

# Capacity Building in the Maldives-Lessons Learned for Emerging Nations

Aya Hesham, 12 October 2024

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The 31st Workshop on Space Technology for Socio-Economic Benefits: "Space Sustainability as a Game-Changer for Development" 11-13 October 2024 in Milan, Italy.

# Maldivian Corals In Space Initiative

## Project objectives

- Studying coral adaptation to harsh space environments.
- Applying findings to enhance coral health in deep space missions.
- Develop better future space practices.





# Capacity Building in the Maldives: Education is Key

Space Medicine-Sustainability Workshop 2024



# Capacity Building in the Maldives: Empowering Space Sustainability

SINC/ Space Security & Sustainability Workshop 2024





# Expanding the Module: The Maldives as a Benchmark for Global Capacity Building

## Space Sustainability Workshops



University of Sousse Workshop, Tunisia  
2024



Ain Shams University Workshops, Egypt  
(2021-2023)



A satellite view of Earth at night, showing the curvature of the planet and the glowing lights of cities and continents. The background is a deep black space.

# Best practices & Lessons learned

- Engaging Youth & Building Expertise
  - Immersive experiences and local infrastructure
- Economic & Scientific Advancements
  - Innovation and research opportunities creation
- Strengthening National Space Capabilities
  - Global partnerships and future readiness



# Recommendations

- Educate aspiring space professionals on environmental-effects of space activities is a plus.
- Develop environmental and human-centered space strategies.
- Prioritize environmental health & sustainability while implementing space practices.
- Leverage the unique marine environment for space-related research offer opportunities for space research and thus effective capacity building programs.



# Recommendations

- Develop programs that address direct needs (For example: combine ocean science with space applications).
- Implement adaptive learning frameworks through designing flexible curricula that can evolve with rapid advancements in space technology.
- Create space sustainability innovation hubs by establishing dedicated centers for developing sustainable space technologies.





# Thank You!

We appreciate your engagement with our presentation.

To continue the conversation or explore these ideas further, please reach out to us at [aya.heshams@hotmail.com](mailto:aya.heshams@hotmail.com).  
We look forward to connecting!