

SOURCING MANGROVE CARBON PROJECTS IN SOUTHEAST ASIA



Client: Blue Forest, 2023



Sectors: Mangroves, Climate Change



Service: Carbon Markets

Mangrove forests are of considerable global importance, safeguarding coastal biodiversity, storing carbon, protecting coastlines, and the flow of mangrove products including fisheries, timber, and fuelwood. Largely due to their waterlogged soil environment, mangroves are estimated to hold up to four times the amount of carbon as some other forested ecosystems, such as temperate and boreal forests¹. This has made mangroves of high interest to carbon project developers.

Symmetry has considerable experience of working on mangrove projects in Southeast Asia, and was hired by Blue Forests, to assess the potential for blue carbon projects. Southeast Asia contains the most extensive area of mangroves in the world.

We undertook an assessment of potential carbon projects for reduced emissions from curbing deforestation and forest degradation, as well as exploring opportunities for mangrove rehabilitation. While contiguous mangrove areas were limited for a REDD+ project, rehabilitation of degraded mangrove areas offers considerable possibilities. Following decades of unsustainable shrimp production, many shrimp farms are now unproductive or increasingly abandoned. Indonesia and Vietnam have extensive areas which are heavily degraded and abandoned. There are opportunities to work with the shrimp sector on more sustainable supply chains and mangrove restoration, while working with local stakeholders on integrated mangrove-shrimp production. There are also potential areas for local community mangrove planting schemes. Carbon credits could provide the necessary incentive to rehabilitate these highly degraded coastal areas.

¹ Donato, D., Kauffman, J., Murdiyarso, D. et al. Mangroves among the most carbon-rich forests in the tropics. *Nature Geosci* 4, 293–297 (2011). <https://doi.org/10.1038/ngeo1123>