Chapter 16

Stakeholder Engagement

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Learning Objectives

- Understand why it is important to engage stakeholders from the beginning of a project, and how this can ease implementation and enhance long-term sustainability.
- Understand how to use the information gathered during the stakeholder analysis to plan stakeholders' involvement.
- Understand the tools to inform, consult and collaborate with stakeholders, how to use these tools, and when to implement them.
- Understand how to distribute and formalise roles and responsibilities, and to identify training needs.

16.1 INTRODUCTION

Stakeholder 'engagement' or stakeholder 'involvement' is key for the successful implementation of faecal sludge management (FSM) projects. It is the art of including stakeholders in the planning process in order to take into account their needs, priorities and interests, to achieve consensus and to remove opposition; in other words, to make them 'participate'. Stakeholder engagement is largely about defining the participation level of people in the process and how to best answer their needs, through for example awareness-raising or training and capacity-building. In order to understand stakeholders, it is important to identify and characterise them (Chapter 15). The stakeholder analysis is a dynamic task that cuts across the entire planning process as the influence and interests of individual stakeholders change, leading to evolving stakeholder engagement strategies (Reed, 2008; Reymond, 2008). Involvement needs to be defined based on the context and characteristics of the key stakeholders. The dynamic nature of stakeholder involvement is put into context in Chapter 17, which contextualises stakeholder analysis and engagement activities within the whole planning framework (summarised in the Planning Framework Figure). At the end of the process, stakeholder engagement culminates with the distribution and formalisation of roles and responsibilities in the selected models of organisation and institutional framework (Chapter 12).

The planning approach proposed in this book can be described as a 'participatory approach', as will be described in Chapter 17. It engages stakeholders to 'participate' in the process, not to remain passive observers. The success of the participatory approach depends on the accountability and motivation of

stakeholders, the recognition of the added value provided by this approach, the knowledge that the process leaders have of the local context, and the credibility and resources they have (Mosler, 2004; Koanda, 2006).

After discussing why it is important to engage stakeholders, this chapter provides an overview of the different participation levels that can be chosen and how they can be selected based on the stakeholder analysis. Possible involvement tools are then listed with insight into how to choose the most appropriate ones in a specific context. Along with the planning process, the chapter then describes engagement milestones, cross-cutting tasks, such as training and awareness raising, and how to distribute and formalise roles and responsibilities.

16.2 THE IMPORTANCE OF ENGAGING STAKEHOLDERS

Proper FSM brings benefits to everybody as it solves long-term urban problems. Authorities gain recognition by improving the population's welfare. Private collection and transport entrepreneurs gain formal disposal sites and better recognition, and the price of services may be reduced for the households. However, the benefits may not be clear to everybody from the beginning and some people may be reluctant to change some aspects of their daily routine or to make the necessary effort for the project. For these reasons, information and transparency are fundamental, and consultation, collaboration and empowerment are the keys to get all the stakeholders to work together and build a system that functions well.

Figure 16.1 Workshop with all the sanitation stakeholders in the town hall of Sokodé, Togo (photo: Philippe Reymond).

Planning for FSM is often characterised by stakeholders with conflicting interests and goals, for example minimising the distance to the discharge point for the private operators versus finding a treatment site outside the city for the authorities (see also Section 15.5.4). For successful implementation, involved parties need to learn about and understand FSM systems, which includes both infrastructure and people. Some FSM projects failed because the distance to selected disposal sites was too far for private entrepreneurs, because the latter were facing problems with the police, or because low-income areas were excluded (see also Case Study 17.2). Such failures would not have happened if the people involved had been consulted and their needs and constraints identified early in the process.

Participation increases the effectiveness of a project because by engaging a wide range of interested parties, the prospects for an appropriate project design and commitment to achieving objectives are more likely to be maximised. Participation empowers people (ODA, 1995). It also increases the sustainability of a project because it develops the skills, trust and confidence required for the people to run the system once it is in place. Awareness raising, communication and capacity development should also accompany the whole process and, as such, are considered *cross-cutting tasks* (Lüthi *et al.*, 2011).

In the end, people participate on a voluntary basis (some get compensation, but nobody is forced into a participatory process). People need to have an interest, and believe that their involvement is for their own benefit or serves a greater goal. It is important to note that poor stakeholder engagement can contribute to the development of opposition, but negative feedback from stakeholders occurring in the process should be regarded positively, as it demonstrates the social and political acceptability of the proposed actions.

Finally, if stakeholder involvement is important, it also has a cost. Adequate resources (budget, personnel and time) must be allocated to the project, while the leaders must be willing to share control (Mosler, 2004). Good participatory processes are difficult and take time, because often trust needs to be built between the participants. However, engaging stakeholders from the start often saves time later by uncovering and overcoming problems which would otherwise hinder implementation and/or operation of the system (ODA, 1995) and thus, has the potential to save money in later phases. Participatory approaches need to be regarded as an investment by the implementing agent.

16.3 PARTICIPATION LEVELS

Choosing how to engage a stakeholder means choosing the appropriate participation level. The level of participation depends on what needs to be achieved with the targeted stakeholders. For example, within a given context, households may be informed about the process, or consulted to understand their collection needs. Collection and transport operators may be consulted about their routes and to help define optimal disposal sites, or collaborate on regulation definition. Collaboration is most often sought from the beginning with municipal authorities, which which is a consequence from their interest in and influence on the project (see also Section 15.4.2).

