

#FORCORAL



The SHAMS Outlook Report

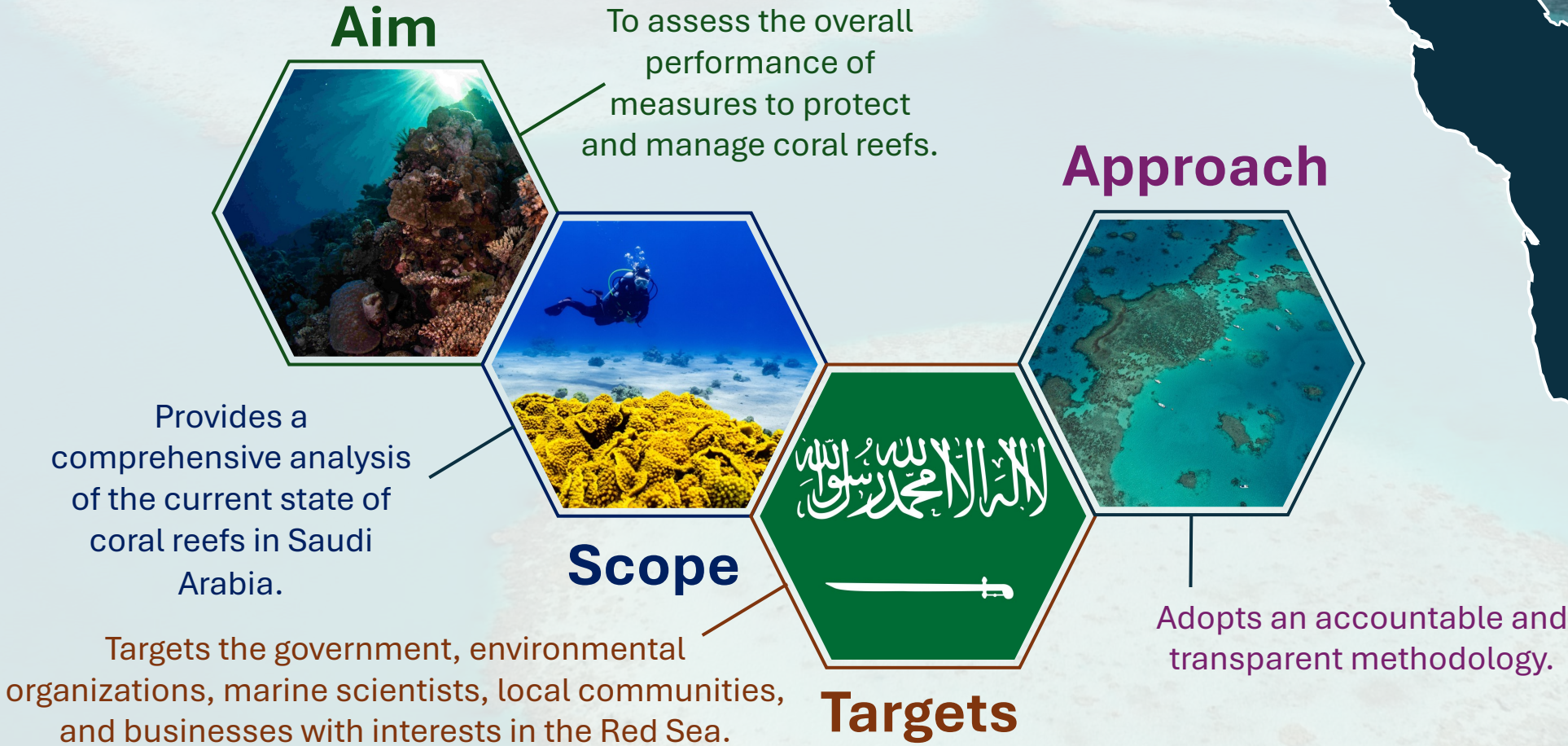
Coral Reefs in the Red Sea, Kingdom of Saudi Arabia

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Outlook report





SHAMS Outlook Report

Comprehensive Analysis

The report provides a detailed assessment of various aspects of coral reefs in Saudi Arabia.

Data-Driven Approach

The analysis is based on the best available information and utilizes a grading system developed by the Great Barrier Reef Marine Park Authority.

