





### BILL& MELINDA GATES foundation



# "Pilot Implementation of FSM Standard in Nepal -Mahalaxmi, Lalitpur as Pilot Municipality" Project

### **About the Project**

In collaboration with Mahalaxmi Municipality, Kathmandu Valley Water Supply Management Board (KVWSMB), Nepal Bureau of Standards and Metrology (NBSM) and other relevant stakeholders, ENPHO is implementing the project "Pilot Implementation of FSM Standard in Nepal- Mahalaxmi, Lalitpur as Pilot Municipality" for the management of basic on-site domestic wastewater services in Mahalaxmi Municipality. The project, which is supported by the Bill and Melinda Gates Foundation (BMGF) under grant assistance, is the first of its kind in Nepal and globally.

#### **Project Duration**

January 2019 to June 2021

#### **Project Areas**

 Mahalaxmi Municipality and replication in two other Municipalities (to be identified)

#### **Project Objectives**

- To test the application of ISO 24521 guidelines for the management of basic on-site domestic wastewater services and thereby help improve environmental sanitation conditions in Mahalaxmi Municipality, and;
- To draw lessons from this piloting experience and evidence to recommend adoption of the ISO 24521 guidelines at the national level through policy and practice changes.

#### **Expected Result**

A fully functioning FSM service delivery model addressing the entire sanitation service chain – containment, transporation, treatment and reuse.

#### **Expected Outputs**

- Output 1: National adoption of ISO 24521 guidelines by National Bureau of Standards and Metrology;
- Output 2: Implementation of ISO 24521 guidelines in Mahalaxmi Municipality as a pilot initiative and, based on lessons learnt, replicate in an additional Municipalities;
- Output 3: Documentation of impact of implementation of ISO 24521 FSM guidelines and influence policy and practices on domestic wastewater management

#### **Project Results Framework**

Project Results Framework has been developed for the project which summarizes Key Performance Indicators (KPIs) on eight inter-linked stages-

- 1. Project Planning;
- 2. Sanitation Situational Assessment;
- 3. Sanitation Improvement Plan;
- 4. Institutional Strengthening, and Sanitation Policy Development;
- 5. Public Private Partnership and Linkages Development;
- 6. Capacity Building and Knowledge Management;
- 7. Fully Functional and Safely Managed Sanitation Services, and;
- 8. Scaling up and National Policy Influence.

Project Implementation Model

## **Overview of ISO 24521 Guidelines**

#### **Objective**

The four main objectives of basic on-site domestic wastewater services, as defined by ISO guidelines, are:

- public health and safety;
- occupational health and safety;
- environmental protection;
- sustainable development.

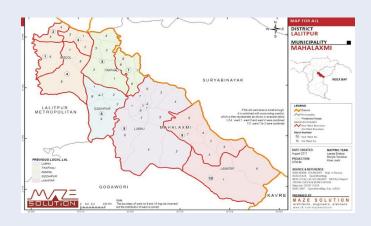
#### Scope of ISO 24521 Guidelines

 Guidelines for the management of basic on-site domestic wastewater services from the operator's perspective, including maintenance techniques, training of personnel and risk considerations;

- guidelines for the management of basic on-site domestic wastewater services from the perspective of users;
- guidance on the design and construction of basic on-site domestic wastewater systems;

### About Mahalaxmi Municipality

Mahalaxmi Municipality is located along Southern periphery of Kathmandu Valley with approximately 28,000 households. The major settlements such as Siddhipur, Lubhu, Imadole, Tikathali completely rely on on-site sanitation systems. These traditional settlements are rapidly urbanizing due to influx of people from all over the country. The vision of Mahalaxmi Municipality is "**Clean**, **Hygienic, Prosperous and Beautiful City**". In sanitation terms, this means that both liquid and solid wastes are not randomly disposed of in water bodies but are connected to systems that treat and safely dispose/reuse these wastes.



#### **Project Outputs as of August 2019**

1. Organized Project Kick-off Meeting at Hotel Summit in Sanepa, Lalitpur on 11 February, 2019



#### 2. Formed and Mobilized Team

Under ENPHO, a Technical Assistance (TA) team has been formed to provide the necessary and high quality technical, management and advisory support. The TA team consists of: (a) Water and Sanitation Governance Advisor (lead), (b) Service and Business Development Advisor, (c) Policy Advisor, (d) Technical Advisor, (e) Standardization Experts.

