

Solid Waste Management Strategy

City of
Debre Berhan

SymbioCity



DEBRE BERHAN
MUNICIPALITY

Table of Contents

Introduction	4
Background	4
The strategic planning process	6
Current solid waste management in Debre Berhan.....	6
Process of strategic planning and institutional setting.....	8
Organisation.....	8
Other strategic documents	8
Strategic vision	10
Mission statement.....	10
Key themes for success	10
Strategy goals and objectives.....	12
1. High awareness about the SWM system	12
Planned activities	12
2. Sound SWM planning and accountability	12
Planned activities	13
3. Financial sustainability of the SWM services	13
Planned activities	13
4. Well-functioning SWM collection services.....	13
Planned activities	13
5. Well-functioning SWM treatment facilities with limited environmental impact	14
Planned activities	14
6. Strong stakeholder engagement	14
Planned activities	14
Priorities during the coming years.....	14
Implementation, monitoring and follow-up.....	15
To learn during the journey of implementation	15
Appendix A.....	16
Appendix B.....	20

Introduction

The city administration of Debre Berhan is committed to improving solid waste management (SWM) in the city. Over the last two years the city has allocated a multisectoral working group and received support from SKL International in assessing, analysing and planning for improved SWM in the city. This strategy is an output from this work and is an effort to change the current situation and move towards more sustainable waste management.

This strategy outlines the goals and key activities for solid waste management in the city of Debre Berhan for the next five years. It was designed to address the ongoing challenges and to achieve improvements to the solid waste SWM system and be an effective tool to guide the city administration with implementing change. The strategy sets clear objectives and targets accompanied with an action plan in order to achieve results. The strategy is in alignment with the national and regional strategies for SWM but has been adapted to local conditions and builds on local strengths to ensure practical implementation.

Background

Debre Berhan, situated about 120 kilometres north east of Addis Ababa, has a population of about 150 000 (2020). As most Ethiopian cities, Debre Berhan is facing rapid urbanisation and is estimated to have a population grow by 4 percent annually over the coming ten years.

The rapid rate of urbanisation puts a severe strain on the municipal service delivery. The growth is causing rapid expansion of informal settlements and the hygienic conditions in many places in the city is causing harm to human health. The handling of solid waste has been identified by both public officials and the citizens themselves as the most severe environmental issue impacting the city. Poor waste management is also causing a negative impact on the aesthetic quality of the city and is adversely impacting the urban poor population, who are already a vulnerable group. The open dumping and burning of waste is also causing emissions to the air, soil and water as well as causes problems with flooding in blocked drainage channels, odour and vermin.

Improved SWM and reducing environmental and human health impact is a development priority on a national level in Ethiopia. A national strategy for improved waste management has been developed and it cascades to the regions and on

to the cities. This strategy links with the national plan for development, *Growth and Transformation Plan* (GTP), which focuses on industrialization and urbanisation as key vehicles for economic transformation and sustainable development. Cognizant of the issue of obtaining sustainable urban development, Ethiopia is implementing a framework called *Ethiopian cities sustainable prosperity goals* (ECSPG). The framework aims at achieving the SDG 11 which emphasizes safe, resilient and clean urban development.

In Debre Berhan, there is a growing understanding of the connection between proper SWM and improved economic growth, ecosystem services and health and safety among city officials and stakeholders. The institutional will to improve SWM is relatively high, but the actual improvements have not been implemented. The current SWM system in Debre Berhan is still facing institutional implementation weakness, severe budget limitations and a low level of awareness among the public.



Figure 1. Street view from Debre Berhan.

The strategic planning process

This strategy was prepared through the SymbioCity approach, a holistic, integrated and multi-disciplinary method to plan for sustainable urban development. One of the key principles of the SymbioCity approach is identifying and engaging key stakeholders to finding integrated sustainable local solutions for local problems. The participatory process was led by the multisectoral working group with representatives from different departments in the city administration. Throughout the process, the working group has interacted with a range of stakeholders including: door-to-door collectors, Kebele administration, business community, academia, regional representatives, NGOs and religious groups. The strategy was prepared based

on the great insights provided by the stakeholders and considering previous interventions and lessons learnt with an aim to extend SWM service provision to the expanding size of the city.

The working group was supported by an international SymbioCity facilitator and a national urban expert and has worked closely with several stakeholder groups throughout the process. The City cabinet has been acting as the project's steering committee, taking appropriate actions and approvals during the preparation process. Also a national advisory board with representatives from regional and national government have been part of the stakeholder group and they have weighed in on the development of the strategy throughout.

Current solid waste management in Debre Berhan

The current SWM in Debre Berhan is categorized by informal organization, limited institutional capacity and severe budget limitations. The awareness of sustainable SWM among both city officials and inhabitants is low. The current SWM system is described in Figure 2.

About 60–70 percent of the city's households have door-to-door collection of household waste. The collection is organized through independent collector cooperatives (micro and small enterprises (MSE)) licensed by the Kebele administration. The MSEs transport the waste to the official dumpsites but much of the waste is dumped in storm water channels, unoccupied spaces and riverbeds and does not make it to the dumpsites. A majority of the waste collection workers in the MSEs are women. It is also often the women of the household who handle and organize the waste management in the homes. Women and children are especially exposed to the existing poor solid waste management.