Several aspects should be considered when developing the involvement strategy (Koanda, 2006):

- perception of involvement: indicates how involved stakeholders feel;
- willingness to contribute to the project;
- expected benefit from the project;
- level of obligation which the stakeholder feels towards their responsibilities in the project; and
- people influencing the willingness of the stakeholder and extent of the peer pressure.

These aspects can also be used as indicators to assess the efficiency of the participatory process.

16.3.1 From information to delegation

Four main participation levels can be distinguished (adapted from ODA, 1995) and are discussed here, in the order of increasing involvement:

Information: The objective is to enable the stakeholders to understand the situation, the different options and their implications. This is a *one-way flow* of communication. All the stakeholders concerned by FSM need to be well informed in order to understand their role and the objectives of the project. For some of the stakeholders, who are not involved in the decision-making process, the involvement is limited to receiving information, which can be done through awareness-raising campaigns or informative meetings (e.g. an initial launching workshop – see Section 15.4) and related field visits. In some cases, information also serves to persuade people to take part in the process, by showing the benefits and providing incentives.

Consultation: The objective is to obtain the stakeholders' feedback on the situation, options, scenarios and/or decisions. This is *two-way* communication. It allows interests, priorities, needs and concerns to be taken into account (e.g. through interviews carried out with the different stakeholders at the beginning of the planning process). However the stakeholders are not involved in decision-making.

Collaboration: The objective is to work as a partner with the stakeholder(s) on various aspects, including the development of scenarios and the identification of the preferred solution. The power for taking decisions is shared between the stakeholders.

Empowerment/delegation: The objective is to build the capacities of stakeholders so that they are able to make informed decisions, to take responsibility for final decision making, and to assume their role and responsibilities once the FSM system is implemented.

Each level includes the previous ones; for example, collaboration cannot be done without consultation, and there is no consultation without information.

Different forms of participation can be used at the same time with the same stakeholder, or during the different stages of the project cycle. For example, some stakeholders may be first informed about the project, and later consulted to get their point of view. Once a trust relationship has been established and the required capacity is there, collaboration can be started.

16.3.2 Determination of the participation levels based on the stakeholder analysis

Before being able to develop an involvement strategy, the stakeholders need to be analysed (see Chapter 15). The stakeholder analysis provides the basis for deciding which stakeholders should participate in the different stages of the process and at which level of participation; this also makes it possible in turn to define which involvement tool(s) should be used with each stakeholder. This step is important, as the success of a project may depend partly on the validity of the assumptions made about its various stakeholders, and the risks facing the project, such as conflicting interests (ODA, 1995).

The involvement strategy mainly stems from the interests, influence and involvement needs of stakeholders. The 'involvement needs' are part of the information to be collected during the stakeholder analysis as described in Chapter 15. The second step is to consider the stakeholders' influence on and interest in the project, which are the main drivers for the selection of faecal sludge (FS) key stakeholders, with selection criteria that are directly related to them. The degree of influence and interest determines the participation level; then, for each participation level, a certain number of involvement tools are available, to be used according to the context and the characteristics of the stakeholders.

The influence and interest of stakeholders vary during the planning process. For this reason, an iterative selection of key stakeholders is proposed in this book. It also means that the involvement strategy may be adapted along the process, with consequent modifications in the participation level and ways to involve the different stakeholders. The five steps proposed in Section 15.6 thus apply to the reassessment of the involvement strategy as well.

16.3.3 The stakeholder participation matrix

The stakeholder participation matrix, as proposed by ODA (1995b), provides a visual representation of the selected participation level for each stakeholder. Table 16.1 shows a theoretical example that can be seen as typical for a medium-sized city, without any national government representations. Such a matrix is developed step by step along with the process, according to the needs and the desired level of detail. At the end of the process, it is a good summary of who has been involved, how and when, and provides a good basis for comparison between different projects. The participation matrix is a dynamic tool and should be adapted regularly according to the results of the iterative approach of key stakeholder selection proposed in Chapter 15, Section 15.6. It should be seen as a way to sum up the available information and take decisions on involvement strategies, such as organisation of workshops and meetings. Case Study 16.2 features a stakeholder participation matrix built retrospectively to illustrate how stakeholders were involved in an existing project in Burkina Faso.

Table 16.1 Stakeholder participation matrix (theoretical example representing a medium-sized city)

		Participation levels			
		Information	**Consultation**	**Collaboration**	**Empowerment / delegation**
Planning	*Launch of the planning process*	All stakeholders		Municipality, utilities	
	Detailed assessment of current situation		Key stakeholders[1]	Municipality, utilities	
	Identification of service options		Key stakeholders[1]	Municipality, utilities	
	Development of an Action Plan	All stakeholders	Endusers	Municipality, utilities, FS operators, NGOs	Empower weak and non-organised groups
Implementation		Households, traditional authorities and opinion leaders	Endusers	Municipality, utilities, FS operators, NGOs	Empower and delegate to municipality, utilities, FS operators, NGOs
Monitoring & Evaluation		Key stakeholders	Households, FS operators, endusers	Municipality, utilities, selected NGOs	

1 The identification and selection of key-stakeholders is described in Sections 15.3 and 15.4.

16.4 INVOLVEMENT TOOLS

Once participation levels for each stakeholder have been defined, the involvement tools can be selected. For each participation level, there are a number of possible involvement tools, as shown in Table 16.2. There are many ways to involve people in a FSM process and there is no ready-made recipe for which tool to use and when. Decisions should be context-driven. The optimal selection of involvement tools varies from case to case, for example, involvement needs may differ according to the complexity and boundaries of the project (e.g. planning at the policy level in a country where no formal FSM organisation exists yet, or planning two faecal sludge treatment plants (FSTPs) in a city where FSM operators are well structured).The personality of the stakeholders is also very important.

