

Coral Reef Restoration in the Maldives

Preparing for the Future: Promoting Resilient Coral Reefs

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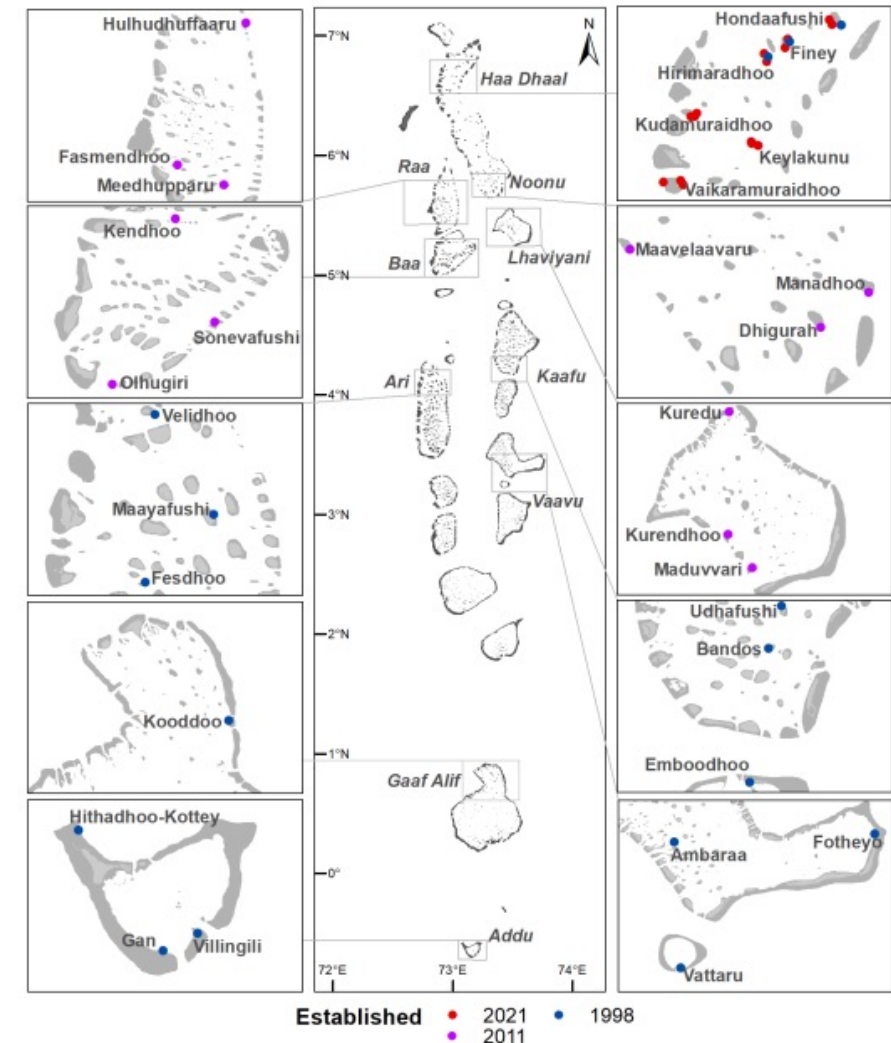
Maldives

- 26 natural coral atolls; 1192 islands
 - Population: 515,122 (2022)
- Estimated coral reef area: 2,691 – 4,510 km²
- Among world's 10 largest coral reef nations
- Main economic drivers
 - Tourism, Fisheries