There are also informal solid waste collectors operating without sanction from the local government. The informal collectors operate irregularly and use any number of means to collect waste, and often dis-

pose of it in streams, under bridges and in ditches. Households without door-to-door collection dispose of the waste by dumping it in open spaces and in the rivers or by burning or burying the waste.

The informal waste sector also consists of qurallios. These informal operators pick up recyclable material like glass, metal, hard plastics, cardboard and paper from households. Qurallio middlemen act as the link between the waste generators and the recycling industry. There are also qurallios who separate and take care of recyclable waste at the city's formal dumpsite.

As for commercial establishments, public service institutions, industries and other larger businesses some are connected to the officially organized door-to-door collection system. Others arrange their own waste transport to the formal dumpsite.

Infectious waste from hospitals is burned directly at site.

Public waste collected by officially hired street sweepers is transported by the municipality to the legal dumpsite.

The municipality lacks information on the characterization of the waste stream from the differ-

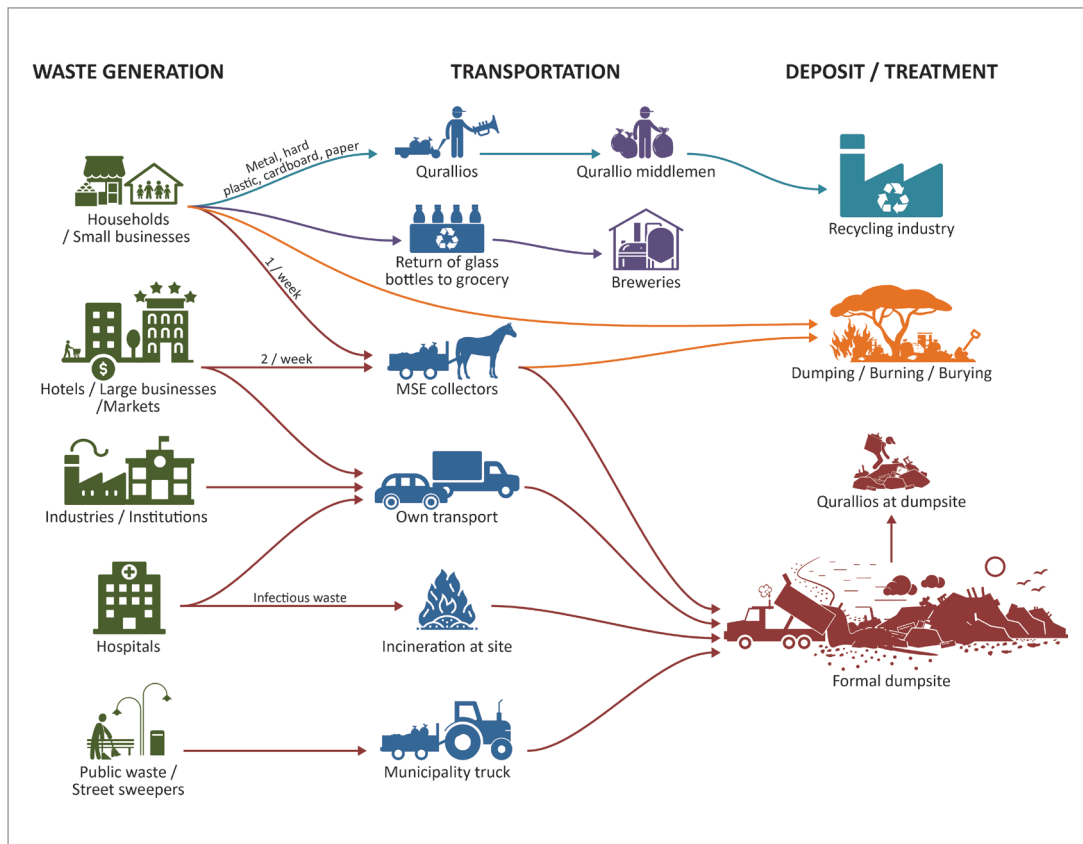


Figure 2. A schematic overview of the current solid waste management system in Debre Berhan.

ent waste generators. Therefore, it has not been possible to determine the waste composition and generation rate per day. This includes households, common residential areas, commercial centers and industries. Consequently, the current state of SWM is difficult to control and monitor. However, the scarce data that do exist reveal that more waste is dumped in illegal places compared to the amounts of waste collected through the formal municipal system and transported to the existing, legal dumping site.

The acute shortcoming of SWM services in Debre Berhan is due to several factors. One factor is the severe human resource constraints in the Department of urban plan, greenery and beautification. The two experts at the city level are mainly tasked with training of the waste collectors and organizing the street sweepers. The responsible person at the kebele level has very unclear duties and authority to actively work with SWM. There is also a high turnover of city officials and leaders, making initiatives irregular and longevity low.

In addition, there is an acute limitation in the technical infrastructure with only fifteen coopera-

tives (MSE) engaged in the collection and transportation of solid waste using horse driven carts. One truck with a loading capacity of 4 m³ is available to the municipality but it is often broken and there is a lack of funds for fuel. Hence, the daily generated volumes of waste (about 500 m³) extensively exceeds the municipality's handling capacity.

As previously mentioned, the awareness of SWM issues is low at all levels of the city. Awareness creating activities for the population about solid waste collection systems and how to remove the generated waste currently takes place intermittently through community-based organisations.

