the NSA. The overall objective of the assignment was to provide technical support to the Ministry and other key stakeholders to decide upon the role/function and formation of the proposed NSA.

Preliminary consultation with MSWR officials indicated that the specific objectives for the establishment of the NSA can be categorised as follows:

- **Sector guidance and coordination** providing the operational framework under which service providers plan and implement services through appropriate institutional and regulatory measures.
- **Implementation** (infrastructure provision) at the district and municipal level.
- **Regulation** - monitoring, evaluation and enforcement of regulations.
- **Capacity building** – research and development and capacity building.

The research has involved a combination of stakeholder interviews and two national workshops to ensure that stakeholders have the opportunity to provide detailed feedback and are engaged in the consultations. As described below the consultation process was informed by an international review of the institutional models in fifteen countries. Full details are provided in the project report entitled *International Study of Institutional Models to support the development of Ghana's National Sanitation Authority* (IMC, 2018).

International review of institutional models

The identification of relevant sources of information for the fifteen institutional frameworks was based mainly on internet research. In addition, sector experts were contacted where information was not so easily available and for their inputs/validation. The information was collected and categorised according to a framework of functional attributes across the sanitation chain. The institutional arrangements of the sanitation sector in these countries were deemed of relevance and interest in Ghana. The assumption was that one or a combination of these institutional arrangements will provide the basis for a model to be adopted in Ghana.

The study presents the institutional frameworks as described in literature and views of the sector experts. However, it should be noted that ground realities are different and the roles as described may or may not be undertaken by the organisations in practice. The study intended to capture roles and responsibilities of various organisations with the sector in fifteen countries: ten from Africa: Burkina Faso, Kenya, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda and Zambia; and the rest from Asia/Latin America: Brazil, India, Indonesia, Nepal and Vietnam.

The institutions/agencies/organisations were categorised according to:

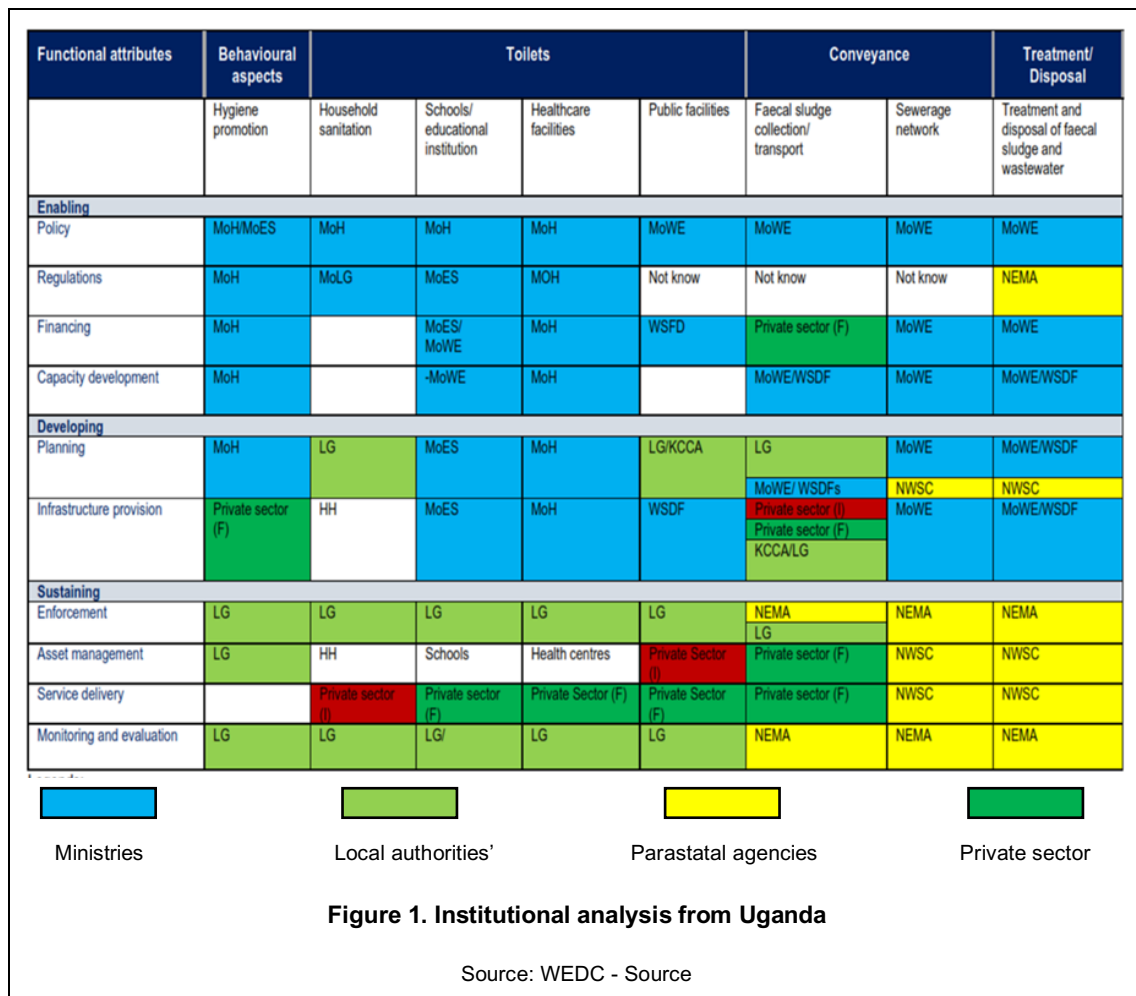
- **Ministries:** Line ministries assigned specific executive roles within the sanitation sector
- **Local authorities:** district and municipal authorities mainly responsible for ensuring services
- **Parastatal agencies:** acting as service providers, asset holding companies, regulators, etc.
- **Private sector:** both formal and informal, providing varying degrees of services from toilet construction to operating and maintaining treatment facilities.

