

Pakse, Lao People's Democratic Republic

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PROJECT OVERVIEW

PPS period	September 2009 – April 2010
Focus sectors	Flood control and drainage management
CDIA supported activities	(i) Prepare Medium-term Urban Infrastructure Program; (ii) PPS on solid waste management and flood and drainage management; (iii) Capacity development for project stakeholders
L2F Status	Funded by Asian Development Bank



Background

Pakse is the largest urban center in the southern Lao PDR and the capital of Champasack province. Since the mid-1990s, it has been the key commercial and tourism center in southern Lao PDR and the Greater Mekong Subregion (GMS). The population in the greater Pakse area in 2007 was about 100,000. Champasack's gross domestic product has averaged 9.8% since 2006, driven largely by industry, tourism and services.

As in many other secondary cities in Asia, Pakse is experiencing rapid environmental degradation caused by pressures arising from significant

urbanization and economic growth. In order to improve the basic urban and environmental infrastructure in Pakse, the Governor of Champasack province requested for CDIA technical assistance in March 2009.

With the approval of the Governor's request by CDIA in April 2009, a PPS team was deployed in Pakse in September 2009 with the following tasks: i) assist Pakse to undertake a rapid infrastructure assessment and produce a **Medium-term Urban Environmental Infrastructure Program (MUEIP)**; (ii) conduct PPS on solid waste management and flood and drainage management

and associated capacity building; and (iii) identify potential linkage of the PPS to downstream financing.

After completion of the PPS work in April 2010, the PPS team submitted the final report on the MUEIP recommending the following prioritized projects: (i) drainage and flood protection in Pakse district (ii) riverbank protection along Mekong and Xedon rivers; (iii) solid waste management; (iv) sanitation; (v) green infrastructure; and (vi) planning and project support.

As in many other secondary cities in Asia, Pakse is experiencing rapid environmental degradation caused by pressures arising from significant urbanization and economic growth.

Implementation Progress as of October 2019

Building on the MUEIP, the ADB and the Government of Lao PDR signed a loan agreement in August 2012 amounting to \$24.25 million and a grant worth \$3.25 million to implement the Pakse Urban Environmental Improvement Project (PUEIP) taking forward most of the MUEIP-prioritized projects. Likewise, the Economic Cooperation and Development Fund (ECDF) of Korea approved in 2016, a \$53 million loan for the Mekong River Integrated Management Project implementing key components of the MUEIP such as the Mekong River riverbank protection and riverbank landscaping. Below is the implementation status of the MUEIP-prioritized projects.

Solid waste management. This project component aims to improve the overall solid waste management (SWM) system in Pakse district by: (i) upgrading and expanding the existing open dumpsite to a controlled sanitary landfill facility (SLF); (ii) upgrading the solid waste collection and transport fleet; and (iii) implementing pilot projects to support recycling. With funding from the ADB-PUEIP loan, the 4.2 ha open dump site has been fully rehabilitated while construction of a new controlled SLF is 95% completed as of September 2019. When fully operational in 2020, this project will showcase a state-of-the-art SLF, the first of its kind in Lao PDR, with an aggregate capacity of 300,000 metric tons of solid waste

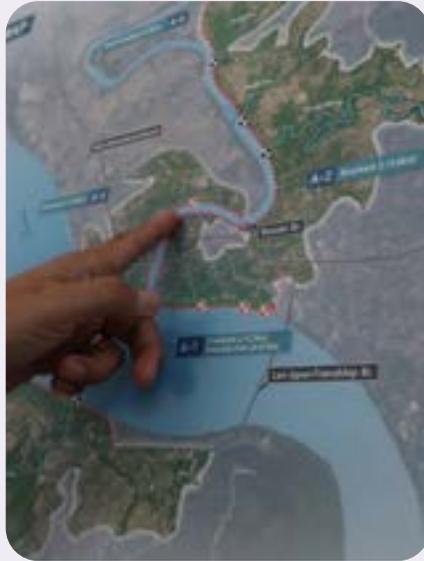


and an estimated useful life of 10 years.

