



# ARIMNet and ARIMNet2

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# Rationale

- Mediterranean agriculture faces major challenges : climate change, water scarcity, food security. Most of them are worldwide issues but are particularly acute in the Med.
- Agricultural Research Capacities in the Mediterranean region are fragmented, not sufficiently developed to address properly these issues in several countries.
- Some previous partnerships , for instance due to in EU-FP6 between Northern Med and Southern Med research teams; but without an involvement of Mediterranean Countries in the design of priorities.
- Need to develop coordination not only at the project level but also at the programmes level.

## ARIMNet (2008-2013)

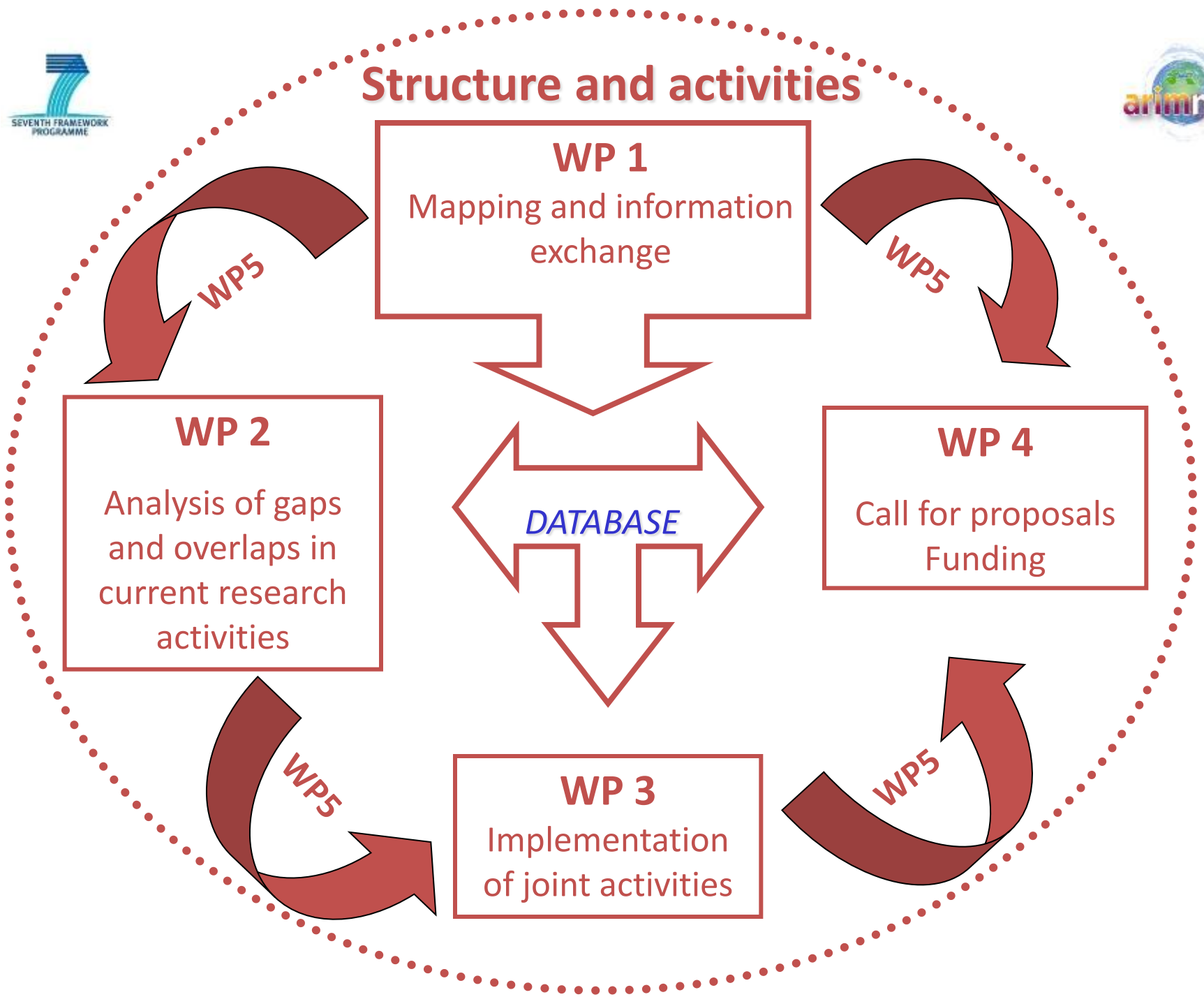
### Agricultural Research in the Mediterranean Area Network

- A four years ERA-Net supported and funded by the European Commission FP7:
  - reinforce the scientific cooperation between countries of the Mediterranean area, creating a research community through the coordination of national programmes in Agricultural Research;
  - address jointly the common key issues for Mediterranean agriculture such as: sustainable development of agriculture, management of natural resources and mitigation of threats resulting from global change;
  - better fulfil the expectations of decision makers, stakeholders and Mediterranean populations.

