



IMPACTS OF CLIMATE CHANGE ON THE DEVELOPMENT OF A SUSTAINABLE BLUE ECONOMY IN THE MEDITERRANEAN: CASE STUDY – ALBANIA

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GENERAL OVERVIEW

This study aims at analysing the impacts of climate change on the development of a sustainable blue economy in the Mediterranean with a focus on Albania. Due to its nature and scope, this study is mainly based on the use of the available literature and secondary data, such as national and international scientific reports, statistics from research institutes, etc. On the other hand, to better illustrate the impacts of climate change in Albania some primary sources attained to field work have been used.

Climate models project at the end of the 21st century for both the Mediterranean region and Albania an increase of the temperature and sea level, of the frequency and intensity of heat waves, floods and droughts and a decrease in the total precipitation. As a result, an increasing importance of the impacts of climate change on their blue economy is expected: in the case of Albania, it will mostly affect marine ecosystems, fisheries, aquaculture sector and tourism.

The study concludes by suggesting some solutions and mitigation options such as: improving the capacity building and expertise in the field of climate change and blue economy in Albania that should be integrated in the local legislation; raising awareness on climate change impacts through education programs; increasing the fraction of marine areas under law protection; exploring the potential and investing more in renewable ocean energy; implementing the Maritime Spatial Planning and increasing the research and scientific support in the field of marine sciences.

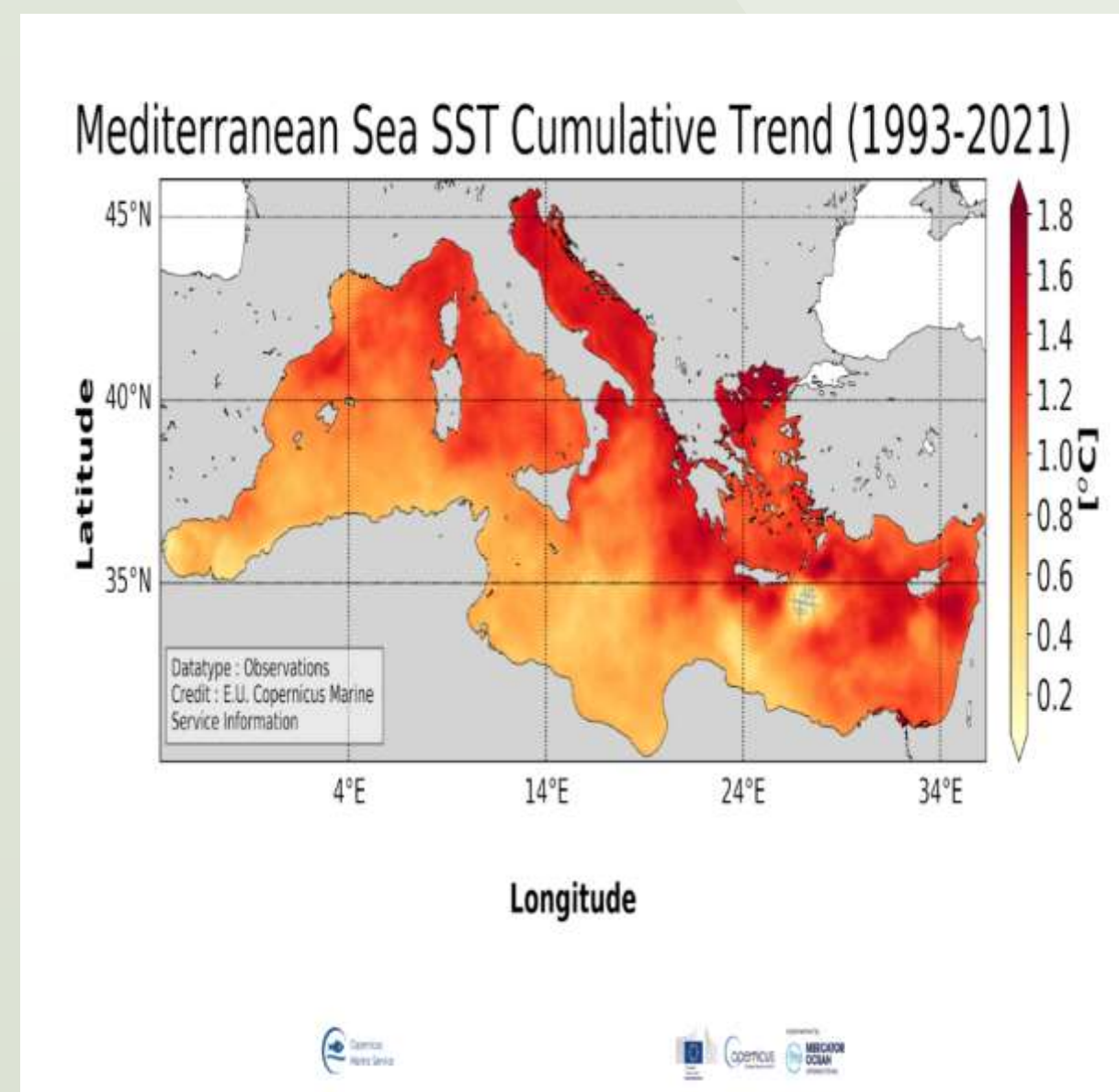


Fig. 1. Mediterranean Sea Surface Temperature (SST) cumulative trend map for the period 1993-2021 from CMEMS (source: Marine Copernicus)



Fig. 2. Exclusive Economic Zone of Albania (source: WorldBank)