The political attention of the matter from city officials and leaders is weak. The high turnover of city officials limits the municipal capacity to handle the SWM issues on a long-term basis. Many initiatives and activities occur instead on an ad hoc basis.

Process of strategic planning and institutional setting

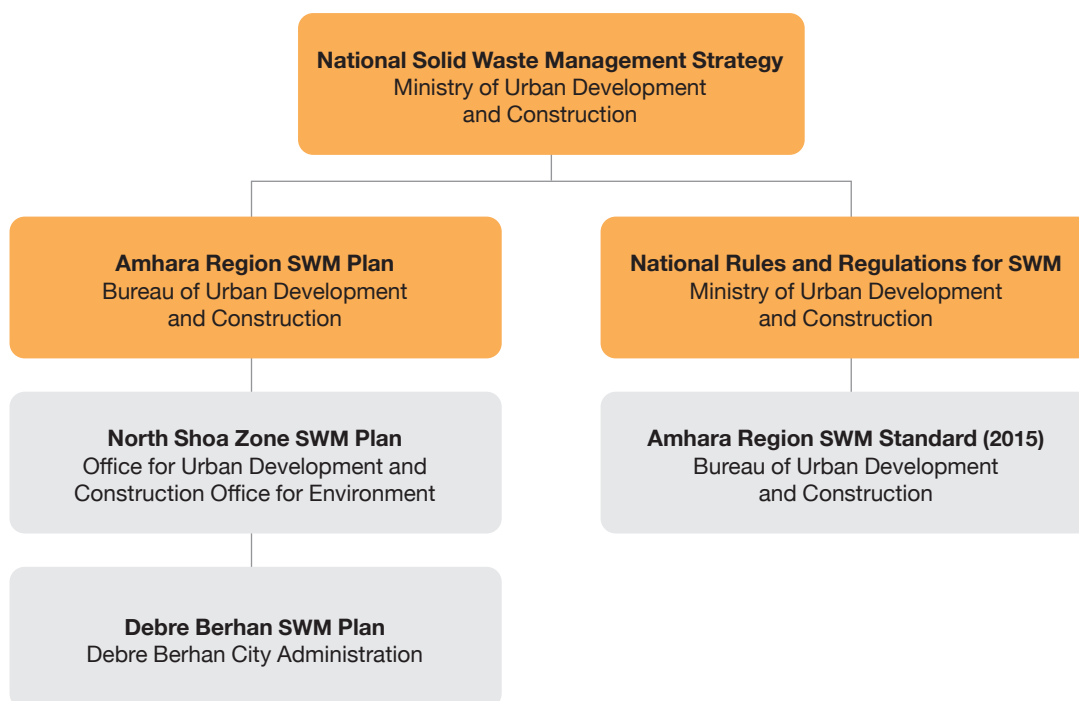


Figure 3. Institutional setting for solid waste management from national to local level.

Organisation

The SWM in Debre Berhan is organized via the city administration and operationalized by the Kebele administration. The Amhara region develops a SWM strategy based on the National Strategy that the cities then implement. The institutional setting for SWM from national to local level is shown in Figure 3. While the national and regional strategy lacks adaption to local conditions, this document provides an implementable strategy for improvement of SWM at local level in Debra Berhan. The local strategy is also in alignment with the national and regional strategy. The strategy may also serve as a tool for people's participation in the urban local development at Kebele level.

Organizational structure of SWM at local level in Debre Berhan is shown in Figure 4.

Other strategic documents

The *Growth and Transformation plan* (GTP 3) is a key policy for development in Ethiopia. The priorities are set on a national level and they cascade down to the local governments who set the local development targets.