# Partners

<b>Name</b>	<b>Short name</b>	<b>Country</b>
<b>Institut National de la Recherche Agronomique</b>	<b>INRA</b>	<b>France (FR)</b>
<b>Centre de Coopération Internationale en Recherche Agronomique pour le Développement</b>	<b>CIRAD</b>	<b>France (FR)</b>
<b>Ministero delle Politiche Agricole Alimentari e Forestali</b>	<b>MIPAAF</b>	<b>Italy (IT)</b>
<b>Institut National de la Recherche Agronomique d'Algérie</b>	<b>INRAA</b>	<b>Algeria (DZ)</b>
<b>Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria</b>	<b>INIA</b>	<b>Spain (ES)</b>
<b>General Directorate of Agricultural Research and Policy, Ministry of Food Agriculture and Livestock</b>	<b>GDAR</b>	<b>Turkey (TR)</b>
<b>Agricultural Research Centre</b>	<b>ARC</b>	<b>Egypt (EG)</b>
<b>Fundação para a Ciência e a Tecnologia</b>	<b>FCT</b>	<b>Portugal (PT)</b>
<b>Hassan II Institute of Agronomy and Veterinary Medicine</b>	<b>IAV</b>	<b>Morocco (MA)</b>
<b>National Agricultural Research Foundation</b>	<b>NAGREF</b>	<b>Greece (EL)</b>
<b>Institution of Agricultural Research and Higher Education</b>	<b>IRESA</b>	<b>Tunisia (TN)</b>
<b>Agricultural Research Institute</b>	<b>ARI</b>	<b>Cyprus (CY)</b>
<b>Ministry of Agriculture and Rural Development</b>	<b>MOARD</b>	<b>Israel (IL)</b>

# Structure and activities



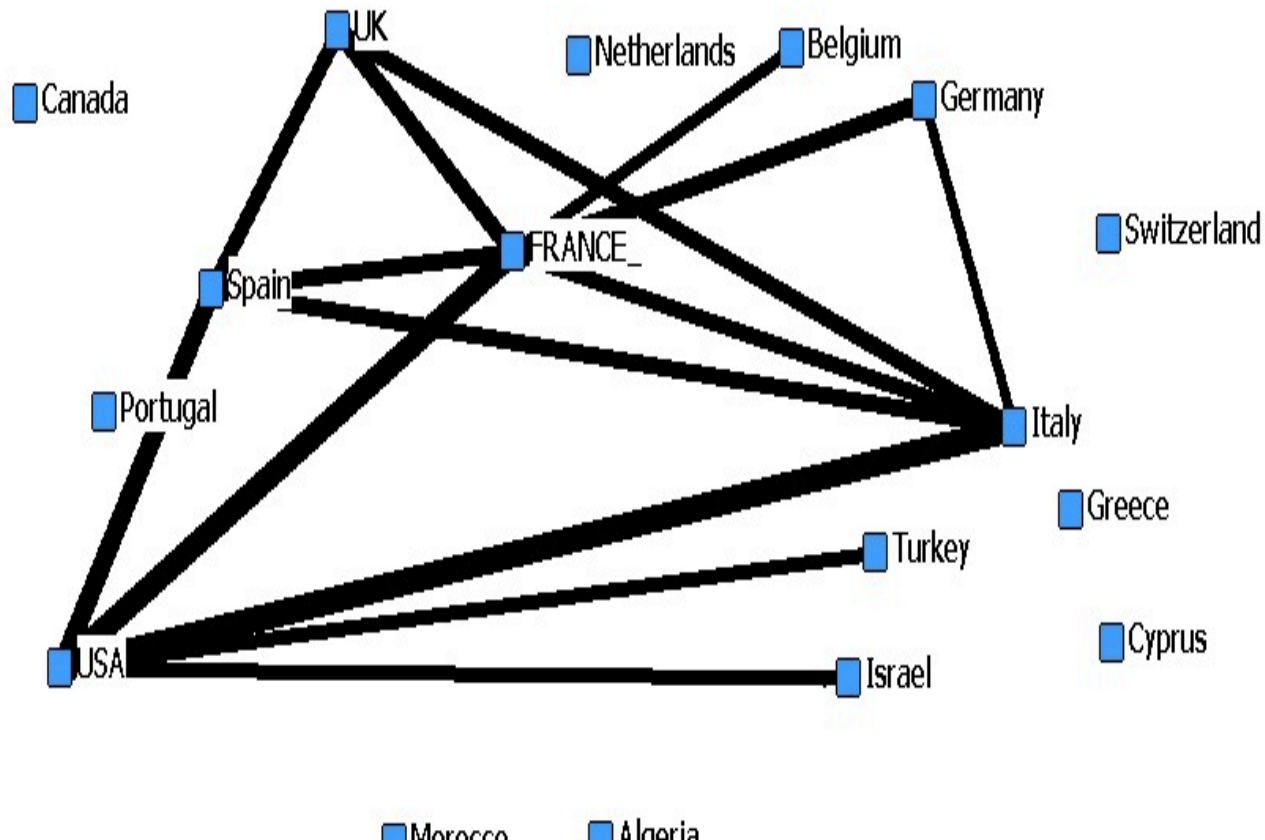
# Characterisation of scientific publications of twelve Mediterranean Countries: Bibliometric analysis

