

Tool 2.2 – Evaluation and Improvement of Storage, Collection and Transport

Table T 2.2 A: Evaluation of infrastructure and design suitability of storage, collection and transport

Category	Feature	Questions to ask – things to observe – elements to evaluate	Actions and possible improvements	
Storage	Individual storage	Do waste generators store waste in a designated area with a container (bag or solid)? Do the containers have a lid? Is the waste not accessible to animals that might spread it?	Safe containment	Provide adequate individual containers for waste storage at the household level. Refer to the Compendium – S.1 Individual/Household Storage (pp. 48-49) for technology options.
	Capacity and waste containment for community/shared storage	Is the capacity of the community/shared storage sufficient to not overflow between collections? Do the community/shared storage have lids or are they covered? (to avoid filling with rainwater, prevent access to animals) Are there animals that contribute to the spread of waste? (opening waste bags, having access to stored waste) Are there waste-picking activities that impact the containment of the waste? Are closed bags opened, or waste spread around, due to the activity? Are the surroundings around the community/shared storage clean and without waste? If not, are they cleaned regularly?	Routes & planning Container specifications Users' behaviour Informal sector involvement Cleaning of collection points	If overflow is frequent, consider increasing the collection frequency or providing larger or more community/shared storage at a given location. Use community/shared storage with lids or covers to prevent rainwater infiltration and keep animals from accessing and spreading waste. Request that waste generators deposit their waste at the collection point shortly before collection, so that waste spends less time on the streets. Collaborate with waste pickers to support them in accessing recyclables sooner in the waste management chain (at source, if possible). Regularly clean the surroundings of collection points. Refer to the Compendium - S.2 Community/Shared Storage (pp. 50-51) for technology options.
	Spatial distribution of containers for community/shared storage	Are collection points available in all areas of the collection zone? Are there sufficient community/shared storage? Are they available in strategic locations? (e.g. easily accessible, not too far from waste generators)	Routes & planning	Provide appropriate community/shared storage for underserved areas. Ensure a strategic location at an easily accessible point for collection vehicles Ensure that waste generators do not have to walk more than ~200 m to deposit their waste.
	Condition and maintenance of containers for community/shared storage	Are the community/shared storage in good condition? Are the surroundings of the collection points free from waste/littering? Are the collection points used as intended? Are spare parts available locally? Is there local know-how to repair and maintain the containers? Are community/shared storage maintained?	Maintenance & repair Routes & planning Waste generator practices // Behaviour change	Repair or replace community/shared storage when needed, especially if it can no longer be emptied easily or if it cannot adequately contain waste. Regularly check and maintain infrastructure. Ensure that the collection frequency is both sufficient and reliable. Inform waste generators about good practices (no burning, dispose waste as intended (in bags, in the containers, at the proper time, ...))
	Containers are easy to load/unload (individual and community storage)	Is the container portable and easy to lift and empty into the vehicle? (weight, portability, presence of unwanted rainwater) Is the waste easy to transfer from the community/shared storage to the vehicle? (Easy: stored in bags or waste can be easily transferred without much lifting/use of shovels, Hard: shovel the waste out of a closed pit)	Container specifications Waste containment Collection point design	Container sizes should allow easy handling. A cover is essential to avoid rainwater. Prioritise waste contained in bags over loose waste that needs to be shovelled and requires effort for cleaning the collection point. Community/shared storage at a higher ground with a lower ground access to the vehicle can greatly facilitate loading.

