

September 2014

South Asia Urban Knowledge Hub



I. INTRODUCTION

A. Context

1. In Bangladesh, lack of fecal sludge management (FSM) services is causing severe environmental pollution in cities and towns, endangering both environment and public health. On-site sanitation is prevalent throughout the country, except for a small portion in Dhaka city, and the huge quantity of fecal sludge generated in septic tanks and pits (of pit latrines) is inaptly managed. Disposal of fecal sludge in low-lying areas and in lakes and canals within urban areas is common, leading to serious environmental degradation. There is no specific regulatory framework related to FSM and lack of understanding about relevant treatment technologies has led to very little success in application of a sustainable FSM program. Hence development of a sustainable FSM strategy, covering both technology and business model, as well as enhancing the organizational capacity of the urban utility service providers, will greatly improve the overall environment and health scenario in urban areas.

2. Furthermore, close to one-third of the population of Bangladesh, currently about 160 million, live in urban areas, and people living in slums and low-income communities account for as much as 40% of the urban population. There are about 3500 to 4000 slums in Dhaka alone. Unplanned development of urban slum areas has led to their vulnerability towards natural disasters (e.g., floods, water logging), fire hazard and access to basic services, including water, sanitation, and energy. In slums where water supply and sewerage authorities (WASA) have facilitated water supply, access to safe water has improved significantly, but questions remain about equity since slum people often pay much higher than the regular WASA water price. The situation is much worse with respect to sanitation; in some slums open defecation is still practiced by as high as 20% of the population, against a national average of 3%. Ensuring access of women/girl and persons with disability are yet to be addressed in most cases. Absence of an “integrated development approach” to address the diverse problems of slum dwellers, the most vulnerable section of urban community is a major challenge in achieving inclusive urban development.

3. ITN-BUET, the Bangladesh National Center for the South Asia Urban Knowledge Hub (K-Hub), intends to promote inclusive, safe and sustainable urban living. In order to achieve this “goal”, ITN-BUET plans to focus on two major issues during the K-Hub project period: (a) improvement of overall urban environment through promoting fecal sludge management (FSM), and (b) improvement of living conditions of people in urban slums and low-income communities by promoting “integrated development approach”.

4. In association with all relevant stakeholders in the country and with support from K-Hub partners, ITN-BUET will provide strong evidence based research findings to support the decision makers to adopt a regulatory framework for FSM, as well as technologies and business models for sustainable FSM services in the urban area. Similarly, it will conduct action research in selected urban slum areas to identify the diverse challenges and formulate an integrated development approach for the slum areas. ITN-BUET will facilitate participation of the Ministries concerned of the Government of Bangladesh, NGOs working in the sector, development partners such as ADB, WB, BMGF, JICA and other development partners and relevant academic institutions in the process.

5. There are differences among the K-Hub partners and also among countries within the region regarding status of urban development. Therefore, sharing of knowledge in urban development among countries could enable K-Hub partners to widen their perspective for better planning and understanding.

6. Lastly, ITN-BUET will utilize the opportunity of working under the umbrella of ADB to contribute to bring changes in course curricula on urban planning and sanitation in relevant academic institutions in the country.

II. GOAL AND IMPACTS

Goal: Inclusive, safe and sustainable urban living by improving the overall environment through implementing appropriate fecal sludge management (FSM) services, and improving living conditions in urban slums and low-income communities, through knowledge based integrated development by 2021.

Impacts: By 2021, the initiatives of ITN-BUET under the South Asia Urban Knowledge Hub are expected to bring about most of the following impacts:

- (i.) Significant reduction in pollution of urban environment by improved FSM through development and facilitating implementation of an institutional/ regulatory framework and sustainable technology and operational/ business model for FSM.
- (ii.) Substantial improvement in living conditions within urban slums and low-income communities through integrating development of different sectors.
- (iii.) The concerned academic institutions of the country will have better understanding of urban planning and sanitation, and updated curricula with a regional development context in mind.
- (iv.) The organizational capacity of WASAs/CCs/Pourashavas will be enriched and will be in a much better position to undertake more comprehensive planning, implementation, operation and management related to utility services in urban areas of Bangladesh.