- **Web of Science 2006-2010**
- **12 Subject Categories:**
- Agriculture, Multidisciplinary; Agriculture, Dairy & Animal Science ; Agronomy ; Agricultural Engineering ; Agricultural Economics & Policy ; Food Science & Technology ; Horticulture ; Soil Science ; Veterinary Sciences; Plant Sciences; Water Resources; Biotechnology and Applied Microbiology

Country	Nb. Pub.	%
<b>Spain</b>	<b>15472</b>	<b>26%</b>
<b>Italy</b>	<b>13539</b>	<b>23%</b>
<b>France</b>	<b>13138</b>	<b>22%</b>
<b>Turkey</b>	<b>8684</b>	<b>15%</b>
<b>Portugal</b>	<b>3085</b>	<b>5%</b>
<b>Greece</b>	<b>2996</b>	<b>5%</b>
<b>Israel</b>	<b>2628</b>	<b>4%</b>
<b>Egypt</b>	<b>1323</b>	<b>2%</b>
<b>Tunisia</b>	<b>1267</b>	<b>2%</b>
<b>Morocco</b>	<b>514</b>	<b>1%</b>
<b>Algeria</b>	<b>491</b>	<b>1%</b>
<b>Cyprus</b>	<b>98</b>	<b>0%</b>

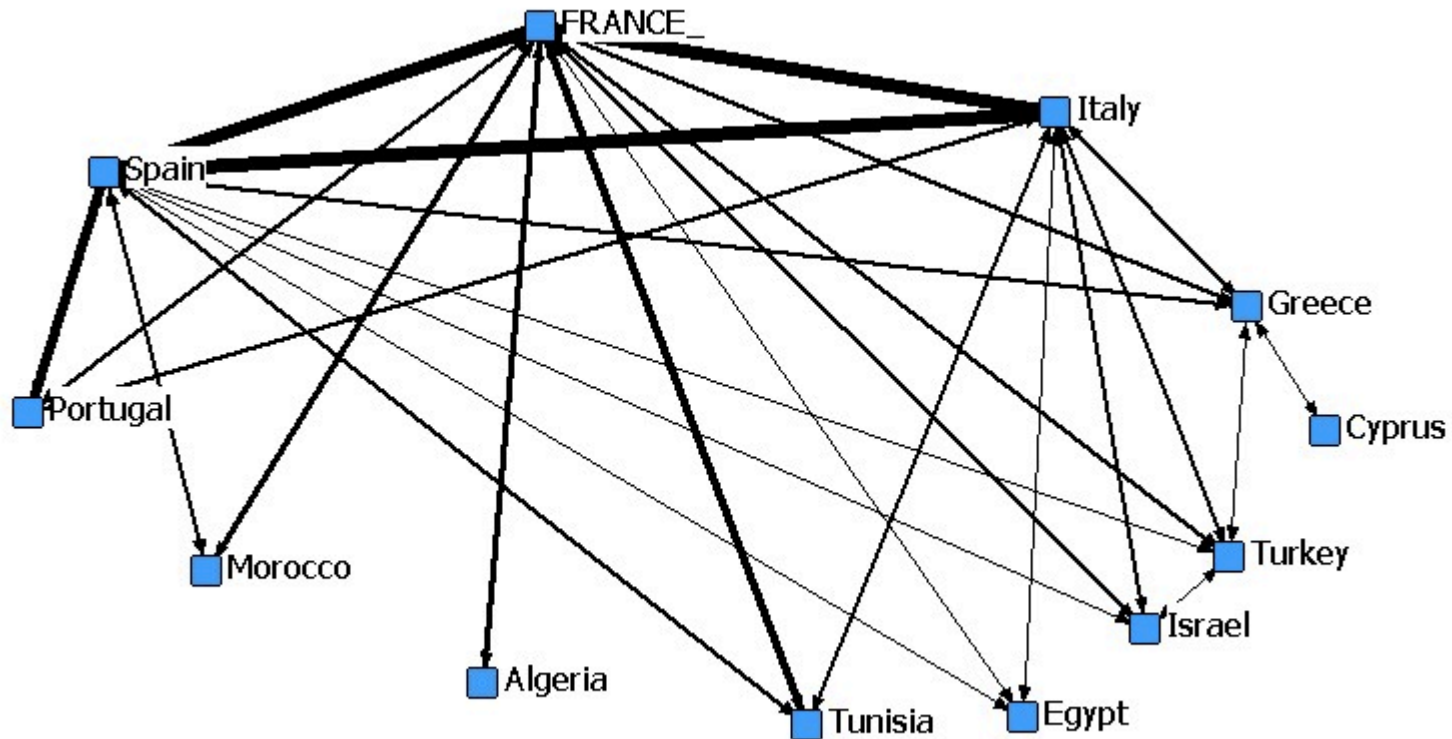
# Characterisation of scientific publications of twelve Mediterranean Countries