16.4.1 List of involvement tools

A few tools that can fit well in a FSM process are presented below (adapted from Mosler, 2004). Each tool corresponds to one or several participation levels, as shown in Table 16.2.

Individual meetings, informal or semi-structured interviews (Section 14.2.2): Meetings with stakeholders are very important, as they allow information to be collected while at the same time build trust and personal relationships. They also provide an understanding of the needs, priorities and constraints. Meeting people individually may lead to more open discussion by avoiding peer pressure.

Focus groups: This tool consists of discussions in small groups, led by a moderator, whereby stakeholders express and discuss their opinions. Focus groups can contribute towards opinion-forming in the group and can be organised in order to elaborate documents.

Table 16.2 Stakeholder involvement techniques and participation levels

	Information	Consultation	Collaboration	Empowerment / delegation
Personal meetings	■	■	■	■
Focus groups		■	■	■
Workshops	■	■	■	■
Site visits	■	■		
Media campaigns	■			
Household surveys		■		
Advocacy / lobbying	■		■	■
Mediation		■	■	■
Logical framework		■	■	

Workshops: A workshop aims to gather selected stakeholders together in order to push the process forward. It can be an *information workshop*, such as the *initial launching workshop* (see Planning Framework in Chapter 17, Activity C), aiming to communicate the plans, activities and current stage of the process. It can also be a *consultative workshop*, aiming to collect stakeholders' opinions and concerns, build consensus and formulate solutions. In some cases, workshops or focus group meetings can be held to acknowledge and reinforce the importance of members in the process and strengthen associations. For example, the organisation of groups of stakeholders such as collection and transport operators into an association may greatly simplify the participatory process, increase the visibility of these stakeholders and lead to empowerment (Bassan *et al.*, 2011).

Site visits: (see Section 14.2.4) A site visit is a powerful tool to expose all stakeholders to reality. Very often, authorities and people working in the office do not fully realise the situation until they can actually see and visualise it. Once they understand, they are much more prone to action and change. Visits to informal (illegal) FS dumping sites may be particularly useful (Figure 16.2). Transect walks, where process leaders walk through the concerned neighbourhoods with relevant stakeholders, are also a recommended option.

Participatory mapping (often referred to as *community* or *social mapping*): Assisted by a facilitator, the stakeholders develop a map of the target area and represent the features related to FSM infrastructure and services. It helps to get an overview of the project, visualise the situation and get a common understanding (Figure 16.3).

Surveys: A representative sample of the population is questioned on a particular topic by means of a structured questionnaire. An example is household surveys used for the assessment of the current situation (e.g. Section 14.3.3).

Figure 16.2 Site visit to an informal disposal site, Sokodé, Togo (photo: Philippe Reymond).

Figure 16.3 Participatory mapping taking place in India (photo: Philippe Reymond).

Media campaigns: Carried out with posters, advertisements, on radios, TV, internet or cell phones, media campaigns aim to inform and sensitise the public. It is particularly useful in making the population understand the changes introduced by a new FSM system and promoting changes in habits (e.g. not to discharge solid waste into the latrines).

Advocacy/lobbying: The goal is to ensure that the interests of non-organised and/or socially disadvantaged and less articulate groups within the population are considered in the planning process. The groups receive advice, and their interests are represented in the appropriate committees and bodies, either through representatives or through the voice of the process leaders. It is a form of empowerment. Advocacy and lobbying are mainly about convincing and persuading stakeholders. They can be used, for example, to convince authorities or utilities of the benefits of an integrated approach.

Mediation: In conflict situations, mediation through neutral third parties is the attempt to reach mutually agreed-upon solutions. First, the key issues and areas of conflict are stated and clarified (interests, aversions, and blockages). Then there is an attempt to find mutually satisfactory ways to resolve the conflict (evaluate options, and check for fairness).

Logical frameworks: Logical frameworks can be elaborated for each of the strategic objectives of a project. This tool aims to facilitate the logical organisation of projects with well-defined objectives, and can be used to promote communication between the stakeholders and to focus their attention (Aune, 2000). This approach allows the identification of the means and activities needed to reach the defined project objectives, together with the risk indicators and outputs related to them.

16.4.2 Determining the most appropriate involvement tools

The selection of involvement tools should be done on a case-by-case basis as it depends on the goals, the personality and capacities of the local stakeholders. The best participatory approach is a combination of several techniques (Koanda, 2006), as illustrated in Case Study 16.1. Before selecting a tool, the process leaders should consider the practical aspects linked with the socio-economic conditions of the stakeholders and make sure that the tool is adapted to the target group. It is also important to clarify in advance the availability of the resources required for conducting an adequate stakeholder involvement program (time, budget, and know-how). Credibility of the process leaders, official legitimisation and transparency are indispensable for the process success (Mosler 2004). The process leaders need a good knowledge of the local context, in order to find appropriate tools and ensure a good facilitation and mediation. A minimum level of trust between stakeholders is also required (Koanda 2006).

The following questions should be considered by the process leaders (adapted from Mosler, 2004):

- Should the group always meet as a whole, or should there also be meetings of sub-groups?
- Is the frequency of meetings tolerable to all participants (or a time burden)?
- How binding should group decisions be for the individual members of the group?
- To what extent will hidden agendas and the previous experiences of stakeholders influence their voicing of opinions in the group?

