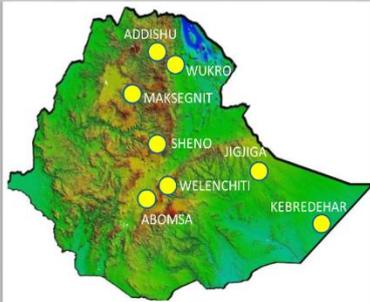




Full Chain Sanitation Services in Small and Medium Towns



Map of ONEWASH Plus programme Intervention Towns

The SDG targets (6.2, 6.3, 6.6, 6a, 6b) call for safe management across the sanitation chain, for safe hygiene practices, safe management and disposal (including recycling/reuse) of liquid and solid waste, and services that target vulnerable groups including women and girls. The ONEWASH Plus programme implements the “safely managed sanitation” concept in an integrated way, by piloting a full package (termed as the “minimum sanitation package”).

Key learning points:

Behaviour change is not sufficient in itself to improve health and livelihoods, nor is construction, improving accountability, training, capacity building or monitoring. A full suite of government-led activities and interventions are needed to support equitable universal access to sustainable sanitation services.

The minimum sanitation package applied under the ONEWASH Plus programme includes a full set of activities linking up relevant users, sectors, public and private partners, behaviour change methodologies, accountability relationships and services delivery. It is defined as “minimum” package based on the essential facilities and services that need to be further expanded by the municipality as towns develop in the coming years.

The Sustainable Development Goals (SDGs) set the post-2015 WASH agenda with their ambitious targets. As governments shift from a focus on increasing the numbers of people with access to improved WASH facilities to enabling universal equitable access to sustainable and safely managed WASH services they face a range of inter-sectoral challenges as well as opportunities.

This learning note discusses the full chain of services for faecal sludge and solid waste management as applied in the ONEWASH Plus programme in eight (8) towns in Ethiopia. This includes an innovative mix of sanitation and hygiene promotion activities; construction of facilities for solid and liquid waste treatment and disposal; construction of public and school toilets designed in observance of gender/disability/Menstrual Health and Hygiene Management (MHH) standards; integrated and participatory planning and action through WASH Task Forces; social accountability dialogues; and establishing and capacity building of small scale private sector “public-private operators” for sanitation services.

None of these interventions would be sufficient if implemented independently, but linked up they can make a tangible contribution to sustainable, equitable sanitation services. This approach provides valuable opportunities to learn, replicate, and scale up WASH innovations to meet the SDGs.

Unpacking the ONEWASH Plus minimum sanitation package

The ONEWASH Plus programme applies an approach towards improving sanitation in its focus towns and the surrounding satellite villages. This approach includes a service chain approach, engagement of citizens and public-private partnerships which have strongly influenced the Integrated Urban Sanitation and Hygiene Strategy (IUSHS) and Strategic Action Plan (SAP) developed by the Government of Ethiopia with the technical and financial support of UNICEF.

Service chain approach

The ONEWASH Plus approach for managing faecal sludge and solid waste in small and medium towns goes beyond citywide large-scale infrastructure development. It addresses the full chain and involves “closing the loop” through the 3R principle (reduce, reuse, recycle) with safe disposal.

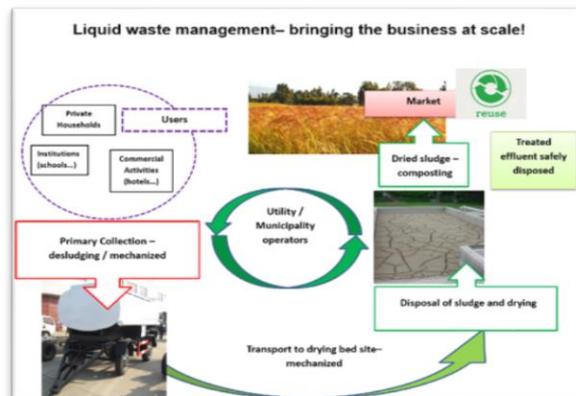
The full chain in solid and liquid waste management comprises:

- The waste generators (users of solid waste and faecal sludge management services including private households, schools, workplaces, restaurants, markets, health facilities, public places such as bus stations, etc.) and containment solutions (including adoption of SaTo pan¹);
- Collection and transport of liquid waste using mechanised vacuum trucks to reach the final disposal site and manually operated push carts for door-to-door collection of domestic solid waste;

- Transfer stations where solid waste from door-to-door collectors is disposed of using strategically located 5 m³ garbage bins;
- Transport of solid waste using skip loaders that operate with a mechanical arm to lift and transport the 5 m³ garbage bins to landfill sites;
- Treatment of liquid waste through sludge drying beds with a possibility of composting and reuse of dry sludge for different purposes such as fertilizer. Remaining effluent is safely treated and disposed of in maturation and evaporation tanks;
- Disposal of solid waste at landfill site with manual segregation of (i) plastic bottles to be recycled, (ii) bio-degradable wastes for organic composting and (iii) non-biodegradable wastes for safe disposal in the landfill.

The development and implementation of these systems entailed:

- Identification and siting of transfer stations and daily routes for door-to-door garbage collection as well as siting and construction



¹ The SaTo latrine pan is a simple, plastic, pour-flush pan that provides an airtight seal – this system helps to

maintain odour free latrines and prevent flies and insects from getting out of the pit.

of landfill and drying-beds following a detailed Environmental and Social Impact Assessment (EISA);

- Supporting operators to move away from manually operated services by introducing mechanised equipment;
- Creation of income-generating activities related to the final disposal of waste, including recycling of plastic bottles, jars and bags into secondary marketable products, composting and co-composting.

Consumer centred approach: Communication for Development

Consumers are vital to sustainable services as their increasing demand regulates the profitability and long-term viability of the business models. To reach out to consumers Communication for Development (C4D) and Social and Behavioural Change Communication (SBCC) activities for urban sanitation have been developed and implemented to trigger demand for service delivery and generate accountability between service providers and users. While in community-based interventions, the traditional C4D/SBCC packages are directly triggering communities to develop their own sanitation solutions. In urban areas, where there is a clear distinction between users and service providers, the communication campaigns are tailored and oriented to (i) generate demand, (ii) promote services and (iii) ensure that end-users are in the position to hold service providers accountable.

The multi-stakeholders approach applied by the ONEWASH Plus programme placed the neighbourhood and community at the core of the planning process, and with this, complements with wider urban sanitation planning. To this end, programme activities have included vulnerability assessments, behavioural change activities and social accountability dialogues.

Vulnerability Assessments: Vulnerable groups, including people with disabilities and women and girls, were identified in all the towns through a comprehensive vulnerability assessment. The assessment has been used as a baseline for planning for facilities development, tariffs/subsidy setting and, broadly, for inclusive service delivery. This has,

led to construction of public latrines at bus stations which are better accessible to people with a disability and led to the development of subsidized schemes for latrine construction for the poorest households.

Behaviour change activities: Promotional activities with the help of Health Extension Workers (HEWs) have been conducted in residential, business and public areas within towns and satellite villages. This has included the establishment of sanitation and hygiene task forces at woreda, kebele and sub-kebele levels.



As a result, households significantly engaged in construction of latrines (see box 1). Also, weekly cleaning campaigns have taken off in marketplaces and bus stations where organic and inorganic waste is separated. Public latrines have been rehabilitated and fines have been introduced for unsafe waste disposal or open defecation in a number of towns.

Social Accountability Dialogues: Dialogues between community leaders, town sanitation and hygiene task force members from sector offices, private operators and representatives of

Box 1: Improved access to sanitation through behaviour change activities

In Maksegnit, the sanitation and hygiene task force has monitored and recorded the construction of 556 new latrines. Also, in Sheno there has been great change in availability of sanitation facilities. As mentioned by one town citizen: *“In our sub-kebele, only four or five households don’t have a latrine. Previously, only four or five households had latrines! Before, people didn’t feel shy to defecate in the open, now they are much more embarrassed. The public latrine is also cleaned well and plastic bags of solid waste on the streets have decreased”*.

identified vulnerable groups have made a

difference by jointly focusing minds on specific issues. Communication and coordination has improved between sectors in municipalities and woredas and overlapping mandates have been reduced. The dialogues enabled users to engage with relevant duty bearers. When WASH problems are identified by service authorities, providers or users they can be resolved jointly in the thematic task teams.