Key Areas of Focus

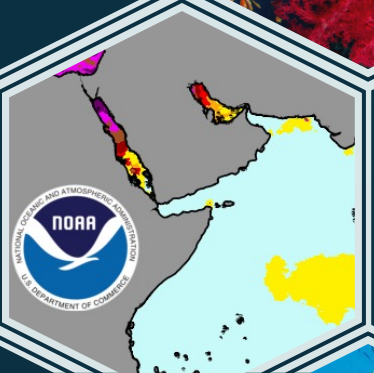
Ecology, status, trends, uses, threats, management, and future outlook.

Recommendations

Identifies data gaps, research priorities, monitoring needs, and conservation strategies.

Future-Oriented

Provides insights into the future of coral reefs in Saudi Arabia's Red Sea waters.



Chapter 2: Coral Reefs and Associated Ecosystems

- Coral reefs
- Mangroves
- Seagrasses
- Macroalgae

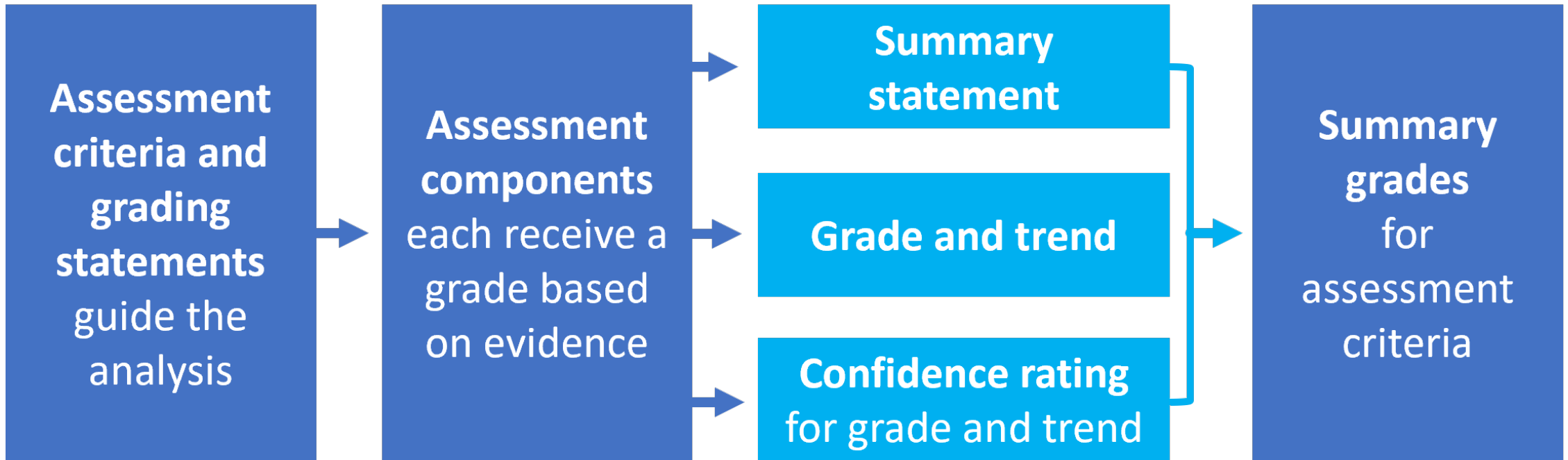
Chapter 3: Rare, Threatened, and Vulnerable Species

- Marine turtles
- Dugong
- Cetaceans
- Sharks and rays
- Teleost fish
- Seabirds

