



PROGRAM & TECHNICAL DOCUMENT

Community Forest Stewards & Eco-Tourism Trail

Converting Legacy Logging Roads into a Community-Led Hiking Trail Network, Phnom Samkos Wildlife Sanctuary

Prepared for

GLOBAL STUDENT OUTREACH

Food Security • Sustainable Livelihoods • Forest & Wildlife Protection • Climate Resilience — Rural Cambodia

Document Rev. 1.0 — 2026

Impact to Date: 403 Hikers | 3,600 Hectares Under Trail-Network Coverage | Camping Standard: No-Trace

1. Executive Summary

Global Student Outreach (GSO) is developing a community-led hiking trail network through the Phnom Samkos Wildlife Sanctuary, converting existing logging roads into way-marked, no-trace hiking and trekking routes staffed and monitored by locally trained Community Forest Stewards. As of 2026, the program has brought 403 hikers into 3,600 hectares of active trail-network coverage under a strict no-trace camping standard.

The program addresses a gap in Cambodia's conservation model: eco-tourism in the Cardamom Mountains has historically targeted foreign visitors, leaving a large population of educated, outdoor-interested urban Cambodians disconnected from the forests being lost around them. GSO's approach inverts the usual conservation-tourism relationship — rather than building new infrastructure through untouched forest, the program converts logging roads that already cut into the sanctuary into hiking trails, turning a symbol of extraction into a tool for visibility, awareness, and community ownership.

This document sets out the program's rationale, the trail network's technical development approach (logging-road-to-trail conversion, waymarking, no-trace camping standards), the Community Forest Stewards role and training model, beneficiary targeting criteria, visitor impact metrics, safety and risk management, and the conservation logic connecting hiker visibility to reduced illegal logging pressure.

2. Program Overview

Parameter	Detail
Location	Phnom Samkos Wildlife Sanctuary, Cardamom Mountains
Reporting year	2026
Impact	403 hikers; 3,600 hectares under active trail-network coverage
Camping standard	No-trace
Program components	(1) Trail network — logging roads converted to way-marked hiking trails; (2) Community Forest Stewards — locally trained trail guides, monitors, and stewards
Core model	Self-guided hikes and treks that bring direct environmental awareness and forest access to Cambodian hikers, paired with community-led trail stewardship and enforcement

3. The Problem — Why This Program Exists

- **Eco-tourism has targeted the wrong audience:** current eco-tourism in the Cardamoms is built around foreign visitors — but conservation cannot depend on outsiders to care about a forest they will visit once and leave.
- **Urban Cambodians are a disconnected but reachable audience:** a large population of educated urban Cambodians already identify as outdoor enthusiasts, but remain disconnected from the forests being lost, largely because no infrastructure exists to bring them there.
- **Logging trails already exist — the question is what they become:** logging roads already cut deep into the sanctuary. Left alone, they remain access routes for further extraction. Converted to hiking trails, they become access routes for visibility and awareness instead.
- **Forest protection needs a domestic constituency:** forest protection cannot remain an exclusively foreign-championed issue. A conservation movement with no domestic Cambodian constituency has no political durability once outside funding or attention moves elsewhere — the solution has to come from within.

GSO's operating premise is that conservation and tourism only work when they are in balance with each other. The trail network is designed around that balance directly: responsible tourism, a strict no-trace camping standard, enforced trail guidelines, and community-led stewardship. High visibility protects the forest from extraction pressure; awareness protects the community's long-term stake in keeping it standing.

4. Program Model — How It Works

GSO develops self-guided hiking and trekking routes through the Phnom Samkos Wildlife Sanctuary by converting existing logging roads — rather than cutting new paths through intact forest — into way-marked trails. When Cambodian hikers can walk these trails and experience firsthand what is at stake, the case for protecting the forest stops being an abstraction communicated by an outside organization and becomes something the hiker has a personal stake in.

Two components run in parallel: the physical trail network (Section 5) and the Community Forest Stewards who guide, monitor, and enforce standards on it (Section 7). Neither functions well without the other — trails without stewardship degrade into exactly the kind of unmanaged access route the program is trying to replace, and stewardship without a trail network to protect has no defined area of responsibility.

