CASE STUDY
Strengthening Municipal Capacity for Public–Private Partnerships in Waste Management

The previous contractor was not able to collect garbage from households regularly and failed to properly manage dumpsite operations at Kaysone Phomvihane City. Photo credit: ADB.

In Kaysone Phomvihane, Lao PDR, good O&M contract management and community support will ensure the sustainability of a new sanitary landfill facility.

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Overview

Like many rapidly urbanizing cities, Kaysone Phomvihane faces a growing waste problem.

Increased business and employment opportunities are drawing more people to live and work in the area, which is being developed by the Lao People’s Democratic Republic (Lao PDR) into an economic hub. Strategically located by the Mekong River bridge between the Lao PDR and Thailand, the border town is part of the Greater Mekong Subregion East-West Economic Corridor.

A project supported by the Asian Development Bank is improving the urban environmental infrastructure and institutional capacity of local authorities in Kaysone Phomvihane and two other corridor towns in the
country to make them cleaner, safer, and more livable for residents. The project includes improvements in waste management, specifically the construction of a new sanitary landfill with its associated materials recovery facility.

This case study highlights growing problems and potential solutions in solid waste management in the city. It summarizes several strategies carried out to achieve a sound and effective system. These include shifting from the existing contractual arrangements with the private sector to a more comprehensive operation and maintenance (O&M) contract under a public-private partnership (PPP) with a financial and service performance monitoring and reporting system to ensure the private operator’s satisfactory performance.

The case study also discusses recommendations to support the operation and maintenance of a new sanitary landfill by boosting revenue collection, enhancing community participation, and raising awareness to ensure the sustainability of the landfill. The strong commitment and determination of the government have been instrumental in attaining the outcomes and targets of this project.

Project snapshot

| Dates          | 6 November 2012: Project Approval  
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| Cost           | $47.73 million: Total project cost  
|                | $26.6 million: Loan from the Asian Development Fund  
|                | $14.2 million: Grant from the Asian Development Fund  
|                | $0.63 million: Grant from the Urban Environment Infrastructure Fund  
|                | $6.26 million: Counterpart funds |
| Institutions and Stakeholders | Financing |
|                | Asian Development Bank |
| Executing agency | Ministry of Public Works and Transport, Lao PDR |
| Implementing agency | Department of Public Works and Transport of Savannakhet Province, Lao PDR |
Challenges

The improvement of transport connectivity along the East-West Economic Corridor has increased trade and traffic flows as well as migration of people in the area. These have put more pressure on the local government to provide sufficient urban infrastructure and services. Consequently, there is an urgent need for effective development planning and management to address the growing demands of a rapidly urbanizing economy. However, weak institutional capacity and limited resources hinder local government efforts to manage urban development.

Context

In March 2015, the Provincial Department of Planning and Investment signed a concession agreement with Lao Pattana Waste Management Company (a foreign-owned company) to undertake the waste collection and operations and maintenance of a 6-hectare dumpsite in Kaysone Phomvihane City. The agreement mentioned transferring the waste management responsibility of the Urban Development Administration Authority to a private operator under a 30-year contract.

However, the performance of the private operator was found unsatisfactory due to low capacity to deliver routine household waste collection services, including an inability to fulfil contractual commitments. Complaints were received from households on the quality of services and from the private operator on the difficulty of managing cash flows because of residents’ unwillingness to pay the waste collection fee.

The local government’s lack of experience in preparing and implementing PPPs resulted in a less than optimal concession agreement. The contract has weak terms and conditions. The roles and responsibilities of the parties were not clear. Complex indicators were difficult to measure. No government agency was designated to monitor and evaluate the operator’s performance. Because of the ambiguity in the concession contract, there was growing concern regarding the future sustainability of sanitary landfill operations. The government needed to revisit the existing concession agreement with the private operator and make sure that the oversight power of the Urban Development Administration Authority in landfill operations could be reinstated. It was also important to explore options and solutions to support the new sanitary landfill’s operating and maintenance costs.