Primary collection, secondary collection and transport vehicle	Vehicle capacity and waste containment	Is the capacity of the vehicles properly exploited for each collection route? (best: 80-100% of capacity, bad: <50% capacity or overfilling) Is there sufficient collection capacity to collect all the waste produced in the service areas? (consider volume and frequency of collection) Is there a risk of waste falling off the vehicles during transport?	Routes & planning New equipment acquisition Small vehicle adaptation	Adjust collection routes to optimise vehicle capacity. Adjust frequency of collection. Acquire new collection vehicles if the current fleet is insufficient (after optimisation). Place a protective mesh or cover over the item during transport.
	Vehicle condition and maintenance	Are the vehicles in good condition and all functions working (lifting, compacting, tipping)? Do the vehicles often have breakdowns? Is maintenance given regularly to the vehicles? (preventive and corrective maintenance) Is there a preventive maintenance plan in place? Are spare parts available locally? Is there local know-how to repair & maintain the vehicle?	Preventive & corrective maintenance Repair and maintenance capacity	Inspect the vehicles and implement any required corrective maintenance. Implement a regular preventive maintenance schedule for all vehicles to ensure optimal performance and longevity. Identify spare part providers. Recruit qualified mechanics or find a mechanical workshop that employs highly qualified mechanics. Prioritise low-tech vehicle acquisition when spare parts and know-how are lacking.
	Easy to load/unload vehicles	Is there automated loading or unloading available on the vehicles? (container lift, tipping) Does the vehicle's design facilitate rapid and effortless loading and unloading? (height not too high for loading and unloading, possibility to open sides, etc...)	Waste containment Vehicle function/specificities	Avoid loose waste and prefer waste in bags or containers (portable or vehicle equipped with a functioning lifting system) Load - Consider options to reduce the height of loading by incorporating openings on the sides of the truck. Unload - Vehicles should be able to open fully on the back or sides, and if possible, be equipped with tilting mechanisms (or other mechanisms for quick unloading).
	Vehicles adequate for roads and terrain	Can the vehicles easily access all the areas/roads to be collected? Can the vehicles operate effectively on muddy terrain after rainfall? Can the vehicles be driven with ease when fully loaded? How are the areas with harder access (bad road conditions, narrow streets, etc.) serviced for collection?	Routes & planning	Consider changing collection point locations to only easily accessible areas (request users to bring the waste or use the primary collection). Adjust collection routes to collect steep areas first, avoiding full-loaded vehicles from driving steep uphill slopes. Utilise vehicles and tyres that are well-suited to the specific context. If muddy terrain is a recurring issue, reconsider collection routes and collection points to avoid the most critical roads. Adjust means of transport to the roads, terrain and amounts of waste to be transported. Refer to the Compendium - Collection and Transport (pp. 54-71) to evaluate appropriate technologies.
	Vehicles are adequate for transport distances	Manually operated vehicle: Is the weight of the fully loaded vehicle acceptable for the collectors throughout the collection and transport distance? Are the distances of collection and transportation efficient in terms of vehicle capacity? (small capacity preferred for short travel distances; large capacity preferred for long-distance transport)	Routes & planning Transfer station	Ensure that the weight matches the carrier's capacity. If not, rethink routes and frequencies to ensure acceptable and safe weight. Avoid overfilling the vehicle as it can be damaging to the car or to animal/human carriers. Consider implementing a transfer station so that small vehicles can transfer waste to larger vehicles for transportation.

Transfer stations	Transfer station capacity and waste containment	Is the capacity of the transfer station sufficient to receive and process all the incoming waste? Is the transfer station designed to avoid access by animals? Is the transfer station designed to prevent rainwater from accumulating? Are the surroundings around the transfer station clean and without waste? If not, is it cleaned regularly? Are there waste-picking activities that impact the containment of the waste? Is there any waste spread around due to the activity? If no transfer station exists, is there a need for one?	Routes & planning Cleaning Fencing Informal sector involvement	Adjust the frequency of waste transportation to avoid overfilling the facility, or consider increasing the capacity/storage of the transfer station or constructing additional ones. Refer to the Compendium – C.5 Transfer Station (pp. 70-71) to evaluate appropriate transfer stations. Regularly clean and maintain the surroundings of the transfer station. Cover and protect containers against rainwater and animals. Fencing the transfer station can reduce the presence of animals. Collaborate with waste pickers to reduce waste spreading – support them to access recyclables sooner in the waste management chain (at source if possible).
	Spatial distribution of transfer stations	Are there transfer stations operating? If not, is there a need for them? Are the transfer stations located in strategic locations? (central to collection routes, minimal travel distance to disposal or treatment) Are there sufficient transfer stations?	Routes & planning	As a rule of thumb, if trucks must travel over 30km (one-way) between the collection area and the disposal/recovery facility, a transfer station can reduce transportation costs. Ensure transfer stations are located as close as possible to waste generators to reduce the distance travelled by collection vehicles. Additionally, locate them on main roads with easy access to disposal and treatment facilities. Consider the need for transfer stations when primary collection is in place, either with direct transfer to secondary vehicles (the preferred option) or indirect transfer (where the material is first unloaded at the transfer station and then loaded onto secondary vehicles).
	Condition and maintenance of the transfer station	Are the transfer stations in good condition, with all features and functions operating as intended? Are transfer stations operated optimally? Are the surroundings of the transfer stations free from waste/littering? Are the transfer stations used as intended? Are spare parts available locally? Is there the know-how locally to repair & maintain the transfer station? Is maintenance given to the transfer station?	Maintenance & repair	Ensure the condition is suitable for proper operations at the site. All intended functionalities, infrastructure and equipment should be operational. Optimise operations at transfer station facilities to maximise outputs and reduce costs. Preventive and corrective maintenance should be ensured. Employ qualified personnel to ensure proper maintenance.

