

## FINANCIAL ANALYSIS

1. The financial analysis has been conducted in accordance with Asian Development Bank guidelines.<sup>1</sup> The financial evaluation of the subprojects was undertaken in real terms using constant 2013 prices. The project cost estimates in nominal terms were converted to real terms by adjusting for the projected effects of foreign and domestic inflation and currency fluctuation. Incremental costs and benefits were derived by evaluating the financial position of the implementing agencies under the with-project and without-project scenarios. All the subprojects were identified as non-revenue generating projects, and the financial analysis therefore focused on the financial capacity of the project owners to meet the operating and maintenance (O&M) cost of the new facilities. The overall financial position of the project owners was projected from fiscal year (FY) 2015 to FY2025.
2. The departments of public works and transport (DPWT) of each province will be the project owners of the main roads and river piers constructed under the project, and will be responsible for their maintenance. Funds for the O&M of these assets will come from the annual budgets of these departments. The small infrastructure facilities in the tourist sites will be operated and maintained by the respective management committees under the authority of the departments of information, culture and tourism (DICT), using income from receipts generated from entrance, parking and rental fees. A separate financial sustainability analysis for the small infrastructure facilities has been prepared to ensure that the fees will be sufficient to cover appropriate O&M.<sup>2</sup>
3. All subprojects were evaluated to be financially viable and sustainable, although the road in Oudomxay Province will require additional subsidy from the provincial government to the DPWT to cover periodic maintenance. The projected financial positions of the project owners, based on historical income and expenditure statements, confirm their financial capacity to cover the recurrent costs to sustain facilities developed under the project. Moreover, given the provincial government's assurance that it will fund the operating expenditure and periodic maintenance, an adequate budget allocation for recurrent O&M costs is reasonably expected. A covenant has been included in the loan agreement for this purpose. Experience from previous tourism projects also confirms that the national and provincial government has in the past allocated sufficient funds for O&M of access roads that are important for tourism.<sup>3</sup>
4. Upgrading of the roads and piers aims to provide a higher level of resilience to extreme climate events, and to accommodate the rapidly growing number of tourists and increasing number and size of vehicles. The cost of maintaining an upgraded road or pier is significantly less than attempting to provide the same level or service on a road or pier that has not been upgraded. Failure to upgrade these facilities will increase O&M costs in the long term and will be an obstacle for tourists and vehicles to access the tourism sites. Financial sustainability analyses for each of the three DPWTs in charge of the subprojects are presented below.
5. **Oudomxay Department of Public Works and Transport.** The historical income and expenditure statement provided shows that the annual budget of the department has increased steadily, with a moderate yearly surplus. Assuming that revenue will increase by 6% annually and expenditures by 5%, Oudomxay DPWT will have sufficient funds to conduct annual routine maintenance on the new 54-kilometer access road when the DPWT takes responsibility for the

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<sup>1</sup> Asian Development Bank. 2005. *Financial Management and Analysis of Projects*. Manila and Asian Development Bank. 2009. *Financial Due Diligence, A Methodology Note*. Manila

<sup>2</sup> Institutional Analysis & Arrangements for O&M of Project Facilities (available from the list of linked documents in Appendix 2).

<sup>3</sup> ADB. 2011. *Completion Report Greater Mekong Subregion: Mekong Tourism Development Project (Cambodia, Lao People's Democratic Republic and Viet Nam) (Loans 1969-CAM, 1970-LAO and 1971-VIE)*. Manila

maintenance starting in FY2019. However, DPWT is not expected to have sufficient funds to undertake periodic maintenance (required in FY2023). The provincial government will have to provide about KN675 million for this purpose. The additional maintenance budget is incremental to the current budget that DPWT uses for other road assets and facilities. Because the amount needed to maintain the new road is significant, the province will need to generate additional revenues, reallocate funds from other departments, or increase allocations from the central government to subsidize periodic maintenance. The projected income and expenditure for Oudomxay DPWT is Table 1.

**Table 1: Oudomxay Department of Public Works and Transport Income and Expenditure (KN million)**

Item	Fiscal Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Income</b>	926	981	1,040	1,103	1,169	1,239	1,313	1,392	1,476	1,564	1,658
<b>Expenditure</b>											
Salaries	593	623	654	687	721	757	795	835	877	921	967
Administration	31	32	34	36	37	39	41	43	45	48	50
Utilities	222	233	245	257	270	283	297	312	328	344	361
Training	62	65	68	71	75	79	83	87	91	96	100
<b>Total</b>											
<b>Expenditures</b>	<b>908</b>	<b>953</b>	<b>1,001</b>	<b>1,051</b>	<b>1,103</b>	<b>1,158</b>	<b>1,216</b>	<b>1,277</b>	<b>1,341</b>	<b>1,408</b>	<b>1,479</b>
<b>Surplus</b>	<b>18</b>	<b>28</b>	<b>40</b>	<b>52</b>	<b>66</b>	<b>81</b>	<b>97</b>	<b>115</b>	<b>135</b>	<b>156</b>	<b>180</b>
<b>Maintenance</b>											
Chom Ong Road					64.8	64.8	64.8	64.8	810.0	64.8	64.8
<b>Total</b>					<b>64.8</b>	<b>64.8</b>	<b>64.8</b>	<b>64.8</b>	<b>810.0</b>	<b>64.8</b>	<b>64.8</b>
<b>Surplus</b>					<b>1</b>	<b>16</b>	<b>32</b>	<b>50</b>	<b>(675)</b>	<b>91</b>	<b>115</b>