III. OBJECTIVES

Objective 1: To create an enabling environment for decision makers to sustainably implement fecal sludge management (FSM) services in urban areas of Bangladesh by Dec 2016.

A. Activities:

- (i.) Perform case study in at least two selected areas (one slum area in Dhaka city and another secondary town where ADB funded project is being implemented) for assessing FSM scenario in urban areas of Bangladesh by **February 2014**.
- (ii.) Draft concept paper for developing a national FSM regulatory/ policy framework for urban areas (KP 1) and submit it to ADB and national centers for review by **February 2015**.
- (iii.) Draft supporting strategy for KP 1 for review by ADB and adapt and fill in on an ongoing basis by **February 2015**.
- (iv.) Create awareness about the importance of FSM among relevant stakeholders [e.g., policy makers from relevant ministries, and departments of the Government, elected representatives of cities and towns (CCs, Pourashavas), NGOs, Research and Academic Institutions, News Media, etc. through 2 to 3 national level consultation workshops on FSM by June 2015.

- (v.) Develop a regulatory/ policy framework for FSM (KP 1) by working with relevant government and non-government organizations and through 2 to 3 stakeholders' consultation workshops, and an accompanying policy brief (PB 1) by August 2015.
- (vi.) Identify suitable treatment option/ technologies for FSM through assessing different alternatives being practices in the country and also within the region, and promoting action research by December 2015.
- (vii.) Draft concept paper for developing business models for providing FSM services involving government, NGOs and the private sectors and submit it to ADB and national centers for review by **September 2015**.
- (viii.) Draft supporting strategy for KP 2, for review by ADB and adapt and fill in on an ongoing basis by **November 2015**.
- (ix.) Develop final supporting strategy by January 2016.
- (x.) Develop operational/ business models involving government, NGOs and private sector for sustainable FSM services (KP2) and accompanying policy brief (PB2) and share with concerned stakeholders through workshops by June 2016.
- (xi.) Work with DWASA, City Corporation (DNCC/DSCC), DPHE, LGED, ADB and at least two Pourashavas (municipalities) in preparing detail plan for undertaking FSM projects in two slum areas within Dhaka city and two Pourashavas (ADB funded project areas including one coastal town) by September 2016.
- (xii.) Establish two twinning partnerships between local urban utility service providing institution(s) (WASAs/CCs/Pourashavas) and similar institutions from regional or extra regional partner countries to enhance planning, operation and maintenance performance of the local institutions in FSM by December 2016.

B. Outputs:

- A Case Study on existing FSM scenarios in urban areas in Bangladesh.
[Case Study 1]
- 4-6 national consultation workshops
- A concept paper for developing a national FSM institutional and regulatory framework for urban areas and business models for providing FSM services involving government, NGOs and the private sectors.
- Institutional and regulatory framework for FSM **[KP 1]**
- Operational/ business models involving government, NGOs and private sector for sustainable FSM services **[KP 2]**
- Policy brief on national FSM institutional and regulatory framework **(PB1)**
- Policy brief on sustainable business model for FSM services **(PB2)**
- Documentation of draft and final strategy to support the policy makers and other concerned stakeholders.
- 2 – 3 visits to regional and/ or extra-regional countries to identify appropriate institutions
- MOU signed for two (2) twinning partnerships between WASAs/CCs/Pourashavas with counterpart service providing institutions from regional and/ or extra-regional countries.

C. Indicators of Success:

- (i.) FSM institutional and regulatory framework approved by the Government by 2016
- (ii.) FSM business models accepted in principle by Pourashavas, City Corporations and WASAs by Dec 2016
- (iii.) Commitment to undertake an FSM project in at least 2 municipalities and 2 slum areas by the government by Dec 2016
- (iv.) Activities under twinning partnerships commence by June 2017, and more institutions show interest in twinning partnerships through ITN-BUET under K-Hub initiatives.

