



# PRIMA

PARTNERSHIP FOR RESEARCH AND INNOVATION  
IN THE MEDITERRANEAN AREA

## The PRIMA Initiative

Angelo Riccaboni  
*Chair Fundación PRIMA*

Athens, 25 September 2017

An initiative of the EC



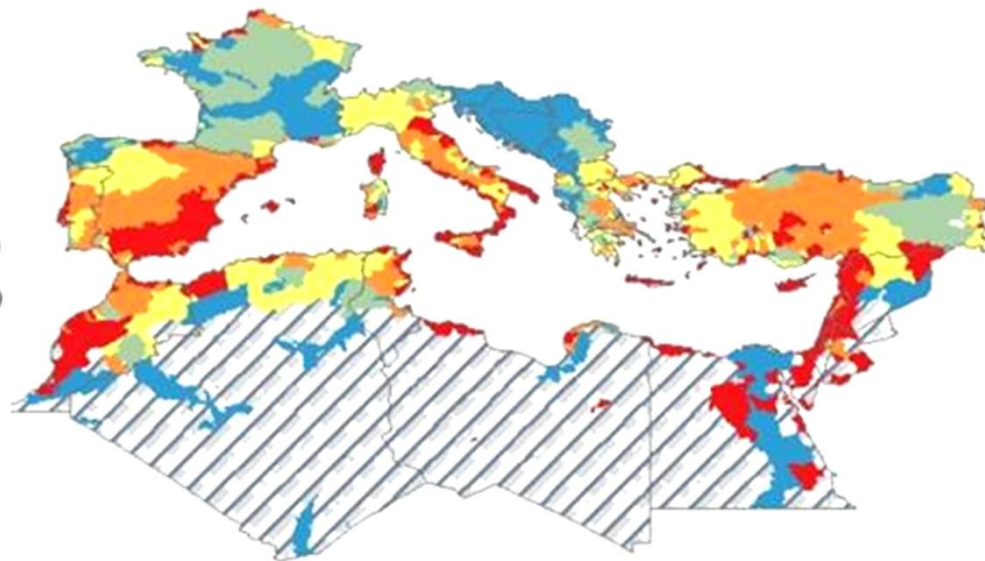
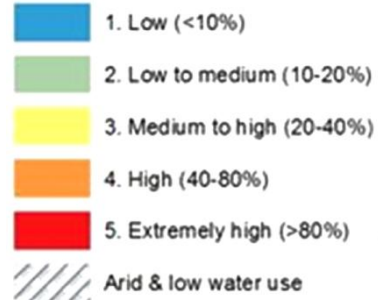


**1. Why PRIMA**

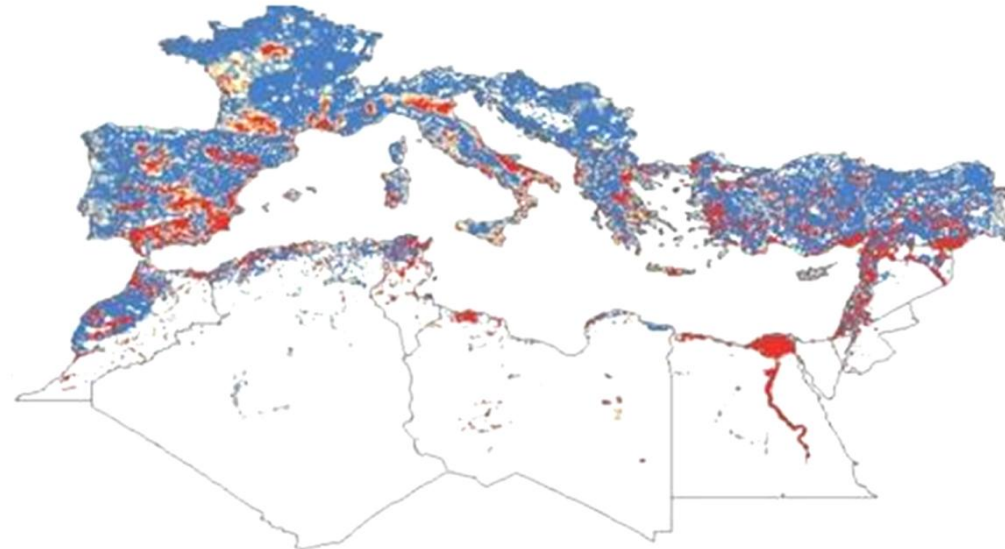
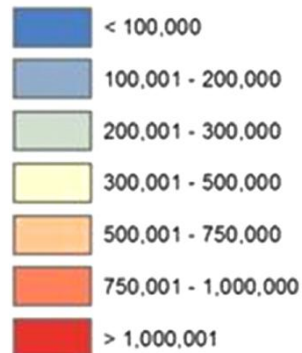
**2. What PRIMA is**