The role of donors was not considered in the landscape since: donors/large NGOs finance and act on behalf of the national governments and in line with national policies/strategies, thus should mostly be aligned with the ministries. CBOs/NGOs on the other hand carry out activities that should be in line with local authorities and, in principle, fill the gap in capacities of local authorities are faced with. Thus functionally, they should be aligned with local authorities. Additionally, considering the larger picture of sector functions, activities of local NGOs and CBOs are restricted to advocacy, service delivery and capacity building at the local level.

The information for each country was collated and categorised according to a framework of functional attributes across the sanitation chain related to enabling, developing and sustaining sanitation services. In relation to these categories the following were the main attributes that were used for the analysis.

1. **Enabling:** i) Policy ii) Regulations iii) Financing and iv) Capacity development
2. **Developing:** i) Planning and ii) Infrastructure provision
3. **Sustaining:** i) Enforcement ii) Asset management iii) Service delivery and iv) Monitoring and evaluation.

Figure 1 shows an example of the institutional analysis from Uganda which shows the extent of involvement of the four main actors (see above) with regards to the functional attributes within the sanitation sector. The same analysis was undertaken for each of the respective countries.



Tables 1,2 and 3 summarise the main findings from the fifteen country review according to the functional attributes listed above.

Table 1. Summary of functional attributes from 15 country review: enabling criteria	
Enabling	
Policy setting:	This function is exclusively with the line ministries and no other agency are involved in policy setting in any of the countries. At the local level, local authorities are involved in the formulation of by-laws pertaining to sanitation.
Regulations (economic and environmental)	This is often the responsibility of line ministries, but exceptions are Brazil, Kenya, Mozambique, Nepal, Rwanda, Tanzania and Zambia where independent institutions regulate the sector. Economic regulators are only present in Brazil, Kenya, Mozambique, Tanzania and Zambia.
Financing of sanitation infrastructure	In most countries financing of infrastructure is carried out by the ministries responsible for (water and) sanitation. The only exceptions being Kenya and Zambia where financing for household sanitation is carried out by Trust Funds. In Burkina Faso, the parastatal agency ONEA also subsidises household sanitation as a pro-poor intervention. India show a promising example of sanitation financing based on comprehensive city sanitation plans.
Capacity development	Capacity building is generally led by line agencies in most countries, with exceptions of Burkina Faso and Zambia, where the parastatals (ONEA and NWASO) are involved in capacity building activities of local service providers.

