

**ADB**

# Engagement Strategy for Knowledge Product - 1

## **South Asia Urban Knowledge Hub**

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University of Moratuwa  
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## **1. Problem Definition**

Local Authorities in Sri Lanka have been vested with the statutory authority of 'regulation, control and administration of matters relating to the public health, public utility services, and public thoroughfares of the area of their authority', and generally with the responsibility of 'protection and promotion of the comfort, convenience and welfare of the people and the provision of amenities of the area of their authority'. Accordingly, Local Authorities act as the bodies bearing the main responsibility for management of environmental sanitation, inclusive of solid waste, waste water, and septage.

Environmental sanitation issues need to be addressed at grass-root level since they directly affect the hygiene of the people. Although Local Authorities of the country have been carrying out these tasks for many years by now, management and provision of services have become increasingly complicated due to the increasing populations and the complex nature of the developments. In the recent times a steady deterioration of the quality and efficiency is observed in the service delivery by LAs, especially in environmental and sanitary management. In this background it is essential to adopt a better system of urban management, which will address the complexities of the ongoing urban development trends and ensure the quality of life of the inhabitants.

Environmental sanitation issues are common not only in major municipal areas with large populations, but their prevalence in the same outlook yet with varying magnitudes can also be noted in smaller urban localities with fewer populations. This clearly shows that the problems in the management of service delivery do not depend on the extent of the area or the size of the population. Rather, it is noted more as a matter related to handling information related to environmental sanitation. Lack of information, difficulties to obtain information and the outdated conventional procedures adopted by the LAs to maintain information have made it difficult not only to upkeep service delivery but also to make timely and important decisions to address critical issues on urban sanitation.

Other state agencies such as the 'Central Environmental Authority', 'Ministry of Public Administration, Provincial Councils, Local Government and Democratic Governance',

and 'Provincial Councils' have separate and integrated programmes and projects to assist the LAs for managing environmental sanitation; these projects are mainly focused on solid waste management, and consist of financial, logistical and technical assistance. But these initiatives and programmes also suffer from drawbacks, especially in information dissemination, adoption of best practices, and facilitation of environment protection.

In view of this situation, the Sri Lanka Centre for South Asia Urban Knowledge-Hub has proposed 'Environmental Sanitation Management Information Systems (ESMIS)' in LAs as a measure to overcome the difficulties and to address the complexities in environmental sanitation management in urban areas. The ESMIS is expected to provide and sustain an updated information base for Local Authorities.

As a piloting initiative of the K-Hub, two urban LAs, namely: Moratuwa Municipal Council, and Gampaha Municipal Council, the areas within whose jurisdictions contain comparatively large populations and high levels of urban agglomerations, have been selected. Environmental sanitation is an issue of major concern for both LAs, and constitutes the largest share among all items in their annual budgets.

Although initiatives to establish information systems are not new to LAs in Sri Lanka in the recent past, most of those initiatives have failed due to many reasons such as the reluctance of the officers concerned to adopt 'novel' and 'sophisticated' modern information technology deviating from conventional practices, lack of visionary leadership who would be convinced of the benefits of effective and systematic management of information, in built resistance within LAs to transparent mechanisms that would expose informal dealings, etc. Hence, the convincing of the political authority as well as the bureaucratic and technocratic elements of the LAs is essential to ensure successful implementation of the proposed ESMIS and its long term sustenance. The contribution of all of the said constituents of the LAs is also essential at the stages of designing the system, its implementation, maintenance and regular updating. Therefore, successful implementation of ESMIS depends on the success of engagement of all of these constituents of the LAs.

## **2. Goals and Objectives**

The goal of the project is the improved service delivery in the sphere of environmental sanitation in the areas under the jurisdiction of Moratuwa and Gampaha Municipal Councils by the year 2020, and then will be infused into the other areas of Sri Lanka.

