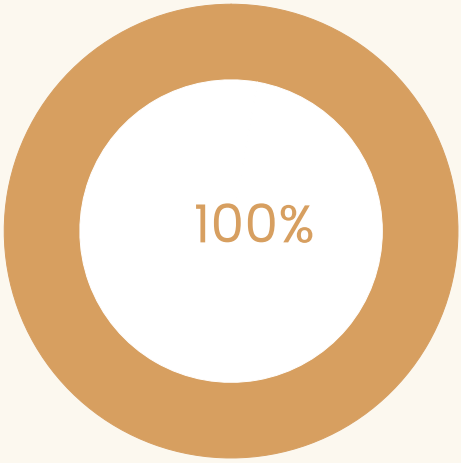
FSM
Faecal Sludge Management
TOOLBOX

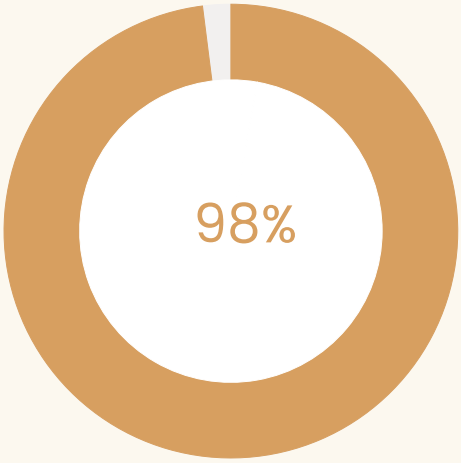
Business Model Selection for
S G Palaya

Public Toilet with Energy Recovery Model



Feasibility Good

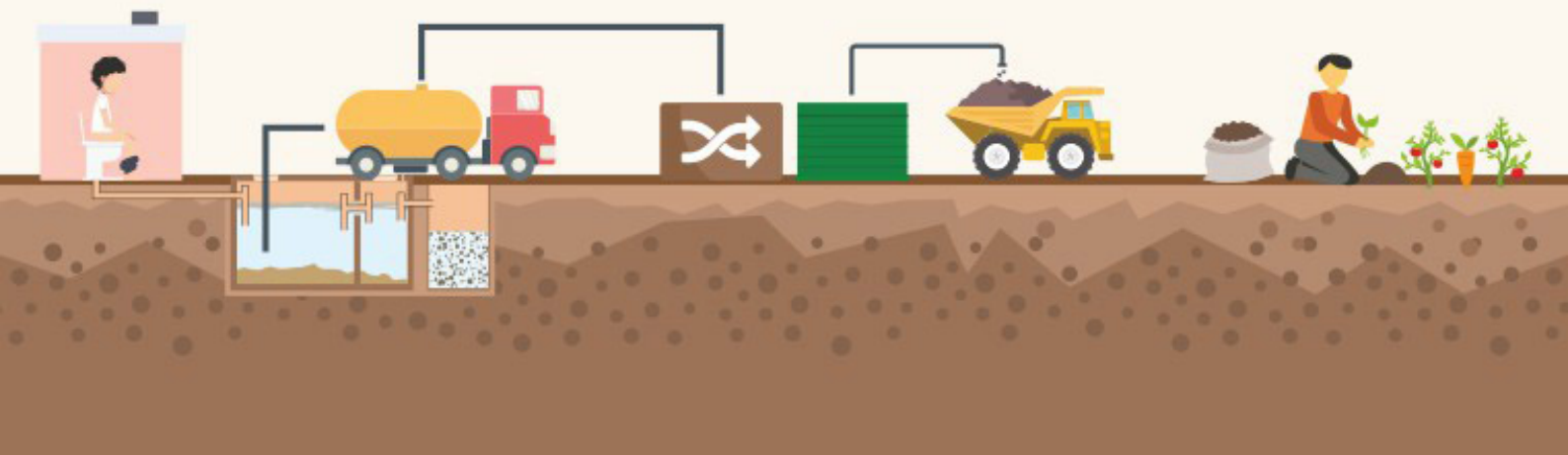
Full Private Model



Feasibility Good

The FSM Index score indicates that the Overall FSM performance of the city is

Scale: Poor 0-33% | Medium 33-66% | Good 67-100%.



Business Model Selection Report: S G Palaya

30 April 2019

Generated By: Vishnu

Produced By: Vishnu, Vishnu New, S G Palaya, Kapisa, Afghanistan.

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CONTENTS

Business Model

Knowledge of potential business model options and evaluation of their suitability for the city is essential for FSM entrepreneurs. Based on the area of interest(s) in the FSM value chain, relevant business model case studies from across the world are presented. This planning module of the FSM Toolbox offers the users with case studies on a range of business models implemented in different parts of the world across the value chain, referenced from IWMI's Resource Recovery and Reuse Series 6 document. It also assists users in evaluating the relevance of these different models to their context to determine the feasibility of implementation.

Note: This module should only be used as a pre-feasibility tool and not an 'end-to-end business solution' tool. The main objective of this section is to function as a guiding tool for users who are interested to start a business in the FSM sector and already are familiar with the intricacies of the sector. This tool only showcases the possible business options which have been documented as part of IWMI's report on 'Business Models for Faecal Sludge Management' as part of the Resource Recovery and Reuse Series.