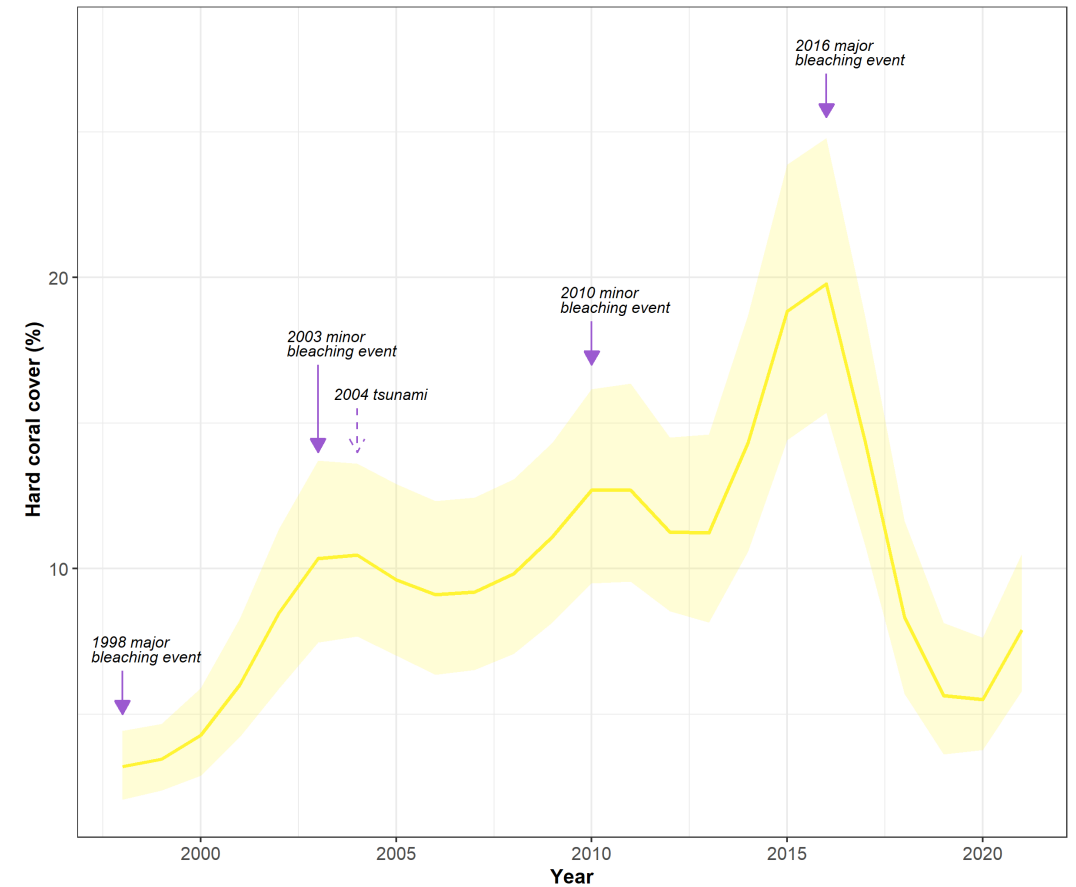
The National Coral Reef Monitoring Program

- One of the oldest reef monitoring programs globally (1998)
- Repetitive monitoring of permanent monitoring sites
 - 11 administrative atolls
 - 50+ permanent monitoring sites
 - 15 sites since 1998
- Collecting data to understand health and status of reef ecosystems
 - Benthic, fish, inverts, diversity
 - Recruitment, diseases etc.



Coral reefs of Maldives

- 26 Natural atolls
 - 16 complex atolls
 - 5 oceanic faros
 - 4 oceanic platform reefs
- 248 coral species, 57 genera
- National coral cover
 - pre-1998 bleaching: 46.5%
 - Pre-2024 bleaching: <10%



Reef restoration in Maldives



Reef restoration in Maldives

- Passive approach in the past
 - Protected areas to allow for natural restoration
- Increasing numbers of resort reef restoration
 - No monitoring of spatial extent
 - Almost exclusively fragment-based restoration
 - Some experimental larval restoration



Reef restoration in Maldives

- Efforts to regulate restoration
 - Voluntary guideline published for monitoring fragment based restoration (2022)
 - Restoration formally regulated under the Project Permit Regulations (2020)
- Rasfari Restoration Project (EPA - 2023)
 - Large-scale restoration
 - Severely damaged reef in 2021
 - USD 10M settlement used for restoration
 - Building coral nurseries, monitoring



National coral reef restoration and rehabilitation program

- Spawning assessment surveys
 - Identifying peak spawning periods
 - Gravid colonies tagging and re-sampling
- Spawning periods identified – Male' Atoll
 - February – April
 - October - December



Reef restoration in Maldives

- Current policy is promoting cost effective technologies to scale up reef restoration
 - Two CORDAP funded projects in collaboration with Australian research partners
 - Developing techniques of larval based restoration
 - Engagement with restoration community
 - Local capacity building
 - Developing guidelines for determining restoration sites



Thank You!