



**Sustain-COAST**

REDUCE · RECYCLE · REUSE · RECOVER

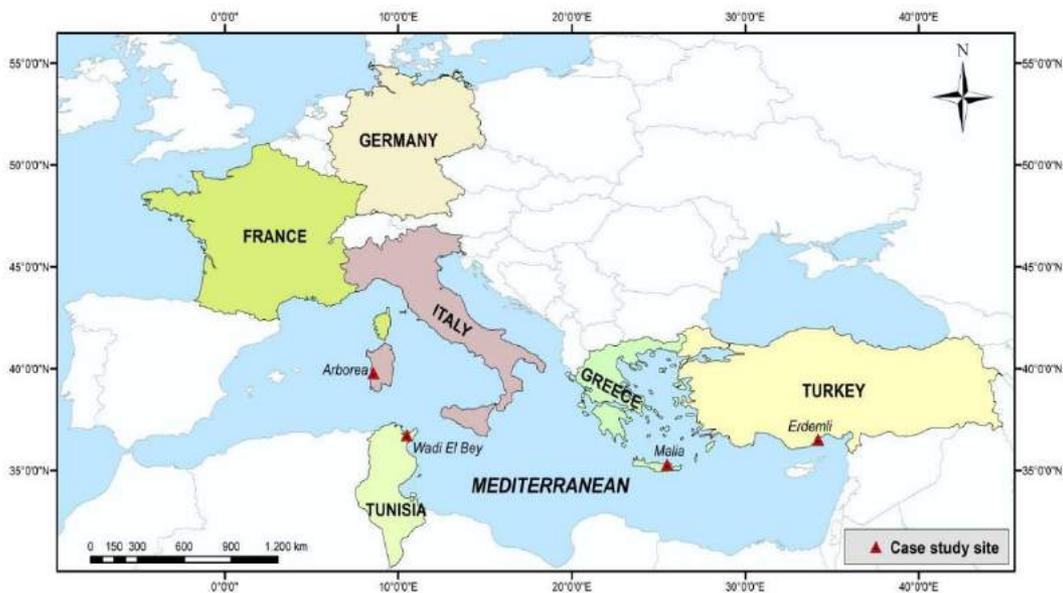
**Webinar 26-27 NOVEMBER 2020, THESSALONIKI, GREECE**  
**UNESCO Category II Centre on Integrated and Multidisciplinary Water Resources**  
**Management,**  
**Thessaloniki, Greece (CIMWRM)**

**Sustain-COAST Project**  
**Sustainable coastal groundwater management and pollution reduction**  
**through innovative governance in a changing climate**

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**Technical University of Crete, GREECE**



# The Sustain-COAST project



**6 countries:** Greece – Italy – Tunisia – Germany – France – Turkey



**4 case studies:** Malia (Greece) – Arborea (Italy) - Wadi El Bey (Tunisia) – Erdemli (Turkey)

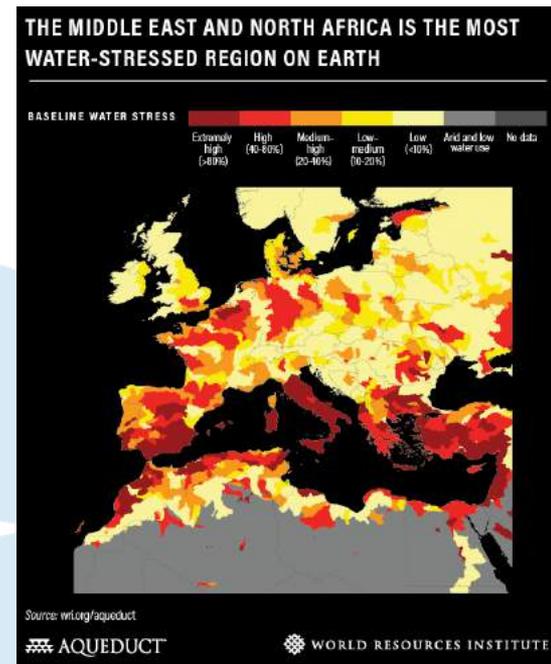


**7 partners:** Technical University of Crete (Greece), Helmholtz Centre for Environmental Research (Germany), Euro-Mediterranean Information System on know-how in Water sector (France), Strasbourg University (France), University of Sassari (Italy), Water Researches and Technologies Center (Tunisia), Mersin University (Turkey)