Basic Information about your city:

- City Name: S G Palaya
- State: Kapisa
- Country: Afghanistan
- Total Population: 1000000

The business models selected are:

S#	Name of Business Model
1	Public Toilet with Energy Recovery Model
2	Full Private Model

Feasibility Assessment

Mandatory and optional variables are used to calculate the feasibility score for the business models selected based on their requirement. The presence of the mandatory variables is essential for the successful implementation of the business models. However, the presence of the optional variables supports the ecosystem and is not an essential requirement for the existence of the business models. Both variable types have equal weightage in the feasibility calculation.

Mandatory Variables for Business Model

Sl.No.	User Interface	Requirement
1	Is there any regulation (rules/guidelines) for the construction of PUBLIC toilets?	YES
	Is there an institution with mandate for provision of land, construction and maintenance of the PUBLIC toilet?	YES
Sl.No.	Collection and Conveyance	Requirement
1	Are there regulations (rules/guidelines) for desludging frequencies?	YES
	Is there an institution with mandate towards enforcing the desludging frequency?	YES
2	Is there a regulation for licensing of desludging operators and workers?	YES
	Is there an institution with mandate for licensing desludging operators and workers?	YES
3	Are there standard operating procedures (zone/time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/transportation?	YES

	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	YES
Sl.No.	Treatment	Requirement
1	Are there design standards for design, operation and maintenance of treatment facilities?	YES
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	YES
2	Are there standards for effluent disposal?	YES
	Are these standards enforced in the city?	YES
	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	YES
3	Are there standards for solids disposal?	YES
	Is there an institution with mandate for monitoring compliance to solids disposal standards?	YES

Optional Variables for Business Model

Sl.No.	User Interface	Requirement
1	Is there any regulation (guidelines/rules) for improving the conditions (retrofitting/redevelopment)of sub-standard toilet structures?	YES
	Is there an institution with	YES

	mandate for improving sub-standard toilets?	
2	Are there standards for inspecting the functionality of PUBLIC toilets?	YES
	Is there an institution with mandate for inspection of PUBLIC toilets?	YES
3	Is there regulation for issuing penalties for not constructing proper PUBLIC toilets?	YES
	Is there an institution with mandate towards enforcing the penalties	YES
Sl.No.	Containment	Requirement
1	Are there standards for the construction of a particular type of On-Site Sanitation System (OSS)?	YES
2	Are there regulations for improving improperly built OSS?	YES
	Is there an institution with mandate for improving OSS?	YES
3	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	YES
	Is there an institution with mandate for issuing permits for OSS construction?	YES
	Are there enough resources (financial and human) to verify and issue permits for OSS construction?	YES
Sl.No.	Collection and Conveyance	Requirement
1	Are there vehicle standards for determining the roadworthiness (whether the	YES

	vehicle can access the roads in terms of elevation - steep climb, road width, etc.) of desludging vehicles?	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	YES
Sl.No.	Treatment	Requirement
1	Are there standard operating procedures for the treatment plant?	YES
	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	YES
Sl.No.	Reuse - Variables	Requirement
1	Are there regulatory provisions for legalising reuse of treated end products	YES
	Is there an institution with mandate to legalise reuse of treated end products?	YES
2	Are there standards prescribing the quality of reuse by-products for a particular use?	YES
	Is there an institution with mandate to inspect the quality of by-products generated for re-use?	YES
Sl.No.	Other Institutional Variables	Requirement
1	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	YES

The feasibility of the business models is grouped as Good, Medium and Poor based on the score obtained.

Scale: Poor (0-33%), Medium (33-66%), Good (67-100%)

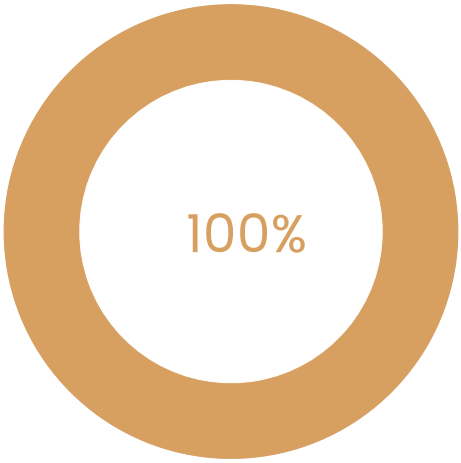
The feasibility of the selected business models are:

(E.g.:)

1- 30% (poor)

2- 60% (medium)

Public Toilet with Energy Recovery Model



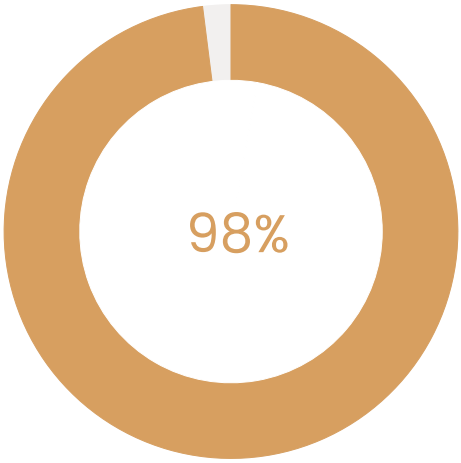
Feasibility Good

Recommendations for implementation of Public Toilet with Energy Recovery Model.

The following table lists the key requirement for successful implementation of this business model.

There are no recommendations

Full Private Model



Feasibility Good

Recommendations for implementation of Full Private Model

The following table lists the key requirement for successful implementation of this business model.

There are no recommendations

FSM Toolbox has an extensive repository of knowledge products that are most relevant to your city. Here is a list of select knowledge products for your reference. Click here to learn more.