Copublications between Arimnet countries and other main countries  
if links > to 400 publications



# Collaborations between Arimnet countries

Copublications between Arimnet countries if links  $>$  to 20 publications





# Joint Call for Research proposals 2011 – General features

- A call co-funded by ARIMnet partners
- Common definition of the scope of the calls
- Common criteria for eligibility
- External evaluation
- Common selection and follow-up of project
- Virtual common pot of 6 million euros

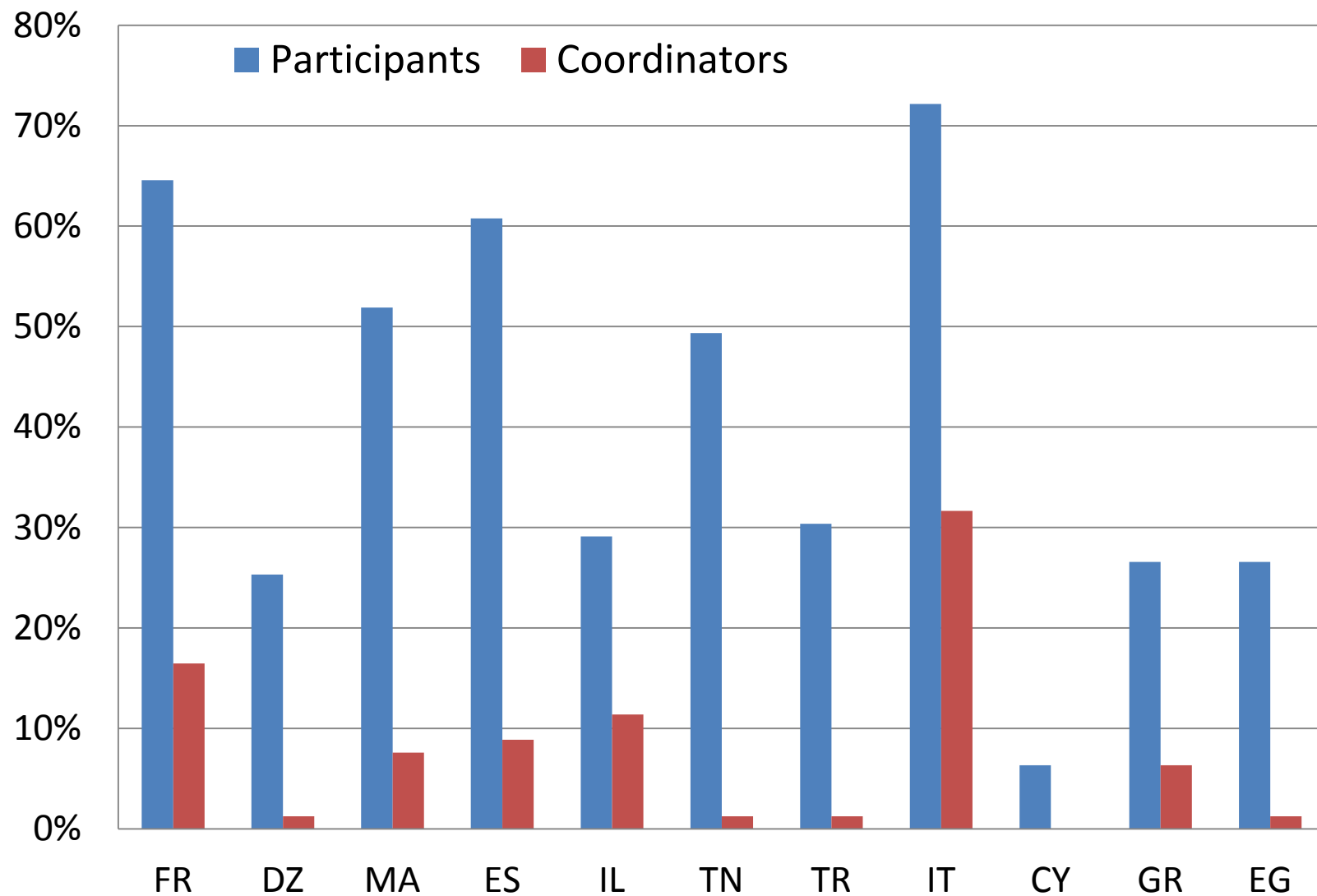