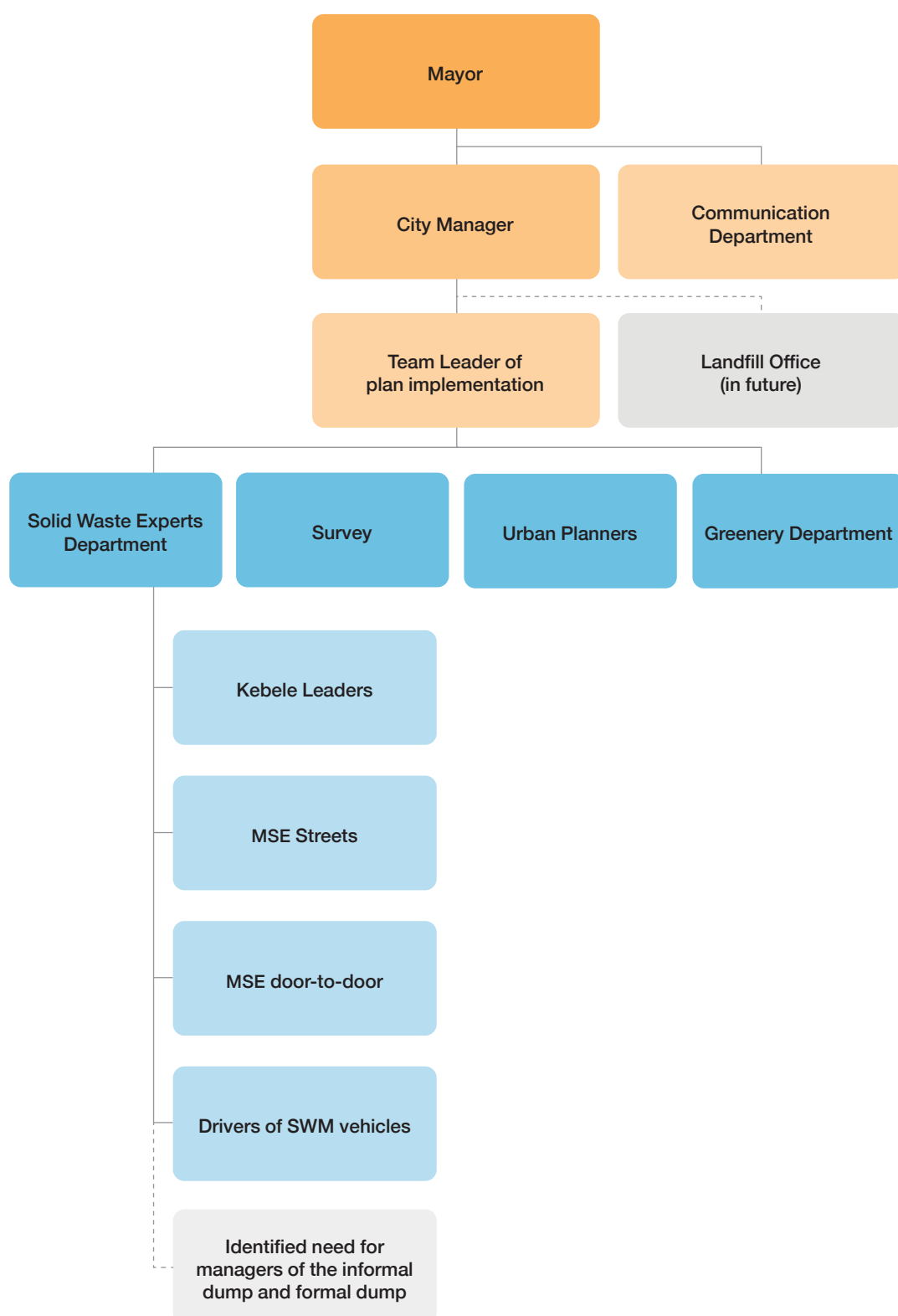


Figure 4. Organizational structure of solid waste management in Debre Berhan.

Strategic vision

By 2025 Debre Berhan will be an exemplary clean and green city, with more jobs in SWM and greenery, with a community that is well aware of sanitation and hygiene and are satisfied with the SWM service provision.

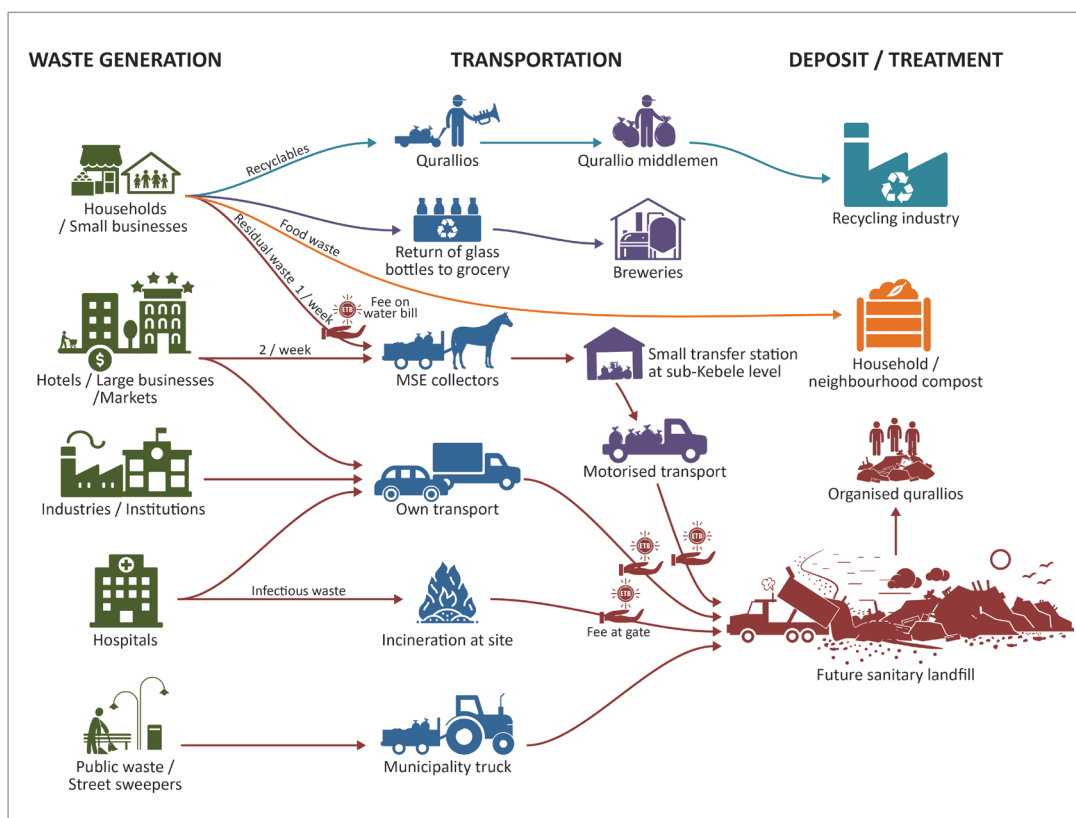


Figure 5. A schematic overview of the future solid waste management system in Debre Berhan.