At the same time, the process leaders have to make sure that the involvement tools fit the local context (adapted from Mosler, 2004):

- Political framework: Does the type of stakeholder involvement fit into the existing political system? Do the political leaders need to be involved or not?
- Legal framework: Does the type of stakeholder involvement conform to the laws?
- Institutional framework: Does the type of stakeholder involvement match the given institutional framework (i.e. role distribution among the stakeholders - see Chapter 12)? Are the right authorities involved? For example, the coordination of the stakeholders from the whole service chain needs to be well organised, and carried out by a competent authority.
- Social framework: Does the type of stakeholder involvement conform to social customs?

Finally, some personal aspects are critical for the success of the process (adapted from Mosler, 2004):

- If there are key stakeholders who are against the project or show distrust, extra care should be taken to inform, consult, and understand them and to discuss how they can benefit from the project.
- If important stakeholders have no interest in the project, their needs have to be identified in order to stimulate their interest.
- If the stakeholder analysis reveals strong conflicts between stakeholders' interests, or if interests of some stakeholders are not being represented, techniques for dealing with conflict should be implemented.
- Assistance can be provided for stakeholder groups or associations in order to better organise them, to ensure that leaders are internally accepted, and to improve their recognition level amongst other stakeholders (see Case Study 16.2).

The period corresponding to the launch of the planning process and the detailed assessment of the current situation is usually dominated by information and consultation with the key stakeholders, aiming at gathering information on needs and priorities (see Chapter 14 and Section 17.3). Full collaboration with some of the stakeholders may be difficult at this stage as the necessary know-how may not be available to make informed decisions. As a consequence of this, part of the preliminary and feasibility studies may be conducted by experts.

Context-specific involvement tools are used to make all the different stakeholder groups ready to make informed decisions and reach consensus where necessary. Information is a cross-cutting task,

and workshops are the fruit of a continuous effort of awareness raising, capacity building, focus group discussions and empowerment, i.e. an appropriate mix of all participation levels. For example, collection and transport of FS is frequently not formally regulated, and is hence technically considered illegal, and so is not properly acknowledged by authorities. To ensure an efficient participatory process, meetings and visits can help authorities to understand the importance of the private operators and their constraints related to the transport and discharge at illegal sites. Another example is the empowerment of manual and mechanical operators. If they do not have a professional association or their association is not active, or the leader is not considered representative, assistance should be provided to strengthen the organisation, otherwise its members should be involved in the important participatory events until an efficient management has been ensured (Lüthi *et al.*, 2011).

Implementation marks the transfer (delegation) of roles and responsibilities to the respective stakeholders (e.g. the FSTP operators), with further empowerment where needed. All the stakeholders who do not have a defined role should be kept informed (e.g. the households and the different authorities), so that the system can start running with the support of the population and other key stakeholders.

Case Study 16.1: Selection of participation levels and involvement tools for faecal sludge stakeholders in Ouahigouya, Burkina Faso

(Adapted from Koanda, 2006)

Koanda demonstrates a participatory planning process to set up a FSM system in Ouahigouya (Burkina Faso), in which the tool selection was adapted to the different stakeholder groups. Mechanical and manual operators, farmers and women associations were consulted in the form of focus groups and informal interviews. Information was provided through films, which established a link with reality. These tools were chosen to make these stakeholders feel at ease. In parallel, information was relayed and consultations were carried out with the municipal authorities and technical services in formal meetings with multimedia presentations. This type of tool was a better match for the formal environment of these stakeholders.

Collaboration was chosen as a participation level for the validation of options. In order to minimise the risk of marginalisation, the validation was first discussed in focus groups. Then, a validation workshop was organised in the municipal building, which gave the different stakeholder groups the opportunity to discuss the choices made in the focus groups and to build consensus. The main outcome of this two-day workshop was the participatory selection of one scenario and the first draft of an Action Plan. In addition, the understanding of the municipal authorities was reinforced so that they could assume their coordination role. In this way they were empowered, while building the basis for the future delegation of responsibilities.

This example shows that it is possible to bring together all FS key stakeholders, even in a very hierarchical society, with their different social and economic profiles, education level and negotiation capacity. The choice of participation levels for the different stakeholders resulted from the stakeholder analysis carried out at the end of the preliminary studies (STEP 2: *Characterisation and selection of the key stakeholders* – see Section 15.5.2). Mechanical and manual operators, farmers and womens' associations were considered to have a high interest in the project, whereas the municipal authorities had both high interest and influence. Figure 16.4 features the corresponding influence-interest matrix. Based on this and the characteristics of these stakeholders, the involvement strategy was developed (see also Figure 15.1 and 15.2).

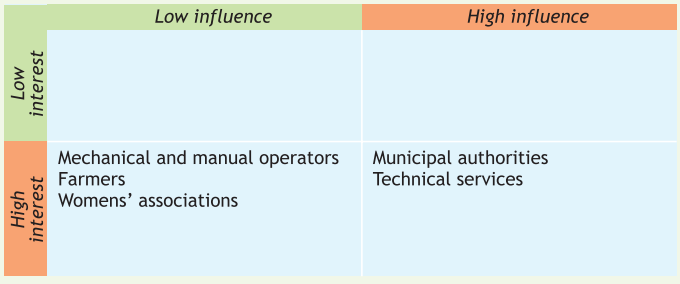

Figure 16.4 Case Study Ouahigouya - influence-interest matrix at STEP 2.