# Call content

The call focused on major challenges faced by Mediterranean Agriculture:

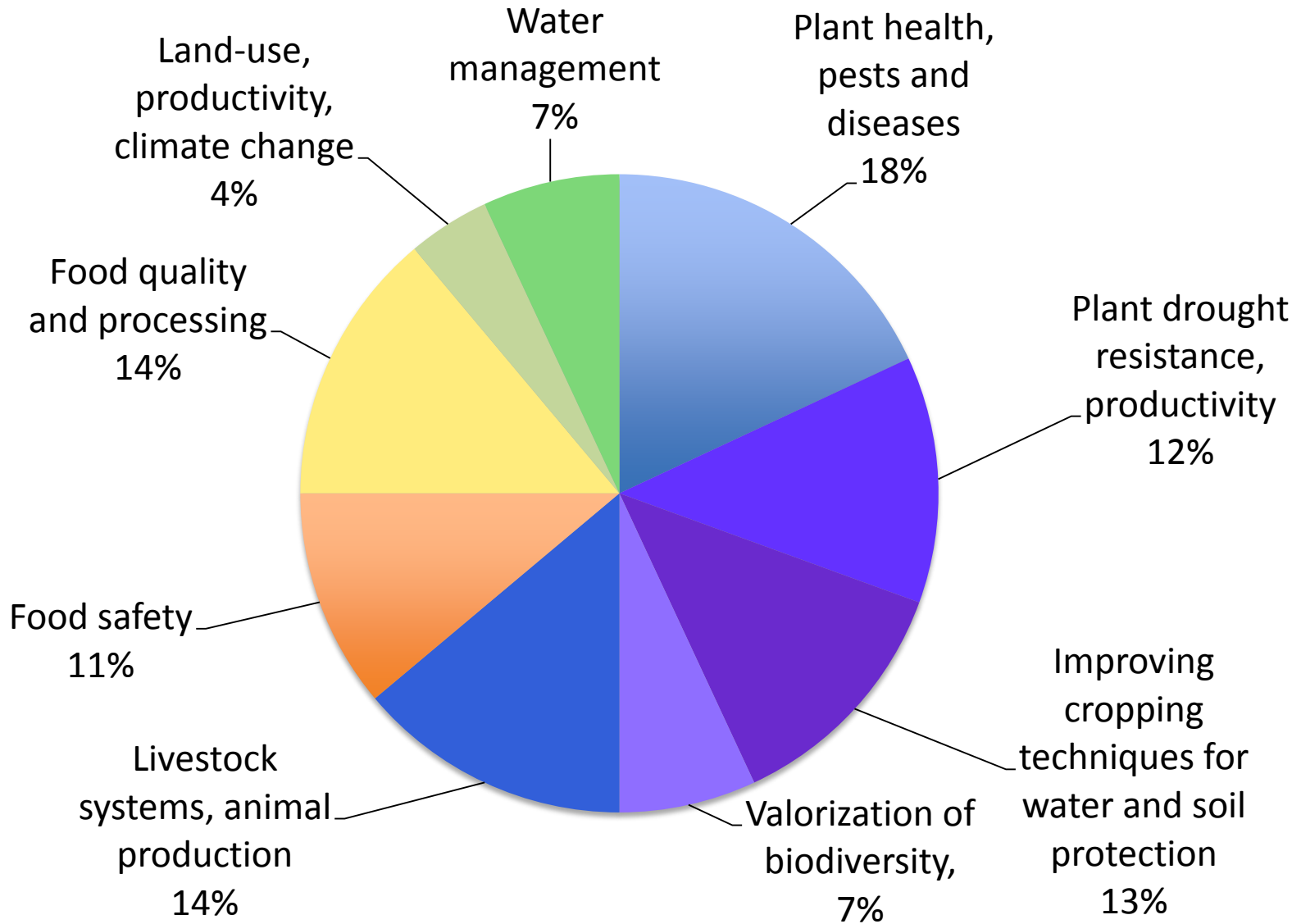
1. Production systems and their components: Developing sustainable agricultural production in a context of increasing ecological and climatic stresses
2. Food chain from production to distribution: Enhancing the advantages of Mediterranean agriculture in developing products with high added value
3. Landscape and resources uses for agricultural and environmental purposes: Sustainable management of land and natural resources