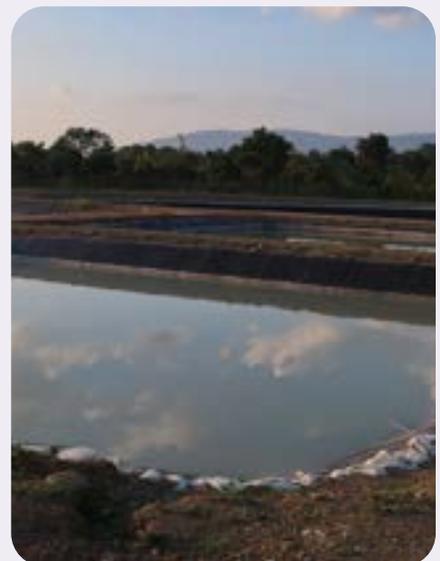
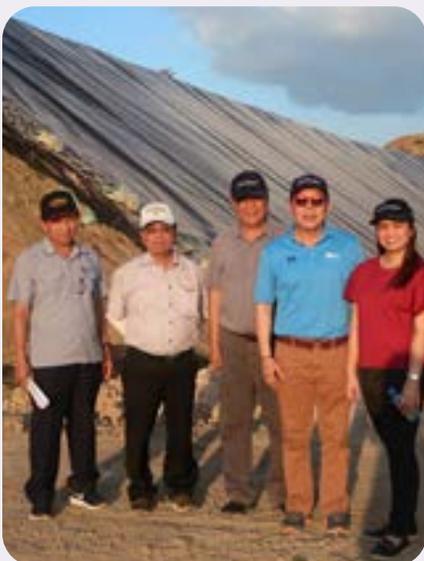
To extend the life of the 11 ha SLF, a material recovery facility (MRF) will be constructed in the 3.7 ha expansion site, benefitting at least 30 poor waste picker families. To capacitate the P-UDAA on operation and maintenance (O&M) of the SLF, a month-long intensive technical training was provided to P-UDAA technical staff last April 2019 while another round of training will be held in Thailand on MRF operation in November 2019. Solid waste from 31 villages in Pakse is currently being collected by a private contractor (Champa Clean). Garbage collection rate has improved from 21% or 20 tons per day in 2011 to 50% or 40 tons per day at present.

Riverbank protection. The MUEIP recommended high priority riverbank protection projects in three locations: (i) Xedon River; (ii) east bank of Mekong River and (iii) west bank of Mekong River. The PUEIP started the implementation of the Xedon riverbank erosion protection project in 2015. As of September 2019, civil works along the 3-km stretch of Xedon river including construction of gabions, greening and slope stabilization along both sides from the Russian Bridge to the French Bridge and on the left side at Wat Ban Kea is about 47% completed.

When completed in 2021, vulnerability of some 200 households residing along the edge of Xedon River to riverbank erosion will be significantly reduced.



Investments from ADB and Korea's ECDF are helping to implement the CDIA-assisted Medium-term Urban Environmental Infrastructure Program.





Riverbank protection along the east and west banks of Mekong River is being implemented under the Mekong River Integrated Management Project with \$53 million loan funding from ECDF of Korea. Riverbank protection works and construction of 10-ha public park along the Mekong River is currently ongoing and will be completed in 2022.

Drainage and Flood Protection. In line with the MUEIP recommendations, the PUEIP implemented this project component in flood-prone areas within Pakse including Wat Chin, Boung Udom, Ban Kea and Hong Phaktop. As of September 2019, civil works for this project component which includes improvement of drainage facilities in flood retention areas, construction of access roads

for drainage maintenance, and installation of pumping stations have been fully completed. Pumps have been procured and will be installed in the pumping stations within the year.

Sanitation. This component was implemented under the Community-driven Urban Environmental Improvement sub-project of PUEIP. This sub-project supported 59 villages in the districts of Pakse, Bachiang and Phonthong in participatory planning, prioritization and selection of small-scale infrastructure investments and identification of poor households for sanitation improvements. This component also aimed to increase public awareness in solid waste management. As of September 2019, construction of small access roads with associated drainage in targeted villages is 62% completed

while 171 toilets for identified poor households have been constructed.