Box 2: Social accountability dialogues

“We work together with police and councils to stop illegal disposal at open spaces, sewers, streets and other spaces in the town. These cause bad smells and attract various disease vectors resulting in worsening aesthetic quality of the city. Even cart donkeys are no more allowed to collect both solid and liquid waste, because they used to dispose near water sources which can create health risks”. (Seylici, Hawl-wadaag Sanitation and Beautification Cooperative, Kebridahar).

Public-Private Partnerships (PPPs) and business models

The current trend in developing countries in waste management services is commercialization through private sector participation. Under the ONEWASH Plus programme, PPPs have been established in the towns supporting the emerging private sector to grow in partnership with Small and Micro Enterprise (SME) Offices and provide solid and liquid waste management services (collection, transportation and disposal).

The towns followed different public-private arrangements. For instance, whereas the solid waste management services in Wukro follow a subsidized approach by the municipality, the ones in Welenchiti adopt tariffs on water bills.

Through donations to each municipality, the solid and liquid waste management micro enterprises (PPOs), established or reorganized in collaboration with the Small and Micro Enterprise Development Agencies in each of the project towns, were strengthened by supporting them with different equipment for collection, transportation and disposal of wastes, as well as through targeted trainings. Moreover, the ONEWASH Plus programme supported the development of user-friendly business plans for the PPOs in each town, helping them to provide better solid and liquid waste management services and to operate on a cost-recovery basis with medium or long-term planning.

Technical trainings have also been implemented to support PPOs’ operations at landfills and drying bed sites to ensure that these facilities are managed sustainably in an environmentally acceptable manner. This technical training package included: (a) preparation of site-specific practical operation and management manuals and (b) provision of hands-on training to the operators responsible for managing the collection, transportation and disposal of the different wastes.



Photo: A completed Sludge Drying Bed in Welenchiti town, Oromia Region. (Photo by UNICEF, May 2017)

Lessons learnt

Mix of managerial and technical skills to manage the sanitation chain

Under the ONEWASH Plus programme liquid (faecal sludge) and solid waste management systems have been developed along the sanitation chain, based on improved standards and according to the principle of “Reduce – Reuse – Recycle”. In addition to the facilities constructed and the equipment provided, the programme realized that improving capacities and skills of service providers for proper and safe handling and management of waste is essential for customers’ satisfaction and reducing possible health risks. To ensure that the “minimum sanitation package” provided is taken up and further expanded by local authorities and operators, the ONEWASH Plus programme deemed it essential to generate a mix of managerial and technical skills at the town level.

Social accountability to find the right balance between demand and supply

Social accountability initiatives as implemented under the ONEWASH Plus programme are a double check on normative service delivery accountability. Both systems need to be in place and led by authorities with active engagement of users and providers.

The business viability, defined as a proper balance between demand and supply, is therefore centred around the accountability ties between end-users and service providers. User

satisfaction and service providers’ readiness have been the drivers in developing these service chains. It is therefore essential that this balance is maintained and nourished by the different towns to ensure services continuity.

Business models: there is no single model

The emerging private sector in Ethiopia engaged in the management of solid and liquid waste does not follow a distinct model. The recommendation is therefore to build on existing systems and adapt business models and technologies rather than to implement standardized options.

Tariff settings, subsidy options, operational arrangements and institutional arrangements have not been imposed by the ONEWASH Plus programme, but have been developed following the existing trends and directions given by town administrations and users.



Photo: A skip loader operating a mechanical arm to lift and transport 5 m³ garbage bins to landfill sites. (Photo by UNICEF, May 2017)

Learning to do better

ONEWASH Plus learning notes promote the sharing of experiences from innovations within the ONEWASH Plus programme. This learning note sets out the points of integration, service chain approach and lessons learnt in improving WASH in small towns in Ethiopia from experiences based on the observations in the 8 small towns in four regions. It was prepared by Michele Paba, Tamene Gossa and Rahel Kaba (UNICEF) with Marieke Adank (IRC).