( ) = negative, FY = fiscal year

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

6. **Khammouane Department of Public Works and Transport.** The historical income and expenditure statement provided shows that the annual budget of the department has been increasing steadily, with a small yearly surplus. Assuming that revenue increases by 6% annually and expenditure increases by 5%, Khammouane DPWT will have sufficient surplus funds to cover the routine and periodic maintenance requirements of the upgraded road to Tham Xang cave. The projected income and expenditure for Khammouane DPWT is in Table 2.

**Table 2: Khammouane Department of Public Works and Transport Income and Expenditure (KN million)**

Item	Fiscal Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Income</b>	3,889	4,123	4,370	4,632	4,910	5,205	5,517	5,848	6,199	6,571	6,965
<b>Expenditure</b>											
Salaries	2,023	2,124	2,231	2,342	2,459	2,582	2,711	2,847	2,989	3,139	3,295
Administration	1,388	1,457	1,530	1,606	1,687	1,771	1,859	1,952	2,050	2,153	2,260
Utilities	318	333	350	368	386	405	426	447	469	493	517
Training	88	93	97	102	107	113	118	124	130	137	144
<b>Total Expenditures</b>	<b>3,817</b>	<b>4,007</b>	<b>4,208</b>	<b>4,418</b>	<b>4,639</b>	<b>4,871</b>	<b>5,114</b>	<b>5,370</b>	<b>5,639</b>	<b>5,921</b>	<b>6,217</b>
<b>Surplus</b>	<b>72</b>	<b>116</b>	<b>163</b>	<b>214</b>	<b>271</b>	<b>334</b>	<b>403</b>	<b>478</b>	<b>561</b>	<b>651</b>	<b>749</b>
<b>Maintenance</b>											
Ban Tham–Xieng Vene Road					4.8	4.8	4.8	4.8	60.0	4.8	4.8
Stupa Compound Internal Roads					2.4	2.4	2.4	2.4	30.0	2.4	2.4
<b>Total Maintenance</b>					<b>7.2</b>	<b>7.2</b>	<b>7.2</b>	<b>7.2</b>	<b>90.0</b>	<b>7.2</b>	<b>7.2</b>
<b>Surplus</b>					<b>264</b>	<b>327</b>	<b>396</b>	<b>471</b>	<b>471</b>	<b>643</b>	<b>742</b>

FY = fiscal year.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

7. **Luangprabang Department of Public Works and Transport.** The historical income and expenditure statement provided shows that the annual budget of DPWT has increased steadily with a moderate yearly surplus. Assuming revenue and expenditures increase by 5% annually, Luangprabang DPWT will have sufficient surplus funds for the routine and periodic maintenance requirements of the upgraded road, piers, and footpaths in Pak Ou and Chompet district. The projected income and expenditure for Luangprabang DPWT is in Table 3.

**Table 3: Luangprabang Department of Public Works and Transport Income and Expenditure (KN million)**

Item	Fiscal Year										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Income</b>	1,363	1,431	1,503	1,578	1,657	1,740	1,827	1,918	2,014	2,114	2,220
<b>Expenditure</b>											
Salaries	637	669	702	737	774	813	853	896	941	988	1,037
Administration	52	55	57	60	63	66	70	73	77	81	85
Utilities	374	393	412	433	454	477	501	526	552	580	609
Training	104	109	115	121	127	133	140	147	154	162	170
<b>Total Expenditures</b>	<b>1,167</b>	<b>1,225</b>	<b>1,286</b>	<b>1,351</b>	<b>1,418</b>	<b>1,489</b>	<b>1,564</b>	<b>1,642</b>	<b>1,724</b>	<b>1,810</b>	<b>1,901</b>
<b>Surplus</b>	<b>196</b>	<b>206</b>	<b>216</b>	<b>227</b>	<b>238</b>	<b>250</b>	<b>263</b>	<b>276</b>	<b>290</b>	<b>304</b>	<b>319</b>
<b>Maintenance</b>											
Ban Xang Hai–Pak Ou Access Road					12.0	12.0	12.0	12.0	150.0	12.0	12.0
Ban Xang Hai–Pak Ou Internal Road					1.1	1.1	1.1	1.1	1.1	1.1	1.1
Chompet Ferry Terminal & Pier					1.2	1.2	1.2	1.2	12.0	1.2	1.2
Chompet Internal Road					1.9	1.9	1.9	1.9	1.9	1.9	1.9
<b>Total Maintenance</b>					<b>16.2</b>	<b>16.2</b>	<b>16.2</b>	<b>16.2</b>	<b>165.0</b>	<b>16.2</b>	<b>16.2</b>
<b>Surplus</b>					<b>222</b>	<b>234</b>	<b>247</b>	<b>260</b>	<b>125</b>	<b>288</b>	<b>303</b>

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.