**3. The future**

### Water stress



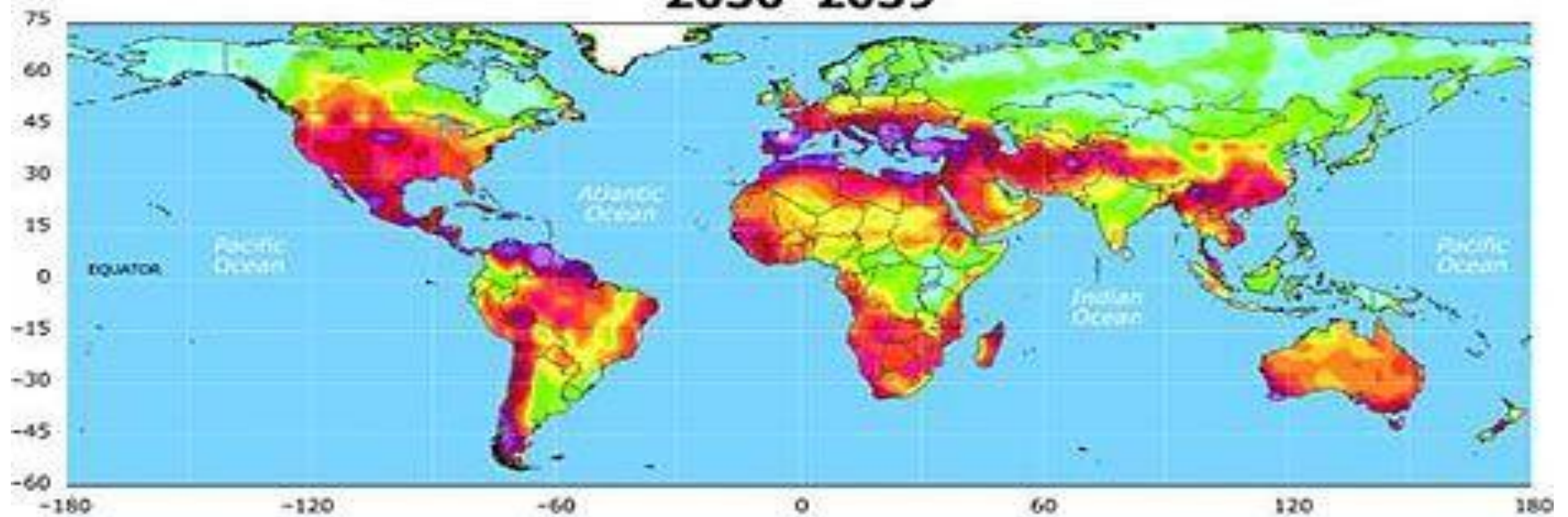
### Water needs (m3)



