



## Business Models QUESTIONNAIRE



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## **Module Description**

This tool presents case studies on a range of business models implemented in different parts of the world across the FSM value chain, referenced from IWMI's Resource Recovery and Reuse Series 6 document. It also goes on to assist users evaluate the relevance of these different models to their context.

Note: This section 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 - Business Models for Faecal Sludge Management - as part of the Resource Recovery and Reuse Series.

There is a total of 16 business models suggested in this tool. Each model has a set of mandatory and optional variables to which the user is expected to provide response as Yes / No. The tool evaluates the feasibility of implementation of the business models selected. While the presence of optional variables creates an enabling environment for the implementation of a business model, for the successful implementation of a business model, it is absolutely essential that the mandatory variables are present.

	Business Model 1: Public Toilet with Energy Recovery Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there any regulation (rules/guidelines) for the construction of public toilets?	User Interface	Mandatory	
	If yes, are the regulatory provisions enforced in the city?	User Interface	Mandatory	
1	Is there an institution with mandate for provision of land, construction and maintenance of the public toilet ?	User Interface	Mandatory	
	If yes, is there budgetary allocation for the provision (land availability) of public toilets?	User Interface	Mandatory	
	Is there any regulation (guidelines/rules) for improving the conditions (retrofitting/redevelopment) of sub-standard toilet structures?	User Interface	Optional	
2	If yes, are these regulatory provisions enforced in the city?	User Interface	Optional	
	Is there an institution with mandate for improving sub- standard toilets?	User Interface	Optional	
	If yes, is there a budgetary allocation or collection of implementer fees for improving sub-standard toilets	User Interface	Optional	

Business Model 1: Public Toilet with Energy Recovery Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	Are there standards for inspecting the functionality of public toilets?	User Interface	Optional
	If yes, are these standards enforced in the city?	User Interface	Optional
3	Is there an institution with mandate for inspection of public toilets?	User Interface	Optional
	If yes, is there resources (financial and human) for inspection of public toilets?	User Interface	Optional
	Is there regulation for issuing penalties for not constructing proper public toilets?	User Interface	Optional
	If yes, are these penalties enforced in the city?	User Interface	Optional
4	Is there an institution with mandate towards enforcing the penalties?	User Interface	Optional
	If yes, is there enough resources (financial and human) to enforce this?	User Interface	Optional
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory
5	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	Are there standards for effluent disposal?	Treatment	Mandatory
	Are these standards enforced in the city?	Treatment	Mandatory
6	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory
	Are there standards for solids disposal?	Treatment	Mandatory
7	If yes, are these standards enforced in the city?	Treatment	Mandatory
,	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory

	Business Model 1: Public Toilet with Energy Recovery Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	
8	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
	Are there standards prescribing the quality of reuse by- products for a particular use?	Reuse	Optional	
	If yes, are these standards enforced in the city?	Reuse	Optional	
9	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	

	Business Model 2: Residential-Institutional Biogas Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
1	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
2	Are there standards for effluent disposal?	Treatment	Mandatory	

	Business Model 2: Residential-Institutional Biogas Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are these standards enforced in the city?	Treatment	Mandatory	
	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
3	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	
4	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
	Are there standards prescribing the quality of reuse by- products for a particular use?	Reuse	Optional	
5	If yes, are these standards enforced in the city?	Reuse	Optional	
	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	

Business Model 3: Private Emptying and Transportation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional
1	If yes, are these standards followed or enforced in the city?	Containment	Optional
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional
	Are there regulations for improving improperly built OSS?	Containment	Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
2	Is there an institution with mandate for improving OSS?	Containment	Optional
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Optional
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Optional
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Optional
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory

	Business Model 3: Private Emptying and Transportation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/transportation?	Collection and Conveyance	Mandatory	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	
6	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	

	Business Model 4: Desludging and Transportation Franchise Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional	
1	If yes, are these standards followed or enforced in the city?	Containment	Optional	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
5	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	

