

INTRODUCTION

- \checkmark Global fish stocks are impacted by climate change in both direct and indirect ways (Brander, 2009).
- \checkmark The ocean is warming, which has an influence on fisheries, which has an impact on food production, and on marine organisms at various trophic levels (Bindoff et al. 2019).
- \checkmark In the Arabian Gulf, there is a positive trend in monthly time series in the sea surface temperatures (SST), with 0.7 °C/decade increase (Hereher M, 2020).
- \checkmark In the Arabian Sea, there is also a noticeable increase in the SST, and a strong intensification of the Oxygen minimum zone (OMZ) in the region which is already considered one of the largest OMZ worldwide. (Lachkar et al, 2019; Saher et al., 2007).



Climate adaptive fisheries management plan of the Sultanate of Oman

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Effort in 2018

Musandam

Al-Batina

Musca

No. Fishermen FiberGlass Lunch (Dhow)

Shargiyah



Feb Mar Apr May Jun Jul Aug Sep Oct Seasonal SST variation along the Oman coast (based on 20 years satellite data)

Exciting fishing ban season in Oman, Data are from Fisheries statistical bool 2020 Fish Fishing Seasons Kingfish All year long except August 15 to October 15 Lobster March- May in each year Shrimp September- November in each year Abalone Fishing season is closed for the years 2021/2021 Sea Fishing season is closed from 26 March 2021 until 25 Cucumber March 2022

Size Restriction of some commercial valuable species in Oman

	Image	Fish	Common Name	Maximum Acceptable Length (cm)
		Argyrops spinifer	Kingsoldier bream	26
		Pomadasys commersonnii	Small spotted grunter	40
	*	Carangoides chrysophrys	Longnose trevally	40
		Carangoides ceoruleopinnatus	Costal trevally	40
	A	Lethrinus nebulosus	Spangled emperor	30
		Cheimerius nufar	Dentex nufar	33

- ✓ In Arabian Peninsula region, there should be a regional agreement aiming to sustainable fisheries management that is consistently parallel to changes in the climate events.
- ✓ Annual stock assessments, stickily monitored fishing ground, No fishing zones.
- Fisheries could be managed better with a transboundary initiative of the GCC region
- More scientific studies on biology and population dynamics of fishes are required in the GCC region to evaluate the vulnerabilities to climate change.
- A good climate- resilient fishery management plan is the one following an effective management system, developing participatory systems for fisheries management, trans-boundary fisheries management, suddenly occurring risk- adaptive and management should be adaptive.
- The majority fisheries management of Arabian Peninsula region countries are not categorized as climate adaptive.
- Adaptive management strategies that enhance ecosystem resilience are essential to mitigate the ill effects of climate change.
- The next step towards climate-adaptive fisheries management can only be completed if government governance and agreements are strengthened on a national and international level.
- \checkmark Climate change adaptation should be integrated into decision-making and response strategies in these countries, such as disaster risk management plans.
- ✓ Using ecosystems approaches and regional cooperation to address climate change, if the regional project is well placed, it can be helpful in coordinating responses to climate changes even the one with transboundary issues.

Note- It is an ongoing project, analysis is going on.

Acknowledgement: Thanks to UNESCO for the MAB Young Scientist award 2022 from Oman. Authors are grateful to CAMS, SQU for admirative support. Thanks to Dr Gerd Bruss, MASF, SQU for providing the SST variations.

Dhofa

Al-Wusta

The Sultanate of Oman Coast