#### 3. Developed the Core Values

PRITTI: Participative, Responsive, Innovative, Transparent and Accountable, Team Spirited and Information Sharing

4. Organized the First Project Planning Meeting at ENPHO Office in New Baneshwor, Kathmandu on 15 March, 2019



5. Oriented TA Team on ISO 24521 Guidelines for the Management of Domestic Wastewater Services at ENPHO Office in New Baneshwor, Kathmandu on 21 March, 2019



6. Project Consultation: Reviewed What Has Been Done So Far and Identified Immediate Priorities at ENPHO Office in New Baneshwor, Kathmandu on 8 April, 2019



7. Organized Consultation and Site Visit in Mahalaxmi Municipality on 12 April 2019



8. Organized Project Planning Workshop in Nagarkot on 21 and 22 April 2019



9. Organized Project Meeting, Finalized Terms of Partnership and Presented Possible Sites for FSTP Construction Amongst Project Partners at KVWSMB Office, Bhaisepati on 7 May 2019



10. Formed Technical Committee at NBSM Office, Balaju on 12 May 2019



11. Visited Site for FSTP Location in Ward 9, Mahalaxmi Municipality on 17 May 2019



12. Organized Consultative Meeting with Global Green Growth Institute (GGGI) at ENPHO Office in New Baneshwor on 21 May 2019 and at GGGI Office on 16 July 2019



13. Signed Terms of Partnership Signed at Ward 1 Office in Mahalaxmi Municipality on 24 May 2019

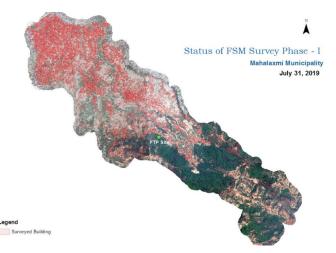


14. Mapping of Potential Private Sector Engagement for Desludging Services and Organized Workshop with FS Service Providers on 13 June 2019



#### 15. Sanitation Situation Analysis

To better understand environmental sanitation condition, GIS based household census mapping and sample survey has been undertaken and the detail analysis report is planned to be completed by October end.



16. Assessed Site for FSTP and Prepared Site Assessment Report



Mayor Deputy Mayo Chief Municipality WASH CC Admin Office Urban Environment Policy and Infrastructure Development Management Planning Section Sanitation Cell

Engineer

### **Key Priorities for October-December 2019**

Sanitation Situation Assessment Report identifying key sanitation issues based on: (a) completed GIS based census and sample surveys, (b) characterization and quantification of Faecal sludge, and (c) FGDs and Municipal consultations.

Sanitation Improvement Plan that will identify city wide inclusive sanitation service options with a plan for sewered and non sewered systems (more focus) including options for co-treatment priorities.

Preparing FSTP detailed designs and securing approval from Kathmandu Valley Water Supply Management Board for the capital cost for construction.

Ensuring Sanitation Cell is up and running equipped with dedicated human capital, information system and logistics, building institutional capacity through training and workshops.

Reaching an understanding between Municipality, and GGGI and ENPHO for deepening sanitation in Mahalaxmi through a joint collaboration plan.

Based on bi-monthly **Review of Actions agreed in signed Terms of Partnership** and expediting actions as appropriate.

Institutionalization of septic tanks designs and as part of Municipal guidelines on new house design permits.

Preparation of Municipal Sanitation by-laws for review and approval by the Municipal Council.



For further information, please contact: **Environment and Public Health Organization (ENPHO)** G.P.O Box 4102; 110/25 Aadarsha Marg 1 I New Baneshwor, Kathmandu, Nepal I Tel: 977-1-5244641; 5244051 Fax: 977-1-5244376 | Email: enpho@enpho.org | Website: www.enpho.org

17. Institutionalization of Standard Septic Tanks in the Municipality



nment and Public Health Organization (ENPHO) July 2019

18. Establishment of Sanitation Cell in the Municipality

Municipality Organizational Structure

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