

COPERNICUS ENHANCED TOOLS FOR ANTICIPATIVE RESPONSE TO CLIMATE CHANGE IN THE EMERGENCY AND SECURITY DOMAIN

#### WHY?



#### 55 Million

people globally are affected by drought every year



#### 95%

of new displacements by conflicts in <u>2020</u> were in countries with high or very high vulnerability to climate change

# Billion

people worldwide were affected by floods between <u>1998 and 2017</u>



### 20 Million

people forced to migrate every year between 2008 and 2016 due to climate change effects

## WHAT?

The overarching objective of CENTAUR is to address societal challenges arising from climate change threats by developing and demonstrating new service components for the <u>Copernicus Emergency Management Service</u> (CEMS) and <u>Copernicus Security</u> <u>Service – Support to EU External and Security Actions</u> (CSS-SESA). In order to achieve this, the project has been granted a total funding of €4.9 million over a span of 3 years from the Horizon Europe research and innovation programme and the European Health and Digital Executive Agency (HaDEA). The project will focus on:

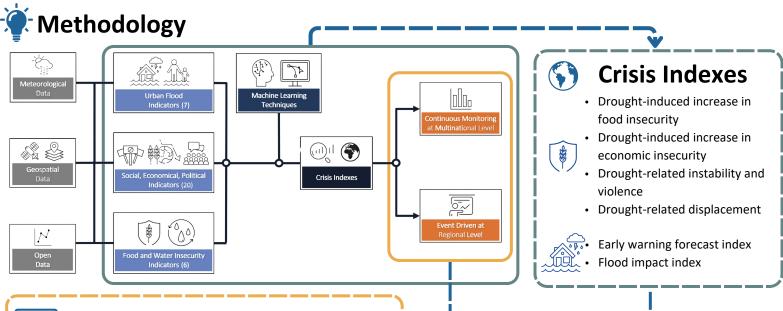


Improving situational awareness and preparedness around climate change and its impact on complex emergencies and multi-dimensional security crises 8

Anticipating the occurrence and possible knock-on effects of crisis events, contributing to resilience and effective adaptation Providing early warning systems which generates alerts when preestablished thresholds for crisis indicators are reached.

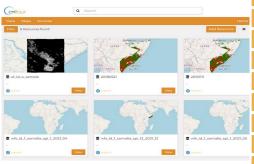
# HOW?

The methodology adopts a three-layered approach to enrich the <u>CEMS</u> and <u>CSS-SESA</u> portfolios and improve the capacity to characterise urban floods and water and food insecurity events. The project team has developed a set of conceptual models to create crisis indexes. These indicators will be tested in hot and cold use cases analysing past and current events affecting countries in Europe and Africa. Once these have been validated, they will feed into monitoring activities on the CENTAUR platform, which will allow for continuous multinational monitoring for crisis detection and an event-driven monitoring which triggers alerts when indicators reach pre-defined thresholds.





The platform will serve as a key hub between the technical aspects of the project and the stakeholders, ensuring a smooth flow of relevant information.



#### **⊘** Use Cases←–

A variety of use cases will be examined to inform the project, test our models, and validate the indicators



Water And

**Food Insecurity** 

Mozambique

Mali

Somalia

Mozambique

# 



#### Institutions

European Commission Services, International Bodies such as the UN



#### **Local Authorities**

Municipal Government, Emergency Services

Nongovernmental Organisations

Nongovernmental organisations, Humanitarian Organisations

### WHEN? 3 year project 2022-2025







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