In order to achieve this goal, three main objectives need to be realized. The first is the setting up necessary infrastructure for the expected service delivery and this will be formulated around the proposed ESMIS. The second is the development of the supportive systems required for the operations and maintenance of the EMIS and the third is the development of the necessary background and the motivation to institutionalize the ESMIS within the LAs. Out of the lessons learnt from previous attempts, the realization of this third objective is the most crucial for the effectuation and the long-term sustenance of Information Management Systems of the proposed nature, and therefore, the engagement strategy proposed in this paper is designed towards the realization of this objective.

## **3. Context of Study**

The context in which this engagement strategy is evolved has to be viewed from two different levels. The first level, which also could be called the 'superstructure', is the policy framework and the process of its effectuation, and the second and the 'substructure' is the will power and the enthusiasm of the organizations and persons at task that is essential to support the grounding of the first.

The Government of Sri Lanka developed an e-Government policy in 2009, consisting of a set of policies and procedures set out for the government sector in using ICTs to achieve overall development within organizations and in delivery of government services. The Information and Communication Technology Agency of Sri Lanka (ICTA) is responsible for the formulation, maintenance, updating and monitoring of the policies and procedures. Individual government organizations are responsible for adoption and implementation of the policies and procedures. Accordingly, all public institutions, including the LAs are obliged to adopt these policies and procedures, as part of which

each LA is supposed to set up an ICT unit within its administration setup. The structure of the unit will depend on the ICT requirements of the respective LA.

In spite of the strongly enforceable ICT policy and the establishment of ICT units in many LAs, harnessing the actual potentials of ICT remains at a depressingly low level and information management still follows the conventional book keeping methods that cannot serve for the present day demands. The use of ICT remains at varying levels and in most of the LAs it is limited to basic day to day activities such as personal communication, web presentations, preparing check rolls, spread sheet applications, etc. However, it is noteworthy that a few LAs, such as Gampaha MC, systems have been established and employed for the maintenance and analysis of revenue and assessment tax records, but limited to internal purposes of the MC administration and with no spatial information base. Another limitation observed is the inherent compartmentalization of the information sources into different departments of the MCs.

The need in this context is to broaden the existing ICT facilities into wide range information systems that will enable to: strategize LA's information, increase the efficiency of LA's activities, accessible for all those who need them, and use effectively for decision making purposes. Proposed ESMIS will provide space ideal for this purpose.

However, the establishment will not be firm without the substructure that enables it to be consolidated within the institutional environment and the routine functions of the LAs. This is the level that consists of the political authority and the bureaucratic and technocratic elements of the LAs. The expected challenges in setting up this ground will be of three types, which need to be dealt in a strategic approach and is the intension of this work.

The first is the chronic lethargy in the administrative and technical staff of the LAs to switch from conventional procedures and processes. Adaptation to new e-environment will not be that easy, not because of any incompetence, but due to deep rooted misconceptions on ICT as 'out-of-reach' technology that is 'difficult to handle' without a long term training, and the misnomer that novel systems usually aim at sophistication.

The second is the attitudinal impasses that resist collaborations, both with the departments, internal to the LAs and the organizations outside them. The interventions by the outside agents are often seen as problematic to the order of the functions and thus, impose some reservations to cooperate, share and dissemination.

The third is the willpower of the political authority, bureaucratic and technocratic figures to shift from conventional enclosed systems of handling information, which provide adequate space for 'out-of-the book' methods of dealing with LAs affairs, to more exposed information systems that leave all transactions accountable to the public.

Jason R. Baron, Director of Litigation at the National Archives and Records Administration, USA describes six factors that should be considered to change from enclosed system to transparent electronically managing information system.

- Committing to electronic recordkeeping and/or e-mail archiving with records management controls in place
- Embracing preventive measures in the form of ad hoc, interdisciplinary groups of professionals (records officers, attorneys, CIOs and IT staff, and senior executives), meeting to discuss the future e-discovery risks each agency faces
- Improving their baseline knowledge management of their own information assets, starting with inventorying and/or data mapping all agency ESI repositories, applications, and platforms in anticipation of discovery about those very subjects;
- Changing workflow to support electronic business processes;
- Updating legacy records schedules and ensuring that unscheduled electronic records (in the form of databases or on network applications) are properly scheduled; and
- Appointing a "knowledge counsel" who will be the "go to" person in each headquarters and regional component of a General Counsel's or Solicitor's office, who would function as a clearinghouse and repository of information on the IT and recordkeeping practices of the agency.