Interface suitability: User and collection point	Distance to collection point	Is the distance from the point of waste generation to the point of collection acceptable? (<200m)	Routes & planning	If needed, plan for new collection points that are both easily accessible to residents and to waste collection vehicles.
	Waste handling practices	Is the waste contained in a closed bin or bags when provided for collection? Is the waste bin easy for users to carry (if carrying is needed)?	Waste containment	Closed bins/containers are preferred for ease of loading and unloading, as well as avoiding the spread of waste. Distribute practical, easy-to-handle and carry waste bins with lids.
	Collection point design/ user friendliness	Is the collection point user-friendly for depositing waste? (consider height, accessibility, shape, maximum capacity, appearance/cleanliness, smell) Are the instructions clear? Especially when considering segregated waste collection.	Users' behaviour	Provide and repeat instructions on how to use the collection points and how to dispose of the waste as frequently as needed. The collection point must be clean, well-organised, and its use straightforward. Including regular cleaning of any surface users should touch to dispose of waste (lids, ...).
	Use of services	Are all waste generators using the provided service? If not, why not?	Users' behaviour	Assess and address reasons why users are not using the service. Work on reducing the barriers identified for not using the service. Behaviour change campaigns can be beneficial if this issue is recurrent and widely spread.
Interface suitability: Collection point & collection vehicle	Access the collection point with the collection vehicle	Can the vehicle easily access the collection points? (road condition, road access, needs for manoeuvre, if deviation from the main route is required and time) Is the access to collection points in good condition? Is the access always possible and not disrupted? Can the vehicle stop right next to all collection points or at a close distance? (minimal walking with waste) Is the access limited during the rainy season/events?	Routes & planning	Consider adjusting the location of collection points to facilitate access and reduce the manoeuvring needs of the vehicles. Vehicles should be able to stop directly at collection points for easy loading, ideally along their route, without the need for manoeuvres (e.g., U-turns or reversing).
	Loading waste into the collection vehicle	Is the loading of the collection vehicle easy? (consider the weight of waste or containers, the height of lifting) Do the waste workers have appropriate and functioning equipment to load the waste? How long does it take to load the waste into the vehicle? How many people are required to load? Does the collection point need to be cleaned/swiped each time? How long does this take?	Waste containment Container specifications Cleaning Staff	Prioritise direct waste loading from a container or a bag. Avoid shovelling loose waste from the ground to the vehicle. The size of portable containers should be adequate to be lifted and emptied. Large containers require operational mechanical lifting mechanisms to be emptied. Consider options to reduce the height of loading with lower openings on the sides of the truck. The collection point should always remain clean. Regular cleaning may be required, but the need for cleaning can be minimised with properly functioning collection points. Reevaluate the number of staff required and how they are handling the waste. Adjust the number of staff if necessary.

Interface suitability: Transfer station & collection & transport vehicles	Access transfer station with collection & transport vehicle	Can the collection and transfer vehicles easily access the transfer station? (consider road type, needs for manoeuvre, if deviation from the main route is required and time) Is access always possible and is not disrupted? Is access limited during the rainy season/events?	Routes & planning Transfer station design	Transfer locations should be easily accessible, typically at or near main roads. The transfer station should be designed and operated to facilitate easy vehicle manoeuvring.
	Unload from the collection vehicle & load into the transport vehicle	How easy is the unloading from the collection vehicle/transfer container and loading into the transport vehicle? Can the waste be unloaded from the top to a lower ground container/vehicle? Does it require a lot of physical effort to unload/load? Consider how many persons are required and the times needed to unload/load.	Transfer station design Vehicle feature	Direct transfer from collection vehicles to transportation vehicles or containers is recommended to minimise the number of transfers. For easy unloading, vehicles should be able to open on the back or sides fully, and if possible, be equipped with tilting mechanisms (or other mechanisms for quick unloading)
Interface suitability: Collection/ transport vehicle & disposal/ treatment	Access disposal or treatment site	Can the vehicles easily access the disposal or treatment site? (consider road type, needs for manoeuvre, if deviation from the main route is required and time) Is access always possible and is not disrupted? Is access limited during the rainy season/events?	Routes & planning Disposal site planning	Treatment and disposal sites should be operated and maintained to ensure safe and accessible routes to the vehicles. Vehicles should always have access to reach the tipping face at disposal sites. Bulldozers or other heavy-duty vehicles can be used to maintain the road and access, especially when driving over existing waste. At disposal sites, an easy-access area can be reserved for rainy days when mud may be an issue in the regular disposal area.
	Unload the waste from the collection or transport vehicle	How easy is the unloading from the transport vehicle? Does it require a lot of physical effort to unload? Is unloading efficient? Consider how many persons are required and the time it takes to unload.	Vehicle specifications Disposal site planning Staff	For easy unloading, vehicles should be able to open fully on the back or sides, and if possible, be equipped with tilting mechanisms (or other mechanisms for quick unloading). At disposal sites, waste is ideally disposed of directly on the floor at the tipping face. Reevaluate the number of staff required and how they are handling the waste. Adjust the number of staff if necessary.

