



Ministère de l'Agriculture, de la Pêche Maritime, du Développement rural et des Eaux et Forêts  
Département de l'Agriculture

# Issues of research and partnership : what are the priorities for integrating research on agricultural and environmental questions between European, Mediterranean and African collaborating teams?

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# Introduction

- Actually the most of mediterranean and african countries put the agriculture sector forward for job creation, stabilizing the rural environment and curbing the rural exodus
- Since 2008 the world food crisis has prompted several countries to review the positioning of agricultural policy
- Agricultural development strategies have placed training, research and technology transfer at a high level
- Important reforms have been made in governance with the organization of the private sector and public-private partnership.
- Cooperation and partnership at regional and international level, mainly in training, research and innovation
- South-South cooperation and North-South cooperation are translated into triangular cooperation

# 1. History of EU-Mediterranean Partner Countries (MPC) Science & Technology collaboration

# Euro-Mediterranean Partnership : S&T policy framework

## REGIONAL LEVEL

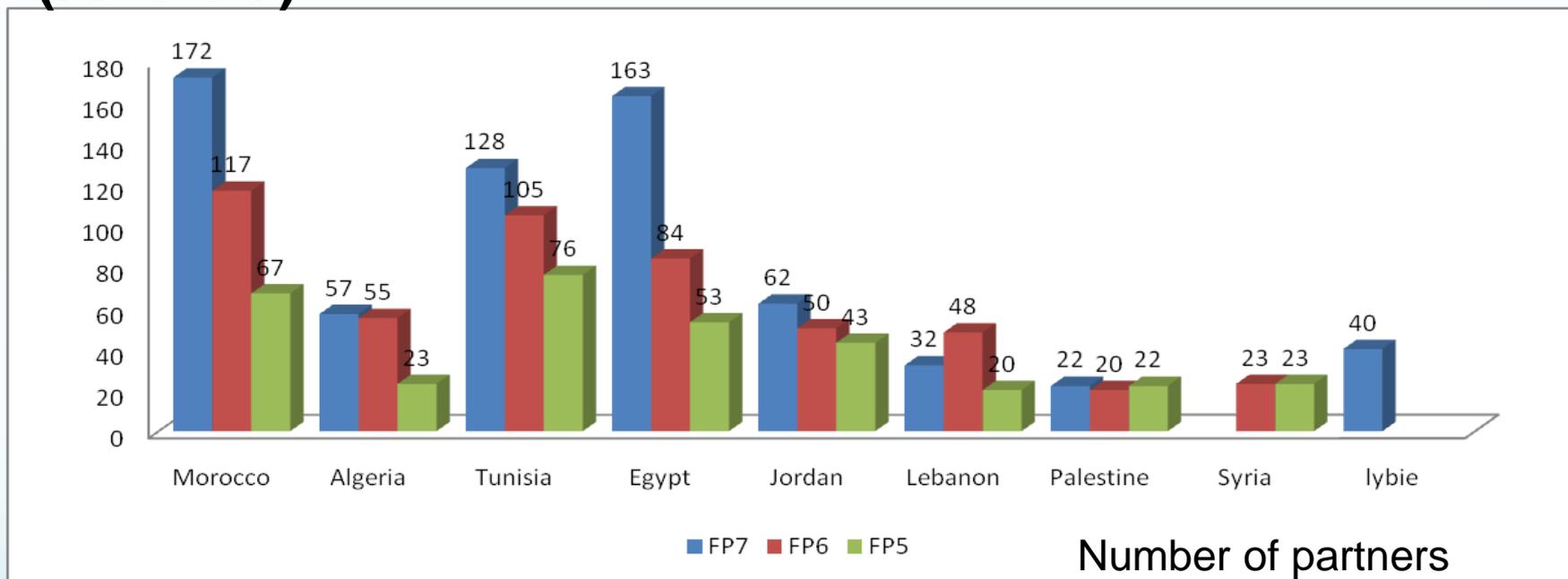
- 1995 : Barcelona process (MOCO )
- 2002 : FP6 Opening ERA to the world
- 2004 : Neighborhood Policy
- 2007 : FP7 Green paper on ERA special emphasis on neighboring countries
- 2007 : First EUROMED, Cairo
- 2008 : Union for the MED

