Tool 6.2 - Evaluation and Improvement of Self-management

Table T 6.2 A: overview of self-management practices

Category	Feature	Questions to ask – things to observe – elements to evaluate	Actions and possible improvements
Waste segregation	Source segregation	Is waste segregation at source in three fractions - organics, recyclables and residual waste - a regular practice of self-management?	Source segregation is crucial for self-management of waste. Reinforce the behaviour change campaign to increase waste segregation at source and specific treatments for each fraction.
			Reduce as much as possible the residual waste which needs to be disposed of in pits or community disposal sites.
		What proportion of the community regularly practices segregation at source?	
	Segregation purity	How well do the households segregate their waste?	Suppose segregating recyclables into multiple material types is beneficial for increasing market value. In that case, it is essential to sensitise and train on which types have what value and why it is important to keep them separate.
		Are the fractions well understood by the community and well segregated?	
		Are the recyclables segregated into multiple material types?	For better organic separation, focus on minimising undesired items, such as plastics.
		, to the respondence edgregated into matapie material types.	For self-managed treatments, individuals can be educated and trained on the connection between purity and product quality.
Treatment	Organics	Are organics treated (e.g. composting, vermicomposting, anaerobic digestion, black soldier fly, fuel from biomass)?	Evaluate the technologies for optimisation. Consider process parameters such as temperature, humidity, C/N ratio, presence of odours, presence of pests, and aeration.
		Is the process functioning as desired?	Product quality is a key indicator; if it's off, it often points to underlying issues in the process.
		Is the product of sufficient quality?	Train the community to improve their operation of the selected treatment technologies, and periodically follow up to ensure good practices are maintained and develop into habits.
		Do the products have value for the community? Is it used and used correctly?	Refer to the <u>Compendium – Treatment and Recycling (pp. 72-89)</u> for more information on technologies for treating organic waste.
	Recyclables	Is there coordination with nearby municipalities or formal or informal recyclable businesses to collect the recyclables generated in the community?	Explore options to create or strengthen the link with the recyclables market, either through partnerships with nearby municipalities that can support the collection of these recyclables, or directly with recyclers that can collect them periodically. There could even be some
		Are the recyclables handed over for free or sold to the market?	earnings for the community through the negotiation of purchase prices for the recyclables, especially if large amounts are stored and sold in bulk.
		Are any plastics self-managed through up-cycling or down-cycling technologies? Are the products valuable for the community?	Refer to the Compendium – Treatment and Recycling (pp. 72-79, 90-95) for more information on technologies for recyclable waste management and plastics, particularly.

Disposal	Controlled disposal pits		Evaluate the practices of the entire community using random sampling if the community is too large to be surveyed comprehensively.
		Is the waste in pits covered periodically with inert material? Is there sufficient volume available in the pit to dispose of the waste in the long term? Is there space to open new pits? Are the pits secured to prevent accidents? (temporary fence,) Is there any evidence of waste being burnt in the pits?	Reinforce the behaviour change campaign to eliminate burning practices, dispose only of residual waste and adequately manage the waste pits with regular covering material.
			To decrease the amount of waste disposed of in pits, train the community on best practices for organic waste treatment and support the development of collaborative solutions for handling the recyclable fraction, which cannot be treated on-site. NOTE: See Compendium - U.8 Controlled Waste Pit (pp. 116-117) to know more about controlled waste pits.

Table T 6.2 B: Evaluation of the support framework for self-management

ategory	Feature	Questions to ask - things to observe - elements to evaluate	Actions and possible improvements
Community- Led Waste Management Framework	Framework		
	Regulatory framework	Are there community rules and regulations in place to support the self-management of waste and guide the community on how to manage their waste effectively? Are local, regional and national laws and regulations followed? Are there mechanisms in place to enforce simple rules and regulations?	Establish clear rules and regulations that support the existing solid waste management system and align with local, regional, and national laws and regulations. Explore possible incentives to promote and increase organic segregation at source.
	Waste	(prohibit dumping, burning, payment, obligation to segregate at source) Is the waste generation and composition known?	Waste generation and composition are essential to measure to better frame the waste
	generation and composition		problem and define alternatives for self-management. A waste generation and composition study can be performed using Tool 7 – Waste Generation and Composition Study . To limit the resources required and, when safe self-management practices are already in place, the characterisation could focus on the residual waste only to assess whether more organics or recyclables could be segregated and better managed.
	Management	Is there a group in place responsible for SWM in the community? Are there roles and responsibilities of this group established?	Although self-management primarily relies on individual efforts. There is a benefit of having a responsible community group which oversees SWM in the community.
		The thore roles and responsibilities of this greap established.	Organise a community group to be responsible for SWM and support the establishment of their roles and responsibilities, which shall include overseeing and actively participating in managing the different elements of the support framework presented in Table T 6.2 B .
	Monitoring, evaluation and	Are there any metrics in place to measure and monitor the success of the self-management framework? (reducing and reusing practices, recovery	Implement monitoring and reporting mechanisms to track the success of the self-management framework.
	reporting	rates, diversion from waste disposal, etc.)	Set achievable short-term, medium-term, and long-term goals to increase the amount of source-segregated and valorised waste and decrease the amount of residual waste going to disposal.
			Support the community in taking ownership of their own waste management.