# The Sustain-COAST Motivation

MED region is highlighted as one of the most sensitive regions to water scarcity, due to climate change and consistently increasing anthropogenic pressures

[wri.org/aqueduct](http://wri.org/aqueduct)



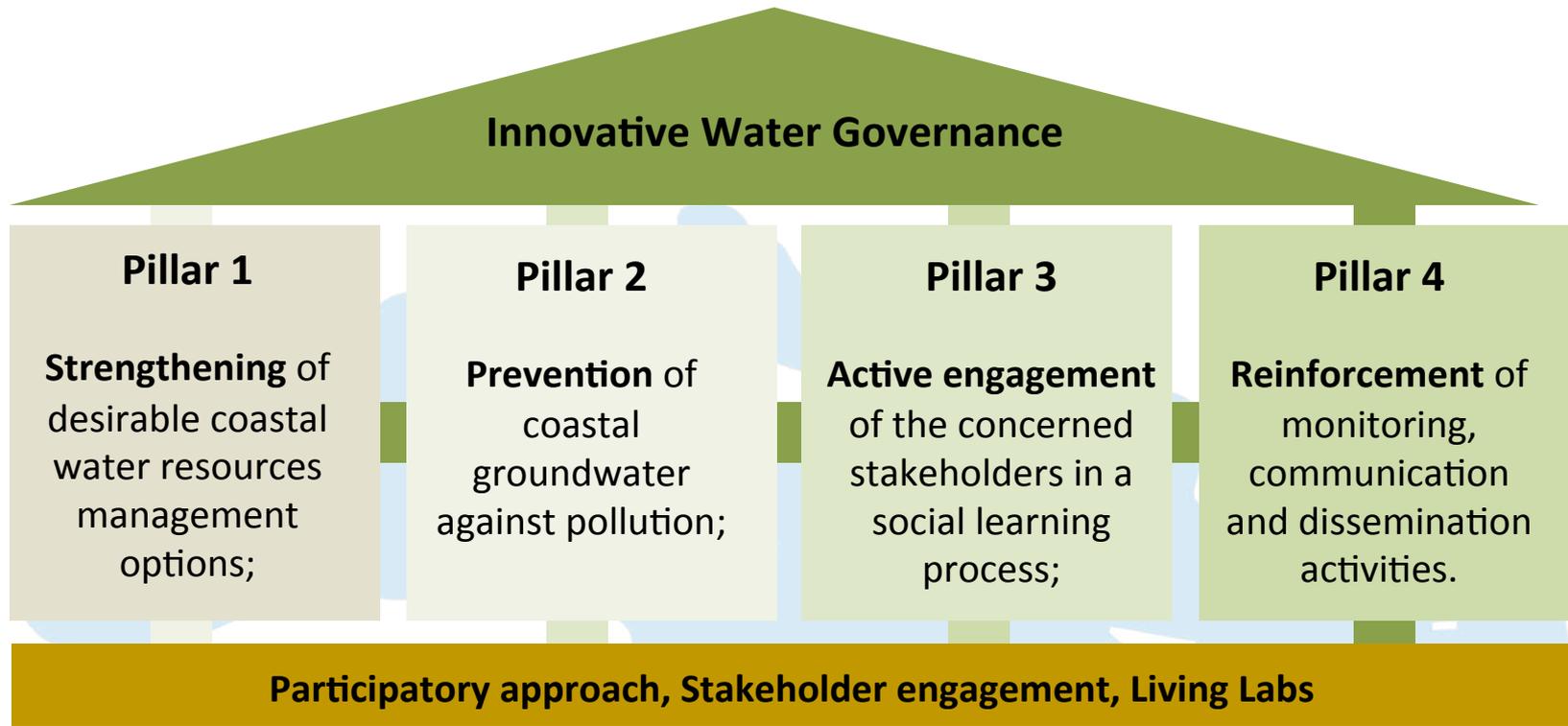
According to World Bank, MED area is expected to face great economic losses from climate-related water scarcity, (~6-14% of GDP) by 2050.