5. Trail Network Development — Technical Approach

5.1 Logging-Road-to-Trail Conversion

Converting a legacy logging road into a hiking trail is not a matter of simply opening it to foot traffic. GSO's conversion process addresses the specific ways a road built for vehicle extraction differs from a trail built for sustainable foot traffic:

Conversion Step	Purpose
Route assessment & erosion audit	Identify sections of the former logging road already showing erosion, washout, or unstable grade before opening to hiker traffic
Narrowing & re-vegetation of road shoulders	A former vehicle road is wider than a sustainable hiking trail needs to be; narrowing the maintained tread and allowing shoulders to re-vegetate reduces the trail's long-term footprint
Drainage and water-bar installation	Logging roads are frequently cut without sustained drainage planning; water bars and cross-drainage are added at regular intervals to prevent the trail becoming a de facto stream channel in the wet season
Waymarking & signage	Consistent trail markers, distance signage, and junction markers at every logging-road branch point, since unmarked branch junctions are the leading cause of hikers straying off the designated route onto unmanaged forest
Trailhead development	Formal trailhead with orientation signage, no-trace camping rules, and permit/registration point, sited at the logging road's original access point where possible
Closure of non-network branches	Logging road branches not incorporated into the designated trail network are physically marked as closed and monitored by Community Forest Stewards, rather than left as ambiguous, unmanaged access

5.2 Trail Classification

Trail Type	Basis	Typical Use
Self-guided day trail	Fully waymarked former logging road segment, clear grade and drainage	Single-day hikers, largest share of current visitor traffic

Trail Type	Basis	Typical Use
Multi-day trek route	Connected logging-road segments plus new connector trail sections linking to designated no-trace campsites	Overnight and multi-day trekking groups
Steward-guided route	Sections requiring closer monitoring — sensitive habitat, less-established trail, or higher wildlife-encounter likelihood	Guided groups accompanied by a trained Community Forest Steward

6. No-Trace Camping Standard

GSO's no-trace standard adapts internationally recognized low-impact backcountry travel and camping principles to the Phnom Samkos context, applied through both trailhead orientation and active Community Forest Steward monitoring rather than signage alone.

Principle	Application at Phnom Samkos
Plan ahead	Hikers register at the trailhead; group size and route are confirmed against current trail and weather conditions before departure
Stay on durable, designated surfaces	Hikers and campers are required to stay on the waymarked trail and use only designated no-trace campsites — walking single-file even on wet ground to avoid trail widening
Pack it in, pack it out	All waste, including food waste, is carried out; no waste is buried or left at campsites
Proper waste disposal where pack-out isn't practical	Human waste is disposed of well away from water sources and the trail corridor, following standard backcountry sanitation practice
Leave what you find	No cutting, carving, or removal of plants, wildlife, or forest materials — including from the former logging-road corridor itself, where regrowth is actively encouraged
Minimize fire impact	Fires restricted to designated sites only, fully extinguished, consistent with dry-season fire risk in the sanctuary
Respect wildlife	Maintain distance from wildlife encounters; no feeding; avoid sensitive habitat areas flagged by Community Forest Stewards
Be considerate of other visitors	Group size limits and noise guidelines maintain both the visitor experience and reduce wildlife disturbance

These principles are adapted from internationally recognized low-impact backcountry ethics rather than reproduced from any single trademarked program, and are taught directly by Community Forest Stewards at trailhead orientation rather than relying on signage alone.

7. Community Forest Stewards — Role & Training

Community Forest Stewards are locally trained Cambodians responsible for trail guiding, no-trace standard enforcement, wildlife and trail-condition monitoring, and trailhead operations. The role is deliberately structured as both a conservation function and a livelihood opportunity, prioritized for the same vulnerable-household profile GSO targets across its other livelihood programs (Section 9).

7.1 Core Responsibilities

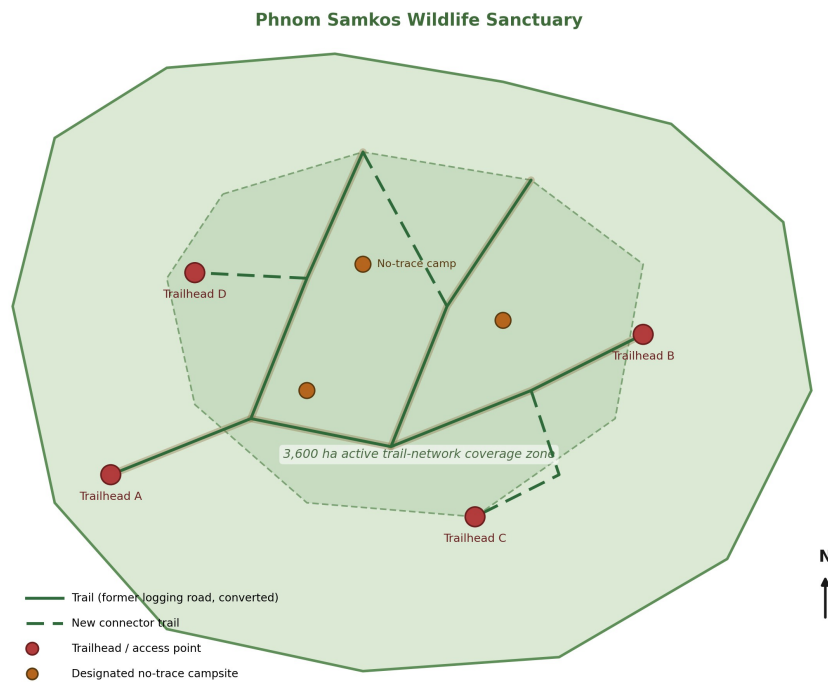
- Trailhead registration, orientation briefing, and no-trace standard training for incoming hikers
- Guiding on steward-guided route segments (Section 5.2)
- Routine trail condition monitoring — erosion, drainage, waymarking integrity, storm damage
- Monitoring for encroachment or unauthorized logging activity on or near the trail corridor