	Business Model 4: Desludging and Transportation Franchise Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
6	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	
0	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	

	Business Model 4: Desludging and Transportation Franchise Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
9	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/ stakeholders?	Other Institutional Variables	Optional	

	Business Model 5: Non-Profit (Desludging) Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional	
1	If yes, are these standards followed or enforced in the city?	Containment	Optional	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
3	If yes, are these regulations enforced in the city?	Containment	Optional	
	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	

	Business Model 5: Non-Profit (Desludging) Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Optional	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Optional	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Optional	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Optional	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional	
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Optional	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Optional	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Optional	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Optional	
6	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
7	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?	Collection and Conveyance	Optional	

	Business Model 5: Non-Profit (Desludging) Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Optional	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Optional	

	Business Model 6: Transfer Station Model				
SI. No.	Questions	Value Chain	Mandatory / Optional		
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional		
1	If yes, are these standards followed or enforced in the city?	Containment	Optional		
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional		
	Are there regulations for improving improperly built OSS?	Containment	Optional		
2	If yes, are these regulations enforced in the city?	Containment	Optional		
	Is there an institution with mandate for improving OSS?	Containment	Optional		

	Business Model 6: Transfer Station Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
6	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	

	Business Model 6: Transfer Station Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
9	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/ stakeholders?	Other Institutional Variables	Optional	

	Business Model 8: Emptying and Transportation Licensing Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional	
1	If yes, are these standards followed or enforced in the city?	Containment	Optional	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
F	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	

	Business Model 8: Emptying and Transportation Licensing Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
6	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	
0	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
8	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
9	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	

	Business Model 8: Emptying and Transportation Licensing Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
10	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
11	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
12	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
13	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	

	Business Model 8: Emptying and Transportation Licensing Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Optional	
	If yes, are these standards enforced in the city?	Reuse	Optional	
14	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	
15	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	

	Business Model 9: Call Centre Model (Desludging)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
1	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional	
	If yes, are these standards followed or enforced in the city?	Containment	Optional	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional	

	Business Model 9: Call Centre Model (Desludging)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	

	Business Model 9: Call Centre Model (Desludging)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	
6	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
9	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	

	Business Model 9: Call Centre Model (Desludging)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
10	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
11	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
12	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	
13	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	

	Business Model 9: Call Centre Model (Desludging)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Optional	
	If yes, are these standards enforced in the city?	Reuse	Optional	
14	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	
15	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	

	Business Model 10: Scheduled Desludging Sanitation Tax Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
1	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Mandatory	
	If yes, are these standards followed or enforced in the city?	Containment	Mandatory	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Mandatory	
2	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	

	Business Model 10: Scheduled Desludging Sanitation Tax Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Mandatory	
	If yes, are these regulations enforced in the city?	Containment	Mandatory	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Mandatory	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Mandatory	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
6	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	

Business Model 10: Scheduled Desludging Sanitation Tax Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory
	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?	Collection and Conveyance	Optional
_	If yes, are these standards followed in the city?	Collection and Conveyance	Optional
7	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory
9	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
10	Are there standards for effluent disposal?	Treatment	Mandatory

	Business Model 10: Scheduled Desludging Sanitation Tax Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are these standards enforced in the city?	Treatment	Mandatory	
	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
11	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
12	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
13	If yes, are these provisions enforced in the city?	Reuse	Optional	
	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
14	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Optional	

	Business Model 10: Scheduled Desludging Sanitation Tax Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, are these standards enforced in the city?	Reuse	Optional	
	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	
15	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	

	Business Model 11: Incentivised Disposal Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional	
1	If yes, are these standards followed or enforced in the city?	Containment	Optional	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	

	Business Model 11: Incentivised Disposal Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	
6	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	

	Business Model 11: Incentivised Disposal Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
9	Is there provision of tipping fee for the desludging operators at the treatment facility?	Collection and Conveyance	Mandatory	
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
10	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
11	Are there standards for effluent disposal?	Treatment	Mandatory	

