SANITATION & WATER IN SMALL TOWNS & RURAL AREAS

(SAWISTRA PROGRAMME) —

LOCATION - GHANA (WESTERN, EASTERN, VOLTA & CENTRAL REGIONS)

DURATION - 5 YEARS (2014 – 2018)

PARTNERS - GOVERNMENT OF GHANA, BILL & MERLINDA GATES FOUNDATION

BACKGROUND

- BMGF is investing in the Sanitation And Water Innovation And Performance (SAWIP) Facility in order to contribute to the improvement of sanitation delivery in Ghana.
- The SAWIP facility has been developed to encourage innovation for segments of the sanitation sector that are still under-developed in small towns and rural areas (such as the development of low-cost and locally suitable technologies for individual latrines in rural Ghana or faecal sludge management (FSM)) and where innovation needs to take place before scaling up pilots.
- Consequently, the ultimate impact of the project is to contribute to the elimination of open defecation in Ghana as well as to making a marked reduction in the spread of water and sanitation associated diseases and prevention of environmental degradation, among others.

OBJECTIVES OF THE PROJECT

- **Objective 1** Promote a
- Objective 2 Support the development of a market for
- Objective 3 Support the development of a sustainable approach to faecal sludge
- Objective 4 Strengthen other sector stakeholders to reinvigorate

he project has been scaled down to focus

SUPPORTING THE DEVELOPMENT OF A SUSTAINABLE APPROACH TO FAECAL **SLUDGE MANAGEMENT'**

here are 3 components which will be implemented in two phases

Phase One

Feasibility study on technical options and management models for fecal sludge management (for transport, safe disposal or reuse) in small towns and rural areas.

Phase Two

epending on the results/findings of the feasibility study the following components will be undertaken:

- Pilot projects for promising downstream FSM options
- Development of strategy for safe reuse and decentralized treatment options to form the basis for further scale-up of

SELECTED STUDY COMMUNITIES



- The criteria for the selection of communities include;
- Geographic spread
- Different cultural settings
- Different social settings
- Different economic settings
- One (1) community with population below 2,000
- One (1) community with population between 2,000 and 7,500
- One (1) community with population above 7,500

PHASE ONE - FEASIBILITY STUDY

- The feasibility study seeks to appraise the production of faecal sludge from various sources such as household, institutional and public toilets as well as the collection, transport, disposal and management of same.
- Additionally, business models in use by stakeholders/small scale contractors/artisans in the sector, if any, are to be studied.
- Management models for the various options proposed will also be developed for piloting in selected small towns and peri-urban areas
 - The survey would be carried out in three (3) selected communities in each of the programme regions (Western, Central, Eastern and Volta Regions).

SPECIFIC OBJECTIVES OF THE FEASIBILITY STUDY

- Provide an overview of sanitation technologies in use for households and institutions as well as for public facilities in rural communities, small towns and peri-urban areas, and the sludge management practices associated with them:
- Propose additional options for FSM for consideration where the existing practices are considered deficient;
- Study existing private and public options for FSM, including national policy and strategy, management, business and operating models for faecal sludge collection, transportation, treatment and disposal/re-use.

ACTIVITIES

Socio-Economic and Environmental Sanitation Assessment and Audit Survey Field Data Analysis of Sanitation and Faecal Sludge Assessment and Audit would cover

- Socio-Cultural issues
- Identifying Knowledge, Attitudes, Practices, Behaviours (KAPBs) with regards to sanitation/human excreta management
- Ability to Pay (ATP) & Willingness to Pay (WTP) for sanitation services and facilities
- Assessing the impact of land tenure/acquisition on sanitation and faecal management services and facilities

ACTIVITIES

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- **Environmental Sanitation Assessment and**
- Environmental assessment of toilet (public. household and institutional) technologies, emptying/collection mechanisms, transportation options and treatment/re-use systems
- Assessing the environmental impact of re-use of sanitation products (if any)

ACTIVITIES

- **Technical Analysis**
- Estimation of liquid waste generation, treatment/disposal rates and access to
- ✓ Sustainability assessment (in terms of O&M) of the existing toilet facilities, emptyina/collection mechanisms, transportation options and treatment/re-use
- ✓ Evaluation of the equipment (adequacy and efficiency and personal) of identified service providers (either public or private)
- Identification and assessment of options for "closing the FSM loop" (Excreta Production, transportation, recycling, re-use)

ACTIVITIES

- **Management Analysis**
- Assessing the capacity (in quantity and skills) of the identified stakeholders in the sanitation management value-chain
- Evaluation of the role of private sector/enterprises along the sanitation value-chain

ACTIVITIES

- **Review of Business Models for Faecal Sludge Management**
- Define appropriate business models in line with existing policies and strategies for service delivery.
- ✓ Case-studies of sanitation/faecal sludge management businesses (models) would be analysed to develop the models.
- Critical to the development of business models for faecal sludge management is the value chain analysis (VCA) of the sanitation/feacal sludge management system.

FRAMEWORK FOR VALUE CHAIN ANALYSIS

Define the scope of VCA

Developing the Value Chain Map of Faecal Sludge Management I Identifying and profiling actors of the sanitation chain Mapping out relationships along the chain- relationship between actors, flow of services and products etc

Analyse the Value Chains

 Assessing identified opportunities and constraints within the value chain using matrice: Profitability analysis of the value chains

Assessing Market Based Solutions

Outlining interventions and solutions to add value to waste as well as improve services Success/risk assessment of proposed solutions

The results of the VCA will be used in the development/adaptation of appropriate business model for faecal sludge management. The detailed review of the selected businesses (models) would

- Financial flow and profitability analysis
- Analysis of service charges, tariff structure and disposal fees
 Review of contractual arrangements between service providers and local authorities (MMDA) if
- Review of human resource capacity and
- equipment requirements
 Technical evaluation of services provided
 Identification of barriers to existing sanitation and faecal management business(models)
- **Development of Scaling-Up Mechanism for** Sanitation Services and Faecal Sludge
- Management Examining national policies, strategic plans and guidelines for recommendations that enable scaling-up of the selected business
- Analysing ingredients of success for rolling
- out sanitation business models ✓ Outlining policy and best practice recommendations on sanitation business models in rural and small town



The inception phase of the project has been completed and the feasibility study is ongoing



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