Table T 2.2 B: Evaluation of service planning and governance of collection and transport

Category	Feature	Questions to ask – things to observe – elements to evaluate	Actions and possible improvements
Collection routes & schedule	Adequate routes	Are the collection routes well defined? Are the routes monitored (GPS, oral/written reporting)? Is the route efficient? - Do the vehicles pass multiple times on the same roads? - Do vehicles have to drive on roads with difficult access (narrow, poor condition)? - Do the vehicles have to perform manoeuvres throughout the routes? (U-turns, reverse, etc.) - Do fully loaded vehicles have to drive up steep roads?	Routes should be well-defined, scheduled, and mapped (using GPS, paper, etc.). Analyse and optimise routes: limit multiple passes on the same roads and intersections, avoid driving uphill with heavily loaded vehicles, and reduce the need for manoeuvres. Routes also depend on the type of collection system and the location of collection points. Evaluating and repositioning collection points can improve the efficiency of the routes.
	Adequate timing	Is the collection timing coherent with the collection system in place and adequate for the waste generators' schedules (households and others)? - Door-to-door and summoning: people must be present and available to hand in the waste (consider typical household schedules) - roadside: people should deposit waste shortly before collection (the night before collection if collection is very early, or on the same day of collection, minimise time waste stays on kerbside – especially stray animals can spread waste. Is the collection taking place during non-congested road hours? Is the planned schedule strictly followed and upheld? Is the time required for collection measured and reported?	Collection of waste is preferably done at times of little road congestion to avoid traffic (causing additional fuel costs) and losing time. The schedule should be well established and enforced, and deviations from the planned schedule should be minimised. If it happens, users should be informed and an alternative implemented. Regular information and reminders to waste generators are usually required over the long run, especially when new behaviours are requested from them.
	Adequate frequency	Is the collection frequency sufficient for containers or community storage to avoid overload or underuse? (80-100% of capacity is desired; overloading is to be avoided, lower capacity use can mean the containers are overdesigned) If the weather is hot and humid, is the collection frequency at least every 2 days in all areas? (for mixed waste or organic waste)	To avoid putrid smells and unhygienic conditions, the frequency of collection should be sufficient according to the climate (humidity and heat require more frequent collection of waste containing organics). Container capacity (in terms of size and number of containers) should be evaluated and adjusted as needed. Overflowing should be avoided, as it increases the need for cleaning and renders the collection points unhygienic and inadequate for proper use.

Staff	Adequate staff and occupational health and safety	Is the staff sufficient to collect the waste as planned? Is the staff trained? (safety and occupational health, use of PPE, efficient collection practices) Is the staff vaccinated and have access to healthcare whenever needed? Is the staff protected with PPE? Is there a contingency plan in place if individuals are unable to work due to illness or other reasons?	Sufficient staff should be available to perform all the required tasks for waste collection in a timely and proper manner. Extra staff may be needed in the event of a special or unplanned absence of regular staff. Train all staff on occupational safety and proper handling of waste, equipment, vehicles and machinery. Equip all staff with the necessary adapted personal protective equipment required for their duties. Health checks and adequate vaccinations should be ensured according to a physician's advice. Refer to the Compendium - X.4 Occupational Health and Safety (pp. 134-136) for more information.
Vehicles	Adequate fleet	Are vehicles always available when needed? Are there sufficient vehicles to collect at the desired frequency and coverage? Is there a contingency plan in place in case vehicles break down?	Evaluate whether the number of trucks is sufficient based on the coverage area, frequency, and collection schedule. Evaluate if trucks could be used for more trips per day – by using multiple staff teams to operate them. Implement regular preventive and corrective maintenance to avoid breakdowns. Plan for alternative solutions in advance in case of unexpected vehicle downtime.

