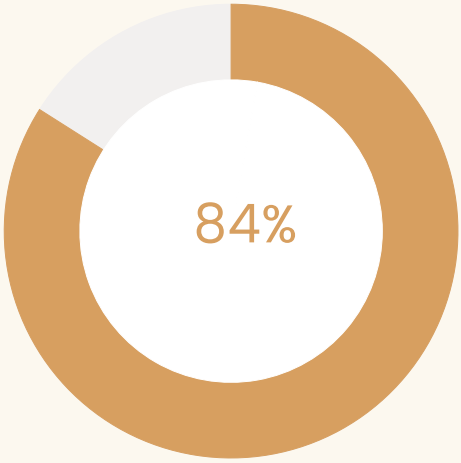
FSM
Faecal Sludge Management
TOOLBOX

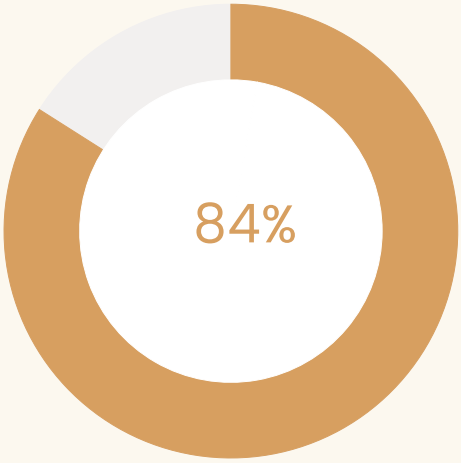
Business Model Selection for
Coimbatore

Co-Composting Town Cluster Approach Model



Feasibility Good

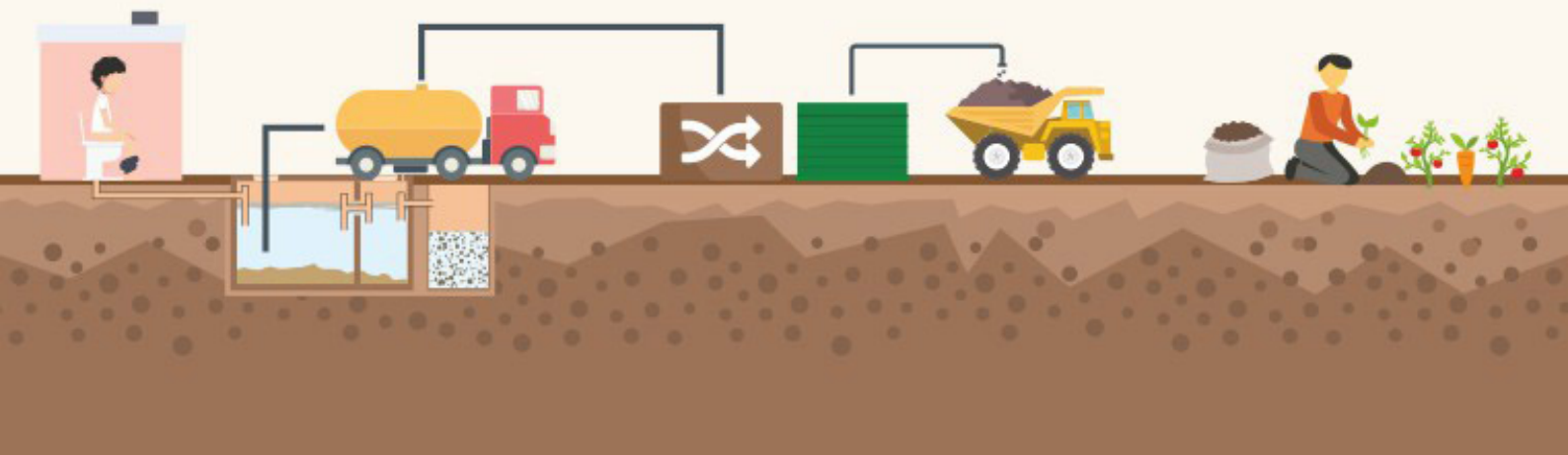
Public FSM Model



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: Coimbatore

25 April 2019

Generated By: Demo User

Produced By: Demo User, Demo User, Coimbatore, Tamil Nadu, India.