# 2011 Call results – 79 proposals



# 2011 Call results – 79 proposals



3. Further steps

# Selected projects

**APMed**- Apple and Peach in Mediterranean orchards – Integrating tree water status and irrigation management for coping with water scarcity and aphid control

**ARIDWASTE**- Development of specific agricultural practices with the use of recycled wastes suitable for intensively cultivated Mediterranean areas under degradation risk

**CLIMED**- The future of Mediterranean Livestock Farming Systems: Opportunity and efficiency of Crops – Livestock Integration

**DOMESTIC**- Mediterranean biodiversity as a tool for the sustainable development of the small ruminant sector: from traditional knowledge to innovation

**MEDILEG**- Breeding, agronomic and biotechnological approaches for reintegration and revalorization of legumes in Mediterranean agriculture

**REFORMA**-Resilient, water- and energy-Efficient FORage and feed crops for Mediterranean Agricultural systems

**SAFEMED**- Food safety regulations, market access and international competition

**SWIPE**-Predicting whitefly population outbreaks in changing environments

**PESTOLIVE**-Contribution of olive history for the management of soil-borne parasites in the Medi Basin

**POHMED**- Potato Health - Managed for Efficiency and Durability

Name	TITLE	FR	DZ	MA	ES	IL	TN	TR	IT	CY	GR	EG	USA	CH	PT
APMed	Mediterranean orchards – Integrating tree water status and irrigation management for coping with water scarcity and aphid control	X		X	X	X			X						
SWIPE	Predicting whitefly population outbreaks in changing environments	X			X	X		X	X		X		X	X	
PESTOLIVE	Contribution of olive oil history for the management of soil born- parasites	X		X	X		X	X	X		X				
CLIMED	The future of Mediterranean Livestock Farming Systems: Opportunity and efficiency of Crops – Livestock Integration	X		X								X			
ARIDWASTE	Use of recycled wastes in cultivated suitable for intensively cultivated mediterranean area under degradation risk				X	X	X		X		X				
DoMEsTic	Mediterranean biodiversity as a tool for the sustainable development of the small ruminant sector: from traditional knowledge to innovation	X		X						X	X				
MEDILEG	...Revalorization of legumes in Mediterranean agriculture	X	X	X	X		X		X			X			X
SAFEMED	Food safety regulations, market acces and international competition	X	X	X	X		X		X						
PoH-MED	Potato Health - Managed for Efficiency and Durability	X	X	X								X			
REFORMA	Resilient, water- and energy-Efficient Forage and feed crops	X	X	X			X		X				X		

# ARIMNet Main achievements

- A better and shared knowledge of on-going programmes in the region.
- A pilot action : A joint call for transnational research projects.
- Establishing the conditions of implementing other joint activities
- The willingness to continue the cooperation in the future

