

## SUSTAINABILITY ANALYSIS FOR TOURISM INFRASTRUCTURE

### A. Introduction

1. The Community-Based Tourism COVID-19 Recovery Project will support recovery from the impacts of the coronavirus disease (COVID-19) pandemic in (i) Techo Thamacheat village in Choam Khsant district, Preah Vihear province and (ii) Prek Taphor village in Angkor Borei district, Takeo province through tourism development to improve livelihood opportunities and household income. The two villages are close to the significant heritage sites of Sacred Site of Temple of Preah Vihear and Phnom Da Temple.

2. In 2019, the Sacred Site of Temple of Preah Vihear drew about 148,000 visitors (85% local, 15% foreign) to Choam Khsant district, and the Phnom Da Temple drew about 32,000 visitors (96% local, 4% foreign) to the Angkor Borei district. In both sites, foreign visitors have dropped to almost nil since the COVID-19 pandemic. Domestic tourism remained strong in Choam Khsant district; however, in Angkor Borei district, domestic tourists in 2020 was only half the 2019 level.<sup>1</sup>

3. The project will (i) support high-value agriculture and (ii) construct tourism infrastructure, including two tourist centers (with car parks, restrooms, restaurants, and souvenir outlets), walking tracks, and small pier. In particular, the waterfront two tourist centers will serve as anchors, to showcase and offer new tourist activities (such as dining, community tours, boat rentals, crafts and souvenir, and homestay) to retain the already-existing tourists at nearby heritage sties. Financial viability of the selected high-value agricultural livelihoods is presented in separate documents.<sup>2</sup> This report presents an assessment on whether the tourism infrastructure can generate sufficient revenue for the community-based tourism (CBT) groups, as owner of the tourism infrastructure, to finance for the infrastructure's operation and maintenance (O&M) costs.

### B. Analysis

4. **Methodology.** This analysis compares the expected revenue with the expected O&M costs. When the ratio between revenue to O&M cost is greater than one, it means revenue exceed O&M costs. To be sure, this ratio should be sufficiently greater than one, if the CBT groups are to make any profits.

5. **Tourism Infrastructure Investment Cost.** Table 1 presents the estimated investment for the tourism infrastructure, which sum to about \$746,000 in Choam Khsant district, and about \$321,000 in Angkor Borei district.

**Table 1: Estimated Tourism Infrastructure Investment Cost**

Civil Work Subprojects	(\$)
Choam Khsant district tourist center	446,000
Other tourism infrastructure in Choam Khsant district	300,000
Angkor Borei district Tourist Center	121,000
Other tourism infrastructure in Angkor Borei district	200,000

Source: Asian Development Bank estimates

<sup>1</sup> In 2020, the number of tourists for Choam Khsant district was 119,617 (96% local, 4% foreign) and for Angkor Borei district, 16,936 (99% local, 1% foreign).

<sup>2</sup> Financial Analysis for High-Value Agriculture Livelihoods for Angkor Borei; and Financial Analysis for High-Value Agriculture Livelihoods for Preah Vihear (both accessible from the list of linked documents in Appendix 2 of the grant assistance report).

6. **Tourism Revenue.** This analysis assumes a conservative scenario, in which only 30% of the already-existing tourists will be drawn to the two project villages. Using the 2019 tourist figures as baseline would translate to about 44,500 tourists visiting Techo Thamacheat village in Choam Khsant district, and about 9,500 tourists visiting Prek Taphor village in Angkor Borei district (Column C of Table 2). Assuming that each visitor will spend \$7 on average, the annual tourist revenue in Techo Thamacheat village is thus about \$310,000, and that in Prek Taphor village is about \$67,000.

7. **O&M Costs.** Annual infrastructure maintenance cost is estimated to be 5% of capital investment, which translate to about \$37,000 and \$16,000 respectively. Infrastructure operating costs is estimated to be about 20% of tourist revenue, which translate to about \$62,000 and \$13,000. Hence, the total O&M costs in Techo Thamacheat village is about \$99,000, and that in Prek Taphor village is about \$29,000.

8. For both project villages, the ratio between tourist revenue and O&M costs is sufficiently greater than one (Column I of Table 2), indicating that the CBT groups can generate sufficient revenue to pay for O&M costs. Moreover, Table 3 indicates that the CBT groups' profit, that is, revenue net of O&M costs and expenditures accrued during the production of goods and services, is about \$124,000 and \$27,000. The CBT groups will have a financial incentive to keep the infrastructure in good condition.

**Table 2: Ratio Between Community-Based Tourism Revenue to O&M Costs**

District	2019 Tourist count <sup>a</sup> (A)	Retention rate (%) (B)	Tourist in project villages (C) = A*B	Average Spending (\$/visitor) (D)	Gross revenue (\$/yr) (E) = C*D	Main. Cost <sup>b</sup> (\$/yr) (F)	Operating cost <sup>c</sup> (\$/yr) (G)	Total O&M costs (\$/yr) (H) = F+G	Ratio (I) = E/H
<b>Choam Khsant</b>	148,000	30%	44,400	7	310,800	37,294	62,160	99,454	3.13
<b>Angkor Borei</b>	31,700	30%	9,510	7	66,570	16,050	13,314	29,364	2.27

Main = maintenance, O&M = operations and maintenance.

<sup>a</sup> Assume no growth in tourists.

<sup>b</sup> 5% of total investment as presented Table 1.

<sup>c</sup> 20% of gross revenue.

Source: Asian Development Bank estimates.

**Table 3: Community-Based Tourism Groups Profit**

District	Gross revenue (\$/yr)	Total O&M cost (\$/yr)	Cost of good/services sold <sup>a</sup>	Profit (\$/yr)
<b>Choam Khsant</b>	310,800	62,160	124,320	124,320
<b>Angkor Borei</b>	66,570	13,314	26,628	26,628

O&M = operations and maintenance.

<sup>a</sup> 40% of gross revenue.

Source: Asian Development Bank estimates.

9. **Assurances.** In the initial years of establishment, the CBT groups are unlikely to acquire all necessary skills, including CBT operations, financial management, marketing and promotion, required for them to operate all tourism infrastructure. Hence, the project will recruit a firm to support CBT operation and provide on-the-job training. The CBT groups will be encouraged to sublease some of the facilities, such as restaurants, to local businesses, partly to reduce the fledging CBT groups' burdens and partly to raise some rental revenue for infrastructure O&M. Once the CBT groups gain sufficient experience by project completion, they can operate the facilities themselves. In the long run, sustainability of the CBT groups and the tourism infrastructure will be secured through revenues from rentals, tour and water, transport services, and recreational equipment hire.

10. Lastly, since the tourism infrastructure is on government land, the CBT groups will enter into a renewable land use agreement to be signed between the CBT groups and local

government. While the agreement will help the CBT groups to retain user right of the land and the infrastructure after project completion, it also stipulates that, as a condition for agreement renewal, the CBT groups must maintain the infrastructure in good condition. Non-compliance of this condition constitutes sufficient ground for the agreement to be revoked, and for the local government to assume operations of the tourism infrastructure.

11. In summary, (i) the CBT groups will generate sufficient revenue to cover O&M costs, based on a conservative scenario on the tourist number; (ii) additional operational support will be provided to the fledging CBT groups to ease their burdens; and (iii) the risk of having the land use agreement revoked will encourage the CBT groups to be attentive to infrastructure maintenance.