PRIMA
Partnership for Research and Innovation in the Mediterranean Area
Un nuevo programa de i+d para el manejo sostenible del agua, la agricultura y la producción de alimentos

Ministerio de Economía Industria y Competitividad

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1. ¿Qué es PRIMA?

2. La Agenda Estratégica (SRIA) de PRIMA

3. La implementación del PRIMA (PRIMA Work Plan)
Common Mediterranean Challenges

• Climate change
The Mediterranean is one of the most vulnerable regions to climate change and is predicted to become even warmer and drier than it already is. The main effects are regional water shortages, with major impacts on agriculture and food security affecting, soils sustainability and crop yields.

• Population growth and food security
Due to demographic growth, there will be some 520 million persons to feed in the region by 2020 (CIHEAM, 2015)². Mediterranean agriculture is globally less and less able to provide sufficient food for its population.

• Water scarcity and overexploitation of natural resources
Mediterranean water resources are limited and often of low quality, fragile and unevenly distributed in space and time. Under the arid and semi-arid conditions of the Mediterranean basin, the various forms of land degradation, particularly erosion and salinization, are sharply felt.
Agriculture is a major economic sector in terms of its capacity to generate employment and income for a large fraction of the Mediterranean population. In most southern Mediterranean countries it is providing employment for 20 to 30% of the population.
Common Mediterranean Challenges

Agro-biodiversity loss

The genetic diversification of food crops and animal breeds (agrobiodiversity) is declining. Many local varieties are being replaced by a small number of improved non-native varieties. Climate change is expected to speed the loss of agrobiodiversity as certain areas become unsuitable for less tolerant varieties.
Mediterranean agro-food value chains

Suffer from inappropriate logistic infrastructure, and a lack of safety, quality and traceability standards. Low rates of innovation and management, and poor marketing and communication skills make difficult for businesses (especially SMEs) to meet consumer requirements. Improved food processing, including innovative packaging, could make local products more competitive and create new trade opportunities.
Who we are
The Partnership for Research and Innovation in the Mediterranean Area (PRIMA) is a Research and Innovation funding program driven by 19 Euro-Mediterranean Countries, including 11 EU States (Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia and Spain) and 8 non-EU countries (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Tunisia and Turkey) to participate in a EU joint research and innovation programme.
In the legal framework of art. 185 of the Treaty on the Functioning of the European Union, this initiative is set up to build research and innovation capacities and to develop knowledge and common innovative solutions for water management and agro-food systems on both shores of the Mediterranean, inspired by principles of co-ownership, mutual interest and shared benefits across the Mediterranean basin.
art. 185 is an instrument within the European Research Area

Enables the EU to participate in research programmes undertaken jointly by several Member States, including participation in the structures created for the execution of national programmes.

Some on-going ART 185

- European and Developing Countries Clinical Trials Partnership 2
- Eurostars 2 (for SMEs)
- BONUS the joint Baltic Sea research and development programme
An article 185 initiative is the most suitable instrument to tackle the global challenges of the Mediterranean region.

**Scientific integration**
Long-term (7-10 years) joint implementation of a common agenda for optimizing national R&I activities and programmes.

**Management integration**
Joint management operated through an independent legal entity - the Dedicated Implementation Structure – In Barcelona under UfM umbrella named **PRIMA Foundation** under the direction of Dr. O. Quintana.

- reduction of transaction costs; avoid duplications;
- alignment of existing programmes

**Financial integration**
High level and solid multiannual financial commitments by participating states. Union contribution: defined in the basic act, in most cases matching the contributions of participating states.
The PRIMA partners

- **250 M€** from the PRIMA countries (30 M€ from Spain)
- **220 M€** from Commission (SC2 H2020, SC5 H2020, Industrial leadership and DG Agri)

The PRIMA initiative remains open to any country willing either to observe or to join the Program, including those associated to Horizon 2020.
PRIMA as a platform for research & innovation integrating disciplines and R&I initiatives

Mediterranean basin specificities

- **Environmental**
  - Water quantity and quality restrictions (salinity)
  - Climate change
  - Salinization and desertification (land sustainability)

- **Socio-economic**
  - Demographic growth
  - Relevance of the agro-food sector

- **Technical**
  - Agriculture the main user of water resources
  - Specific high value farming systems
  - Mediterranean diet
1. What PRIMA is

2. PRIMA Strategic Research and Innovation Agenda (SRIA)

3. PRIMA Implementation
Strategic Research and Innovation Agenda

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PRIMA main thematic areas

What we do

The Strategic Research and Innovation Agenda aims to set the technical and scientific basis for developing knowledge and common innovative solutions for water management and agro-food systems in the Mediterranean basin. Three thematic areas are identified in this framework:

- **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.
### Operational Objectives

#### Thematic area 1
**Sustainable management of water for arid and semi-arid Med areas**

- To test and stimulate adoption of context-tailored *water-saving solutions*, in particular in agriculture.
- To improve *land and water sustainability* in *arid* and semi-arid *watersheds*.
- To elaborate and stimulate adoption of new policies and protocols for the *governance of water management systems*.