Control	Adequate supervision	Is the collection service supervised? Is there a mechanism to report collection/transport completion? Is there a mechanism for staff to report problems/issues during the collection/transport? Is it used?	Implement data collection to optimise the collection service. Ensure that you recruit qualified managers for supervision and monitoring.
	Adequate monitoring	Collection rate [%] - number of households serviced over the total number of households - amount collected over the total amount generated, in kg or tons Is there any track record of (daily) collection routes? Are filling rates monitored and reported? Is the weight of waste collected recorded? Are GPS used for monitoring routes? Is there any track record of the amounts of waste collected? Is there any track record of the time required for collection/transport? Is fuel consumption reported and monitored? Are efficiency indicators measured? (some examples below) - Amount of waste collected per person per day (for primary collection) - Number of households serviced per day per collection vehicle (primary and secondary collection) - Fuel consumption per km per vehicle (also account for who is driving) Is there a list of waste generators? Which need to receive waste collection service (users)?	Implement processes to track the amount of waste collected and/or the number of waste generators serviced, and ensure the data is kept up to date. Calculate collection rates as one of the effectiveness measurements of the service. Measure and report the time for collection (for monitoring and further improvements). A weighbridge at treatment or disposal facilities is a valuable tool to measure the amounts of waste collected. Alternatively, estimations using volumes can be recorded for monitoring along with truck filling rates. The distance and fuel consumption of vehicles can be monitored and compared to detect inefficiencies and reduce consumption and costs. Having a mechanism in place for staff and users to report issues during the collection routes can also be beneficial for monitoring and further improvements. This can also inform other needs, such as the maintenance or cleaning requirements of specific locations or infrastructure. Have a list of waste generators (users) of the service. They should all receive service, and in specific cases, also pay for it. This list should be regularly updated.

Informal waste pickers	Inclusion	Are the informal waste pickers included in the participatory planning process? Is the informal waste pickers' contribution to waste management acknowledged and supported?	Waste pickers can be active at any part of the service chain. Identify where they operate first to understand their role in the system. Include waste pickers when planning for changes and improvements in the SWM system to account for their needs, challenges and possibilities to support waste management. Collaborate with waste pickers to reduce waste spreading – support them in accessing recyclables sooner in the waste management chain (at source, if possible).
	Interaction with the waste management service	Are there negative impacts from waste-picking activities on the storage, collection and transport service? (opening bags, spreading waste, burning, etc...) Are there positive impacts from waste-picking activities on the storage, collection and transport service? (amounts of waste to collect reduced)	Identify, discuss and plan for alternatives to minimise negative interactions and maximise positive impacts. Collaborate with waste pickers to reduce unsafe waste practices – support them in accessing recyclables sooner in the waste management chain (at source, if possible).
	Regulation and support	Is waste picking regulated to prevent the spreading, dumping, or burning of waste? Are informal waste pickers supported in increasing the recovery of materials and avoiding negative interactions with waste services? (trainings, equipment, PPE, easier access to waste, etc...)	Collaborate with waste pickers to reduce unsafe practices – support them to access recyclables sooner in the waste management chain (at source if possible). Provide training, infrastructure, space, equipment, and PPE to informal waste pickers to support them in achieving safer working conditions, improved waste recovery, and increased income. Include and communicate with all waste pickers about their rights and obligations, with the intention of minimising the dumping and burning of waste.