## 2. EU S&T Supporting programs : FP's-H2020



# EU supporting program : FP's-H2020

## MPC participation to EU Framework Program (FP 5-6-7)



Sources :

FP7 EC statistics (DG Research May 2014)

FP6, FP5 : *Overview of MPC participation*

*in FP5 and FP6 MIRA – WP4 SCREENING CONFERENCE*

*CAIRO, APRIL 16-17 2008*

# EU programs : a bridge between MPC/African researchers

## AFRICA call ( FP7) in 2010

- Published : 30-07-2009
- Budget : € 63,000,000
- Topics : Health , Food, Agriculture and Fisheries, Biotechnology, Environment (including Climate Change)
- Objective : The aim of this Call is to address some of the Science & Technology objectives of the "Africa - EU Strategic Partnership" putting emphasis on 'Water and Food Security' and 'Better Health for Africa '.

# Examples of funded projects (1)

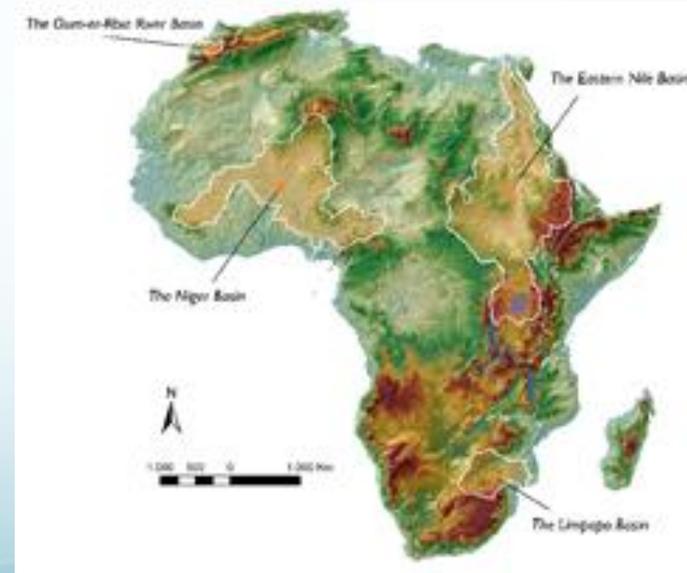
**DEWFORA : Early warning and forecasting systems to predict climate related drought vulnerability and risks in Africa**



**18 Partners** : UNESCO, ACFMRWF -United Kingdom, JRC –Belgium, 2 Germany, 2 Spain, Portugal, IAM, Netherlands, Egypt, Sudan, Kenya, Mozambique, 2 South Africa, Morocco, Botswana

## Results :

- developing a risk-based approach for establishing and mapping drought vulnerability and hazards
- developing high resolution predictions of future climate scenarios
- drafting a framework for the improvement of early drought warning systems
- Youtube movie : on "Futuris" on euronews



# Examples of funded projects (2)

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**Biowaste 4Sp** : Effective technological use of a selected list of biowaste of significant importance and from both the industrial and agricultural sector in five African countries : Morocco, Egypt, Ghana, South Africa

**16 Partners:** 2 Denmark, 2 Sweden, Turkey, 2 Malaysia, Ghana, South Africa, Egypt, Italy, 2 Morocco, South Africa, Kenya, WAITRO

## Results :

- developed a feedstock catalogue that has information on biowastes and bioresidues found in large quantities in the partner countries. They used a total of 49 biomass samples
- developed a generic biorefinery process and was able to retrieve up to 80 % of sugars from biomass feedstock