Objective 2: To support government organizations (like City Corporations, Pourashavas, DPHE, LGED, PSU, RAJUK, WASAs, DESA, DTCA, etc.) and non-government organizations to opt for an “integrated development approach” in at least one slum/low-income area in Bangladesh, encompassing different vulnerability concerns and challenges like degraded environment and housing; access to basic services like water, sanitation, energy and transportation; drainage and SWM, natural disasters and fire hazard; and safety by Jan 2017.

A. Activities:

- (i.) Review and identify the gaps, through 2 national level consultation workshops, within existing development approaches and plans for urban slums by **May 2015**.
- (ii.) Perform case study (**Case Study 2**) in selected slums and low-income communities in Bangladesh to identify the challenges and vulnerabilities including housing, lack of basic services, drainage and SWM, natural disasters, fire hazard by December 2015.
- (iii.) Draft concept paper for developing an integrated development approach for urban slums and low-income communities by March 2016.
- (iv.) Draft a supporting strategy for review by ADB and adapt and fill in on an ongoing basis by June 2016.
- (v.) Formulate an integrated development approach for urban slums and low-income communities to be implemented in partnership with NGO(s) in a model slum area (**KP3**) and associated policy brief (**PB3**) by July 2016.
- (vi.) Finalize the supporting strategy by September 2016.
- (vii.) Consultation workshops (3 to 4 workshops at different points in time) with key stakeholders (both government and non-government), as well as community representatives for sharing the findings and finalizing the “development approach” that is owned by all stakeholders by December 2016.
- (viii.) Follow-up meetings with interested decision-makers to further promote the integrated development approach (November 2016 to January 2017).

B. Outputs:

- Case study on existing challenges/vulnerabilities in slums [**Case Study 2**]
- 5 – 6 national level consultation workshops over 2 years
- A concept paper highlighting vulnerability of urban slums and low-income communities and importance of an integrated development approach for these areas
- A Knowledge Product on development of an integrated development approach for selected urban slums and low-income communities [**KP3**]; A

policy brief on integrated development approach of urban slums and low income communities **[PB 3]**

- Draft and final strategies to support the policy makers and other stakeholders to opt for an integrated development approach.
- 2-3 meetings with interested decision makers on the integrated development approach

Indicator of Success:

- (i.) Decision makers in at least 1 slum/low-income area ask ITN-BUET for support to use the integrated approach in their planning by Jan 2017.

Objective 3: To promote capacity development of fresh graduates in urban planning and management through bringing about appropriate changes in course curricula on urban planning and sanitation in selected, relevant academic institutions in the country by 2016.

A. Activities:

- (i.) Review overall urban development trend of selected cities/ towns of partner countries and identify comparable urban development trends in Bangladesh by December 2015.
- (ii.) Share with partner countries the knowledge and experience achieved from different action research and urban development projects in Bangladesh in order to enhance perspectives in improving course curricula on urban planning and sanitation by June 2016.
- (iii.) Draft supporting strategy for review by ADB, and adapt and fill in on an ongoing basis by June 2015
- (iv.) Consultation meetings (3 to 4 at different points in time) with academia and practitioners for sharing and agreeing the required changes in curricula by July 2016.
- (v.) Finalize supporting strategy by September 2016
- (vi.) Recommend updated and improved course curricula on urban planning and sanitation for Bangladesh by December 2016.

B. Outputs:

- Review report on trends in urban development planning in partner countries
- 3 – 4 consultation meetings with academia and practitioners
- Draft and final supporting strategy
- One sharing meeting with partner countries
- 4 working group consultation meetings
- Recommendations on updated course curricula on urban planning for academic institutions in Bangladesh

C. Indicator of Success:

- (i.) Two universities in the country commit to updating their urban planning and sanitation course curricula based on recommendations prepared ITN-BUET under K-Hub initiatives by March 2017.