Table 2. Summary of findings from international review: developing criteria	
Developing	
Planning (at a local level)	This function is generally conducted by local authorities (district and municipal). The exceptions in this case are Burkina Faso, Kenya, Senegal and Zambia where local level planning for sanitation service are undertaken by the parastatal agencies such as ONEA, ONAS, Water and Sanitation Boards and the Commercial Utilities respectively.
Infrastructure provision	The provision of bulk infrastructure (sewerage networks, treatment facilities (faecal sludge and wastewater) etc) are provide by either national or provincial governments. In case of Burkina Faso, Kenya, Senegal, South Africa, Tanzania and Zambia, these are carried out by their respective parastatals. Smaller investments in sludge emptying services are either conducted by local authorities or the private sector and in a very small scale by CBOs in Indonesia.

Table 3. Summary of findings from international review: sustaining criteria	
Sustaining	
Enforcement	The enforcement of by-laws is primarily the function of local authorities (municipal), but in most cases they are only related to containment at a plot level. The enforcement of regulations for emptying, transport and treatment falls under National/regional pollution boards or environmental regulators, which are mostly parastatal agencies. Case in point are authorities in Burkina Faso, Kenya, Rwanda, Senegal, South Africa, Tanzania, Uganda and Zambia. In case of Brazil, India, Indonesia, Nepal and Vietnam these functions are also relegated to environmental departments of local authorities.
Asset management	This function is devolved to the service provider. These are either local authorities/boards in ownership of the infrastructure or to parastatals/private sector under the service agreement.
Service delivery	There are mixed actors while considering functions or emptying and transport, which is either undertaken by the private sector (formal and informal) or the local authorities. The larger operations of sewer networks and treatment facilities are in most cases taken up by the service provider (parastatal or private companies). India, Nepal and Nigeria are the only cases where this function is undertaken by state authorities/provincial governments. Indonesia provides an interesting case were CBOs are becoming increasingly popular in providing emptying and treatments services for decentralised wastewater treatment systems.
Monitoring and evaluation	Primarily the function of ministries using the local authority structure for data collection. Expectations in this case being the parastatals of Mozambique, Senegal and Zambia who monitor the sector performance based on evaluations of the service providers.

These examples were studied for a comparative analysis of the aforementioned functional attributes against a set of minimum requirements relating to a) the functional attributes as required by the NSA and b) the similarity with the socio-economic conditions to Ghana. These were scored according to three levels of low, medium and high. Out of the fifteen countries, six were selected for further analysis as they were considered to be most relevant for the Ghanaian context as well as demonstrating a positive impact on sanitation service delivery in their respective countries. These six consisted of Burkina Faso, India, Kenya, Senegal, Uganda, and Zambia. Table 4 summarises the key features of the institutional models in each of the six countries in terms of their most interesting functional attributes considered to be of relevant to the MSWR and the proposed functional attributes of the NSA.

Stakeholder consultation workshop

IMC Worldwide and MAPLE Consult supported MSWR convene a stakeholder consultation workshop on Wednesday 28th February 2018 with the objectives to:

- Gain a greater understanding of the functions that MSWR envisions for the proposed NSA;
- Ensure participatory and inclusive discussion on the design of the NSA;
- Share information on institutional models for the sanitation sector from other countries and discuss the applicability of these models to the Ghanaian context.