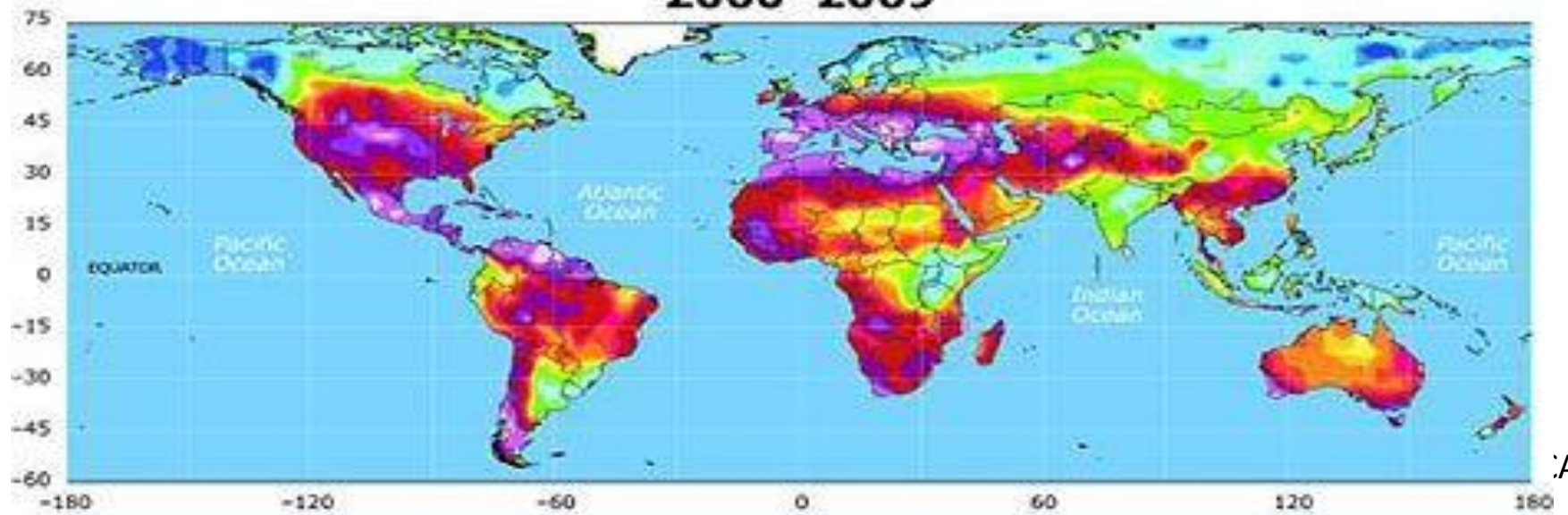
Daccache et al. 2014

**Severe water stress affects MED Countries**  
**Strong water needs for Agriculture, up to 85%**

**2030-2039**



**2060-2069**



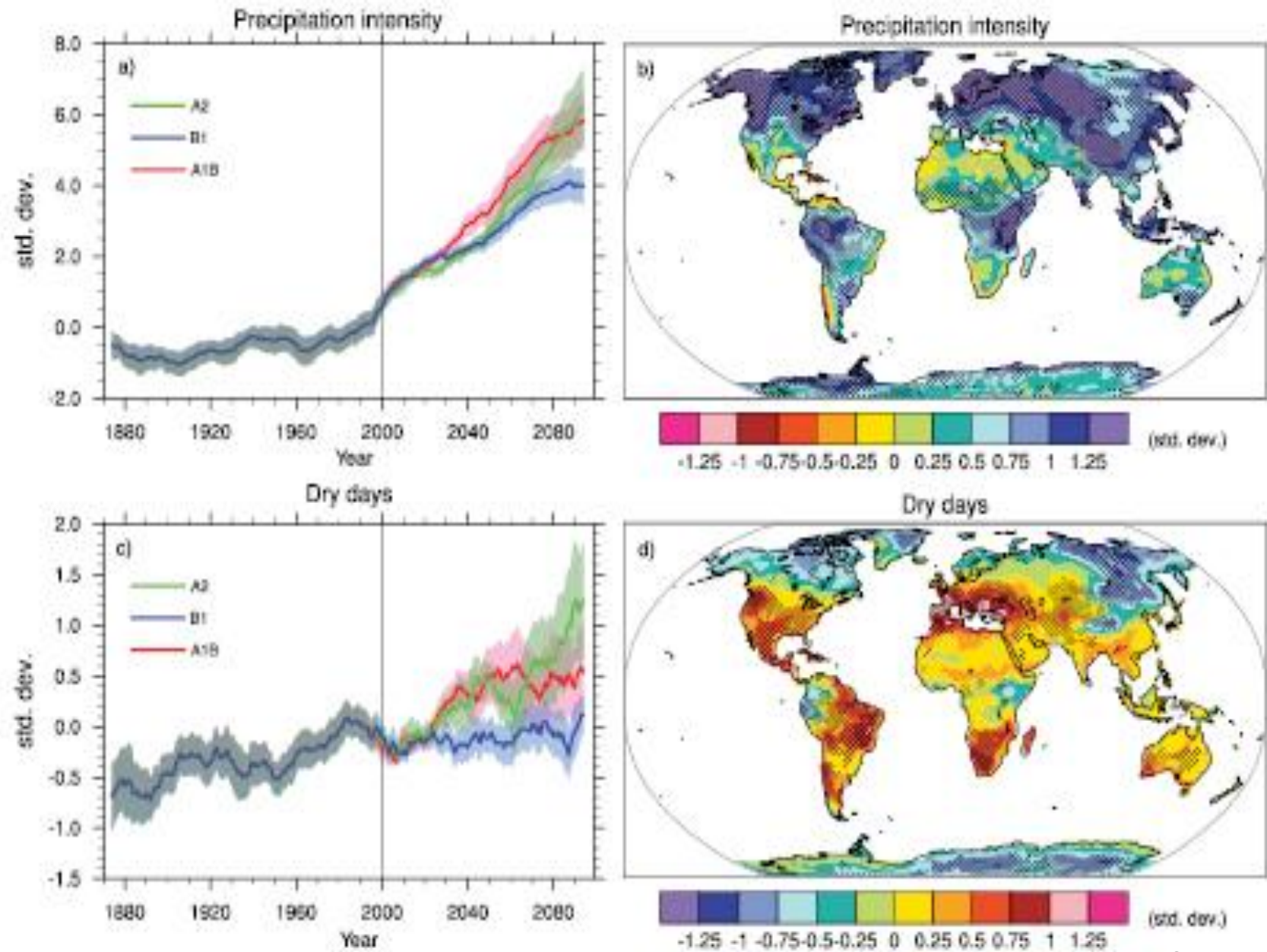
AR

DRY

CONDITION

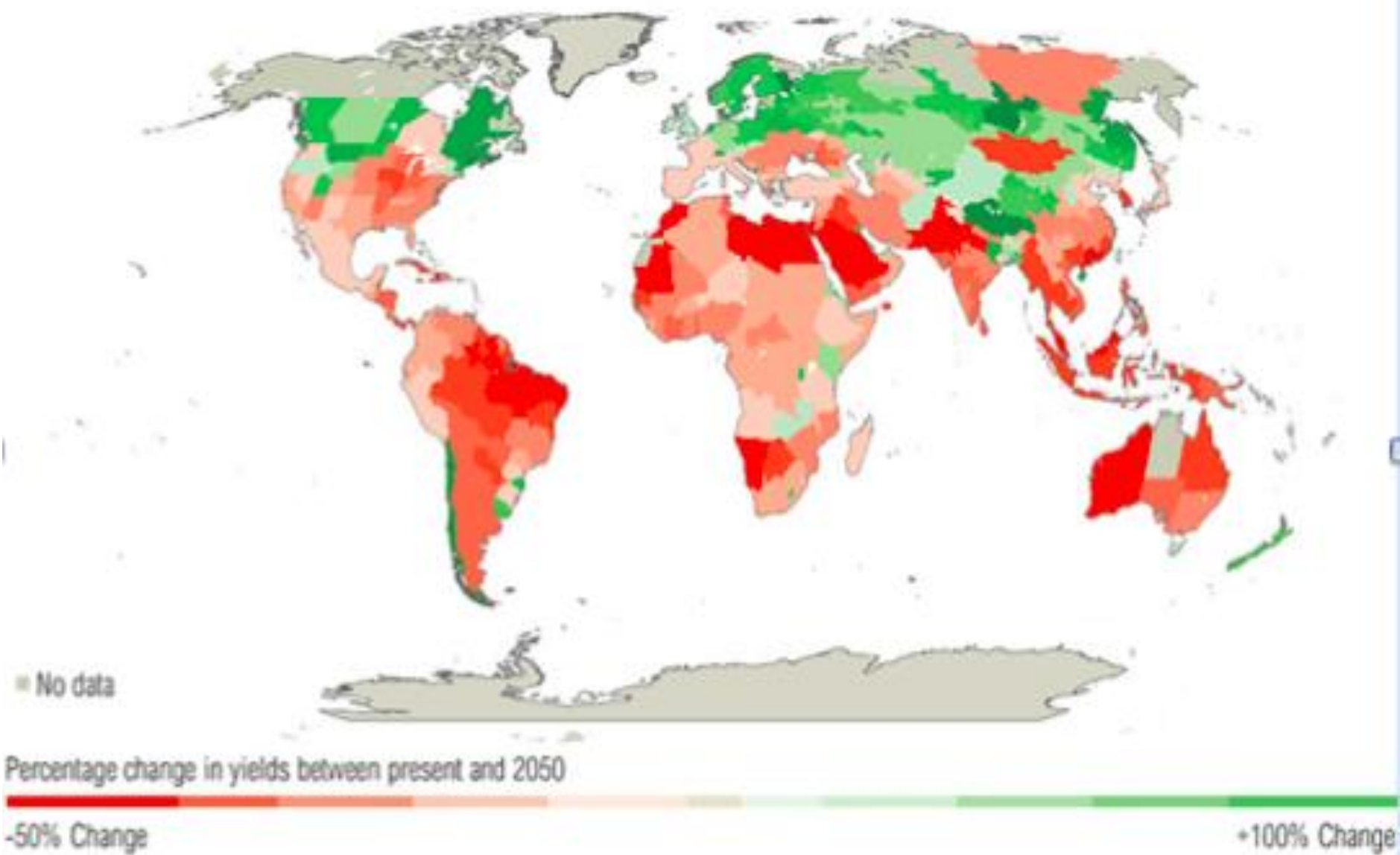
WET

**Strong effect of climate change on drought in the MED Area**



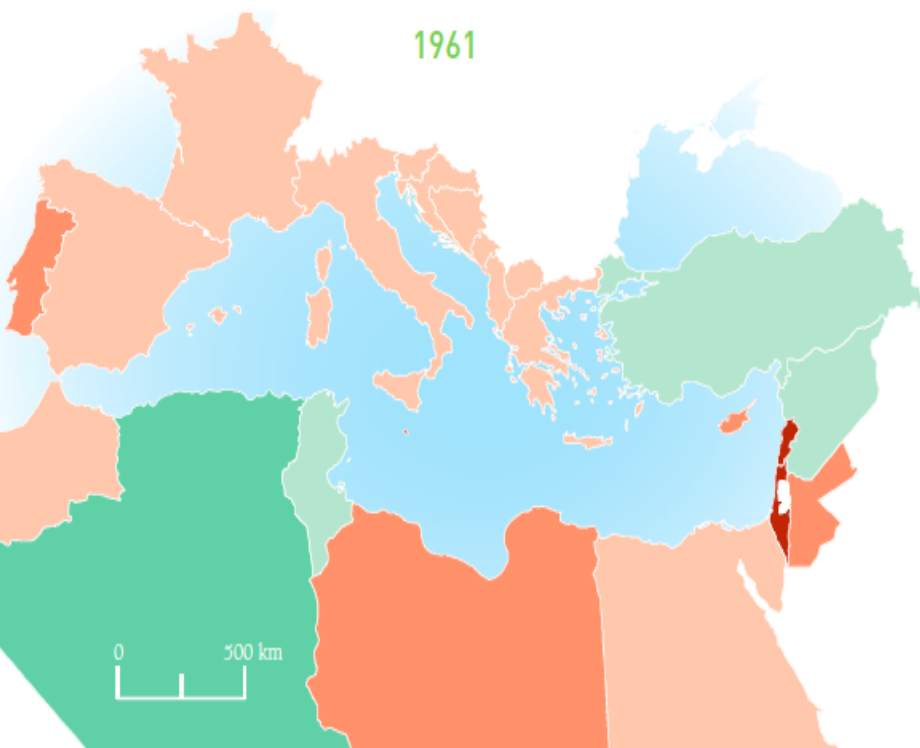
Source: IPCC

**Increase in the number of dry days**

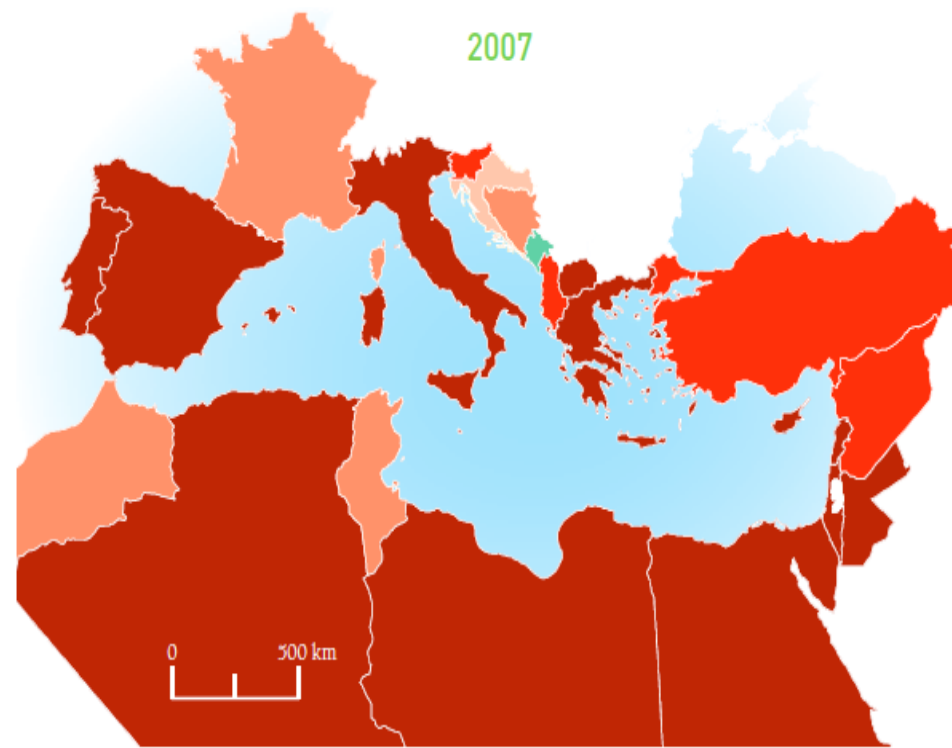


World Resources Institute

## Reduction in crop yields



- Footprint more than 150% biocapacity
- Footprint 100- 150% larger than biocapacity