- Wildlife sighting logs, contributing to the sanctuary's broader monitoring picture alongside GSO's other forest-crime and wildlife monitoring work
- First-response coordination for hiker incidents (Section 11)

7.2 Training Curriculum

Module	Content
No-trace standards & enforcement	Section 6 principles, how to brief hikers, how to correct in-field violations
Trail guiding & navigation	Route knowledge, pace management for mixed-fitness hiking groups, communication basics for foreign or non-local hikers where relevant
Wildlife awareness & encounter protocol	Species likely to be encountered, safe distance practice, incident reporting
First aid & emergency response	Basic backcountry first aid, evacuation coordination, communication equipment use
Trail maintenance basics	Drainage clearing, waymark repair, minor erosion control — enabling stewards to handle routine upkeep without waiting for a separate maintenance crew
Forest-crime monitoring & reporting	Recognizing and reporting signs of illegal logging or poaching activity to the appropriate sanctuary ranger authority

8. Trail Network — Illustrative Map



The current network converts several former logging-road corridors into the core trail spine, linked by newly cut low-impact connector trails to designated no-trace campsites. Trailheads are sited at the logging roads' original vehicle access points, minimizing new ground disturbance. Non-network logging-road branches remain marked closed and are monitored, rather than left as unmanaged access into the sanctuary interior.

Trail names, exact distances, elevation profiles, and GPS-verified coordinates are not yet included in this document — see Section 15 for the specific fields GSO should supply to finalize this map for the permanent program record.

9. Who Benefits

The program benefits two distinct groups: the broader population of urban and rural Cambodians who gain direct forest access and environmental awareness through hiking, and the specific households who gain livelihood opportunities through Community Forest Steward employment and training.

Priority Tag	Application to This Program
Women Priority	Community Forest Steward recruitment prioritizes the same vulnerable-household profile as GSO's other livelihood programs, including women supporting dependents with limited other income options
Environment	Trail-based visibility and monitoring directly support forest and wildlife protection across the 3,600-hectare coverage zone
Conservation	Converts an existing extraction-era access route (logging road) into an awareness and protection asset, rather than requiring new infrastructure through intact forest

9.1 Broader Public Impact

Urban and rural Cambodians gain direct forest access and environmental awareness through the hiking network — 403 hikers reached in 2026 across 3,600 hectares of active trail-network coverage.

Conservation cannot remain a foreign-championed issue; bringing Cambodians themselves onto these trails is how the case for protecting the sanctuary becomes domestically owned rather than externally imposed.

9.2 Community Forest Steward Priority Criteria

As with GSO's other livelihood programs, Community Forest Steward roles are assessed and prioritized as GSO becomes aware of need, using UN Sustainable Development Goal (SDG) criteria:

- Single mothers
- Elderly women caring for grandchildren abandoned with them
- Families most vulnerable to the economic pressure that drives forest encroachment

10. Visitor & Hiker Impact

Metric	2026 Figure	Notes
Total hikers	403	First full reporting year with formal trailhead registration
Trail-network coverage	3,600 hectares	Area under active trail-network monitoring and no-trace camping standard
Camping standard compliance	No-trace (enforced)	Enforced through Community Forest Steward trailhead orientation and in-field monitoring, not signage alone

Growth in hiker numbers is treated as a leading indicator of the program's core hypothesis — that a domestic, Cambodian-facing audience for forest access exists and will use it once safe, way-marked infrastructure is available — rather than as an end in itself. Visitor growth should be tracked alongside no-trace compliance and trail-condition monitoring data to confirm growth is not degrading the trail corridor faster than stewardship can manage.