16.5 MILESTONES AND CROSS-CUTTING TASKS

Globally, the level of participation of key stakeholders should increase as the process develops. From information at the very beginning, it should move towards collaboration, so that when it comes to implementation and operation, smooth collaboration between key stakeholders is secured. The way in which participation levels evolve is context-specific. However, the process is marked out by milestones corresponding to the end of phases, where participation levels are formally re-thought and where important changes can be decided for the next phase.

In parallel, the planning process is marked by two participatory cross-cutting tasks, as illustrated by Lüthi *et al.* (2011): (i) awareness raising to a wide audience (i.e. not limited to key stakeholders) and (ii) capacity building, which first aims to enable the key stakeholders to take informed decisions, and then prepares the key stakeholders to endorse their role and responsibilities in the implementation and operation of the system.

16.5.1 Main milestones in the participatory process

A participatory planning framework is proposed in Chapter 17, which is characterised by different phases and milestone events. Three main milestones are identified for the involvement strategy:

1. Initial launching workshop, including a field visit with all the stakeholders. This consists mainly of an information workshop, aiming to communicate the plans, activities and current stage of the process. Afterwards, all the key stakeholders should have a common understanding.

2. Validation workshop of selected options by all the stakeholders: This event brings all the key stakeholders together to publically and officially seal the decisions taken up to this point. The technical options and management options are presented, discussed and validated.

3. Validation workshop of the Action Plan: This workshop seals the agreements reached on the validation of options and how to proceed further. The roles and responsibilities of the different stakeholders in the project are defined in a common understanding, which will facilitate the coordination of the various tasks.

Figure 16.5 Sign translates as, 'Managing one's wastewater and latrine without harming one's neighbours is a sign of good faith', Nzérékoré, Guinea-Conakry (photo: Philippe Reymond).

Further workshops can be added. For example, Lüthi *et al.* (2011) propose two workshops for the identification of technical service options. First, an e*xpert consultation workshop* to identify the feasible systems, and second, the selection of the most appropriate options by the key stakeholders in a *stakeholder consultation workshop*[1]. Case Study 16.2 illustrates a similar process.

16.5.2 Raising awareness

Awareness raising is a cross-cutting task throughout the whole process, enabling people to make informed choices and adopt good practices (Lüthi *et al.*, 2011). Awareness-raising activities may be needed at different levels, with different stakeholders. Very often, the advantages of a new FSM system may not be obvious to all. Some of them may be reluctant to support the project, or are not interested in participating, especially if a behavioural change is required. Some may be interested but lack the necessary information or skills to efficiently take part in the decision-making process. In this case, awareness raising can be developed through workshops or field visits which allow the different stakeholders to understand each other's potential and constraints. It is also imperative to educate households on how to use and maintain their onsite sanitation infrastructure, and make them understand why this is important for the whole FSM system, even if they are not involved in the decision-making process. Ultimately, it is crucial that households understand how improving the FSM system will contribute to protecting public health and raise their living standards. Training can be carried out along with awareness raising to increase the skills of the stakeholders involved in the participatory approach.

Awareness raising is critical to reach a common understanding of existing problems and to ensure that stakeholders agree on the goals (Figure 16.5). It can also be crucial when utilities or private operators who are already delivering services need to change their habits, for example, when collection and transport operators who have been discharging FS directly into the environment are required to transport FS to the FSTP after it has been built.

1 See CLUES guidelines p. 33 -37 for details on such workshops (Lüthi *et al.*, 2011).

Involvement tools like information workshops, field visits and community mapping can be very effective in raising awareness of the situation amongst stakeholders. In all cases, awareness-raising activities involve extensive communication, both at individual and collective levels. The stakeholders need to be informed of the initial situation, and the environmental and public health risks linked to the existing practices, as well as the project's aims, potential approaches and benefits in terms of the economics, environment and society. Objectives and benefits of the participatory approach need to be defined and presented to the stakeholders to increase their understanding and commitment (McConville, 2010).

16.5.3 Training and capacity building

Skills and capacities are important components of the enabling environment (Lüthi *et al.*, 2011). When it comes to implementation, the capacities of the key stakeholders at the technical, managerial, financial, commercial and social levels are crucial. Therefore, the capacities and skills of the stakeholders need to be assessed (Chapter 15) and if necessary reinforced to ensure the efficiency and long-term sustainability of the project.

Table 16.3 presents an example of potential training needs for the different roles in the service chain. The role distribution is further discussed in Section 16.7. Each role requires certain skills and knowledge. A training plan may be elaborated to define the type of knowledge required and the stakeholders concerned, and to suggest a training schedule.

Several tools and activities, such as workshops, practical exercises, participative document elaboration and field visits, can be used for training (Figure 16.6). It is also recommended that people are introduced to existing infrastructures and expertise so that they can see facilities and pilots (Lüthi *et al.*, 2011). The employees who will be in charge of the operations and maintenance (O&M) can benefit from training sessions in other cities, where there are existing FSM programmes.

Fig. 16.6 Training on sanitation systems, Ecuador (photo: Philippe Reymond).