Objective (Operational)4: To build capacity of institutions (e.g. ITN-BUET and relevant stakeholders) in knowledge management, communications and learning by Dec 2016.

A. Activities:

- (i.) Organizing Eminent Lecture Series (one each in 2014, 2015, 2016)
- (ii.) Activating and maintaining webpage / website
 - a. Participating in working group
 - b. Providing content
- (iii.) Contributions to Newsletter - twice yearly
 - a. Participating in working group
 - b. Providing content
- (iv.) Reporting and Learning
 - a. Monthly (or bi-monthly) telecons by team leader with ADB K-Hub representative
 - b. Quarterly Progress Reports (to Regional Coordinator and ADB)
 - c. Annual Reports of Working Groups (to ADB, Regional and National Centre)
 - d. Steering Committee Meetings (team leader at least once per year)
 - e. Twice yearly reflections on outcomes (telecons between our team and ADB)
 - f. Mid Term Capacity Building / Reflection Retreat (for national teams - early 2016)
 - g. Participation in two training webinars per year (for national teams)
 - h. Participation in a final Reflection Workshop on Lessons on Implementation of Regional K -Hub (early 2017 - K-Hub partners and implementing agencies)
- (v.) Knowledge Products
 - a. Contributing to Knowledge Products of other countries by submitting Bangladesh country profile on the topic (9 in total)
 - b. Reviewing the KP concept paper of other countries and providing comments
 - c. Contributing to the regional knowledge product(s) (i.e. regional database)
 - 1) Participate in working group
 - 2) Contribute to influencing strategy
 - 3) Contribute to the concept note on the KP
 - 4) Support implementation

B. Outputs:

- Webpage / Website
- Newsletter
- Knowledge Products
- Quarterly Progress Reports
- Annual Reports
- Working Group Reports
- Steering Committee Meeting minutes
- Participation in trainings

C. Indicators of success:

- (i.) Team members and other stakeholders show progression from researchers/professionals to influencers by having influencing strategies for work outside the K-Hub deliverables by December 2016.

IV. WORKPLAN FRAMEWORK

Design Summary	Performance Targets and Indicators of Success	Risks
<p>Intended Impacts</p> <p>The initiatives of ITN-BUET under the South Asia Urban Knowledge Hub are expected to bring about the following impacts:</p> <ol style="list-style-type: none"> 1. Significant reduction in pollution of urban environment by improved FSM through development and facilitating implementation of a regulatory framework and sustainable technology and operational/ business model for FSM. 2. Substantial improvement in living conditions within urban slums and low income communities through integrating development of different sectors. 3. The concerned institutions of the partner countries will have better understanding of urban planning and sanitation, and updated curricula with a regional development context in mind. 4. The organizational capacity of WASAs/ CCs/ Pourashavas will be enriched and will in a much better position to undertake more comprehensive planning, implementation, operation and management related to utility services in urban areas of Bangladesh. 	<ol style="list-style-type: none"> 1. FSM regulatory framework approved by concerned ministry by December 2015 2. Government initiates policy/ strategy formulation based on Integrated development approach for urban slums and low-income communities by July 2016 3. Use of improved curricula by December 2016 4. Twinning partnerships of at least two institutions operational by July 2017 	<ol style="list-style-type: none"> 1. Delay in acceptance of FSM regulatory framework by the government 2. Policy makers/ government do not agree to urban slum development approaches 3. Concerned institutions do not cooperate changing existing curricula 4. Lack of interest by institutions for twinning partnership

Activities with Milestones

Objective 1: To create an enabling environment for sustainable implementation of fecal sludge management (FSM) services in urban areas of Bangladesh by Dec 2016.