Within this context, the proposed ESMIS will specifically aimed at improving service delivery in the area of environmental sanitation, but it can be extended to cover other functions of such as the property assessment, revenue collection, development permits and regulations, etc.

#### **4. Decision Makers, Key Actors and Relationships**

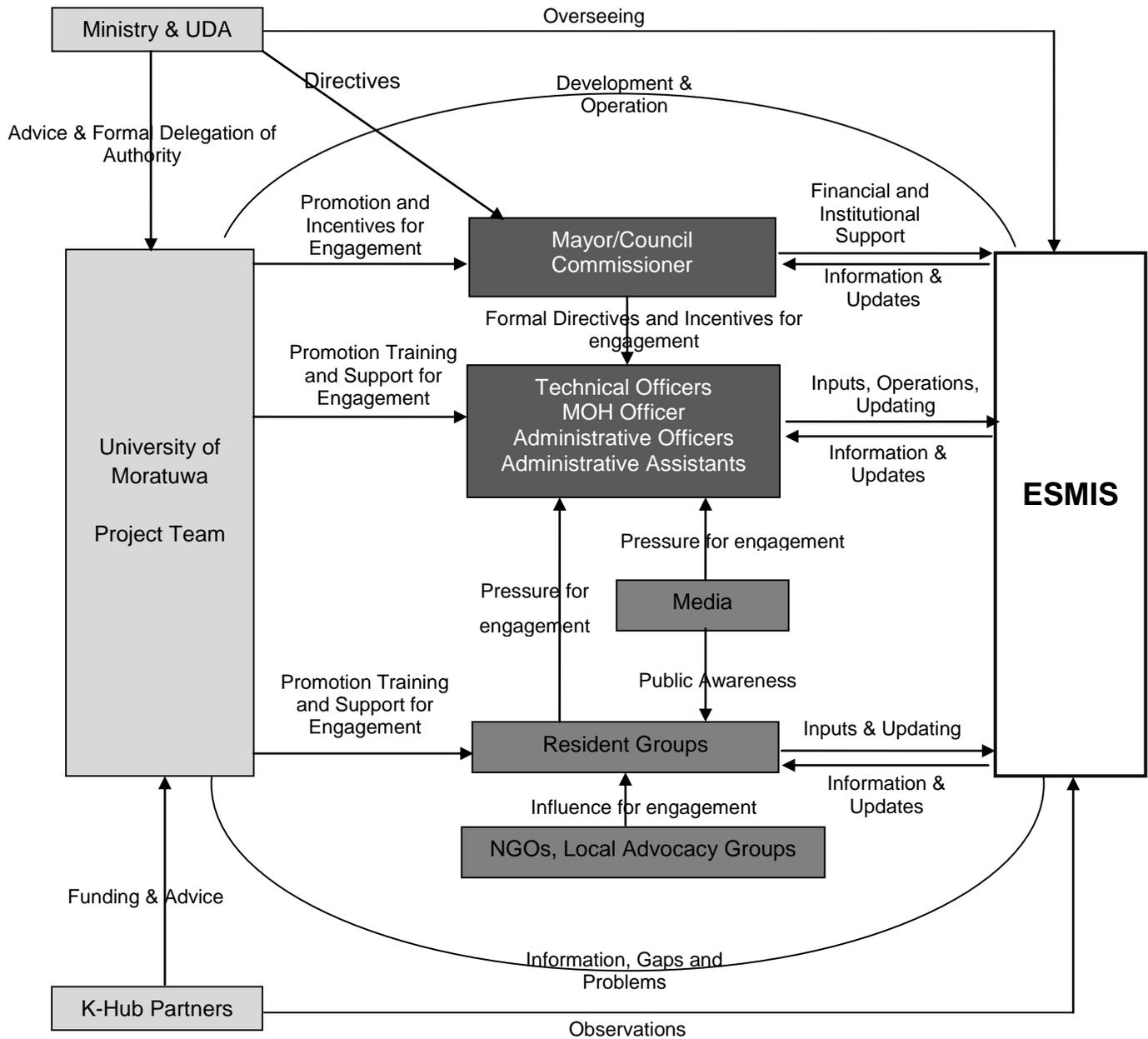
Establishment of the ESMIS is an effort of many stakeholders. University of Moratuwa, Urban Development Authority (UDA) and Ministry of Urban Development, Water Supply and Drainage are the key decision makers throughout the process. They are responsible for developing the ESMIS, providing technical assistance to the relevant Local Authorities, facilitating the incorporation of the proposed system to the planning and plan implementation process of the selected Local Authorities and coordinate, steer, monitor, and provide feedback on the progress of the project activities