Table 16.3 Training needs for the responsibilities involved at each level of the organisational scheme

Components of the supply chain	Responsibilities	Training needs
Collection & transport	Contact with the customer (service schedule and payment)	Training on marketing, commercial and financial management
	Collection and transport to the transfer station / treatment plant / disposal site	Training on risks, safety measures and good practice for sludge collection and conveyance;
	Quality control	Training on risk, safety measures and good practice for sludge collection and conveyance
Treatment	Collection of disposal fee	Training on financial management
	Reception and management of the trucks, operation and maintenance of the treatment plant	Training on operation principles, and on operation and maintenance procedures Training on treatment processes
	Monitoring of the treatment plant	Training on operation principles, and on operation and maintenance procedures Training on monitoring parameters for the FSTP, sampling procedures, and interpretation of the results
	External quality control	Training on operation principles, and on operation and maintenance procedures Training on the analysis of parameters for the FSTP, and on interpretation of the results
Disposal/enduse	Reception, treatment and conditioning of the endproducts	Training on operation principles, and on operation and maintenance procedures
	Customer management (sale schedule and payment) and sales	Training on operation principles, and on operation and maintenance procedures Training on marketing, commercial and financial management
	Quality control	Training on operation principles, and on operation and maintenance procedures Training on how to analyse parameters for the endproducts, and how to interpret the results
Coordination of the sector	Monitoring of system, enforcement of laws, regulations and contractual agreements, public relations, organisation of sector meetings	Training on group coordination, team leading and communication Support on document elaboration such as contracts, licences and partnership agreements Training on data collection, monitoring, and capitalisation

Financial mechanisms can be defined to answer capacity-strengthening needs. Several solutions can be explored including distribution of fees, subsidies, microcredits, community development funds and so on (Lüthi *et al.*, 2011). For example, a part of the discharge fees at the FSTP could be ear-marked for training of the operational staff. Also, a part of the registration fees for professional FS collection and transport associations could be reserved for capacity building. The budget for capacity building should be an integral part of the initial project budget, so that the infrastructure built can be efficiently operated on a long-term basis. Continuous training should then be planned, either by the organisation in charge of the coordination, or by each group of stakeholders.

SUMMARY: From stakeholder analysis to involvement strategy

Choosing the right involvement tools at the right moment and developing an involvement strategy is not an easy task. The following is a list of the necessary stages in the order they are carried out, as detailed in this chapter and in Chapter 15:

1. Look at the FSM planning framework (Chapter 17) to locate the main steps in the stakeholder analysis and involvement milestones in the whole picture of the integrated planning process.
2. Identify the stakeholders (Section 15.4).
3. Characterise the stakeholders (Section 15.5); draw up a stakeholder table (Section 15.5.1).
4. In particular, characterise the stakeholders' interest in and influence on the project (Section 15.5.2), as well as their involvement needs; the selection criteria for key stakeholders helps to define their interests and influence (Section 15.5.3). Common interests and involvement needs are described in the table featured in Section 15.5.4.
5. Establish an influence-interest matrix, as shown in Section 15.5.2.
6. Define the participation levels (Section 16.3) based on the influence-interest matrix and the specific characteristics of each stakeholder.
7. Select involvement tools for each stakeholder or group of stakeholders, according to the defined participation levels, involvement needs and specific characteristics (Section 16.4); Table 16.2 illustrates which involvement tool is appropriate for each participation level.
8. Adapt the strategy according to how the planning process develops, for example along the step-by-step approach proposed in Section 15.6.
9. Consider the cross-cutting tasks.

The case studies (Case Studies 15.1, 16.1 and 16.2) provide further illustrations on how this can be done.

16.6 DISTRIBUTING AND FORMALISING ROLES AND RESPONSIBILITIES

Once the technical options and organisational modes have been chosen, the roles and responsibilities need to be distributed and formalised. Defining how this should be done is one aspect of the development of the Action Plan (see Chapter 17, Section 17.4.3 and the Planning Framework). As mentioned in Chapter 11, special care needs to be taken not to generate responsibility overlaps between different stakeholders. A precise definition of the activities, conditions and sanctions is needed for each component of the supply chain.

All the stakeholders' points of view, constraints, and skills must be properly understood and represented during the process of distributing roles and responsibilities. This is facilitated by the stakeholder analysis, and a continuous, participative process that allows the process leaders to understand the capacities of each stakeholder. The main strengths of the different stakeholders in each component of the supply chain are further discussed in Chapter 12.

16.6.1 Formalisation documents

According to the particular situation and the stakeholders who are involved, formalisation documents can take different forms such as licences, contracts, partnership agreements, standards and laws. These different types of documents are described below.

Licences: In the context of FSM, licences can be issued by the authorities for services throughout the whole supply chain. A stakeholder can have a licence for one or more services, e.g. for collection, transport and treatment (see Chapter 12). In all cases, the official licence document should contain

a list of requirements, the activities allowed and the validity of the licence. The conditions to obtain the licence can be defined either in the document itself, in standards or official decisions, or in specific terms of reference for the different operators. Licences can have a limited validity. A monitoring and enforcement system is required to ensure the conditions are respected, be it during the licence time, or when renewing it. A sanction system will discourage operators from running an activity without a dedicated licence.

Contracts: Contracts can be signed between stakeholders involved in the FSM supply chain for specific activities or services. In some countries, contracts are signed between national utilities and authorities to set their objectives, as well as financial and operating conditions. The validity and specific conditions for contracts are most often defined by national and regional regulations. Three types of contracts can be distinguished: 1) contracts linking a service provider to its customers (e.g. households, shops), that have to be defined according to the regulations; 2) contracts linking two operators undertaking different activities in the supply chain (e.g. between the treatment plant operator and user of treatment endproducts); 3) contracts between one operator and the authorities (e.g. for the delegated operation of public infrastructure by a private operator or an association).