# Overall Sustain-COAST Objectives



# Sustain-COAST Pillars



# Sustain-COAST Pillars' Objectives

## Pillar 1

**Strengthening** of desirable coastal water resources management options;

- Stakeholders' active engagement
- High Resolution Monitoring Approach
- Multi-criteria Decision Support System

## Pillar 2

**Prevention** of coastal groundwater against pollution;

- Learning process involving “main identified polluters”
- “4R principle: Reduce; Recycle; Reuse & Recover”
- Flow & pollution plume transport prediction using numerical models

# Sustain-COAST Pillars' Objectives

## Pillar 3

**Active engagement** of the concerned stakeholders in a social learning process;

- Raising awareness on water management
- New social learning spaces - interactive living labs & workshops
- New generations attraction via digital ICT approaches, smart, adapted and visualized web apps

## Pillar 4

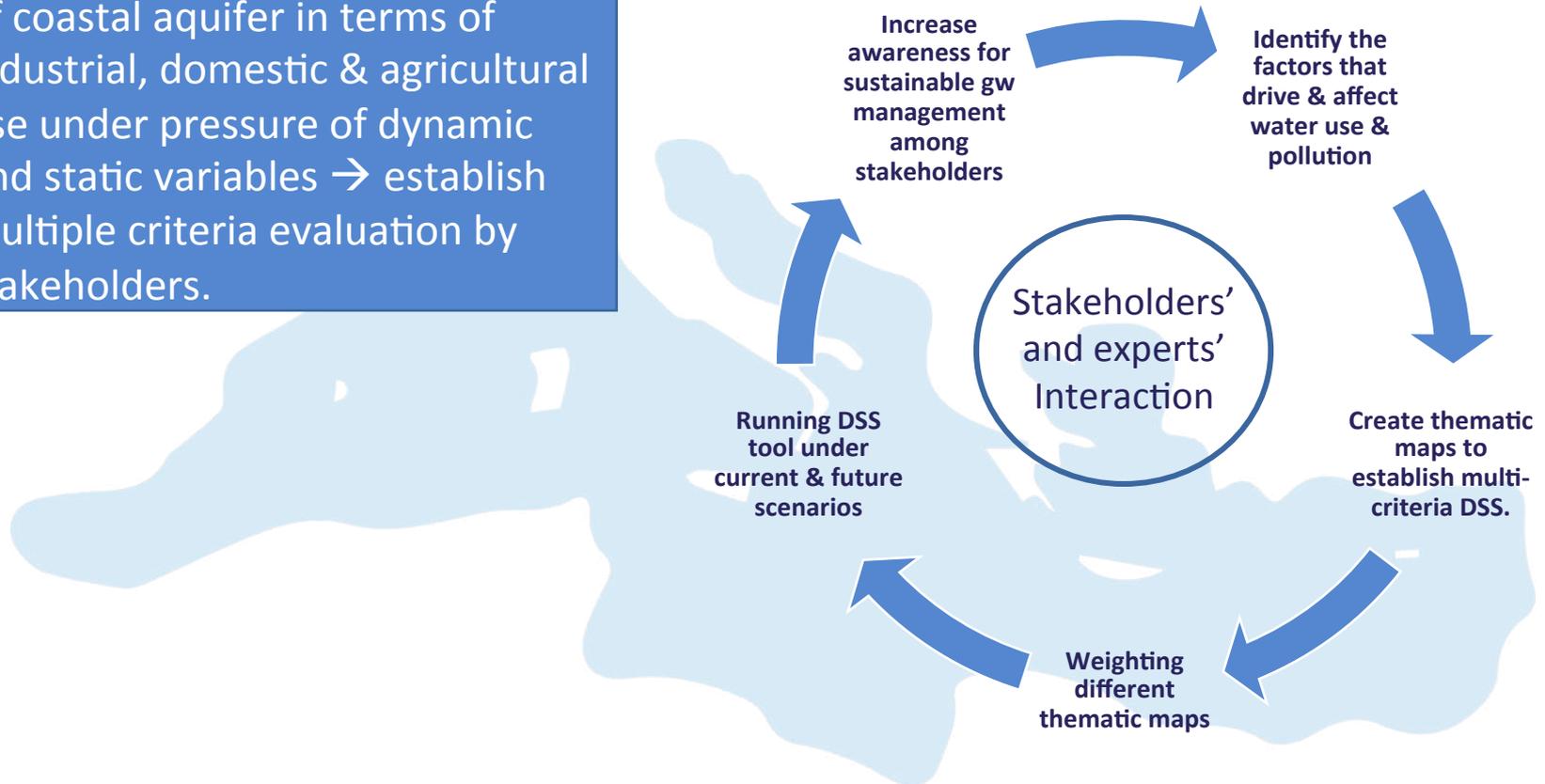
**Reinforcement** of monitoring, communication and dissemination activities.