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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: Coimbatore
- State: Tamil Nadu
- Country: India
- Total Population: 67565

The business models selected are:

S#	Name of Business Model
1	Co-Composting Town Cluster Approach Model
2	Public FSM 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.	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 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
4	Is there regulatory provision for setting the desludging tariff?	YES
	Is there an institution with mandate for setting the desludging tariff?	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	YES

	compliance to effluent disposal standards?	
3	Are there standards for solids disposal?	YES
	Is there an institution with mandate for monitoring compliance to solids disposal standards?	YES
4	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

Optional Variables for Business Model

Sl.No.	Collection and Conveyance	Requirement
1	Are there vehicle standards for determining the roadworthiness (whether the vehicle can access the roads in terms of elevation - steep climb, road width, etc.) of desludging vehicles?	YES
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	YES
Sl.No.	Reuse - Variables	Requirement
1	Are there regulatory provisions for legalising reuse of treated end products	NO
	Is there an institution with mandate to legalise reuse of treated end products?	NO

2	Are there standards prescribing the quality of reuse by-products for a particular use?	NO
	Is there an institution with mandate to inspect the quality of by-products generated for re-use?	NO
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%)

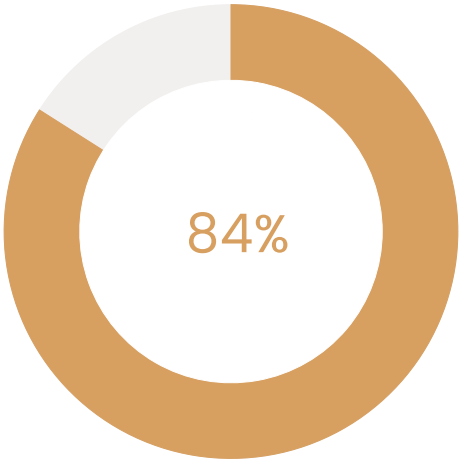
The feasibility of the selected business models are:

(E.g.:)

1- 30% (poor)

2- 60% (medium)

Co-Composting Town Cluster Approach Model



Feasibility Good

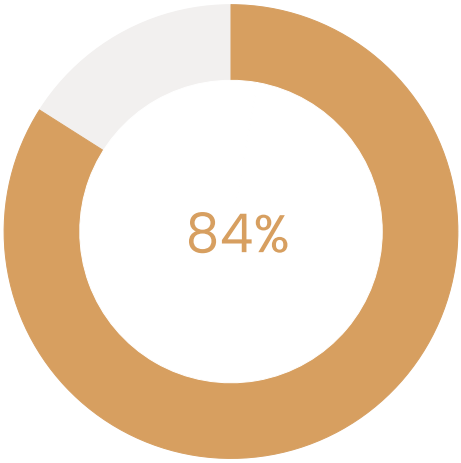
Recommendations for implementation of Co-Composting Town Cluster Approach Model.

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

Sl.No.	Treatment	Requirement	Your Answer	Recommendations
1	If yes, are these procedures enforced and followed in the city?	yes	no	Once such procedures are in place, it is required that the provisions are enforced and practiced on ground.
Sl.No.	Reuse - Variables	Requirement	Your Answer	Recommendations
1	Are there regulatory provisions for legalising reuse of treated end products	yes	no	In order for this business model to be successfully implemented, it is mandatory that there are regulatory provisions which state that the treated faecal sludge can be reused as fertilizer. The regulations should also prescribe the quality (in terms of pathogens, nitrogen, phosphorus, potassium content) of the treated faecal sludge to be reused as a

				fertilizer.
	Is there an institution with mandate to legalise reuse of treated end products?	yes	no	In order for the regulatory provision to be enforced successfully on ground, there needs to be an institution responsible for its implementation.
2	Are there standards prescribing the quality of reuse by-products for a particular use?	yes	no	In order for this business model to be successfully implemented, it is mandatory that there is regulatory provision which states that the treated faecal sludgecan be reused as a fertlizer. Also along with this the regulations should also prescribe the quality (in terms of pathogens, nitrogen, phosphorus, potassium content) of the treated faecal sludgeto be reused as a fertilizer.
	Is there an institution with mandate to inspectthequalityofby-products generated for re-use?	yes	no	In order for the regulatory provision to be enforced successfully on ground, there needs to be an institution responsible for its implementation.

Public FSM Model



Feasibility Good

Recommendations for implementation of Public FSM Model

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

Sl.No.	Treatment	Requirement	Your Answer	Recommendations
1	If yes, are these procedures enforced and followed in the city?	yes	no	Once such procedures are in place, it is required that the provisions are enforced and practiced on ground.
Sl.No.	Reuse - Variables	Requirement	Your Answer	Recommendations
1	Are there regulatory provisions for legalising reuse of treated end products	yes	no	
	Is there an institution with mandate to legalise reuse of treated end products?	yes	no	

2	Are there standards prescribing the quality of reuse by-products for a particular use?	yes	no	
	Is there an institution with mandate to inspect the quality of by-products generated for re-use?	yes	no	

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.