Partnership agreements: Agreements can be signed between two stakeholders to provide a collaborative framework for the institutional or technical management of any component of the FS supply chain. For example, a partnership agreement can be signed between a private operator and a municipality to define their contribution in the enforcement of rules and the use of fees collected at a treatment plant. The partnership details are constrained by the legal framework. Specific cases of partnership agreement are public-private partnerships, where stakeholders from the public and private sector collaborate to provide services to the population. This allows a collaboration which makes the most of the strengths of the different stakeholders (see Chapter 12).

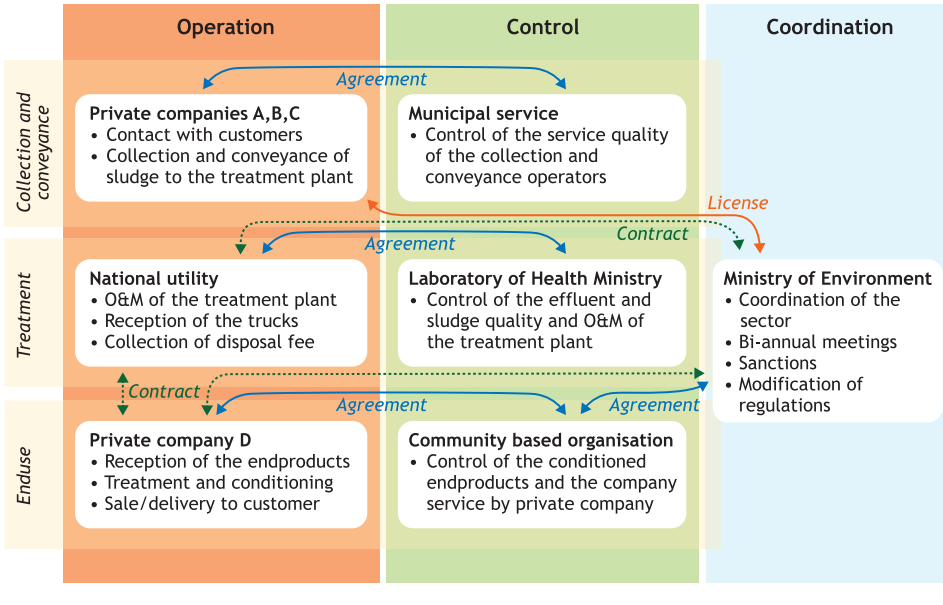

Figure 16.7 Theoretical example of a diagram of relationships with formal links between stakeholders.

Standards and laws: Standards and laws are defined by competent authorities to fix requirements, quality levels, obligations and sanctions for all components of the FSM supply chain. They may define the roles and responsibilities among stakeholders, are generally unlimited in time, can be modified through given legislative procedure, and further detailed by official decisions. They are discussed as a part of the enabling environment in Chapter 12 (Section 12.3).

16.6.2 Diagram of relationships

A diagram of relationships can be used as a tool to visualise and discuss potential formal links between stakeholders (see also Section 15.5).Positions can be added or removed from the diagram (e.g. when a stakeholder is in charge of treatment and by-product sale) (see Chapter 12). The contractual links between stakeholders can also be represented in a diagram of relationships. The diagram of relationships can be discussed during a workshop on the role distribution and institutional framework to ensure that each stakeholder has a full understanding of the organisational scheme. Several modes of organisation can be evaluated. Figure 16.7 shows a theoretical example of a diagram of relationships with different formalisation documents. In this example, partnership agreements link the operators with the control institutions, licences are delivered by the authorities to the private companies in charge of the collection, conveyance and enduse, and contracts link the authorities with the semi-private utility in charge of treatment.

Case Study 16.2: Participative definition of an organisational setup and technical strategy in Ouagadougou, Burkina Faso

(Adapted from Bassan and Strande, 2011)

Burkina Faso adopted a National Sanitation Strategy in 1996. Its principal innovation is the integration of FS management in the document. Based on this strategy and on Sanitation Plans for the main cities of the country, the National Utility for Water and Sanitation (ONEA) launched meetings to elaborate a strategy for FSM and site visits to identify potential sites for FSTPs (Bassan and Strande, 2011).

In Burkina Faso, the responsibility for the management of excreta and wastewater in the main cities is delegated to ONEA within its contract with the State, but the municipalities have the mandate to provide water and sanitation within their area. Sewered sanitation has been implemented in the centre and industrial areas of the two main cities (Ouagadougou and Bobo-Dioulasso). The rehabilitation of the simple latrines and the distribution of new ventilated improved pit (VIP) latrines is planned in other areas and mid-sized cities. Private informal entrepreneurs provide collection and transport services, given the lack of official organisation for this activity.

The elaboration of a FSM global organisation scheme for the capital city, Ouagadougou, was launched under the supervision of ONEA, the project leader. The stakeholder analysis and a succinct assessment of the initial situation were conducted, but no specific involvement strategy was developed for the choice of technical options or institutional framework. Between 2009 and June 2010, only the president of the collection and transport operators association was invited to participate in the site identification and to some of the important validation meetings. Members of the association were not informed of this process. As a consequence, key stakeholders were not consulted prior to the FSTP design, and the decisions were taken independently from the real needs and constraints of the collection and transport operators.

External process leaders were mandated from January 2010 to help develop the legal and contractual framework. After the elaboration of first drafts of the terms of reference and technical licences for the collection and transport entrepreneurs, a consultation and validation workshop was organised to discuss the current situation and the preliminary institutional framework. As no initial launching workshop had been organised at the beginning of the process to inform all the stakeholders about the aim and activities of the project, the different stakeholders did not have a common understanding of the situation. This event highlighted the need for longer discussions and for better involvement of the key stakeholders (collection and transport entrepreneurs and municipal services - district authorities, police, property management, legal authorities). Further information activities were needed before the elaboration of final versions of the documents setting the institutional framework. It was also acknowledged that the collection and transport association was not effective and that members did not recognise its committee.