- Integration of international clusters and initiatives
- Participation to high level international conferences
- Cross-country interactive dissemination strategy

# Sustain-COAST

## Emphasis is given:

Determine suitability & sensitivity of coastal aquifer in terms of industrial, domestic & agricultural use under pressure of dynamic and static variables → establish multiple criteria evaluation by stakeholders.



# Sustain-COAST Ambition

## Integrating scientific & local knowledge

- Support decision-making in adaptive pathways on coastal WR

## Adopt high-resolution techniques for water quality & quantity

- New monitoring technology development

## Long-term Reference Terrestrial Observatories development

- Continuous monitoring strategies at 4 MED sites

## Enrich the international network of critical zone observatories

- 4 MED Sustain-COAST case studies

## Long-term collaborating partners hub creation

- Unique virtual excellence center of WR management

## Gain international visibility & scientific excellence

- Safety, security & resilience to climate change in MED coastal governance



# Sustain-COAST Impact

## Social

- Positive impacts on inhabitant's health & their livelihood opportunities

## Economic

- Support economic growth, new SMEs establishment and employment opportunities

## Environmental

- Sustainable use of pumped water, ecosystem integrity & climate change mitigation

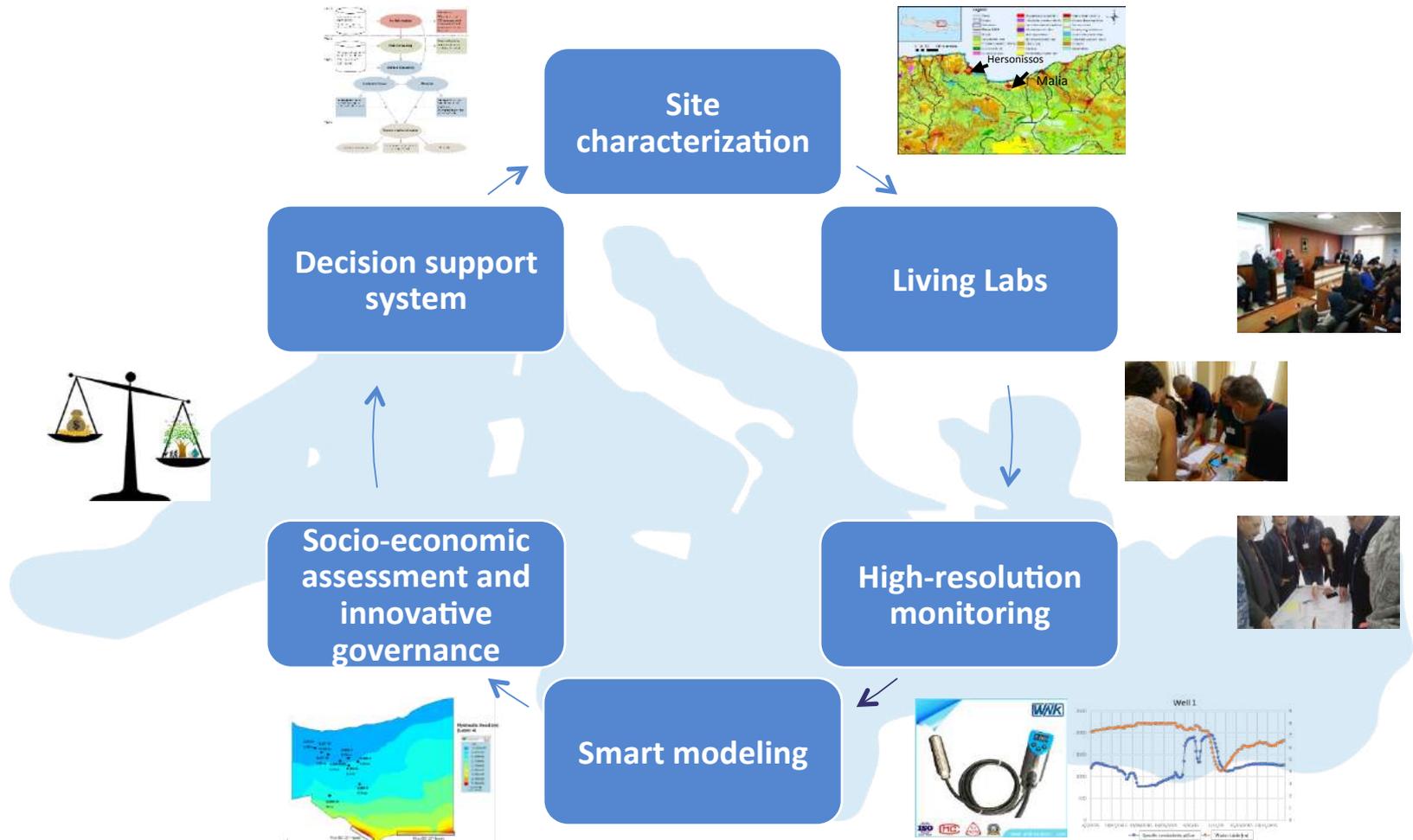
## Political

- Transparent & democratic aquifers governance supports political stability in MED countries

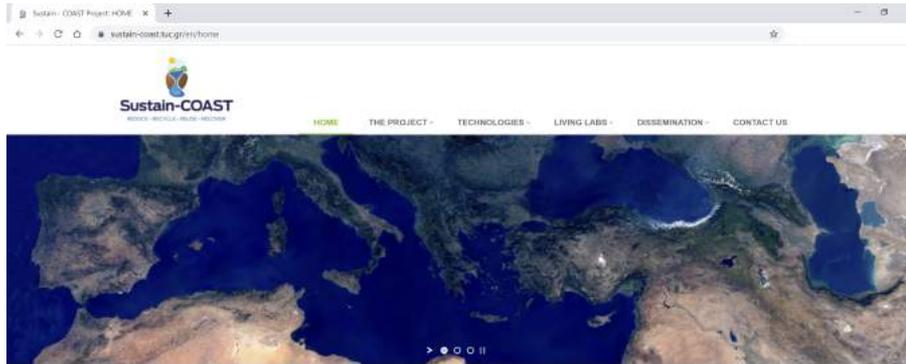
## Capacity and knowledge development

- Raising greater awareness, sharing information, technology transfer and forming opinions

# Sustain-COAST Approach Overall



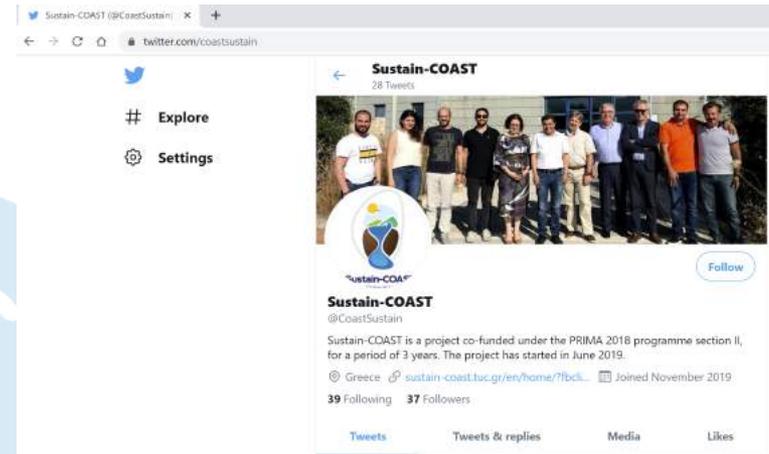
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# Sustain-COAST PRIMA Project



**Thank you for  
your attention!**



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