<u>Using coral farming for restoration of areas affected by the</u> <u>MV Wakashio grounding</u>



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Report

Brief:

Nestled in the azure waters of the Indian Ocean lies the island nation of Mauritius, renowned for its stunning natural beauty and rich marine biodiversity. The marine ecosystems surrounding Mauritius are vital not only to the nation's economy but also to the global ecological balance. However, like many marine environments worldwide, Mauritius's marine ecosystems face significant degradation, exacerbated by the impacts of climate change. Mauritius boasts a diverse array of marine habitats, including coral reefs, seagrass beds, mangrove forests, and open ocean waters. These ecosystems support a wealth of marine life, from colorful coral species to iconic marine mammals like dolphins and whales. The health of these ecosystems is intricately linked to the well-being of both the local communities that depend on them for livelihoods and the broader marine environment. Despite their importance, Mauritius's marine ecosystems have suffered from various forms of degradation. Pollution from land-based sources, including agricultural runoff, untreated sewage, and marine litter, poses a significant threat to water quality and marine life. Overfishing and destructive fishing practices further exacerbate the decline of fish stocks and disrupt delicate marine food webs. Additionally, coastal development and habitat destruction have led to the loss of critical marine habitats, such as coral reefs and mangroves.

In the restoration of areas affected by the MV *Wakashio* grounding, a significant component involved the transplantation of large, mature coral colonies to re-establish reef frameworks and enhance ecological recovery. A total of 32 well-grown colonies from four key species— *Acropora selago, Acropora muricata, Millepora* sp., and *Pocillopora damicornis*—were successfully relocated from Pointe aux Feuilles to Pointe D'Esny. These species were selected for their structural complexity and ecological significance, as they contribute to reef resilience, habitat provision, and biodiversity.

The transplanted colonies were securely positioned on spider frames, ensuring stability and optimal environmental conditions for survival and growth. Spider frames, known for their lightweight yet durable design, provided a robust foundation for the corals, facilitating their integration into the new site. Divers meticulously attached the colonies to the frames using marine-safe adhesives and ties, minimizing stress to the corals and maximizing their likelihood of adaptation.

Sensitizations:

- 1. On-Site Sensitization Programs
- 2. Engaging Educators and Families
- 3. Introducing Coral Reefs to Children
- 4. Outcomes and Long-Term Impact

Coral Farming (Transplantation)