Under present situation, the Team from University of Moratuwa has to take lead in the Development of the proposed ESMIS, given that the other partners are not in a position to spare resources and skills required for this task. As the success of this system depends on enthusiasm, and commitment of the officers of the two LAs, they will also be the key actors of developing the system. In order to get the initiative driven through the Mayor, Commissioner and heads of the departments (eg: Health, SW, Engineering) need to be engaged. Technical officers of the LAs are the main responsible persons in maintaining and continuing the ESMIS. MOH officer, administrative officers and administrative assistants also will be engaged in updating and maintaining the ESMIS. Therefore, an interest has to be induced them as well. In addition to the internal staff, the resident groups of the two LA areas will also have to be integrated to promote, operationalized and to support the continuation of the ESMIS. Residents will also be able to access for the data and information in the ESMIS and will be able to inform the LA if there's anything inaccurate and they also can complain on issues and be able to give feed-back and suggestions.

Media will be engaged to aware public about the system and to put pressure on the LA for the efficient engagement. NGOs and the local advocacy groups will be aware on the

importance of the system for the people and they will help to get public interested to provide information for the system.

The following network illustrates the relationships among decision makers, key actors and the ESMIS.



## 5. Engagement Strategy

The engagement strategy discussed here, has a preceding section, at which the evaluation of LAs for the selection for the proposed establishment was included.

Out of the case studies on previous attempts, it was learnt that for the successful implementation of an ESMIS, locating 'Champions' those who have the motivation and the drive to capitalize upon the opportunities coming on their way is crucial. The champions shall be identified both from inside the LAs and from the outside community. Therefore, as a precautionary measure, in the selection of the appropriate LAs for this pilot project, the capabilities, capacities and the attitudes of the political leaders (Mayors), the administrative heads (Municipal Commissioners), the highest officers in the technical divisions (Municipal Engineers), and the community leaders (tax payers association) have been considered as a major criterion. In addition to that, similar ICT based systems already in place is also considered, on the assumption that the proposed systems will not be completely alien to the staff of the selected LAs as they will be working in the ICT environments that are familiar to them. The information required for this evaluation was obtained from the Urban Development Authority (UDA), who works closely with all urban LAs of Sri Lanka for all planning and development activities.

The strategy itself consists of three major components, namely: the inspiring, incentivizing and diffusion, which will have concurrent applications on the selected LAs.

In the first component, the selected leading champions of the LAs are expected to be inspired by the presentation of case studies; demonstration of model applications; and meetings with other champions those who have success stories in similar projects. The first two items in this component will be handled by the University of Moratuwa and the last item will need to be organized with the support of the Ministry of Urban Development.

In the second component, the required training and the relevant background knowledge will be provided to the technical and administrative staff of the LAs. The training will lead to an awarding of a certificate which can be a qualification obtained by the respective

trainees. While the formal training on ICT applications will be arranged by the University of Moratuwa, it is assumed that the LAs will provide necessary time and incentives for the relevant staff for their engagement in such training.

In the third component, the persons with enthusiasm and dedicated to their work, and who show the potential to be future drivers of the proposed ESIMS, will be identified both in a close examination of the routine behavior of the staff of the LAs and on the recommendations of the leading champions of the selected LAs. The identified persons along with the leading champions will have close contacts and continuous relationships with the K-Hub Team and in order to reinforce such relations they will be invited for occasional, but informal get-togethers, field visits and dinner table discussions, by which they are expected to be diffused in the K-Hub project.