Solutions

Given the constraints identified above, the ADB project team proposed two key solutions for the city government to consider. These are to restructure the existing contract and explore options for the sustainability of sanitary landfill operations.

Restructuring of the existing contract agreement. Taking advantage of the completion of the new sanitary landfill, ADB proposed to restructure the existing contract arrangements to include a development contract management system and contract monitoring team. The new PPP agreement will come in the form of a 15-year contract, with possible extension, depending on the performance of the
selected operator. The performance evaluation will be reviewed by a monitoring committee on an annual basis to ensure the contract’s performance indicators are met. It is recommended that the agreement should have financial and service performance audits by a qualified independent auditor. The contract should clearly outline the agreements, including roles and responsibilities of concerned parties, investment assets, provision of revised waste collection fees, operating and maintenance procedures, detailed obligations for compliance with regulatory and environmental safeguards requirements, and a financial and service performance monitoring and reporting system.

**Future sustainability.** Aside from ensuring a sound and effective solid waste management system, it is also important to meet the operations and maintenance costs to make the waste management project sustainable. Enhancing the payment system and revenue from solid waste collection, as well as waste recycling and composting, are all critical to improving revenue generation. At the same time, the local authority needs to promote efficient solid waste management practices through a waste segregation and recycling campaign to reduce waste volume and extend the lifespan of the landfill. Solid waste segregation is being implemented at the household and community level. A 2% of waste collection fee is now included in the billing statement to fund the segregation campaign. At the national level, revenues from excise taxes on the importation or production of plastic could be used to support solid waste management programs and projects in the Lao PDR, such as recycling and other waste collection initiatives.

**Results**

The new sanitary landfill was turned over to the provincial government in July 2021, while the old dumpsite was closed. Photo credit: ADB.

The solid waste management component of the project covers a total area of 10 hectares. Work on the new landfill was completed in June 2020, and the construction of a material recovery facility within the new landfill in the area was completed in February 2021.

Upon assessment of the previous waste management system, ADB shared information on best practices to help the government improve decision-making and infrastructure governance. The government then implemented several strategies to catalyze improvements to the new landfill. First, the
city government cancelled its contract with the private operator. Second, a more comprehensive contract agreement was prepared to incorporate performance monitoring, reporting, and an auditing system. A contract monitoring committee was established to monitor and evaluate the performance of the private operator to ensure it fulfils contract conditions.

The government also conducted a more transparent bidding process in selecting a qualified private operator with relevant expertise and experience on solid waste management/landfill operations. The new sanitary landfill was handed over to the provincial government in July 2021, while the old dumpsite was closed.

One of the project’s initial outcomes is enhanced solid waste segregation at the household and community level. Furthermore, the materials recovery facility helped enhance the efficiency of the recycling process, and it has created opportunities for the new private operator to find markets for recyclable materials. The first batch of recycled items was sold to Thailand.

Improvements to the household waste collection payment system included enabling payments via mobile phones and bank transfers. Households can also pay their monthly waste collection fee through the waste management committee at the village level.

Lessons

The new landfill started its operations in early August 2021. The effectiveness of the new contract will be monitored over time. The government learned from the failures of past dumpsite operations and has drawn on that experience to improve solid waste management.

The new contract incorporates the mandate of the Urban Development Administration Authority, which includes participating in the monitoring system and conducting waste management training for local communities. The monitoring system will also ensure the government’s accountability to the project and provide a mechanism for evaluating the private operator’s performance.

The contract monitoring committee comprises key provincial authorities, i.e., the Urban Development Administration Authority and village heads who represent the households. The committee participated in the selection/bidding process for the new private operator.

The contract was drafted in consultation with the previous private operator to better identify the issues and to understand private sector perspectives. The revised service fee structure and operation and maintenance manual were incorporated into the contract as an additional reference guide.

It bears noting that the government was prepared to shift to a new O&M contract under a PPP modality. The project team’s quick response to address issues behind the previous dumpsite failures has improved solid waste management in Kaysone Phomvihane City. The government needs to ensure that the PPP modality is properly implemented for efficient and effective delivery of public infrastructure and services.
Resources


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