Chapter 4: Physical and Environmental



Evidence collection, analysis, synthesis and peer review



GRADES →

TRENDS →

← CRITERION

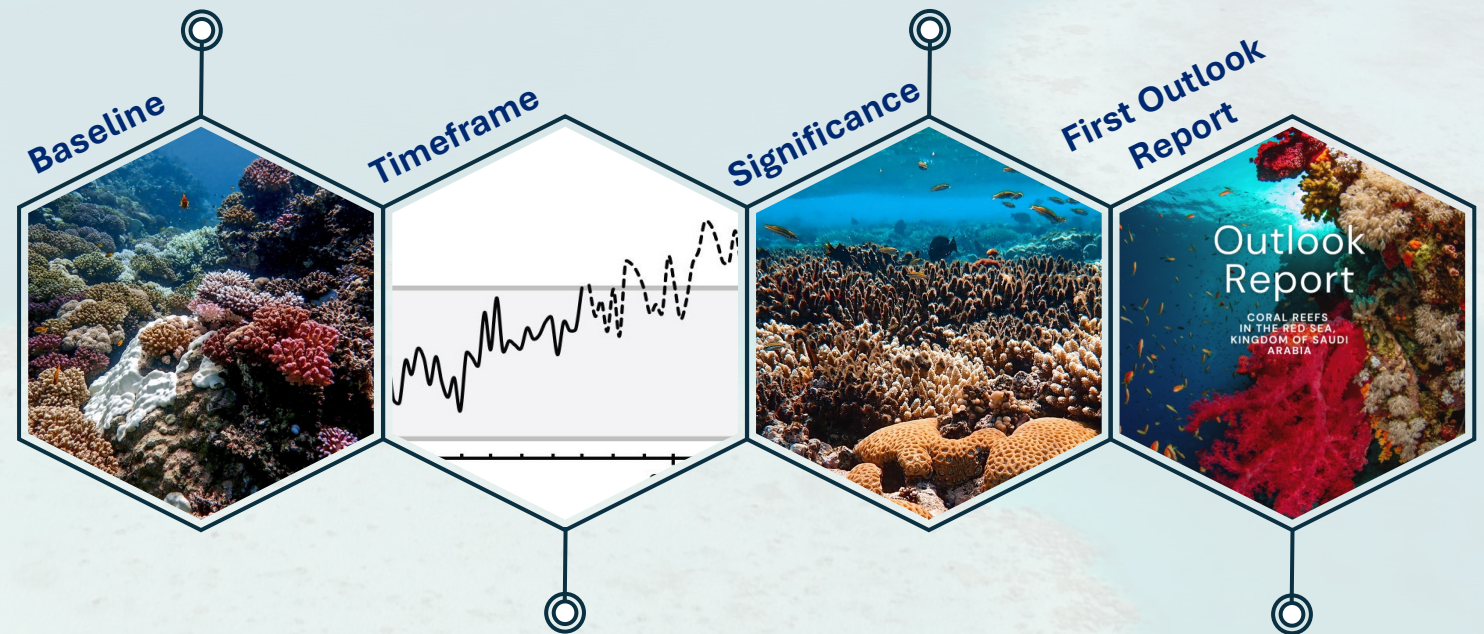
COMONENTS

| Confidence | | | Criterion and Component Remarks |
|---------------|-------|-------|---|
| Grade & Trend | Grade | Trend | |
| | | | Historic Marine Heritage: Most historic heritage assets are likely in poor condition and deteriorating. |
| | | | Ancient Archaeological Sites and Trade Routes: The majority of ancient sites including ports and shipwrecks are likely in poor or very poor condition and deteriorating. Ancient trade routes are probably intact, except near major developments. |
| | | | Ship and Airplane Wrecks: Many modern shipwrecks and the Catalina seaplane wreck are in poor condition and deteriorating. |
| | | | Modern Marine Heritage: Most modern heritage assets are in good condition although, some are deteriorating. |
| | | | Aesthetic Values Associated with Seascape and Views: The aesthetic values are mostly in good condition, except where ecosystems and species have declined or where coastal development is high. |
| | | | Scientific Values: The scientific values of the Red Sea and its associated species, habitats, and processes remains high. |

| Grading statements: Marine Heritage | | | | Trend since the 1980s |
|---|---|--|--|---|
| Very Good: There is no or very little deterioration of the site or asset. | Good: There is some deterioration to the site or asset. | Poor: The site or asset has become badly deteriorated. | Very Poor: The site or asset has become very badly deteriorated. | ↑ Improved ↔ Stable ↓ Deteriorated — No consistent trend |
| | | | | Confidence |
| | | | | Adequate high-quality evidence Limited evidence Inferred, very limited evidence |

The report establishes a historical context for coral reef conditions in Saudi Arabia.

Provides a long-term perspective on changes in coral reef health and ecosystems.



The analysis spans over 40 years, starting from the 1980s.

This is the inaugural report of its kind for Saudi Arabia's Red Sea.



This report is based on a desktop review of peer-reviewed scientific papers and technical reports (potentially not subject to peer-review).