Community- Led Waste Management Framework	Stakeholder engagement	Are the roles and responsibilities of the stakeholders involved in self-management clear?	Create a stakeholder map to identify all relevant stakeholders and engage them at different levels: inform, consult, involve, collaborate, and empower.
		Is there close coordination with other humanitarian sectors? (shelter, WASH, health, planning) Were potential support stakeholders approached to coordinate and find synergies? Municipalities, formal and informal recyclers? Are local authorities and other relevant local stakeholders engaged in the planning and implementation? Is there anyone responsible for overseeing and supporting the population with their self-management practices? Who will play this role when humanitarians leave?	Clarify roles and responsibilities with the relevant stakeholders.
			Early engagement and empowerment of local stakeholders and authorities will allow smoother transitions for long-term SWM.
			Collaboration with local municipalities from the outset of the project is crucial for ensuring long-term sustainability. By synergising resources for organic pre-processing, the project can also boost potential income through economies of scale and strengthen possibilities for using or selling the products generated during treatment.
			Specific waste collection services could be coordinated with various stakeholders, including municipalities or recyclers. A periodic collection of recyclables or residual waste could be incorporated into the waste management strategy.
	Waste management in host communities	Is support also given to host communities about SWM?	Waste management benefits greatly from economies of scale – shared use of facilities is often desired. Ensuring equitable treatment and resource distribution between host communities and displaced populations, addressing disparities in access to essential services and support to prevent inequalities or tensions.
	Strategic planning	Is there a long-term strategy to improve and/or at least maintain good self-management practices?	Improving self-management typically involves a stepwise approach, with long-term strategies and a clear vision guiding gradual improvements.
		Is there a forecast for future trends and needs related to waste disposal? What mechanisms exist for adapting and improving the system in response to future needs and challenges?	Do a forecast analysis to help plan for future changes that can impact the self-management of waste.
	Financing and cost recovery	Are the costs of SWM known? Can the current costs be reduced?	Define precisely the yearly costs of the community self-management service, including capital costs and operational costs. Tool 8 – Cost Evaluation can be used for support.
		Is the community capable of maintaining and paying for the costs of SWM management over time? Has a tariff been implemented to cover these costs? Are fees currently collected? Who collects the waste fees? Is it possible to increase revenues from product sales or recyclable sales?	Evaluate the self-management system and improve efficiency to reduce costs.
			Consider implementing a community tariff that can help cover the costs of community projects, promoting safer self-management practices.
			Conduct a market analysis to assess opportunities for increasing revenue from the sale of recyclable materials. Explore options for pre-processing and storing larger quantities of recyclables, which could help optimise pricing leverage and enhance profitability. (consider pre-processing steps such as cleaning, shredding, cutting, compacting, sell in larger amounts, store to sell at better market prices, etc.)
			Early collaboration and empowerment of local stakeholders are essential for the long-term sustainability of SWM services.

Community-Led Waste Management Framework

Behaviour change

Is there an active behaviour change campaign to improve waste segregation at the source and enhance self-management practices, such as the treatment of organics, safe disposal of waste, or storage and preparation of recyclables?

Is the community well-informed and reminded of proper practices?

Is the efficiency of the behaviour change monitored and evaluated?

Are there cultural barriers that have been identified and need to be overcome?

How can consistent participation be encouraged?

Define the target behaviours to change and use adapted behaviour change techniques to achieve this goal.

If social barriers are identified, integrate this element into the behaviour change campaign and work closely with the communities to find suitable and culturally appropriate alternatives.

Regularly assess the behaviour change campaign and adapt according to the needs. The first focus should be on ensuring proper collection and disposal of waste, and then adequate waste segregation can be improved.

Consider possible incentives to increase participation and promote good practices of waste segregation at source, as well as self-management of organics, recyclables, and residual waste.

Consider possible incentives to increase participation and good practices of waste segregation at source. Evaluate if the current system for recyclables collection is suitable to foster good practices of waste segregation.

The following resources provide more in-depth information about waste segregation. Refer to the **Compendium Waste Separation (pp. 34-37)**.

Using a systematic approach to define the behaviour change drivers for a specific behaviour can help design a targeted behaviour change campaign. For more information on behaviour change, refer to the Change (pp. 139-141) and to the Compendium of Hygiene Promotion in Emergencies (Gensch et al., 2022) – Social and Behaviour Change.

Community awareness and participation

Are there opportunities for participatory planning and community involvement?

Is there a regular education and public awareness program in place?

Is there a mechanism or periodic evaluation in place to capture feedback from the community?

Support the community by strengthening their Community-Based Participatory Approaches, empowering local stakeholders to contribute to decision-making actively, ensuring that solutions are tailored to their unique needs, and fostering long-term sustainability. By promoting collaboration, these approaches create a sense of ownership, enhancing the effectiveness and resilience of community-driven initiatives.

Plan and implement a regular education and awareness program to ensure that the community has the knowledge required to make informed decisions.

Participatory planning and community consultation can enhance community support and ownership, while also better identifying and responding to local needs and concerns, among other benefits.

Establish a structured feedback mechanism, incorporating stakeholder meetings, to gather insights from the community. Use this feedback to identify challenges, improve participation, and enhance the efficiency of the self-management system.