	Business Model 11: Incentivised Disposal Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are these standards enforced in the city?	Treatment	Mandatory	
	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
12	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
13	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
14	If yes, are these provisions enforced in the city?	Reuse	Optional	
	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
15	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Optional	

	Business Model 11: Incentivised Disposal Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, are these standards enforced in the city?	Reuse	Optional	
	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional	
16	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	

Business Model 12: Full Private Model (Entire Service Chain)			
SI. No.	Questions	Value Chain	Mandatory / Optional
1	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional
	If yes, are these standards followed or enforced in the city?	Containment	Optional
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional
2	Are there regulations for improving improperly built OSS?	Containment	Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
	Is there an institution with mandate for improving OSS?	Containment	Optional

Business Model 12: Full Private Model (Entire Service Chain)			
SI. No.	Questions	Value Chain	Mandatory / Optional
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory
6	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Mandatory
	If yes, are these standards enforced in the city?	Collection and Conveyance	Mandatory
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory

	Business Model 12: Full Private Model (Entire Service Chain)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Mandatory	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
8	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
9	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
10	Are there standards for solids disposal?	Treatment	Mandatory	
10	If yes, are these standards enforced in the city?	Treatment	Mandatory	

	Business Model 12: Full Private Model (Entire Service Chain)			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Optional	
	If yes, are these procedures enforced and followed in the city?	Treatment	Optional	
11	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Optional	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Optional	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	
12	Is there an institution with mandate to legalize reuse of treated end products?	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	
13	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/ stakeholders?	Other Institutional Variables	Optional	

Business Model 13: Farmer Truck Operator Partnership Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
1	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Optional
	If yes, are these standards followed or enforced in the city?	Containment	Optional
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Optional
	Are there regulations for improving improperly built OSS?	Containment	Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
2	Is there an institution with mandate for improving OSS?	Containment	Optional
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Optional
3	If yes, are these regulations enforced in the city?	Containment	Optional
	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Optional
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Optional
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory
5	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory

Business Model 13: Farmer Truck Operator Partnership Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Mandatory
	If yes, are these provisions enforced in the city?	Reuse	Mandatory
6	Is there an institution with mandate to legalize reuse of treated end products?	Reuse	Mandatory
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Mandatory
	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Optional
7	If yes, are these standards enforced in the city?	Reuse	Optional
	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Optional
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Optional

Business Model 14: Co-composting Town Cluster Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
1	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Mandatory
	If yes, are these standards followed or enforced in the city?	Containment	Mandatory
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Mandatory

	Business Model 14: Co-composting Town Cluster Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Mandatory	
	If yes, are these regulations enforced in the city?	Containment	Mandatory	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Mandatory	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Mandatory	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	

	Business Model 14: Co-composting Town Cluster Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Optional	
6	If yes, are these standards enforced in the city?	Collection and Conveyance	Optional	
0	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
9	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
5	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	

	Business Model 14: Co-composting Town Cluster Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
10	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
11	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
12	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
13	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Mandatory	
	If yes, are these provisions enforced in the city?	Reuse	Mandatory	

	Business Model 14: Co-composting Town Cluster Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Mandatory	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Mandatory	
	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Mandatory	
	If yes, are these standards enforced in the city?	Reuse	Mandatory	
14	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Mandatory	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Mandatory	
15	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Mandatory	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Optional	

	Business Model 15: Co-composting Pull Push Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Mandatory	
1	If yes, are these standards followed or enforced in the city?	Containment	Mandatory	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Mandatory	

	Business Model 15: Co-composting Pull Push Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
	If yes, are these regulations enforced in the city?	Containment	Optional	
2	Is there an institution with mandate for improving OSS?	Containment	Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Mandatory	
	If yes, are these regulations enforced in the city?	Containment	Mandatory	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Mandatory	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Mandatory	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Mandatory	
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Mandatory	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Mandatory	