# ARIMNet2 (2014-2017)

## Consolidating the ARIMNet achievements and deepening the cooperation

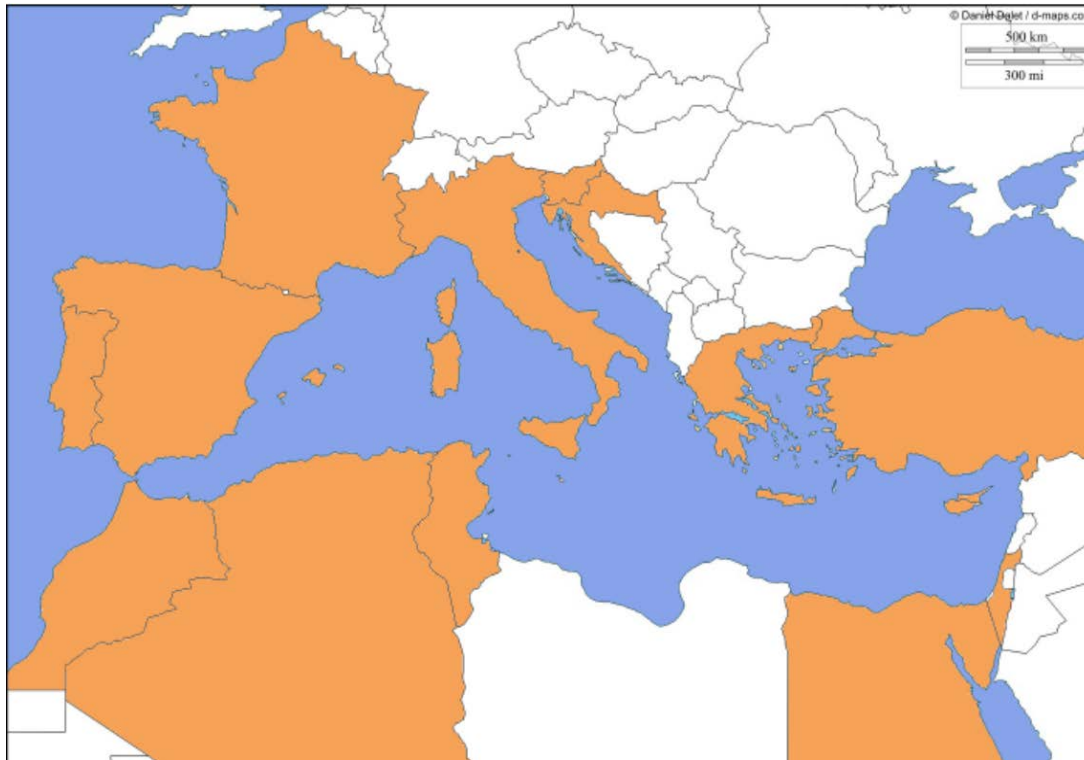
- Deepen and ensure the cooperation between Mediterranean countries
- Establishing a common vision on agricultural research and innovation and a common scientific strategic agenda
- Undertaking actions to push further the achievements of ARIMNet



# ARIMNet2 (2014-2017)

24 partners from 15 countries :

- 9 members of the EU (Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia, Spain),
- 2 Associated Countries (Turkey, Israel),
- 4 Mediterranean Partner Countries (Algeria, Egypt, Morocco, Tunisia).



- National Funding Agencies and Research Programme Owners
- 2 international organisations ICARDA, CIHEAM-IAMMn

# ARIMNet2 Partners

N°	Participant organisation name	Short name	Country
1.	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	INRA-FR	FRANCE
2.	ACADEMY OF SCIENTIFIC RESEARCH AND TECHNOLOGY ASRT	ASRT-EG	EGYPT
3.	AGENCE NATIONALE DE LA RECHERCHE	ANR-FR	FRANCE
4.	CENTRE DE COOPERATION INTERNATIONALE EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT	CIRAD-FR	FRANCE
5.	CENTRE INTERNATIONAL DE HAUTES ETUDES MÉDITERRANÉENNES-INSTITUT AGRONOMIQUE MÉDITERRANÉEN DE MONTPELLIER	CIHEAM-IAMM	
6.	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	FCT-PT	PORTUGAL
7.	HELLINIKOS GEORGIKOS ORGANISMOS - DIMITRA (HELLENIC AGRICULTURAL ORGANIZATION - DEMETER)	DEMETER-GR	GREECE
8.	INSTITUT AGRONOMIQUE ET VETERINAIRE HASSAN II	IAV-MA	MOROCCO
9.	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE D'ALGERIE	INRAA-DZ	ALGERIA
10.	INSTITUT ZA JADRANSKE KULTURE I MELIORACIJU KRSA-SPLIT	KRS-HR	CROATIA
11.	INSTITUTION DE LA RECHERCHE ET DE L'ENSEIGNEMENT SUPERIEUR AGRICOLES	IRESA-TN	TUNISIA
12.	INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARIA Y ALIMENTARIA	INIA-ES	SPAIN
13.	INTERNATIONAL CENTRE FOR AGRICULTURAL RESEARCH IN THE DRY AREAS	ICARDA	
14.	ISTITUTO NAZIONALE DI ECONOMIA AGRARIA	INEA-IT	ITALY
15.	MINISTERE DE L'ENSEIGNEMENT SUPERIEUR ET DE LA RECHERCHE SCIENTIFIQUE	MESRS-DZ	ALGERIA
16.	MINISTERO DELLE POLITICHE AGRICOLE ALIMENTARI E FORESTALI	MIPAAF-IT	ITALY
17.	MINISTRSTVO ZA IZOBRAZEVANJE, ZNANOST, KULTURO IN SPORT	MIZS-SI	SLOVENIA
18.	MINISTRSTVO ZA KMETIJSTVO IN OKOLJE	MKO-SI	SLOVENIA
19.	MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT	MOARD-IL	ISRAEL
20.	MINISTRY OF AGRICULTURE, NATURAL RESOURCES AND ENVIRONMENT OF CYPRUS	ARI-CY	CYPRUS
21.	MINISTRY OF FOOD AGRICULTURE AND LIVESTOCK	GDAR-TR	TURKEY
22.	MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH	MESRT-TN	TUNISIA
23.	OFFICE OF THE PRIME MINISTER	MCST-MT	MALTA
24.	THE AGRICULTURAL RESEARCH CENTER	ARC-EG	EGYPT