Users (waste generators)	Service payment	Do users pay for the service? Do residents have a willingness to pay? Are residents capable of paying the current waste fees? Is there enforcement of the payment? Is there an efficient method for collecting payments?	Waste management always incurs a cost that users' service fees can partly cover. For long-term financial sustainability, payment of a fee should be considered. Typical efficient payment collection includes associating the fee with other services, such as water or electricity. Direct payment to waste collectors is often inefficient and costly, and should be avoided.
	Adequate communication	Are users well informed about how to use the service? (schedule, how to and in which form to hand over the waste: segregated or not, in bags, in containers, deposit at collection point, etc.) Is there a mechanism to inform users of changes or remind them about how to use the system? Is there a communication and behaviour change strategy and/or campaign in place promoting adequate waste management practices? Are the users reminded regularly about how to properly use the service, their obligations and rights?	Information and reminders about how to use the service should be regularly planned and communicated to all service users. Users should be aware of their obligations and rights regarding the SWM service. New users should be immediately informed about proper waste management practices.
	Behaviour	Are users consistently meeting their obligations for waste management? (no dumping or burning, disposing of it according to the system's designated form and schedule, paying fees, and segregating if requested) Are there waste generators that are reluctant to use the service? (because they don't want to pay, have other habits, use different means (burn, dump, dispose in sanitation facilities), system not convenient to them, cultural barriers, etc.)	Behaviour change is often required when using a new service or when any change is made to an existing service. A behaviour change campaign is a valuable tool to support in achieving a well-functioning system. Note that multiple behaviours can require a change, and it is a challenging task to achieve (no burning, no dumping, handling waste according to instructions, segregating waste, using bags, ...). For more information on behaviour change, refer to the Compendium - X.6 Hygiene Promotion and Behaviour Change (pp. 139-141) and to the Compendium of Hygiene Promotion in Emergencies (Gensch et al., 2022) – Social and Behaviour Change.
	Feedback mechanisms	Is there a mechanism for users to report flaws in the collection service? Are there means for collecting user feedback (e.g. complaint boxes, user satisfaction through apps)?	Feedback mechanisms help identify problems and address them promptly. Implementing a simple feedback mechanism can support identifying problems and potential improvements.
	Satisfaction	Are users satisfied with the service? Are there waste generators without service requesting to receive service?	This is one indicator of service quality. It can be measured with users' satisfaction surveys.
Governance	Regulatory framework	Are local, regional and national laws and regulations followed? Are rules and regulations regarding SWM clear and established? Are there mechanisms in place to enforce simple rules and regulations? (prohibit dumping, burning, how to use the service, payment, obligation to use the service)	Establish simple rules and regulations that support the existing solid waste management system and align with local, regional, and national laws and regulations.

Governance	Stakeholder engagement	Are the roles and responsibilities of the stakeholders involved in the storage, collection, and transport of waste clearly defined? Is there close coordination with other humanitarian sectors? (shelter, WASH, health, planning) Is the local community engaged in SWM planning and implementation? Are local authorities and other relevant local stakeholders engaged in the planning and implementation? Has collaboration been discussed? Is sharing of infrastructure and capacity an option? Are there efforts to integrate the informal sector into the SWM system?	Create a stakeholder map to identify all relevant stakeholders and engage them at different levels: inform, consult, involve, collaborate, and empower. 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. Collaborate with waste pickers to reduce unsafe waste practices – support them in accessing recyclables sooner in the waste management chain (at source, if possible).
	Strategic planning	Is there a long-term strategy to improve and/or at least maintain service provision? Is there monitoring of key indicators to facilitate planning and informed decision-making? (waste generation, amounts collected, service coverage, service level, etc.) Is there any forecast for future trends and needs for the collection and transport system? (population, expansion of service, change in collection system, ...)	Improving SWM typically involves a stepwise approach, with long-term strategies and a clear vision guiding gradual improvements. Define and measure key performance indicators for waste collection and transport service. Measure waste generation and composition using Tool 7: Waste generation and composition study. Conduct a forecast analysis to help plan for future changes that may impact the storage, collection and transport service.
	Financing and cost recovery	What are the current costs of storage, collection and transport? Can the current costs be reduced? Are the current costs sustainable in the long term? Are cost-recovery mechanisms in place? If so, which ones? What are the current revenue sources, and how can they be sustained? Is there a strategy in place to cover the long-term operational and capital costs? Have tariffs been implemented?	Precisely define the yearly costs of the service, including capital costs and operational costs. Tool 8: Cost evaluation can be used for support. Evaluate the storage, collection, and transport system to improve efficiency and reduce costs. Consider implementing tariffs for service provision to waste generators (users) to offset the costs associated with waste management. Early collaboration and empowerment of local stakeholders are essential for the long-term sustainability of SWM services.
	Public awareness and engagement	Are there opportunities for participatory planning and public consultation? Are local stakeholders and the affected population actively involved in planning and decision-making? Are there regular education and public awareness programs in place?	Engage the community in planning and decision-making to ensure waste management meets local needs, encourages ownership, and improves compliance. Implement regular education and awareness activities. Establish a structured feedback mechanism, such as periodic surveys, suggestion boxes, or stakeholder meetings, to gather insights from waste generators. Use this feedback to identify challenges, improve participation, and enhance efficiency.