State of Coral Reefs by Region

1

Gulf of Aqaba: Most coral reef assemblages are in very good condition (with high coral cover and associated fish communities).

2

Far Northern Red Sea: coral communities on inshore reefs are in good condition in some locations. The reefs surrounding offshore islands appear to be in good condition.

3

Northern Red Sea: Mixed conditions, with offshore reefs generally healthy but some nearshore reefs affected by bleaching and human activities.

4

Central Red Sea: Offshore reefs in good condition, but nearshore reefs impacted by bleaching and coastal development.

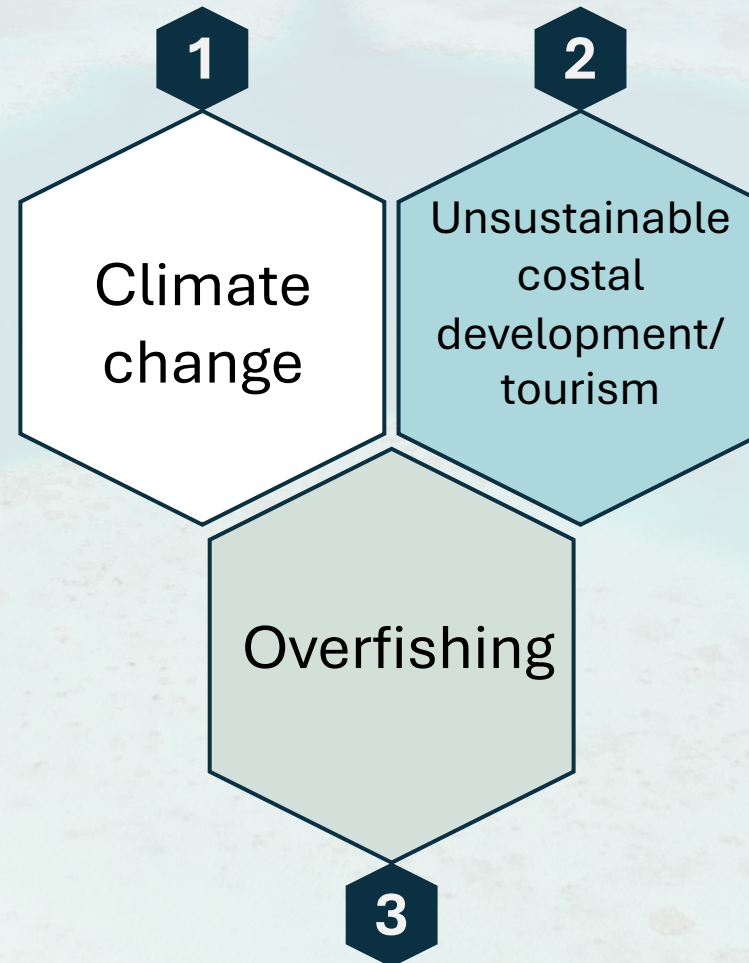
5

Farasan Banks: Extensive damage from bleaching, recovery uncertain.

6

Farasan Islands: Good condition overall, but impacted near towns and islands due to fishing and bleaching.

Main threats to Coral Reef Ecosystem



Evidence collection,
analysis, synthesis,
and peer review

Outlook Report

- At present and with limited data available, the condition of coral reefs and associated ecosystems is highly variable across the region .
- Where some reefs and associated fish assemblages remain in good or very good condition (i.e., the Gulf of Aqaba and some offshore reefs), habitat loss or degradation on other reefs can be very evident.
- Mangroves, which exhibit a high degree of connectivity with coral reefs, appear to be increasing in their extent, likely due to compensatory afforestation projects.
- The condition of other important habitats from a coral reef resilience perspective include seagrasses and macroalgae communities - both of which are generally not well researched.

Outlook Report

- In most areas large reef fishes (i.e., reef sharks and groupers) are overfished and often rare or absent from reefs, except those where access by fishers is limited.
- available data shows that while marine turtles and dugong show mixed population trends, sharks, guitarfish, and rays have declined substantially and continue to face overfishing threats.
- report also reveals large data gaps on biological and ecological processes (e.g., nutrient cycling, genetic and ecological connectivity, reef building, herbivory) that are central to reef ecosystem health and resilience.

THANK YOU!



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