Planning and project support.

This component seeks to strengthen the capacity of the project coordination unit (PCU) and the project management and implementation unit (PMIU) on project design and supervision, gender and development, accounting and financial management, procurement and disbursement, environmental and social safeguards. As of July 2019, 42 trainings were undertaken (38% of participants were women). Progress of this component as of September 2019 was estimated at 15% with bulk of capacity development activities to be conducted in the remaining two years of PUEIP implementation.



The project is expected to enhance the resilience of Pakse to risks associated with climate change and natural disasters.

Intervention Results

With almost all of the PPS-recommended infrastructure investments taken forward by the government with financial assistance from ADB and ECDF, key project stakeholders are confident that the benefits envisaged by the MUEIP back in 2011 will be fully achieved. With the increased reliability and coverage of urban infrastructure implemented under the ADB-funded PUEIP, the project is expected to enhance the resilience of Pakse to risks associated with climate change and natural disasters thereby resulting in significant social and environmental benefits for the city residents.

Enhanced resilience to climate change and disaster risks.

The flood control and drainage

infrastructure projects implemented under PUEIP are expected to increase the city's resilience to risks of climate change and natural disasters. According to the city officials, design of these projects took into account climate-induced risks thereby reducing vulnerability of some 130,000 city residents to the adverse impacts of flooding such as loss of lives, properties and means of livelihood.

Improved living environment of the urban poor.

Although community-driven urban infrastructure projects have yet to be fully completed, residents in 42 out of 69 poor communities targeted by PUEIP are already experiencing the benefits arising from paved village roads, upgraded roadside drainage and improved

toilet facilities. Improvement of village roads have enhanced access of poor residents to basic social services such as health and education while upgrading of roadside drainage and provision of toilets have resulted in better sanitation thereby reducing the health risks in poor communities.

Improved solid waste management.

The solid waste management component of the PUEIP is benefiting the city as a whole. The completion of the state-of-the-art SLF and upgrading of garbage collection and transport fleet, solid waste collection and disposal is expected to significantly improve thereby reducing health risks associated with air pollution from burning and water pollution from indiscriminate dumping of



garbage in water channels. When fully implemented, the SWM component is expected to benefit a total of 130,000 people, half of which are women.

Strengthened capacity for project management and implementation. Capacity building measures recommended by CDIA back in 2011 were implemented under the PUEIP as part of the overall strategy for improving the operation and management of the PUEIP-funded infrastructure projects. As a result of training and on-the-job coaching activities of the PUEIP, key staff of PCU and PMIU have improved their skills on project design and supervision, gender and community development, accounting and financial management, solid waste management, among others.



Conclusion and Lessons Learned

It is very apparent that all of the project components being implemented under PUEIP emanated from the PPS prepared by CDIA in 2009. A few of the PPS recommendations were excluded from the PUEIP as these were earmarked for implementation by other agencies such as P-UDAA, EDCF-Korea and the private sector (e.g., Houay Phoun area development). Factors cited by key informants that may have facilitated the implementation of PPS recommended measures include: (i) alignment and consistency of the PPS projects with the city and national plans; (ii) capacity building inputs by CDIA during the PPS process and sustained under the PUEIP; (iii) good project preparation at PPS and PPTA stage; (iv) ownership of the project by key officials who were involved in the PPS and who have subsequently assumed key positions in the city and provincial government; and (v) appropriateness of project implementation mechanism which facilitated smooth coordination between project coordination unit (PCU) at the national level and project management and implementation unit (PMIU) at the local level.

The CDIA intervention in Pakse offers a number of key lessons. These include: (i) engaging key city/provincial officials in project preparation and decision making is key to enhancing project ownership and building the capacity of communities and local government agencies; (ii) need to define appropriate implementation mechanism taking into account evolving decentralized governance structure at the project preparation stage; and (iii) need to sustain capacity building during the project implementation phase to ensure readiness of the city to operate and manage the completed project facilities.



KEYS TO INTERVENTION RESULTS:



- Alignment of PPS with city and national plans
- Capacity development of project implementers
- Good project preparation
- Project Ownership
- Appropriateness of project implementation mechanisms