Activities:

1. Perform case study in at least two selected areas (one slum area in Dhaka city and another secondary town where ADB funded project is being implemented) for assessing FSM scenarios in urban areas of Bangladesh by **February 2014**.
2. Draft concept paper for developing a national FSM regulatory framework for urban areas and submit it to ADB and national centers for review by **February 2015**.
3. Draft supporting strategy for KP 1 for review by ADB, considering good practices in K-Hub partner/ regional countries, and adapt and fill in on an ongoing basis by **February 2015**.
4. Create awareness about the importance of FSM among relevant stakeholders [e.g., policy makers from relevant ministries, and departments of the Government, elected representatives of cities and towns (CCs, Pourashavas), NGOs, Research and Academic Institutions, News Media, etc.] through 2 to 3 national level consultation workshops on FSM by **June 2015**.
5. Develop a regulatory framework for FSM (**KP 1**) by working with relevant government and non-government organizations and through 2 to 3 stakeholders' consultation workshops, and an accompanying policy brief (**PB 1**) by **August 2015**.
6. Identify suitable treatment option/ technologies for FSM through assessing different alternatives being practices in the country and also within the region, and promoting action research by **December 2015**.
7. Draft concept paper for developing business models for providing FSM services involving government, NGOs and the private sectors (KP 2) and submit it to ADB and national centers for review by **September 2015**.
8. Draft supporting strategy for KP 2, for review by ADB, considering good practices in K-Hub partner/ regional countries, and adapt and fill in on an ongoing basis by **November 2015**.
9. Develop final supporting strategy by **January 2016**.
10. Develop operational/ business models involving government, NGOs and private sector for sustainable FSM services (KP 2) and accompanying policy brief (PB 2) and share with concerned stakeholders through workshops by **June 2016**.
11. Develop detail plan for undertaking FSM projects in two slum areas (by WASA, City Corporation), and two Pourashavas (ADB funded project areas including one coastal town by Pourashava authority, DPHE/ LGED, ADB) by **September 2016**.
12. Establish two twinning partnerships between local urban utility service providing institution(s) (WASAs/CCs/Pourashavas) and similar institutions from regional or extra regional partner countries by **December 2016**.

Objective 2: To support government organizations (like City Corporations, Pourashavas, DPHE, LGED, PSU, RAJUK, WASAs, DESA, DTCA, etc.) and non government organization to opt for an integrated development approach encompassing different vulnerability concerns and challenges like degraded environment and housing; access to basic services like water, sanitation, energy and transportation; drainage and SWM, natural disasters and fire hazard; and safety by Jan 2017.

Activities:

1. Review and identify the gaps, through 2 national level consultation workshops, within existing development approaches and plans for urban slums by **May 2015**.
2. Perform case study (Case Study 2) in selected slums and low-income communities to identify the challenges and vulnerabilities in slum areas including housing, lack of basic services, drainage and SWM, natural disasters, fire hazard by **December 2015**.
3. Draft concept paper for developing an integrated development approach for urban slums and low income communities by **March 2016**.
4. Draft a supporting strategy for review by ADB, considering good practices in K-Hub partner/ regional countries, and adapt and fill in on an ongoing basis by **June 2016**.
5. Formulate an integrated development approach for urban slums and low-income communities to be implemented in partnership with NGO(s) in a model slum area (KP 3) and associated policy brief (PB 3) by **July 2016**.

6. Finalize the supporting strategy by **September 2016**.
7. Consultation workshops (3 to 4 workshops at different points in time) with key stakeholders (both government and non-government), as well as community representatives for sharing the findings and finalizing the “development approach” that is owned by all stakeholders by **December 2016**.

Objective 3: Promote capacity of fresh graduates in urban planning and management through bringing about appropriate changes in course curricula on urban planning and sanitation in selected, relevant academic institutions in the country by 2016.