The residents will be influenced by three levels.

1. Aware Grama Niladhari officers by the District Secretariat about the system.
2. Aware public by each Grama Niladhari (GN) officer of respective GN Division by holding meetings.
3. Aware ordinary level students at secondary schools.

They will be influenced through presentations, highlighting the benefits they gain from the system and the efficiency of acquiring data and information. The knowledge on operating the system will be given through practical sessions. Media, NGOs and local advocacy groups will also be engaged in public awareness.

## **6. Monitoring and Learning**

As stated earlier, the proposed ESMIS for Municipal Councils of Moratuwa and Gampaha shall be considered as pilot projects, which intends to draw the attention of many other urban local authorities. The ESMIS will be developed by the University of Moratuwa, It will be adjusted and streamlined by the UOM Project Team to address any issues that may arise due to ground realities after it is implemented at the two Local Authorities. The system will be developed to handle solid waste management and septage management at the initial stage, which are critical issues at the LAs

The proposal is to possess the system by the UoM until the LAs will acquire the required environment and the capacities appropriate for maintain the system. Even after handing over UoM Project Team will continue to support the ESMIS system at the LAs, in order to assure its sustenance. LAs will be given the responsibility for updating and managing the database, and periodic monitoring would be carried out by the Urban Development Authority to identify any gaps regarding the information system, which will be addressed by the University of Moratuwa project team.

After implementing the system a case study will be developed referring to Moratuwa and Gampaha Municipal councils to share the successes and failures of ESMIS. This could be shared with K-Hub partners and could be used by others who interested in implementing ESMIS.

Following table indicates how the progress will track and assessing the degree to which things have changed.

<p><b>How will you assess if you are heading in the right direction?</b></p>	<ul style="list-style-type: none"> <li>– Quarterly Meetings with the two Municipal Councils, UoM, UDA and the Ministry of Urban Development, Water Supply and Drainage (Steering committee meeting).</li> <li>– Monthly meetings for the working groups in Municipal Councils.</li> <li>– Weekly meetings for the UoM team.</li> <li>– Progress workshop participating UoM, UDA, Ministry of Urban Development, Water Supply and Drainage and Local authority in every six months.</li> </ul> <p>After every meeting and workshop, an After Action Review (AAR) will be held to discuss about ‘what was supposed to happen?’, ‘what actually happened?’ and finally to compare these two in order to understand ‘Why were there differences?’ and ‘What did we learn?’</p>
<p><b>How will you track whether you are doing what to planned to do (and take note of what was unplanned)?</b></p>	<ul style="list-style-type: none"> <li>– Monthly progress reports</li> <li>– Quarterly reports</li> <li>– Meeting Minutes</li> </ul>
<p><b>How will you ensure your outputs are the right quality?</b></p>	<ul style="list-style-type: none"> <li>– Peer review of documents among K-Hub partners and national partners (UDA and the Ministry of Urban Development, Water Supply and Drainage).</li> </ul>

	– User testing (physical test run) of ESMIS for local authority staff.		
<b>What indicators of success will you use</b>	<b>Expect to See</b>	<b>Like to See</b>	<b>Love to See</b>
	Implementation of at least one aspect (one service delivery) in one pilot area (ward) in both municipal councils.	Implementation of all the aspects (Completed ESMIS) in both municipal councils.	Up scaling of ESMIS to other Municipal councils (National Level)
<b>How will you measure this?</b>	monthly electronic log reports, entries, troubleshooting, electronic reports	monthly electronic log reports, entries, troubleshooting, electronic reports	Through workshops, meetings and policy papers.
<b>What will you do with the results?</b>	Continuous monitoring, upgrading and troubleshooting based on feedback		
<b>How will you ensure you are learning?</b>	The efficiency of service delivery (improvement in health and sanitation) thereby improvement of the quality of life.		
<b>How will you share your learning with others?</b>	Through conferences, K-Hub web site, newspapers, media, local authority websites and annual reports, Ministry publications, leaflets, etc...		

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