

Output-Based Aid for Municipal Solid Waste Management in Nepal

Development Challenge

In Nepal, as in most developing countries, population increase and rapid urbanization have created challenges for effective and efficient solid waste management (SWM) programs. In just over a decade, Nepal’s population has grown by 67 percent, adding pressure to a SWM sector that has not been managed properly. Less than half of the 700,000 tons of waste generated each year is collected in the cities. Most of the waste is dumped inappropriately, leading to serious environmental and health concerns for the urban poor who live near waste heaps and river banks.

Municipalities are responsible for providing SWM services in Nepal, but technical and financial constraints limit their capacity. Furthermore, the unwillingness-to-pay for people who may receive these services escalates the problem. To address these constraints, the Global Partnership for Output-Based Aid (GPOBA) implemented a project for municipal SWM in 2013. The \$4.3 million project used an incentive-based approach, with a gradual diminishing subsidy as municipalities strengthen capacity and gain the resources to sustain the program on their own.

Within four years after project implementation, each participating municipality had improved its SWM services, first by developing a SWM strategy and service implementation plan (SIP), and subsequently by following the plans with the support of the grant subsidy. The subsidy helped bridge the gap between the costs of delivering improved SWM services (capital costs, operations and maintenance costs, and other expenses) and the revenues collected. The amount of the subsidy was designed to decrease as services improved and as more fees were collected, helping to recover costs.

The Project and Its Partners

The project was implemented in five municipalities -- Dhankuta, Ghorahi, Lalitpur, Pokhara, and Tansen -- which met certain operating and maintenance requirements. The project aimed to build upon the municipalities’ existing systems and make them more sustainable, rather than developing new systems. The main central government counterparts included the Town Development Fund (TDF) and the Solid Waste Management Technical Support Centre (SWMTSC) within the Ministry of Urban Development (MoUD) which acted as the technical implementing partner.

The participating municipalities were incentivized to:

- develop SWM Service Improvement Plans (SWM-SIPs) that identified improvements in service delivery
- choose a service delivery model (whether to use the municipality’s own in-house team, contract with private sector/non-governmental organizations)
- carry out improvements in service delivery; implement fees and revenue collection; and
- implement gradual increases in the fee structure.

As the SWM sector is underfunded to provide optimum quality of service to beneficiaries, an output-based subsidy model was adopted to increase the capacity of the municipalities. The subsidy helped deliver improvements in service quality and enabled the municipalities to increase SWM service fees.

The graph below illustrates the funding model as reference:

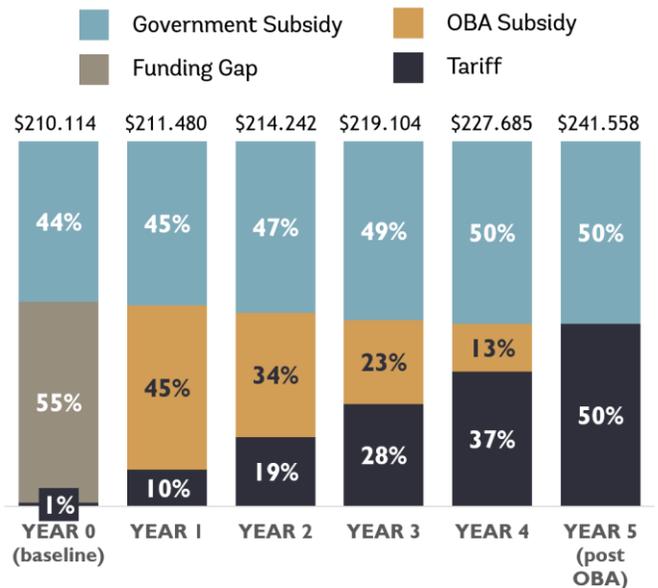


FIGURE: OBA subsidy contribution to total revenues (in US\$); Subsidy as a multiple of collected revenues (local currency) in the Dhankuta municipality

To measure results, there were two separate and independent stages of verification. The first part used indicators that measure performance against technical criteria. If services proved satisfactory, the second part activated subsidy payment to match SWM revenues according to an agreed multiplier, provided that SWM operations and services met pre-agreed minimum technical performance criteria. s had been provided according to certain technical criteria.

Improved Service Quality

The service quality was measured through indicators that tracked the performance of each municipality in:

- Implementation of the approved SWM plan
- Collecting and disposing solid waste against defined targets
- Providing satisfying services to households through sampled household reporting that waste collection and street cleaning services provided by the municipality have met or exceeded their expectations in the key areas of reliability, frequency, improvement in environmental quality, convenience and responsiveness
- Improved financial sustainability: This was measured through financial performance indicators, which track fee collection, cost recovery, and efficiency of the system such as increase in SWM fee charged to all waste generators; annual revenues from collected SWM fees; and percentage O&M cost recovery from SWM fees.

Results

An institutional framework was established

The project has been instrumental in setting up designated units with allocated staff in all the participating municipalities. Prior to the project, the municipalities lacked the units specially designated for SWM services. This has paved way for ownership on SWM matters within communities.

The project has triggered better record keeping and grievance handling adding to the sustainability of the project throughout the municipalities. Prior to the OBA grant, the municipalities lagged on monitoring and evaluation system. Their report mechanism for grievances were not in place. All the participating municipalities have established dedicated unit for complaint handling along with responsible municipal officer, responsible for tracking beneficiaries' comments, recording arrangement for complaints registration, remedial action taken.

Municipal service delivery continues to improve.

All five municipalities have developed waste collection routes and are providing waste collection services according to a regular collection schedule. Waste is collected either from households or from designated collection points and transported to the waste disposal site. Three years into the project, one of the participating municipalities, Dhankuta, was named the "cleanest city in the country" in an annual contest established by MoUD in 2013; in Pokhara, close to 50,000 households are getting SWM service; in Lalitpur, the

rate of solid waste fees collection increased by 400 percent.; while In Ghorahi and Tansen, household-level recycling and composting is keeping the cities remarkably Thisclean. These results has have motivated other municipalities to improve their SWM systems.

Financial sustainability has increased

Revenue generation has increased considerably in each municipality. The results-based financing (RBF) design has encouraged the practice of segregating types of waste. The OBA project encouraged municipalities to link the tariff with the quality of services, rather than the amount of expenses.

Lessons Learned

1 Awareness raising and outreach is crucial for successful delivery of the project as it focuses on the behavioral aspect of SWM, crucial for sustainability of the service. The project has established and strengthened the SWM committees in municipalities leading to significant ward-level community mobilization. Also, awareness programs should also target the municipal staff and not just beneficiaries. Staff convinced on the benefits of SWM system would take the implementation seriously and take the project further. With the right system in place, this would then help the new incumbents, even if there is high turnover of human resources in municipal offices.

2 The involvement of the private sector and other SWM actors in various sectors should be better integrated into SWM services. Private sector involvement should be considered as an integral part of Nepal's SWM services. Private companies are operational in the SWM sector without written agreements with the municipalities. A policy-led inclusive framework for private sector is essential keeping in mind the available SWM workers. Tariff categories should be identified, revised and operationalized by the governing and implementing bodies.

3 Results-based investments in SWM, needed to be coupled with comprehensive capacity building programs for communities and municipal staff. The capacity building programs need to be designed flexibly to address the communities needs and opportunities for household-level improvements, for example in the promotion of recycling and composting programs. Additionally, technical assistance programs are typically needed for municipal staff programs to fill knowledge gaps in establishing best practices for municipal operations, for example in developing operational manuals for sustainable landfill management, waste collection and transfer.