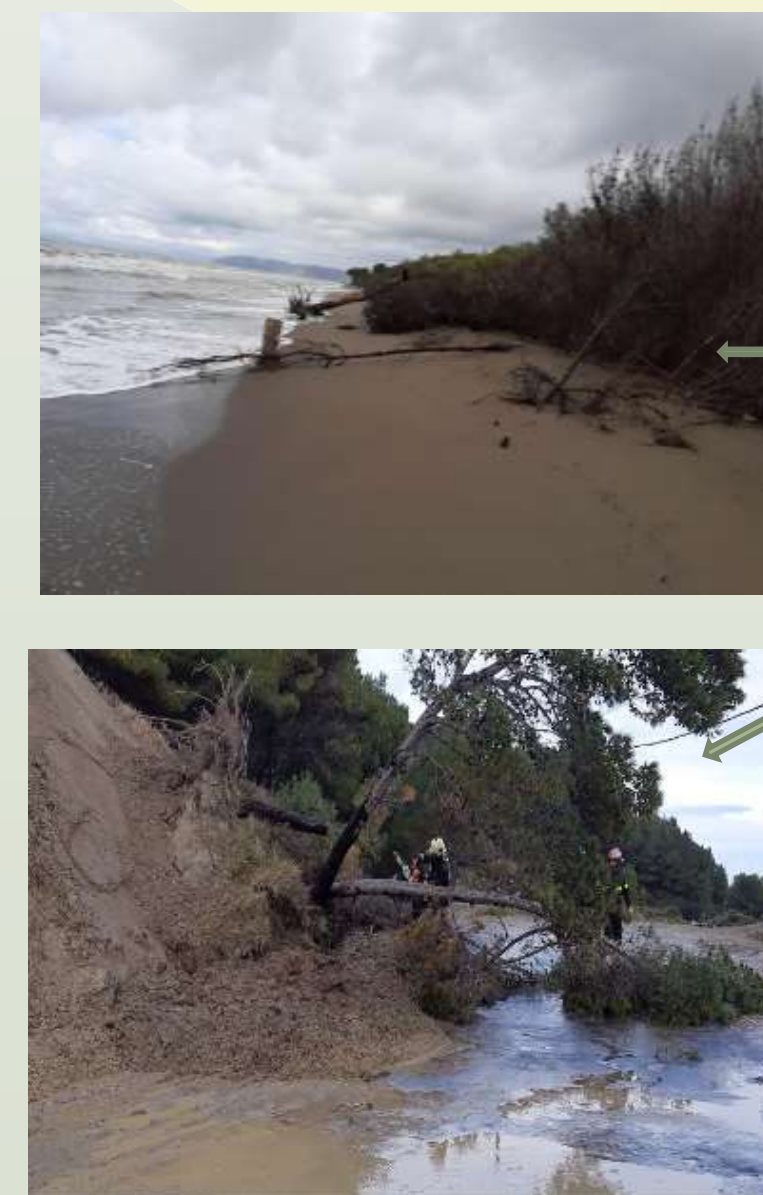


Fig. 3. Map of coastal hazards in Albania (source: MUDA), illustrated by the erosional processes along the coastline of Kune-Vain in Lezha region (photo credit: D.Rustja), and the landslides in Currila, Durres (source: https://albanianpost.com)

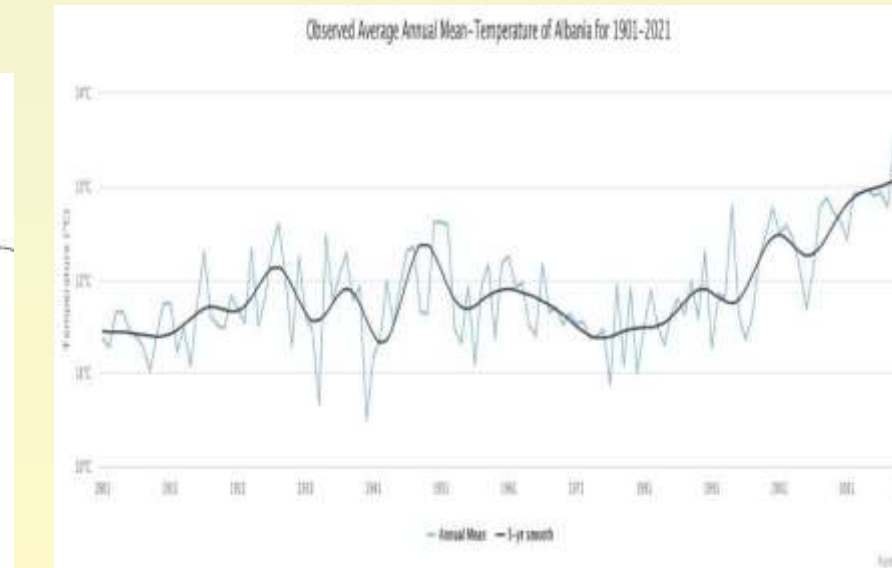


Fig. 4. Temporal evolution of the average annual mean temperature (in °C) in Albania in the 1901-2021

source: <https://climateknowledgeportal.worldbank.org/country/albania/climate-data-historical>

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Conclusions

This study is the first-of-its-kind for Albania. This could represent a possible limitation but, on the other hand it represents a challenging opportunity. Future studies and research are needed to better understand the impacts that climate change will have on the development of the blue economy in Albania with the final purpose to suggest proper solutions for their mitigations.

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