- Footprint 50-100% larger than biocapacity
- Footprint 0-50% larger than biocapacity



- Biocapacity 0-50% larger than footprint
- Biocapacity 50-100% larger than footprint
- Biocapacity 100-150% larger than footprint
- Biocapacity more than 150% footprint

MWO 2012

**A growing ecological deficit**

	<b>Sustainable Nitrogen Management Index</b>
France	0.38
Egypt	0.66
Croatia	0.67
Italy	0.70
Croatia	0.70
Greece	0.70
Turkey	0.79
Slovenia	0.82
Algeria	0.83
Malta	0.87
Morocco	0.87
Spain	0.90
Bosnia & Herz.	0.90
Lebanon	0.91
Israel	0.94
Tunisia	1.00
Albania	1.00
Jordan	1.06
Cyprus	1.13
Montenegro	1.10
Portugal	1.14

SDSN SDG index 2017

**Low sustainability of MED farming systems**

	<b>Adult obesity (%)</b>
Albania	17.6
Bosnia & Herzegovina	17.9
Serbia	19.5
Montenegro	20.0
Portugal	20.1
Italy	21.0
Morocco	22.3
Greece	22.9
Croatia	23.3
Spain	23.7
Cyprus	23.8
France	23.9
Algeria	24.8
Slovenia	25.1
Israel	25.3
Malta	26.6
Tunisia	27.1
Egypt	28.9
Turkey	29.5
Jordan	30.5
Lebanon	31.9

SDSN SDG index 2017

**More food & healthier food needed**

# MED Food Value Chains

## LACK OF INTEGRATION

- ✓ Within the supply chain
- ✓ Within the food system
- ✓ Within the sector

## LACK OF ENTREPRENEURSHIP AND TECHNOLOGICAL & MANAGERIAL INNOVATION

**Job and market opportunities are lost**

# SDSN SDG Index: Most MED Countries between #22 and #87

## Top 8/157 Countries: Northern European Countries



**All MED countries far from achieving  
the Sustainable Development Goals of Agenda 2030**

# Key role of technological, social & organizational innovation

Only in 3 MED Countries,  
Gov R&D expenditure > 2% GDP

Important previous R&I initiatives  
with fragmentation and overlapping

**Integrated Research & Innovation initiatives needed  
PRIMA**

## 2. What PRIMA is

**An integrated Research and Innovation Programme on  
food systems and water resources  
implemented by Fundacion PRIMA**