The vision statement was evolved through a broad participatory process and has been agreed upon by a large stakeholder group as a common future aspiration. Also an image of the future solid waste management system has been developed. Some of the key features are to introduce waste separation at the source, improve collection and waste transportation, increase recycling of recyclables and introduce composting of organic waste.

Mission statement

The mission statement for the city administration regarding SWM is to ensure sustainable growth of the city through better urban governance that enhances benefits to its citizens.

Key themes for success

The strategy is structured around three key themes (Figure 6) and different components of the strategy are interlinked and work together to improve the SWM system (Figure 7):

1. Capacity building and partnerships, stakeholder participation.
2. Sound financing and sustainable resources' allocation.
3. Awareness raising and communication.

Strategy Key Themes

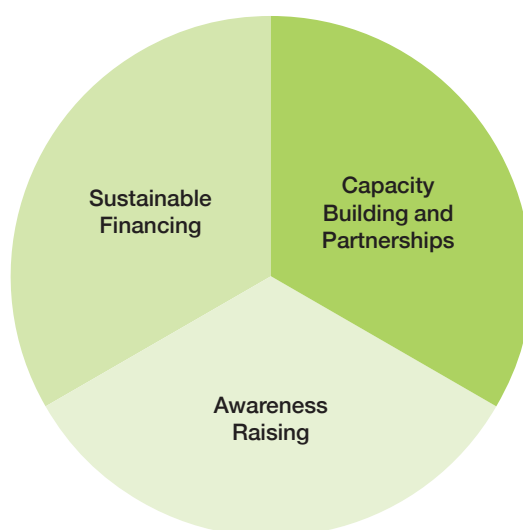


Figure 6. The three important key themes of the strategy; Capacity building, Sustainable financing and Awareness raising.

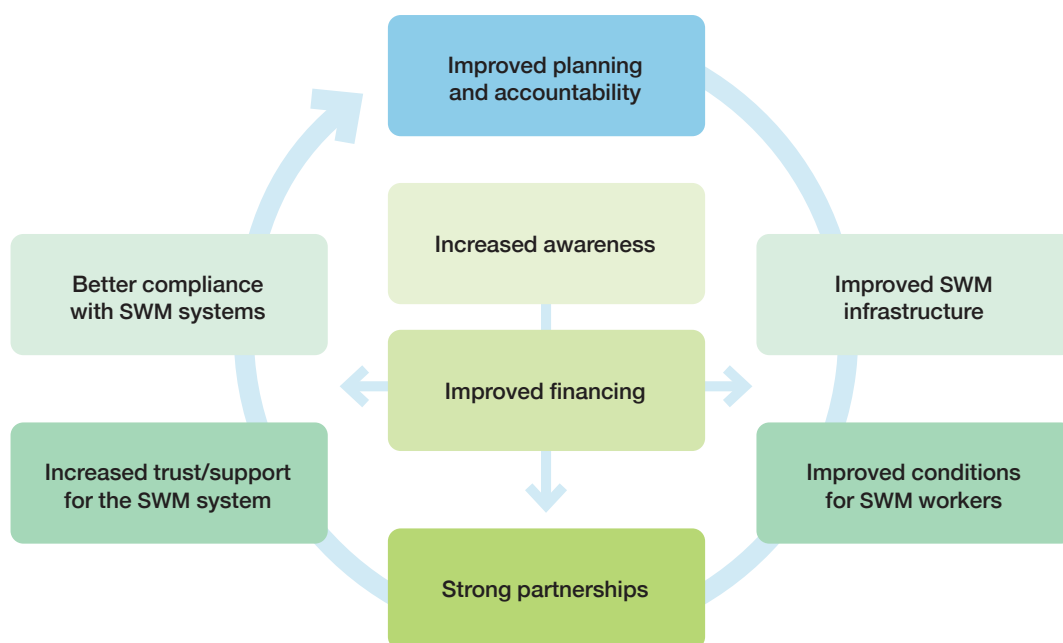


Figure 7. Different parts of the strategy are linked together and jointly they contribute to a stronger system.

Strategy goals and objectives

The strategy consists of six overarching goals. For each goal there are objectives together with targets set for the year 2020 and 2025 respectively. Each objective also has a set of indicators which will enable monitoring of whether an objective will be met or not. A set of activities that need to be carried out in order to reach the goal is linked to each objective.

Goals and objectives together with a short de-

scriptive justification of each goal's importance follow below. Key activities to be performed are also highlighted below together with who is responsible for the activity being carried out. The full set of targets and indicators are found in Appendix A. A more detailed description of the activities together with who is responsible for carrying them out and when they are to be carried out can be found in Appendix B.

1. High awareness about the SWM system

OBJECTIVE A: Increase awareness of SWM practices and management for the city administration.

OBJECTIVE B: Increase household and businesses' awareness about basic facts regarding solid waste collection, hygiene and environmental protection.

Why is this important? Raising the level of awareness among the city's inhabitants is a key element to achieve more sustainable SWM. A high awareness of SWM issues can help to form the behavior change and public participation that is needed for the waste management system to be well-functioning. A better understanding of SWM issues and how they relate to health, safety and the aesthetic qualities of the town is believed to build a greater trust and understanding of how the system works. This in turn is expected to increase the number of inhabitants using the formal SWM system, also generating a higher solid waste fee revenue.

