

Illustration of how the city of Debre Berhan would like to organize solid waste management in the city in the future. It includes at household level source separation of waste in three fractions; 1) Organic 2) Recyclables 3) Residual waste. The MSE collectors (donkey cart) would still be operating in the residential areas but would drop of the waste at smaller kebele level transfer stations to allow for more efficient transport of waste to the future sanitary landfill and recycling

industries. Hotels and large business would continue to organize collection by themselves to encourage private sector involvement. Also industries and large institutions have to organize their own collection and transport of waste and they will be charged a gate fee to dispose of waste in the landfill. An important difference is also that the fee for SWM would be bundled with the water bill, making it easier for the municipality to control the process.

SWM has received increased attention from all different stakeholders and have become a political important topic to work with at the city administration. The cities have carried out awareness campaigns, cleaned up of some informal dumpsites and had more than twenty cleanup days during the project. Funds have been used and earmarked for SWM activities and investments in solid waste management have been incorporated into the cities Capital Investment Plans. Land and resources have been identified to build transfer stations and pilot areas have been agreed for implementation and try-out of the new



One of the new collection vehicles in Shashemene with anti-dumping message on the side as well as a SymbioCity sticker.

solid waste management system. Based on the willingness to pay study a proposal on waste collection fee on the Water Bill has been developed. The developed solutions and ideas for a future solid waste management system have been included in the Solid Waste Strategies that the cities have developed within the project.

Using the SymbioCity methodology, the cities have learned and applied new ways of working and thinking in relation to urban sustainable development as well as learned how to include its citizens as a way to identify sustainable solutions for all.



For more information about SymbioCity please see www.symbiocity.org.
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SymbioCity

City Projects:

Ethiopia

City Projects Ethiopia

SymbioCity fits well with the Ethiopian framework of inclusive, sustainable and economically growing cities. It is a concept of sustainable, holistic and visionary urban development, based on the experiences of Swedish municipalities and focused on improving the living conditions of citizens through the participation of various actors and disciplines. It integrates the economic, environmental, sociocultural and spatial dimensions, incorporates the perspective of vulnerable populations with a gender perspective and promotes synergistic relations. SymbioCity is a way of working with inclusive and comprehensive urban development. It does not provide predetermined solutions for all urban challenges but offers methodologies, guidelines and tools to support locally adapted sustainable urban development processes.

Between the years 2018–2020, the cities of Shashemene and Debre Berhan, were part of the SymbioCity project in Ethiopia, financed by the Swedish International Development Cooperation Agency (Sida), and implemented by SKL International, a subsidiary to the Swedish Association of Local Authorities and Regions. The main objective has been to contribute to that cities in Ethiopia are better equipped to address pro-poor sustainable urban development from a social, economic and environmental perspective. Through workshops and onthe-job training the cities have learned and applied the SymbioCity methodology and tools.



Stakeholder consultation meeting in Debre Berhan with solid waste collectors on possible future solutions.



Clean up day in Shashemene as part of awareness campaign.

In line with the methodology of SymbioCity the cities selected a cross-sectoral working group and decided to focus on solid waste management (SWM), a serious challenge in both cities. The cities carried out an Urban Sustainability Review (USR) to diagnose the current situation of SWM of their city, assessing the city's strengths and challenges. The process was done in a participatory manner including several key stakeholders and actors such as waste collectors, government officials, academia, business sector and NGOs. This provided a more comprehensive understanding of the current system, challenges, opportunities, potential synergies but also ideas for improvements. As part of the USR a willingness to pay study was also carried out in order to understand citizens' willingness to contribute for solid waste management services.

With this new understanding the cities have together with stakeholders formulated a vision for solid waste management as well as objectives and indicators. Taking into account the vision and objectives, the working groups identified different types of integrated solutions covering physical, institutional, financial and behavioral changes, as well as high/low cost and short/long term solutions and developed detailed activity plans.

Process timeline for the project.



Urban Sustainability Review 🗸



Future image of the Solid Waste Managment System ✓



Willingness to pay study 🗸



Project implementation plan for piloting the new SWM system 🗸



Communication plan for the Pilot \checkmark



Solid Waste Management Strategy

✓



Guidelines for SWM workers <

ORGANIZING THE PROJECT

- Work process for the multisectoral working group.
- Identification of key
- Organizing steering
- Developing communication plan for the

UNDERSTANDING THE CURRENT SITUATION

Mapping of the solid waste management situation in the city. Including both workshops and collabor-ation with stakeholders but also in field analysis. The working group described how the current systems works and where the main

DEVELOPMENT OF VISION AND OBJECTIVES

After having mapped the current situation of SWM in the cities a careful analysis of root causes was made and key issues identified. The working group and stakeholder then formulated a vision and developed specific objectives for SWM.

DEVELOPMENT OF ALTERNATIVE SOLUTIONS

Having identified a vision for SWM for the cities the working groups went on to develop a future image of the SWM system as well as alternative solutions of how to get there.

PREPARING PILOT IMPLEMENTATION PROJECT

Having developed the future image of the Solid Waste Management System the working groups decided to implement pilot projects of the new system in a selected area. A plan for the pilot project was developed and entered into the cities capital investment plans. Also a communication plan was developed to create awareness about the new system.

STARTING IMPLEMENTATION OF PILOT PROJECT

Starting implementation of pilot project Procurement of the construction of pilot transfer sites and work with awareness about the new Solid Waste Management DEVELOPMENT OF SWM STRATEGY

The working group developed a strategy of how to extend the SWM system to the

STAKEHOLDER CONSULTATIONS TO

Assessing urban sustainability with focus on SWM through a series workshops with stakeholders such as MSE door-to-door collectors, business community, academia of challenges and opportunities.

IN FIELD STAKEHOLDER CONSULTATION AND

- Continued Stakeholder

JOINT WORKSHOP WITH THE TWO CITIES

Possibilities to compare results and exchange ideas about possible solutions. The cities were able to get feedback from their peers and could exchange leassons learnt.
Swedish Solid Waste Management

Expert from a municipality also joined and shared experiences about how they had worked with development of the solid waste management system

STUDY VISIT TO SWEDEN

The working groups from representatives from the
Ministry of Urban Housing and
Construction came to Stockholm
and Helsingborg to learn about the Swedish Solid Waste Management system.

WILLINGNESS TO PAY STUDY

SWM was poor financing of the services In an effort to find sustainable fee levels and to identify how much citizens were willing to contribute to the collection system a willingness to pay study was carried out by administering a questionnaire to households of the city.

SOLID WASTE MANAGEMENT GUIDELINES

The working groups developed guidelines for Solid Waste Management workers to make roles and responsibilities clear to all professionals working with the system and to improve the work environment for

Work session 1 In Shashemene and Debre Berhan April

2018

Work session 2 In Shashemene and Debre Berhan in May/June 2018

Work session 3 In Shashemene and Debre Berhan August 2018

Work session 4 Joint work week at Yaya Village, Addis Ababa November 2018

Work session 5 In Shashemene and Debre

Berhan Febuary

2019

Study trip to Sweden May 2019

Work session 6

In Shashemene and Debre Berhan September/October 2019

Work session 7

In Shashemene and Debre Berhan January 2020

Final seminar December 2020











