

March 2026

2025 Update: Cambodia marine project

Field partner: Marine Conservation Cambodia

Quick summary

- In 2025, 154 patrol trips were conducted, with 72% resulting in the direct interception of illegal activity. Patrols identified 281 illegal vessels.
- 817 Fisheries Production Structures (FPS) were installed, deterring illegal bottom trawling and providing a substrate for burgeoning marine life.
- A study to evaluate FPS effectiveness found that, compared with control sites, fish abundance was 6 times higher on FPS sites, the species diversity was significantly higher, and the FPS structures were allowing juveniles to thrive, aiding population recovery.
- Pioneer seagrass meadows were recorded at 208 FPS deployment sites, representing approximately 3,000 hectares of seagrass regrowth.

Your support was used for:

- Maintenance and fuel for the three boats used for FPS installation and marine patrolling
- Wages for operational staff (community project officer, boat captains, and reserve bosuns)
- Office costs on the mainland (the office serves as a coordination center for staff, volunteers, and visiting scientists)

Background

Founded in 2008, Marine Conservation Cambodia (MCC) is a community-based NGO dedicated to protecting Cambodia's marine ecosystems. Biome began its partnership with MCC in 2016. MCC was involved in the creation of Cambodia's first "marine fisheries management area" (MFMA, same as marine protected area) and was invited by government and local communities to collaborate on the development and management of Cambodia's second MFMA in Kep Province.

To safeguard seagrass meadows and nearshore habitats from illegal, unreported and unregulated fishing activities, MCC designed and deploys Fisheries Production Structures (FPS). These inexpensive structures, assembled underwater using concrete blocks and rope, entangle nets of illegal bottom trawlers in the shallow waters of Cambodia. They also act like coral reefs in supporting the rapid recruitment marine life. Biome's core support led to MCC achieving major funding from the Asia Development Bank, starting in 2025, to deploy Fisheries Protection Structures beyond the project area across Cambodia's marine waters.



Fisheries Production Structures are made of concrete blocks (each costing about \$5) and assembled underwater by divers. They deter illegal fishing and harbour marine life.

MCC also conducts long-term studies on seahorse populations and marine mammals, including Irrawaddy dolphins, dugongs, and Indo-pacific humpback dolphins.

MCC is supported by the Royal Government of Cambodia, and works in partnership with the Ministry of Agriculture, Forestry, and Fisheries, the Fisheries Administration, international development agencies, universities, and local communities.

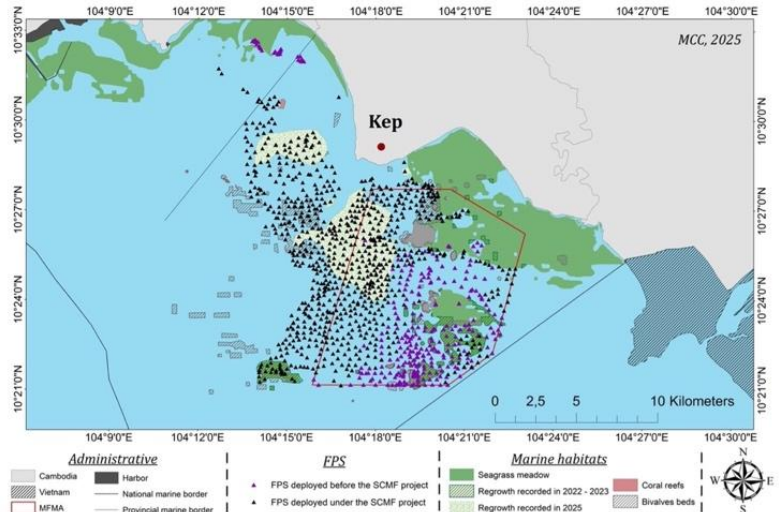
Results in 2025

Law enforcement and government advocacy

In 2025, 154 patrol trips were conducted (with 580 hours of active presence at sea). Overall, 72% of patrols resulted in the direct interception of illegal activity and 281 illegal vessels were identified, demonstrating effective strategic targeting.

Fisheries Production Structure (FPS) deployment and monitoring

A total of 817 FPSs were deployed, surpassing the first deployment goal of 500 FPSs. To evaluate their effectiveness, MCC conducted underwater surveys at selected FPS sites and nearby areas without FPS, which served as control sites. The 67 underwater visual surveys done in 2025 found that the fish abundance was 6 times higher on the FPS sites compared with control sites, that the species diversity was very significantly higher, and that the structures were not only attracting neighboring fishes but also allowing juveniles to thrive and thus assisting population recovery.



Pioneer seagrass meadows were recorded on 208 FPS deployment sites, representing approximately 3,000 hectares of seagrass regrowth, mostly around Koh Tonsai area. Training and workshops were provided for 24 volunteers and staff members in seagrass and seahorse identification, freediving (APNEA), and survey protocols. This is important for long-term seasonality and monitoring research.

Marine Mammal Project

Encounter rates for Irrawaddy dolphins during boat-based surveys in 2025 were mixed, showing no clear trend overall. The 2025 aerial surveys yielded a dugong encounter rate of 0.194 groups/hour and 0.485 individuals/hour. Several opportunistic sightings were also made suggesting a continued presence of dugongs within the Kep Archipelago. Dugongs remain rare in the region.

Evaluation of project outcomes

Our project with MCC is continuing to show strong results on a modest budget. Local fishermen report higher catches and more frequent sightings of endangered species such as dugongs and Irrawaddy dolphins compared with a decade ago. And monitoring data is documenting increases in biodiversity and biomass.

MCC's seagrass mapping and monitoring show increasing seagrass coverage in the Kep Archipelago, with regrowth areas especially recorded around the deployed FPS units. This is significant because seagrass meadows contribute to blue-carbon sequestration, coastal protection, and broader biodiversity recovery.



Seagrass monitoring has demonstrated recovery of seagrass in protected marine areas.

Looking ahead

Biome has budgeted US\$116,640 for this project in 2026. Our support is applied to personnel and operational costs for field work. The innovative Fisheries Production Structures that MCC developed have proven so effective that funding from the Asian Development Bank has been awarded to MCC to implement the devices across Cambodia's marine waters. Core support from Biome remains needed.

Finally...

The following pages show annotated images of project activities.

Thank you for your support for this project! Please let us know if you have questions or would like to discuss this project or receive further information.

Biome's Project Lead for this project:

Andre Boraks, PhD, Director of Programs & Data, andre@biomeconservation.org