#### Thematic area 2
**Sustainable farming systems under Med environmental constraints**

- To develop *smart* and sustainable *farming systems* to maintain *natural resources* and to increase *production efficiency*.
- To design and promote the adoption of novel approaches to reduce the impact of *pests and pathogens in farming*.

#### Thematic area 3
**Mediterranean food value chain for regional and local development**

- To innovate in the Mediterranean food products based on *Mediterranean diet heritage* and to enhance the *links between nutrition and health*.
- To find context-adapted solutions to increase *food and water chain efficiency*, and *reduce losses and wastes*.
- To conceive and implement innovative, *quality oriented models in agro-business* as potential sources of new jobs and economic growth.
Cross-cutting issues

- Soil sustainability
- Food Security
- Digital revolution
- Socio-economic research and stakeholder involvement
- Capacity building
Beyond Research and Innovation
Public consultation opened from April to June 2017
Total of **861** valid replies received.

A first draft version for PRIMA Strategic Research and Innovation Agenda (SRIA) has been jointly defined by PRIMA partners based on an initial broad consultation of relevant stakeholders. The SRIA aims at enabling the prioritization of 8 objectives to be pursued by PRIMA:
1. Smart and sustainable farming;
2. Water-saving solutions;
3. Nutrition/Mediterranean diet;
4. Food and water chain efficiency;
5. Reduction of impact of pests and pathogens in farming;
6. Innovative business models in agri-food industry;
7. Land and water sustainability in arid and semi-arid watersheds;
8. Policies and governance of water management systems.
Answers received from each organization type

Type of organizations

- Public research: 75%
- Government authority: 4%
- Private research (technological centre): 3%
- Private company (SME): 7%
- Private company (Large): 4%
- End-user: 3%

75% of total replies were from Academy and Research
Public versus Private

- Public: 80%
- Private: 20%
Do you think the main general priorities “Management of Water, Farming Systems and Agro-Food Value Chain” describe major challenges of the Mediterranean?

- Yes: 80%
- No: 12%
- No answer: 8%
Do you think the main general priorities “Management of Water, Farming Systems and Agro-Food Value Chain” describe major challenges of the Mediterranean?

- Yes: 80%
- No: 12%
- No answer: 8%
PRIMA aims to promote scientific research into solutions to these challenges through a multi-actor approach, in which public academia and research centres, private companies and end-users will actively collaborate. Do you believe this is the correct approach?

- **Yes**: 80%
- **No, It should be focused primarily on applied innovation with pilot demonstration projects**: 9%
- **No, it should be more oriented to basic research**: 7%
- **No, it should be more oriented to training, mobility and coordinated and support actions**: 4%
Is there any other major challenge you think PRIMA should consider?

Number of answers received:

- No answer or No: 478
- Human health: 21
- Migration: 12
- Climate change: 25
- Energy: 14
- Forestry: 6
- Fishery: 5
- Cultural Heritage and...: 4
- End-users involvement: 5
- Digital revolution: 4
- Desertification: 8
- Agriculture Policy: 2
Index talk

1. What PRIMA is

2. PRIMA Strategic Research and Innovation Agenda (SRIA)

3. PRIMA Implementation
• **Section 1.** EU funds in form of Research & Innovation and Innovation action H2020 like (with an expected budget per project of 2.0 to 3.0 M€)

• **Section 2.** ERA-NET like with national funds. Spain will support both public and private institutions by means of AEI and CDTI

• Both section under **PRIMA SRIA**, and PRIMA DIS implementation plans. **Calls to be launched early in 2018.**
PRIMA Implementation

• **Work Programme for 2018 under evaluation.** A first draft is currently under revision by the Commission and an external evaluation panel.

• **Proposal to be submitted in two stages.** Format, length and evaluation procedure similar to H2020 rules.

• **Section 1.** Proposals with a multi-disciplinary and multi-actor approach.