11. Safety & Risk Management

Risk	Mitigation
Wildlife encounters	Steward-led orientation briefing on encounter protocol; steward-guided routes for higher-encounter-likelihood segments; wildlife sighting logs inform route classification over time
Hikers straying off-trail at unmarked logging-road junctions	Consistent waymarking and physically marked closure of non-network branches (Section 5.1)
Weather / flash flooding on former logging-road grades	Drainage and water-bar installation during conversion (Section 5.1); trailhead registration includes current condition check before departure
Medical incidents on multi-day treks	Steward first-aid training and evacuation coordination protocol (Section 7.2)
Fire risk in dry season	Fires restricted to designated sites; steward monitoring; coordination with sanctuary ranger fire-watch schedules
Overuse / trail degradation from visitor growth	Group size limits, trail-condition monitoring, and steward capacity are tracked alongside hiker growth (Section 10) rather than treating growth as unconditionally positive

12. Conservation & Ecosystem Alignment

- **Visibility as protection:** regular, monitored foot traffic and a resident Community Forest Steward presence on former logging-road corridors makes unauthorized re-entry for illegal logging or poaching harder to conduct undetected than on an unmonitored road.
- **No new forest clearance:** the trail network is built primarily from existing logging-road corridors rather than cutting new routes through intact forest; new connector trail sections are kept to the minimum needed to link existing corridors to designated campsites.
- **Domestic conservation constituency:** building a Cambodian hiking public with firsthand experience of the sanctuary is treated as a conservation outcome in its own right, not only a tourism outcome — see Section 3.
- **Integration with existing forest-crime monitoring:** Community Forest Steward wildlife and encroachment observations (Section 7.1) feed into the same monitoring picture used by GSO's broader anti-poaching and forest-crime work in the Phnom Samkos area.
- **Coordination with sanctuary authorities:** trail development, closures, and fire-season restrictions are coordinated with Ministry of Environment ranger staff responsible for the sanctuary.

13. Program Economics & Sustainability

A specific fee structure, permit pricing, and steward compensation model were not included in the program material provided for this document. The following framework is offered as a starting point for GSO to confirm or revise:

Revenue / Cost Element	Status
Trailhead registration / permit fee	Not yet specified — common in comparable community-led trail programs as a modest per-hiker fee supporting steward wages and trail maintenance
Community Forest Steward compensation	Not yet specified — livelihood/wage structure should be confirmed and documented
Trail maintenance & signage costs	Not yet specified — ongoing cost separate from initial conversion

Revenue / Cost Element	Status
	cost (Section 5.1)
Multi-day trek / guided route premium	Not yet specified — steward-guided routes (Section 5.2) may justify a differentiated fee from self-guided day trails

This section should be completed with GSO's actual fee and compensation structure before this document is treated as a finalized permanent program record.

14. Implementation & Growth Plan

Phase	Focus
Completed — Initial network development	Logging-road assessment and conversion of the core trail spine; trailhead development; first Community Forest Steward cohort trained; 403 hikers reached in 2026 across 3,600 ha
Near-term — Consolidation	Formalize fee/compensation structure (Section 13); complete trail naming, distance, and GPS documentation (Section 15); expand steward cohort using SDG-prioritized selection criteria (Section 9.2)
Medium-term — Network expansion	Assess additional logging-road corridors for conversion; expand no-trace campsite network; evaluate steward-guided route classification against growing multi-day trek demand
Ongoing — Monitoring & adjustment	Track hiker growth against trail-condition and no-trace compliance data (Section 10); integrate steward wildlife/encroachment observations into sanctuary-wide monitoring (Section 12)

15. Revision & Contact

This document synthesizes the Community Forest Stewards & Eco-Tourism Trail program's reported impact, rationale, and operating model into GSO's standard technical document format (Rev. 1.0, 2026). The following fields were not included in the source material provided and should be added before this document is treated as a finalized permanent program record:

- Individual trail names, distances, elevation profiles, and GPS-verified coordinates
- Exact trailhead locations and access directions
- Community Forest Steward cohort size, names of participating villages, and compensation structure
- Trailhead registration / permit fee structure, if any
- Trail development photographs (referenced in source material but not provided for this document)
- Formal coordination agreement details with Ministry of Environment sanctuary ranger authority, if established

Global Student Outreach — Food Security, Sustainable Livelihoods, Forest & Wildlife Protection, and Climate Resilience in Rural Cambodia.