**Equal footing through Governance and organisational mechanisms**

**500 million euro budget**

**11 EU Countries, 8 SEMCs and the EC**

**First calls: Early 2018**

**S1 - Transnational Calls managed & financed by PRIMA (Union contribution)**

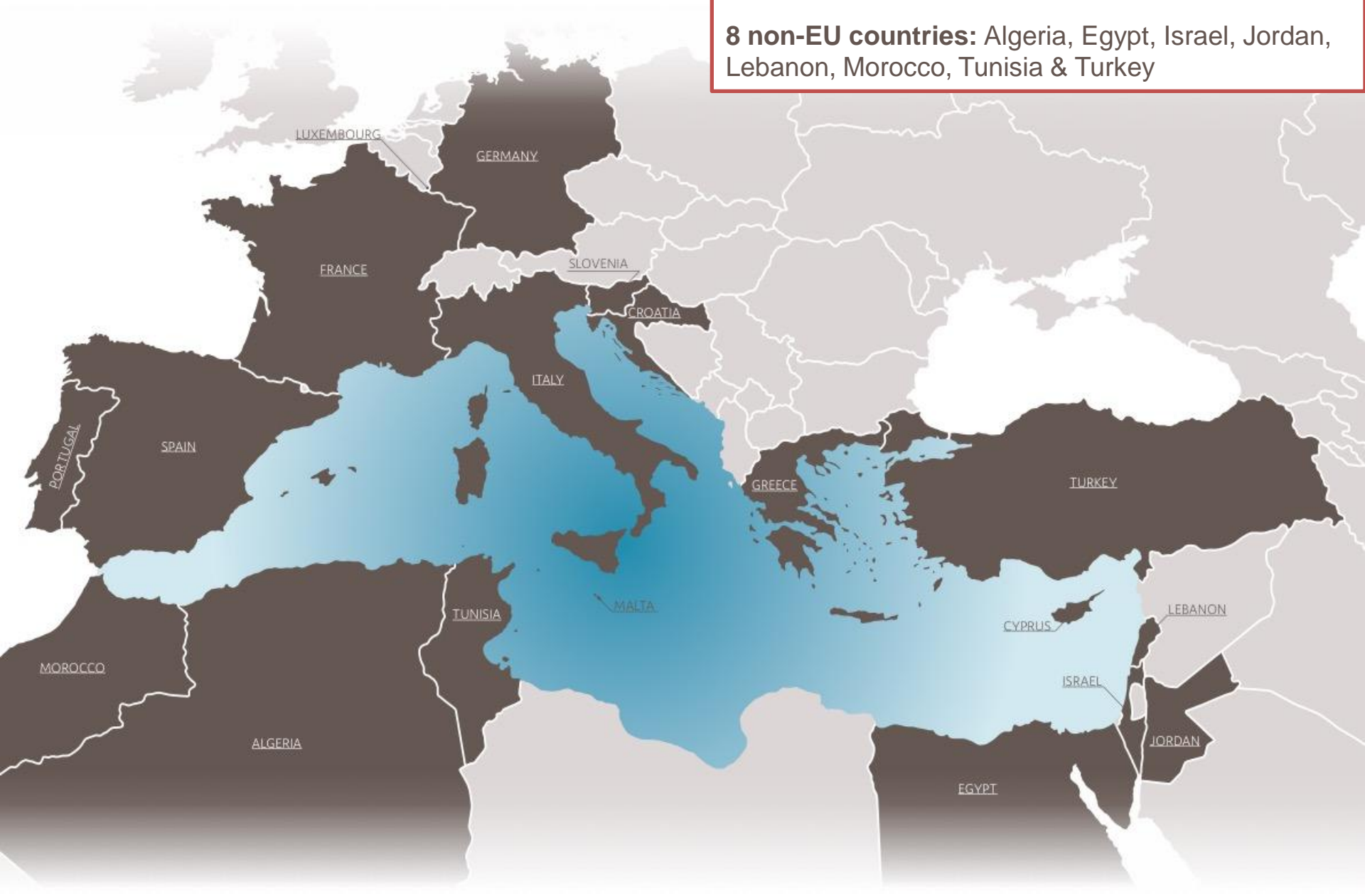
**S2 - Transnational Calls managed by PRIMA & financed by Participating States at national level**

**S3 - Activities of Participating States managed and financed at national level**

# PRIMA Participating States

**11 EU Countries:** Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia & Spain

**8 non-EU countries:** Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia & Turkey





Support by EuroMed Govts & European Institutions


10-year Strategic Research and Innovation Agenda

Research, Innovation and Adoption of solutions

Involvement of Stakeholders – 3 Os

Consumers, enterprises, communities, farmers, investors,...