• **Section 2.** More targeted and specific projects will have to consider the national rules and funding rates.
<table>
<thead>
<tr>
<th>Research and innovation priority</th>
<th>Technology readiness level</th>
<th>Type of action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water resources availability and quality within catchments and aquifers</td>
<td>2 to 5</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Sustainable, integrated water management</td>
<td>3 to 6</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Irrigation technologies and practices</td>
<td>4 to 8</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Water reuse and water desalination for agricultural and food production</td>
<td>5 to 8</td>
<td>Research and innovation action funded under section 1 (EU Funds)</td>
</tr>
</tbody>
</table>
Survey Results
Priorities for the Management of Water thematic area

Water resource availability and quality in catchments and aquifers

Sustainable integrated water management

Irrigation technologies and practices

Water reuse and desalination for agriculture and food production
New topics/priorities suggested:

• Water & Climate change
• Water pollutants and effects on human health
• Water-Energy nexus
• Water and soil conservation (Desertification)
<table>
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<th>Research and innovation priority</th>
<th>Technology readiness level</th>
<th>Type of action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptation to climate change and associated expanding drought, warming, and extreme events</td>
<td>2 to 5</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Developing sustainable and productive agro-ecosystems</td>
<td>3 to 7</td>
<td>Research and innovation action funded under section 1 (EU funds)</td>
</tr>
<tr>
<td>Preventing the emergence of animal and plant diseases</td>
<td>2 to 6</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Developing farming systems able to generate income, to create employment and to contribute to a balanced territorial development</td>
<td>2 to 5</td>
<td>Spain will not include funding for this priority in 2018</td>
</tr>
</tbody>
</table>
Survey Results

Priorities for the Farming systems thematic area

Adaptation of agriculture to climate change

- Very high priority: 200
- High priority: 150
- Medium priority: 100
- Low priority: 50
- Very low priority: 10
- No answer: 0

Developing sustainable productive agro-ecosystems

- Very high priority: 250
- High priority: 200
- Medium priority: 150
- Low priority: 100
- Very low priority: 50
- No answer: 0

Preventing emergence of animal and plant disease

- Very high priority: 150
- High priority: 200
- Medium priority: 100
- Low priority: 50
- Very low priority: 10
- No answer: 0

Developing farming systems that generate income, create employment and contribute to balanced regional development

- Very high priority: 100
- High priority: 250
- Medium priority: 150
- Low priority: 100
- Very low priority: 50
- No answer: 0
Survey Results

New topics/priorities suggested:
• Agroforestry
• Fishery and aquaculture
• Agriculture & Landscapes
• Agriculture footprints studies
## Work Plan 2018. Agro-Food value chain Priorities

<table>
<thead>
<tr>
<th>Research and innovation priority</th>
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<th>Type of action</th>
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<td>Valorising food products from traditional Mediterranean diet</td>
<td>2 to 7</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Food safety in local food chains</td>
<td>2 to 6</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
<tr>
<td>Implementing innovation in Mediterranean Agri-food chains by smallholders and SMEs.</td>
<td>5 to 8</td>
<td><strong>Innovation action funded under section 1 (EU Funds)</strong></td>
</tr>
<tr>
<td>Health effects of the dietary shifts and promotion of healthy and sustainable diet for the Med Populations</td>
<td>2 to 6</td>
<td>Research and innovation action under ERANET scheme</td>
</tr>
</tbody>
</table>
Survey Results
Priorities for the Agro-Food Value Chain thematic area

Valorising food products from the traditional Mediterranean diet

Food safety in local food chains

Implementation of innovations in the agro-food chain, promoting quality, sustainability and competitiveness, with particular reference to smallholders

Health effects of dietary shifts and promotion of healthy sustainable diets for the Mediterranean population
New topics/priorities suggested:

- Contaminants / Pollutants
- Functional foods / Fermented foods
- Food packaging
- Social value of Med Food
General recommendations

• PRIMA is a Research & Innovation programme. Scientific excellence and tangible impacts should be demonstrated.

• PRIMA searches for tight collaborations between north and south shores of the Mediterranean. South partners have to be well involved in the proposals.

• PRIMA is an initiative searching for solutions to the Mediterranean challenges and its specificities.

• For Section 2 mainly, previous R&D programmes such as ARIMNET and ERANET-MED should be considered as reference.
Next events

PRIMA STAKEHOLDER FORUM

Montpellier October 13, 2017

To join please email to: fabrice.gouriveau@inra.fr
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