Capacity building and awareness raising activities are also needed within the city administration, at Kebele level, at municipality level (other departments) and for the MSEs. A common un-

derstanding of SWM issues and how they relate to other urban issues will facilitate the path towards an effective and efficient delivery of SWM services. It may also generate synergies between the city's different departments.

However, a higher level of awareness cannot deliver change alone. Awareness raising activities need to be accompanied by other measures in order to bring sustainable results.

PLANNED ACTIVITIES

To increase awareness, the *city administration* will:

- Carry out capacity development training in the area of SWM for officials and experts at both municipality level and Kebele level.
- Carry out capacity development training in the area of SWM for SMEs.
- Carry out awareness creation activities on SWM towards the households.
- Carry out awareness creation activities on SWM towards various community groups such as religious organization leaders and schools.

2. Sound SWM planning and accountability

OBJECTIVE A: Increase planning for SWM in all levels (household, Kebele, city administration) and develop metrics for follow-up for SWM department.

Why is this important? Sound planning and accountability is key in order to achieve results and move forward with the system development. The

SWM sector needs to move away from the current situation where initiatives and activities occur on an ad hoc basis. Good planning should be accompanied/supplemented with monitoring, (analysing) and evaluation activities. Careful planning, monitoring and evaluation is essential in order to build an organisation that can plan forward and

act, building on already performed activities and lessons learnt. This will enable to plan the next steps ahead and move towards an organisational system that moves forward. A sound planning is also a tool to secure external donor funding.

PLANNED ACTIVITIES

To increase planning and accountability, the *city administration* will:

- Restructure the institutional set-up of the SWM.
- Strengthen the urban data recording system.
- Appoint an officer who is responsible for monitoring and evaluation of the implementation of the SWM strategy in close collaboration with the regional bureau.

3. Financial sustainability of the SWM services

OBJECTIVE A: Increase financial sustainability of the SWM system by increasing government support, citizen contribution (fees and voluntary contribution) and external donors.

Why is this important? A well-functioning and sustainable SWM system needs financing. Investments are required to build-up the infrastructure needed to handle the generated volumes of waste. More human resources are required at all levels/both department and Kebele level. In addition, operation and maintenance costs need to be planned for and financed. A sound operation and maintenance financing will lead to a more sustainable SWM system, both for the technical infrastructure as such

and in terms of SWM workers' working conditions. A strength to build upon is that the budget allocated currently is used efficiently.

PLANNED ACTIVITIES

To increase financial sustainability, the *city administration* will:

- Conduct a resource auditing in the area of SWM.
- Form a committee that can oversee the implementation of payment of SWM services through the water bill system.
- Secure funding for logistical vehicles and waste containers.

4. Well-functioning SWM collection services

OBJECTIVE A: Improve household and business solid waste collection service in each Kebele and reduce informal dumping.

Why is this important? SWM is closely linked to health and safety aspects. Well-functioning collection services will limit the spread of transmittable diseases as well as improve the safety aspects of the city.

Combating illegal dumping of waste will support Debre Berhan's strive to become a cleaner and greener city. It will support resilience by reducing waste disposal in waterways making the city less prone to flooding events and other climate related disturbances.

In addition, well-functioning SWM collection services means provision of safe working condi-

tions and social inclusion for waste workers.

More job opportunities need to be created to achieve a comprehensive waste management.

By sorting the waste, materials can be treated in an efficient way. This can result in resources being saved and can also generate revenue.

PLANNED ACTIVITIES

To improve the SWM collection services, the *city administration* will:

- Restructure the institutional set-up of the SWM.
- Strengthen the urban data recording system.
- Implement transfer station pilot.
- Provide safety equipment and materials to waste collection workers.

5. Well-functioning SWM treatment facilities with limited environmental impact

OBJECTIVE A: Improve SWM treatment facilities and management practices at the facilities.

Why is this important? SWM is closely linked to health and safety aspects. Well-functioning treatment facilities will limit the spread of transmittable diseases as well as improve the safety aspects of the city.

More job opportunities need to be created to achieve a comprehensive waste management. In addition, well-functioning SWM collection services means provision of safe working conditions and social inclusion for both formal and informal waste workers.

Appropriate treatment of solid waste links to several environmental issues. It will support a cleaner and greener city and increase the city's ecological resilience.

Increased reuse and recycling activities may

have impact on both the environment and economic growth. For example, the use of organic waste as a fertilizer means that both resources and money can be saved. New market opportunities can be generated if waste is considered as a resource that can generate revenue and be used for greenery and beautification purposes.

PLANNED ACTIVITIES

To increase the solid waste treatment facilities, the *city administration* will:

- Close the informal dumpsite.
- Implement the landfill project.
- Train and organize qurallios and waste collecting workers on sorting, recycling and composting.
- Increase the demand for compost material that can be used for urban agriculture and city greenery.

6. Strong stakeholder engagement

OBJECTIVE A: Improve cooperation with stakeholders (University, colleges, regional government, religious leaders, circus Debre Berhan).

Why is this important? A broad community perspective is needed in order to generate change. By involving the community, the chances of seeing effective and lasting change in SWM is increased. By communicating with different stakeholders, the needs of various groups can be understood which facilitates needs to find the right solutions.