Activities:

1. Review overall urban development trend of selected cities/ towns of partner countries and identify comparable urban development trends in Bangladesh by **December 2015**.
2. Share with partner countries the knowledge and experience, achieved from different action research and urban development projects in Bangladesh in order to enhance perspectives in improving course curricula on urban planning and sanitation by **June 2016**.
3. Draft supporting strategy for review by ADB, and adapt and fill in on an ongoing basis by **June 2015**.
4. Consultation meetings (3 to 4 at different points in time) with academia and practitioners for sharing and agreeing the required changes in curricula by **July 2016**.
5. Finalize supporting strategy by **September 2016**.
6. Recommend updated and improved course curricula on urban planning and sanitation for Bangladesh through cooperative exchange of experience and ideas by **December 2016**.

Objective (Operational) 4: Build capacity of the institutions (ITN-BUET and relevant stakeholders) in knowledge management, communications and learning by Dec 2016.

Activities:

1. Organizing Eminent Lecture Series (**one each in 2014, 2015, 2016**)
2. Activating and maintaining webpage / website
3. Contributions to Newsletter - **twice yearly**
4. Reporting and Learning
 - a. **Quarterly** Progress Reports (to Regional Coordinator and ADB)
 - b. **Annual** Reports of Working Groups (to ADB, Regional and National Centre)
 - c. Steering Committee Meetings (**At least once per year**)
 - d. **Twice Yearly** reflections on outcomes (telecoms between our team and ADB)
 - e. Mid Term Capacity Building / Reflection Retreat (for national teams - **early 2016**)
 - f. Participation in two training webinars per year (for national teams)
 - g. Participation in a final Reflection Workshop on Lessons on Implementation of Regional K -Hub (**early 2017** - K-Hub partners and implementing agencies)
5. Knowledge Products
 - a. Contributing to Knowledge Products of other countries by submitting Bangladesh country profile on the topic (9 in total) in due course
 - b. Reviewing the KP concept paper of other countries and providing comments
 - c. Contributing to the regional knowledge product(s) (i.e. regional database)

ADB = Asian Development Bank; KP = knowledge product; NIUA = National Institute of Urban Affairs; ITN-BUET = International Training Network, Bangladesh University of Engineering and Technology (BUET); WASA = Water Supply and Sewerage Authority; CC = City Corporation; DPHE = Department of Public Health Engineering; LGED = Local Government Engineering Department

V. TEAM INPUTS

The objective wise inputs given below are for professional staff only:

Objective No. 1: <i>To create an enabling environment for sustainable implementation of fecal sludge management (FSM) services in urban areas of Bangladesh.</i>	
Position	Person-month inputs
Team Leader	05
Urban Expert	04
Infrastructure Expert	01
Environmental Expert	01
Finance and Administrative Specialist	01
Total	12
Objective No. 2: <i>To influence government organizations (like City Corporations, Pourashavas, DPHE, LGED, PSU, RAJUK, WASAs, DESA, DTCA, etc.) and non government organization to opt for an integrated development approach encompassing different vulnerability concerns and challenges like degraded environment and housing; access to basic services like water, sanitation, energy and transportation; drainage and SWM, natural disasters and fire hazard; and safety.</i>	
Position	Person-month inputs
Team Leader	04
Urban Expert	04
Infrastructure Expert	02
Environmental Expert	01
Finance and Administrative Specialist	01
Total	12
Objective No. 3: <i>Promote capacity of fresh graduates in urban planning and management through bringing about appropriate changes in course curricula on urban planning and sanitation in selected, relevant academic institutions in the country by 2016.</i>	
Position	Person-month inputs
Team Leader	02
Urban Expert	03
Infrastructure Expert	01
Environmental Expert	01
Finance and Administrative Specialist	01
Urban Planning Curricula Specialist	02
Total	10
Objective No. 4: <i>Build capacity of the institutions (ITN-BUET and relevant stakeholders) in knowledge management, communications and learning.</i>	
Position	Person-month inputs
Team Leader	01
Urban Expert	01
Infrastructure Expert	01
Environmental Expert	03
Finance and Administrative Specialist	01
Total	07

Total team input = 41 person-months