Monitoring



# **Strategic Research and Innovation Agenda (SRIA)**

# 3 Thematic Areas



## MANAGEMENT OF WATER

Integrated and sustainable management of water for arid and semi-arid Mediterranean areas



## FARMING SYSTEMS

Sustainable farming systems under Mediterranean environmental constraints



## AGRO-FOOD VALUE CHAIN

Sustainable Mediterranean agro-food value chain for regional and local development.

## Thematic Area 1

# Integrated and Sustainable Management of Water for Arid and Semi-Arid MED Areas






RESEARCH AND INNOVATION PRIORITY	LINK TO OPERATIONAL OBJECTIVE	MAIN ACTIONS	TRL
<b>1</b> Water resources availability and quality within catchments and aquifers	 2/LAND AND WATER SUSTAINABILITY	RIA	2 to 5
<b>2</b> Sustainable, integrated water management	  2/LAND AND WATER SUSTAINABILITY 3/WATER GOVERNANCE SYSTEMS	RIA and CSA	3 to 6
<b>3</b> Irrigation technologies and practices	 1/WATER SAVING SOLUTIONS	RIA and IA	4 to 8
<b>4</b> Use of alternative water resources, technologies and governance models	  1/WATER SAVING SOLUTIONS 3/WATER GOVERNANCE SYSTEMS	RIA and IA	5 to 8

## Thematic Area 2

# Sustainable Farming Systems under Mediterranean Environmental Constraints

RESEARCH AND INNOVATION PRIORITY	LINK TO OPERATIONAL OBJECTIVE	MAIN ACTIONS	TRL
<b>1</b> Adaptation of agriculture to climate change	 4/ SMART AND SUSTAINABLE FARMING	RIA	2 to 5
<b>2</b> Developing sustainable and productive agro-ecosystems	 4/ SMART AND SUSTAINABLE FARMING	RIA and IA	2 to 7
<b>3</b> Preventing the emergence of animal and plant diseases	 5/ PESTS AND PATHOGENS IN FARMING	RIA	2 to 6
<b>4</b> Developing farming systems able to generate income, to create employment and to contribute to a balanced territorial development	 4/ SMART AND SUSTAINABLE FARMING	RIA and CSA	2 to 5

# Sustainable Mediterranean Agro-Food Value Chains for Regional and Local Development

RESEARCH AND INNOVATION PRIORITY	LINK TO OPERATIONAL OBJECTIVE	MAIN ACTIONS	TRL
<b>1</b> Valorising food products from traditional Mediterranean diet	 6/ NUTRITION AND HEALTH	RIA and CSA	2 to 7
<b>2</b> Food Safety in local food chains	 7/ REDUCE LOSSES AND WASTES	RIA	2 to 6
<b>3</b> Implementation of innovation in the Agro-food chain, promoting higher quality, sustainability and competitiveness, with particular reference to smallholders	  7/ REDUCE LOSSES AND WASTES 8/ NEW AGRO-FOOD BUSINESS MODELS	RIA and IA	4 to 8
<b>4</b> Implications of dietary shifts and sustainable diets for the Med populations and food industry	 6/ NUTRITION AND HEALTH	RIA and CSA	2 to 6

# 3. The future

## Ex Ante Assessment of DIS Approval and implementation of Annual Work Plans

### PRIMA Impacts

#### Economic Impacts



- ✓ Increase in production and efficiency;
- ✓ Access to new markets;
- ✓ Greater funding options (InnovFin programme);
- ✓ Large-scale aggregate economic impacts.

#### Social Impacts



- ✓ Political stability and reduced migration.

#### Environmental Impacts



- ✓ Biodiversity conservation;
- ✓ Sustainable farming practices.



To strengthen Area's **knowledge and innovation base,**  
**to meet water and food needs**

To foster mutual understanding, capacity-building &  
economic growth

A tool to address common MED challenges  
and build bridges between nations

**PRIMA as an initiative of Scientific Diplomacy**  
(Flink and Schleiterer, 2010)



THANK YOU FOR YOUR ATTENTION