Table 4. Salient features of the sanitation sector in the selected countries	
Country	Salient features
Burkina Faso	<ul style="list-style-type: none"> • Good demonstration of sanitation infrastructure interventions in urban and peri-urban areas • Well established capacity building programme for local authorities to improve service delivery • Well established governance structures (mostly for water supply)
India	<ul style="list-style-type: none"> • Financing based on comprehensive citywide sanitation plans • Innovative Corporate Social Responsibility Fund for financing sanitation improvements • Sanitation Bench Marking systems to raise political awareness on sanitation and, influence motivation of LAs and funding for sanitation improvements
Kenya	<ul style="list-style-type: none"> • Well established results-based financing mechanism for household sanitation • Comprehensive approach to financing: financing + supervision + capacity building of local implementers • Investments provided for urban, peri-urban and rural settings • Good pro-poor strategies • High level of accountability and transparency
Senegal	<ul style="list-style-type: none"> • Good PPP involvement strategies at various levels of the sanitation chain aimed at improving service delivery • Good asset management approaches • Capacity building of private sector for service delivery • Strong focus on on-site sanitation interventions
Uganda	<ul style="list-style-type: none"> • Good operational model for water and sanitation infrastructure planning and implementation at the regional level • Investment planning combines water and sanitation interventions right at the inception phase • Strong focus on small towns and rural growth centres
Zambia	<ul style="list-style-type: none"> • Well established sector regulator, with sound financial sustainability, independent from line ministries • Good pro-poor initiatives • Independent authority enforcing sector standards and guidelines

The workshop's participants expressed strong interest for the attributes of the six institutional models presented that focused on the roles of local authorities in service delivery, private sector involvement, and approaches towards pro-poor service provision through engagement with civil society and non-governmental organisations. There was considerable interest in the experiences from Kenya and Zambia with the role of the national regulator and the monitoring and publishing the performance of service providers. The participants also wanted to learn more about the Trust Funds in Kenya and Zambia in relation to the funding modalities for the NSF. At the same time, it was highlighted that the consultants should look into the experiences from within Ghana from the Community and Water Sanitation Agency, the Road Fund and the Education Trust Fund.

The workshop participants also expressed concern that some of the proposed functions of the NSA put forward by the MSWR risk duplicating the role of existing sanitation organisations; and in particular, the proposal that NSA would play an active role in programme implementation. The potential conflict with the mandated responsibilities of the local assemblies under the Local Governance Bill (2016) was raised.

One of the key conclusions to date is that there is no evidence from the international review to suggest that a single agency has the mandate to carry out all the activities proposed by the MSWR. In most countries where the sanitation sector is more developed the various functional responsibilities are usually divided across a range of different institutions. Consequently, the consultants have put forward the following models for the NSA for further consideration by the MSWR:

Model 1: NSA provides funding and capacity building to local authorities: (examples from Uganda, Burkina Faso and Senegal for capacity building and Zambia and Kenya for trust funds). NSA as lead agency providing support to MMDAs with guidance for improving service delivery with a strong supporting through structured capacity building programme. MMDAs maintain responsibility for sanitation services within their

areas of jurisdiction. Responsibility for regulation lies within the Ministry, which also provides oversight to the proposed NSF.

Model 2: NSA primary role as the national regulatory body: (as seen in Kenya and Zambia). NSA is the national regulatory agency for the sanitation sector; also providing strategic guidance and a capacity building function. The NSF is established as an independent financing mechanism under the Ministry of Finance. MMDAs maintain responsibility for sanitation services within their areas of jurisdiction.

Model 3: NSA as a national utility (as seen in Uganda, Burkina Faso and Senegal). NSA takes over responsibility for sanitation services and is established as a national utility with regional departments and city level commercial entities responsible for urban sanitation services. MSWR is responsible for the national sanitation fund as well as sector monitoring and regulation.

The next steps for the research are for MSWR to consider issues raised during the stakeholder consultation and to decide which institutional model is most appropriate for Ghana and to learn more from the international review to provide guidance based on experience from other countries that will be directly relevant to the MSWR in the establishment of the NSA. It will also important for the MSWR to consider the existing institutions and organisations at different levels their current roles in relation to the sanitation service provision, and how the establishment of the NSA will affect these institutions.

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