	Business Model 15: Co-composting Pull Push Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Optional	
	If yes, are these standards enforced in the city?	Collection and Conveyance	Optional	
6	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	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?	Collection and Conveyance	Optional	
7	If yes, are these standards followed in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring whether the desludging vehicles meet the roadworthiness standards?	Collection and Conveyance	Optional	
	If yes, is there resources (financial and human) for monitoring roadworthiness of desludging vehicles?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Mandatory	
8	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Mandatory	
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
9	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	

	Business Model 15: Co-composting Pull Push Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
10	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
11	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
	Are there standard operating procedures for the treatment plant?	Treatment	Mandatory	
	If yes, are these procedures enforced and followed in the city?	Treatment	Mandatory	
12	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Mandatory	
	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Mandatory	
13	If yes, are these provisions enforced in the city?	Reuse	Mandatory	
	Is there an institution with mandate to legalize reuse of treated end products?	Reuse	Mandatory	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Mandatory	

	Business Model 15: Co-composting Pull Push Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards prescribing the quality of reuse by-products for a particular use?	Reuse	Mandatory	
	If yes, are these standards enforced in the city?	Reuse	Mandatory	
14	Is there an institution with mandate inspect the quality of reuse by-products?	Reuse	Mandatory	
	If yes, is there enough resources (financial and human) to carry out regular/periodic inspection?	Reuse	Mandatory	
15	Is there an institution with mandate for FSM related coordination between institutions/stakeholders?	Other Institutional Variables	Mandatory	
	If yes, is there resources (financial and human) for FSM related coordination between institutions/ stakeholders?	Other Institutional Variables	Optional	

	Business Model 16: Non-Movable UDDT Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Mandatory	
1	If yes, are these standards followed or enforced in the city?	Containment	Mandatory	
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Mandatory	
	Are there regulations for improving improperly built OSS?	Containment	Optional	
2	If yes, are these regulations enforced in the city?	Containment	Optional	
	Is there an institution with mandate for improving OSS?	Containment	Optional	

	Business Model 16: Non-Movable UDDT Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional	
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Mandatory	
	If yes, are these regulations enforced in the city?	Containment	Mandatory	
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Mandatory	
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Mandatory	
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory	
4	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory	
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory	
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory	
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Optional	
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional	
5	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Optional	
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Optional	
	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Optional	
6	If yes, are these standards enforced in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	

	Business Model 16: Non-Movable UDDT Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional	
	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Optional	
7	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional	
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Optional	
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory	
8	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory	
	Are there standards for effluent disposal?	Treatment	Mandatory	
	Are these standards enforced in the city?	Treatment	Mandatory	
9	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory	
	Are there standards for solids disposal?	Treatment	Mandatory	
	If yes, are these standards enforced in the city?	Treatment	Mandatory	
10	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory	
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory	
11	Are there standard operating procedures for the treatment plant?	Treatment	Optional	

	Business Model 16: Non-Movable UDDT Model			
SI. No.	Questions	Value Chain	Mandatory / Optional	
	If yes, are these procedures enforced and followed in the city?	Treatment	Optional	
	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Optional	
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Optional	
12	Are there regulatory provisions for legalizing reuse of treated end products	Reuse	Optional	
	If yes, are these provisions enforced in the city?	Reuse	Optional	
	Is there an institution with mandate to legalize reuse of treated end products?	Reuse	Optional	
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional	

Business Model 17: Container Based Sanitation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	Are there standards for the construction of a particular type of On-site Sanitation System (OSS)?	Containment	Mandatory
1	If yes, are these standards followed or enforced in the city?	Containment	Mandatory
	If No, is there an institution with mandate for recognizing the particular type of containment unit?	Containment	Mandatory
2	Are there regulations for improving improperly built OSS?	Containment	Optional