# ARIMNet2 Work Plan

	<b>Work package title</b>
<b>WP1</b>	<b>Developing an Integrated Strategic Research Agenda</b>
<b>WP2</b>	<b>Preparation and launching of Joint Calls for transnational research projects</b>
<b>WP3</b>	<b>Monitoring, follow-up and impact assessment of ARIMNet Calls and joint activities</b>
<b>WP4</b>	<b>Implementing pilot actions of joint activities to support cooperation in Mediterranean agricultural research (mobility, summer schools, ..)</b>
<b>WP5</b>	<b>From Research to Innovation (Agricultural Knowledge and Innovation Systems )</b>

# ARIMNet2 2014 Call

- Joint call for research proposals launched September 2014
- Research + innovation potential
- Contribution to capacity building (training&mobility)
- Dissemination in higher education
- 16 partners, 14 countries,
- Virtual pot 7 million euros

# ARIMNet2 2014 Call

TOPICS 2014 Call	ANR	MIZS <sup>1</sup>	MIPAAF	INIA	FCT	DEMETER	KRS	GDAR	MOARD	MESRSFC	MESR	IRESA	MESRS	ASRT	ARC	MCST
	France	Slovenia	Italy	Spain	Portugal	Greece	Croatia	Turkey	Israel	MOROCCO	Tunisia	Tunisia	Algeria	Egypt	Egypt	Malta
1. Increase in resilience, rusticity and productivity of Mediterranean agricultural production systems	X	X		X	X	X	X	X		X	X	X	X	X		X
2. Improving inputs management , at the level of the production systems	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
3. Common Mediterranean challenges in animal and plant health	X	X	X	X	X	X		X	X	X		X	X	X		X
4. Sustainable Mediterranean Aquaculture and Fisheries	X								X	X		X	X			X
5. Innovation in the agroindustry	X	X			X			X		X		X	X	X		X
6. Logistics, supply chain organization, transportation	X			X	X			X					X		X	X
7. Food safety, food sanitary issues	X	X			X	X		X	X	X	X	X	X	X		X
8. Food consumption patterns: consumers' behavior, quality of products, diet and nutrition	X				X									X		X
9. Agricultural and food policies	X	X			X			X		X	X		X	X		X
10. Sustainable management of water and other resources used by agriculture	X	X	X	X	X	X	X			X	X	X	X	X		X
11. Landscape and spatial management, competition with other land uses, peri-urban and urban agriculture	X				X	X						X	X			X

# Lessons and perspectives

## State of the play

- Complexity of the scientific challenges
- Need to produce innovation, to contribute to economic development  
Contribution to the economic development
- Fragmentation and insufficient forces in research

## What to do ?

- Develop various initiatives. We need simultaneously : Networks of researchers, of laboratories, research organisations, programme owners and funding agencies
- The priorities and actions to be done should be differentiated function of the subtopics (PPP, research facilities sharing, training of young researchers, mobility)
- Some priorities for further actions :
  - Joint actions by National Research Organisations and funding agencies
  - SMEs (and other end users) involved in research projects
  - Training and Mobility included in research projects
- Build a framework for long term cooperation

# Thanks for your attention