Focus groups were led by the international advisors and ONEA in order to inform the stakeholders, reach a common understanding, and collaborate with them to refine the regulatory documents. First, the collection and transport operators were identified and contacted. The collection and transport association was then empowered through several focus groups, personal meetings, visits and workshops and a new committee was elected. In parallel, the members actively collaborated to define the institutional framework for the collection and transport activities. As a part of the empowerment activities, the participation of the association and some of its members in information workshops was also encouraged.

The mayors of the five districts of Ouagadougou were contacted, together with the municipal police, the property management, and the legal authorities. The project and the first draft developed with the collection and transport operators were presented in a first workshop. Several focus groups were then organised to modify the documents.

At the end of this process, a validation workshop with all local stakeholders was held, during which the documents elaborated within the focus groups were validated, the roles and responsibilities in the future FSM system pre-defined, and the transition phase to the implementation of the organisational scheme discussed.
The initial project planning in this case study is typical of infrastructure projects where an international consulting company was mandated to develop the technical component only and the organisational setup was not addressed and no stakeholder participation was planned in the beginning. The involvement of the collection and transport operator, which makes the FSM project differ from wastewater projects where the transport is done by sewers, only became obvious late in the process.

This case study shows how important it is to involve all key stakeholders from the beginning of the process, and how time can be saved if this is done well. It also shows that the lack of involvement of all the stakeholders from the beginning results in complications when it comes to the distribution of roles and responsibilities. The overall process was time demanding, especially because the awareness raising, empowerment and involvement needs of the collection and transport operators had not been acknowledged early enough. The trust relationship with the collection and transport operators was hard to build as several decisions concerning their work had already been taken without them being consulted.

The main strengths of this project were the real involvement of the utility (ONEA), the willingness to define the organisational and regulatory setups before the implementation, and the recruitment of a long-term process leader for the stakeholder engagement, the definition of the role and responsibilities, and the elaboration of the institutional framework. Without the discussions and workshops conducted to elaborate these setups, it is possible that the FSTP would have been built without any consultation of the collection and transport operators, who would probably have rejected the obligation to discharge FS at the FSTPs.

Finally, the involvement tools applied, though late in the process, allowed an efficient awareness-raising process, the participation of some of the operators, and the empowerment of the association. After about one year of consultation workshops, the organisational setup documents set according to the local context were validated by all the stakeholders in a workshop (Bassan *et al.*, 2011).

The stakeholder participation matrix of this project, developed retrospectively for the sake of analysis, is presented below (Table 16.4). It highlights the separate development of the technical and organisational components. The planning process as proposed in this book (see Section 17.3 and the planning framework) is included for comparison in the last column. Figure 16.4 also presents the late but efficient activities to involve the key stakeholders, especially the municipal services and the collection & transport association, in the definition of the organisational scheme and the regulatory documents. This process started with information and consultation and ended with empowerment and collaboration.

Figure 16.8 Inspection of an inlet, Burkina Faso (photo: Magalie Bassan).

Table 16.4 Retrospective stakeholder participation matrix of the Ouagadougou case study with main involvement activities

Planning steps	Participation levels of Case Study 16.2				Activities	
	Information	Consultation	Collaboration	Empowerment / delegation	Case Study 16.2	Ideal case *(see Planning Framework, Table 17.2)*
Launch of the planning process	-	Municipal services, President of C&T assoc.[2], MoUP[2]	ONEA (project leader), international technical consultant	-	Field visits for selection of treatment sites	START OF THE PARTICIPATORY PLANNING PROCESS FOR THE PLANNING OF THE WHOLE FSM SYSTEM **Launching workshop** Field visits
Assessment of the current situation	-	-	ONEA, international technical consultant	-	Brief technical assessment studies **Report of preliminary studies on treatment technologies**	Participative assessment of the initial situation Information / consultation with stakeholders **Report of preliminary studies**
Identification of service options	-	-	ONEA, international technical consultant	-	**Report of feasibility study on treatment technologies**	Involvement activities according to need **Report of feasibility study** **Validation workshop of options**
Development of an Action Plan	-	-	ONEA, international technical consultant	-	Detailed design for treatment options **Detailed project document on treatment technologies**	Participative action planning with key stakeholders; empowerment and awareness raising **Validation workshop of Action Plan** **Detailed project document**

Planning steps	Participation levels of Case Study 16.2				Activities	
	Information	Consultation	Collaboration	Empowerment / delegation	Case Study 16.2	Ideal case *(see Planning Framework, Table 17.2)*
Assessment of the current situation	Municipal services, C&T operators, MoUP , Universities, NGOs, international tech. consultant	Municipal services, C&T[1] operators, ONEA	ONEA, international advisors	-	PARTICIPATIVE PLANNING PROCESS: PLANNING OF ORGANISATIONAL SETUP Brief institutional assessment studies **Preliminary organisational setup** **Information workshop**	
Identification of service options & development of an Action Plan	Municipal services, MoUP[2], Universities, NGOs	-	Municipal services, C&T operators, ONEA, international advisors	Municipal services, C&T operators, ONEA	Empowerment, awareness raising Focus groups to develop regulatory texts **Validation workshop on roles and regulatory texts**	

1 C&T: Collection and transport
2 MoUP: Ministery of Urban Planning

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