Business Model 17: Container Based Sanitation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	If yes, are these regulations enforced in the city?	Containment	Optional
	Is there an institution with mandate for improving OSS?	Containment	Optional
	If yes, is there a budgetary allocation for improving (retrofitting/redevelopment) sub-standard OSS?	Containment	Optional
	Are there regulations (rules/guidelines) for issuing permits for OSS construction?	Containment	Mandatory
	If yes, are these regulations enforced in the city?	Containment	Mandatory
3	Is there an institution with mandate for issuing permits for OSS construction?	Containment	Mandatory
	Is there resources (financial and human) to verify and issue permits for OSS construction?	Containment	Mandatory
	Are there regulations (rules/guidelines) for desludging frequencies?	Collection and Conveyance	Mandatory
_	If yes, is the regulation enforced in the city?	Collection and Conveyance	Mandatory
4	Is there an institution with mandate towards enforcing the desludging frequency?	Collection and Conveyance	Mandatory
	If yes, is there enough resources (financial and human) and information) to enforce this?	Collection and Conveyance	Mandatory
	Is there a regulation for licensing of desludging operators and workers?	Collection and Conveyance	Optional
5	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional
	Is there an institution with mandate for licensing desludging operators and workers?	Collection and Conveyance	Optional
	If yes does it have the resources (financial and human) required for licensing desludging operators and enforcing it on ground?	Collection and Conveyance	Optional
6	Are there standard operating procedures (zone /time of operations, accidents, spills, proper disposal, record keeping, route planning) for desludging/ transportation?	Collection and Conveyance	Optional

Business Model 17: Container Based Sanitation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	If yes, are these standards enforced in the city?	Collection and Conveyance	Optional
	Is there an institution with mandate for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional
	If yes, is there enough resources (financial and human) for monitoring of desludging operator's compliance to standard operating procedures?	Collection and Conveyance	Optional
7	Is there regulatory provision for setting the desludging tariff?	Collection and Conveyance	Optional
	If yes, is the regulation enforced in the city?	Collection and Conveyance	Optional
	Is there an institution with mandate for setting the desludging tariff?	Collection and Conveyance	Optional
	Are there design standards for design, operation and maintenance of treatment facilities?	Treatment	Mandatory
8	If yes, are these standards followed and enforced in the city?	Treatment	Mandatory
	Is there an institution with mandate for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring design, operation and maintenance of treatment facilities?	Treatment	Mandatory
	Are there standards for effluent disposal?	Treatment	Mandatory
9	Are these stamdards enforced in the city?	Treatment	Mandatory
	Is there an institution with the mandate for monitoring compliance to effluent disposal standards?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring compliance to effluent disposal standards?	Treatment	Mandatory
10	Are there standards for solids disposal?	Treatment	Mandatory

Business Model 17: Container Based Sanitation Model			
SI. No.	Questions	Value Chain	Mandatory / Optional
	If yes, are these standards enforced in the city?	Treatment	Mandatory
	Is there an institution with mandate for monitoring compliance to solids disposal standards?	Treatment	Mandatory
	If yes, is there resources (financial and human) for monitoring compliance to solid disposal standards?	Treatment	Mandatory
	Are there standard operating procedures for the treatment plant?	Treatment	Optional
11	If yes, are these procedures enforced and followed in the city?	Treatment	Optional
	Is there an institution with mandate to monitor the treatment plant's compliance to standard operating procedures?	Treatment	Optional
	If yes, is there resources (financial and human) for regular inspection of treatment operations and compliance to standard operating procedures?	Treatment	Optional
	Are there regulatory provisions for legalizing reuse of treated end products?	Reuse	Optional
	If yes, are these provisions enforced in the city?	Reuse	Optional
12	Is there an institution with mandate to legalize reuse of treated end products	Reuse	Optional
	If yes, does the institution has enough technical capacity to conduct research on potential reuse options for treated FS?	Reuse	Optional