In addition, the SWM sector can offer new job opportunities for the city's population. There may also be benefits for the private sector to engage, creating new business opportunities and jobs.

Debre Berhan has a strong community involvement in urban development and in SWM issues through the Kebele organization that can be further developed. Stakeholder participation on SWM has improved during the recent past, but efforts need to be taken to maintain the momentum. A sound and strong stakeholder engagement builds on carefully planned communication and activities.

A strong stakeholder engagement is also a tool to secure external donor funding.

PLANNED ACTIVITIES

To improve stakeholder engagement, the *city administration* will:

- Identify the various stakeholders and lead a stakeholder consultation process in the city.
- Create a platform for the private sector to enable them to engage in overall waste management and greenery in the city.

PRIORITIES DURING THE COMING YEARS

Implementation *priorities* during the coming years are outlined in the timeline in appendix to this strategy document.

Implementation, monitoring and follow-up

With the finalisation of this SWM strategy, including the identification of goals and commitments, the city administration will start implementation. Capacity development in terms of both human financial resources play a key role of the strategy.

While implementing the plan some key aspects to consider include:

- Ensure accountability and transparency at all levels.
- Ensure public participation at all levels.
- Assign roles and responsibilities to the general public and the implementers of the plan.

Proper follow up will be made by the department of urban plan, beautification and greenery on the nine kebeles and all bureaus for their implementation of proper solid waste management and the urban greenery and beautification.

To learn during the journey of implementation

As the strategy is turned to action, the work of documenting and learning also need to start. Knowledge and understanding generated during the implementation process need to be collected, documented and shared in a structured way. Experiences distilled from activities should be actively considered in future actions and behaviors.

Vision: “Debre Berhan will be an exemplary clean and green city, with more jobs in swm and greenery, with a community that is well aware of sanitation and hygiene and are satisfied with the SWM service provision”.

1. Key Issue: Low awareness of SWM issues in the city administration, citizens and community as a whole.			
Objective A Increase awareness of SWM practices and management for the city administration.	Objective B Increase household and businesses' awareness about basic facts regarding solid waste collection, hygiene and environmental protection.		
Indicator A Number of trained city administrators, and Kebele leaders on SWM issues (yearly).	Indicator % of households that has awareness of the basic facts (measured by questionnaire).	Indicator % of households that are willing to participate in training regarding SWM (measured by number of people who attend training).	Indicator Number of business sectors/ groups that the city administration has a cooperation with regarding SWM.
Target by 2020 All city administrators have been trained. Target by 2021–2025 and beyond A reoccurring yearly training has been introduced and is carried out.	Target by 2020 50% of households have awareness of the basic facts (measured by questionnaire). Target by 2025 75% of households have awareness of the basic facts (measured by questionnaire).	Target by 2020 75% of the households have participated in training regarding SWM. Target by 2025 85% of the households have participated in training regarding SWM.	Target 2020 3 identified and continuing cooperation with business sectors. Target 2025 6 identified and continuing cooperation with business sectors.

2. Key Issue: Poor planning and accountability to carry out the planned tasks

Objective A

Increase planning for SWM in all levels (household, Kebele, city administration) and develop metrics for follow-up for SWM department.

Indicator A

No of LDP plans or structural plan that have considered SWM.

Indicator B

No of new construction properties that have indicated solid waste management space.

Indicator C

Presence of a follow-up metrics in connection with the yearly plan for the SWM department.

Target by 2020

7 LDP have included SWM.

1 follow-up based on developed metrics has been performed on the SWM department.

Approval from City Council to have SWM as a part of permits for new construction (focus on commercial buildings and condominium buildings).

Target by 2025

1 structural plan have considered SWM issues.

50% of new construction properties that have indicated solid waste management space.

4 follow-up has been performed on the SWM department (yearly follow-up).

3. Key Issue: Lack of budget for SWM services, management and treatment

Objective A

Increase financial sustainability of the SWM system by increasing governmental support, citizen contribution (fees and voluntary contribution) and external donors.

Indicator A

No of households and businesses who pay the city administration for SWM services.

Indicator B

Amount allocated to SWM from the city administration budget.

Indicator C

No of proposals to improve solid waste management system.

Indicator D

No of volunteers who are participating in greenery and SWM projects.

Target by 2020

50% of households and businesses with water meter are paying SWM fees to the city administration.

The SWM budget will increase by 100%.

4 proposals to improve solid waste management.

The number of volunteers will increase by 10% (from 2018).

Target by 2025

100 % of households with water meter are paying SWM fees to the city administration.

1% of the city administration budget.

10 proposals to improve solid waste management.

The number of volunteers will increase by 25% (from 2020).

4. Key Issue: Lack of comprehensive SWM collection services
<p>Objective A Improve household and business SW collection service in each Kebele and reduce informal dumping.</p>
<p>Indicator A No of household that have a dedicated collection service (either door-to-door, or designated common place).</p> <p>Indicator B No of businesses that have a dedicated collection service.</p> <p>Indicator C No of identified informal dumping areas that are cleaned up.</p>
<p>Target by 2020 75% households will have a dedicated collection service (either door-to-door, or designated common place). 50% of businesses have a dedicated collection service. 2 (out of 5) of the worst informal dumpsites are cleaned.</p> <p>Target by 2025 100% households will have a dedicated collection service (either door-to-door, or designated common place). 100% of businesses have a dedicated collection service. 5 (out of the 5 identified in 2018) of the worst informal dumpsites are cleaned.</p>
5. Key Issue: Poor SWM treatment facilities with large environmental impact
<p>Objective A Improve SWM treatment facilities and management practices at the facilities.</p>
<p>Indicator A No of infrastructure proposals to improve SWM treatment facilities.</p> <p>Indicator B Strategies to reduce impact of current solid waste management treatment facilities.</p> <p>Indicator C No of waste collection and treatment workers who have appropriate protective gear and knowledge of occupational hazards.</p>
<p>Target by 2020 1 infrastructure proposals to improve SWM treatment facilities. 1 strategy document developed regarding management practices of current SWM facilities. 100% waste collection and treatment worker have appropriate protective gear and knowledge of occupational hazards.</p> <p>Target by 2025 2 infrastructure proposals to improve SWM treatment facilities. 100% waste collection and treatment worker have appropriate protective gear and knowledge of occupational hazards.</p>

6. Key Issue: Poor cooperation with stakeholders
<p>Objective A Improve cooperation with stakeholders (University, colleges, regional government, religious leaders, circus Debra Berhan).</p>
<p>Indicator A No of research projects relating to SWM in D.B.</p> <p>Indicator B No of religious groups who have been invited to participate on awareness campaigns regarding SWM.</p> <p>Indicator C No of experience sharing (for other cities and regional government) activities in D.B or elsewhere.</p>
<p>Target by 2020 1 research project relating to SWM in D.B. All religious groups (30) have been invited to participate on awareness campaigns regarding SWM. 3 experience sharing (for other cities and regional government) activities in D.B or elsewhere.</p> <p>Target by 2025 2 research project relating to SWM in D.B. All religious groups (30) have been invited to participate on awareness campaigns regarding SWM. 6 experience sharing (for other cities and regional government) activities in D.B or elsewhere.</p>

Table 1. Planned activities, budget and financing.

Activities	Quantity	Time frame	Required budget (Ethiopian birr)	Financing
INFRASTRUCTURE CONSTRUCTION				
Pilot transfer station.	1	Short run	500,000	75% municipality 25% local NGOs
Provide three-holed bins for each household and on main roads.	25 545	Short/long	51,090,000	10% HDs 20% municipality 20% investors and university 50% NGOs
Maintenance of the road leading to the dump site.	500 meters	Short run	1,000,000	Municipality
Scale up transfer stations in all sub-communities (Ketena).	27	Long run	13,500,000	75% municipality 15% local NGOs 10% investors
Construct shade in the sorting areas for SW qurallios.	4	Long run	600,000	25% quarrelers, 75% local NGOs
Fence the remaining part of the dump site Construct gate.	50 meters One (1) gate	Short run	100,000	100% municipality
PROVISION OF SAFETY EQUIPMENT TO SOLID WASTE WORKERS				
Provide SW collectors (MSEs) with appropriate safety equipment, materials such as gloves, masks, boots etc.	426 individuals	Short/ long run	447,300	50% university 50% NGOs
TRAININGS				
Train and organize qurallios and SW collector SMEs on SWM; waste collection, sorting, recycling, and composting as well as entrepreneurship skills.	450 individuals	Long run	630,000	40% TVET College 40% university 20% NGO
AWARENESS CREATION				
Religious organization leaders.	40	Short/long	5,000	Municipality and Working group
Schools and educational institutes (students).	18 200	Short/long		Municipality and Working group
Community groups members.	65 000	Short/long		Municipality and Working group
City and Kebele administrators.	55	Short/long		Municipality and Working group
Public transport Service office.	1	Short		Municipality and Working group
Promote the SWM activities through wearing labeled shirts and other mechanisms.	213	Short/long		Municipality and Working group
LOGISTICAL VEHICLES AND WASTE CONTAINERS				
Trucks for moving SW from transfer station to dump site.	4 trucks	Long run	8,000,000	UIIDP
SW loaders at transfer station.	3 loaders	Long run	9,000,000	UIIDP
Large waste containers at transfer stations.	84 Containers	Short/long run	4,200,000	UIIDP
LANDFILL SITE SELECTION				
Land fill site construction.	1	Long run	225,000,000	50% municipality 50% UIIDP

SymbioCity supports local governments in addressing several of the Sustainable Development Goals (SDGs) and in implementing the principles of the New Urban Agenda. The overall goal is to improve living conditions with a special emphasis on the urban poor.



SymbioCity

SKL International
AFFILIATED TO THE SWEDISH ASSOCIATION OF LOCAL AUTHORITIES AND REGIONS

**Swedish Association
of Local Authorities
and Regions**

SymbioCity is based on Swedish municipalities' approach to urban development and experiences from implementing this in transition- and developing countries. Since 2010, with funding from the Swedish International Development Cooperation Agency (Sida), the Swedish Association of Local Authorities and Regions (SALAR) and SKL International have used SymbioCity as an approach and a method to promote sustainable urban development and contribute to the alleviation of urban poverty around the globe.

To learn more about SymbioCity please see www.symbiocity.org, call phone + 46 (0)8 452 70 00 or send us an e-mail on info@sklinternational.se