# Examples of funded projects (3)

**OH Nextgen project** : Training of the One Health Next Scientific Generation in the Sahel and Maghreb

**9 Partners** : 2 Belgium, Switzerland, United Kingdom, Sweden, South Africa, Morocco, Senegal, Ghana

## Results :

- developing the curriculum for a web-based modular training course on neglected diseases like rabies
- course content, advocacy, and monitoring and evaluation have been developed, and 10 course modules were defined.
- OH-NEXTGEN trained a total of 29 francophone and 15 anglophone scientists
- development of Master



## 3 . UE-MPC joint calls : ERANET

- **ARIMNET**
- **ERANETMED**

# A new regional dynamic : ARIMNET 1 & 2 projects



**Specific goal** : coordination of agricultural research in the EU-MED countries through publication of Joint Call for Transnational Research Proposals in Agriculture

**Euro-MED Partners** : (ARIMNET1 : 13 ; ARIMNET2 : 26)

**Call Secretariat** : IAV and INRA France

**Call 2011** :  
80 proposals : 10 selected

**Call 2016** :  
120 proposals : 11 selected

**Call 2014** :  
180 proposals : 10 selected

**NEXT CALL FOR YOUNG RESEARCHERS**

Countries	Funding Organisation	financial contribution (€)
 France	ANR	1,500,000
 Italy	MIPAAF	400,000
 Algeria	MESRS	200,000
 Spain	INIA	200,000
 Turkey	GDAR	650,000
 Egypt	ASRT	500,000
 Portugal	FCT	250,000
 Morocco	MESRSFC	500,000
 Greece	ELGO – DEMETER	70,000 in cash + 70,000 in kind
 Tunisia	MHESRT	600,000
	IRESA	300,000
 Slovenia	MIZS	300,000
 Croatia	KRS	20,000
 Malta	MCST	39,000
 Israel	MOARD	300,000

# A new regional dynamic : ERANETMED

**Specific goal:** supporting transnational research through renewable energies and energy efficiency, water resources management, ENERGY-WATER nexus

**Euro-MED consortiums :** 16 partners

**Call 2014 :** 21 selected projects

**Call 2017 :** pre announcement

Country	Funding Partner	Contribution up to (in k€)
Algeria	MESRS	In Kind
Croatia	KRS	In Kind
Egypt	ASRT	600
Egypt	ARC	40
France	ANR	2000
Greece	DEMETER	100 in cash 100 In Kind
Israel	MOARD	300
Italy	MIPAAF	800
Malta	MCST	In kind
Morocco	MESRSFC	800
Portugal	FCT	400
Slovenia	MIZS	300
Spain	INIA	200
Tunisia	MESR	600
Tunisia	IRESA	300
Turkey	GDAR	600

4. Partnership for Research Innovation  
Mediterranean Area (PRIMA)  
(art.185 Treaty of Funtioning of the EU)

# PRIMA

**PRIMA Partners** : 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)

**Objective** : 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.



# Common challenges identified by PRIMA

- **Climate change :**
- **2-4°C increase by 2050**
- **20-30% decrease rainfall by 2050**



**Population :**  
**Expectation of growth  
by 2020, 520 million**

# Common challenges identified by PRIMA

- **Water scarcity and overexploitation** of natural resources, water demand is higher, water agricultural demand more than 70%



## Sustainable Agriculture

Production in Agriculture in MPCs is typically between 10% and 20% of GDP compared to 3% in EU.

20-30% employment in MPC comparing to 4% in EU

# Common challenges identified by PRIMA

## Agro-biodiversity loss



## Mediterranean agro-food value chains



Reinforcing Mediterranean lifestyle : diet, physical activity, socio-cultural, overweight 74/86% for women and 69/77% for men

# PRIMA thematic areas

## 3 THEMATIC AREAS

### MANAGEMENT OF WATER

### FARMING SYSTEMS

### AGRO-FOOD VALUE CHAIN



## 8 OPERATIONAL OBJECTIVES



**1/ WATER-SAVING SOLUTIONS**  
To test and stimulate adoption of context-tailored water-saving solutions in particular in agriculture



**4/ SMART AND SUSTAINABLE FARMING**  
To develop smart and environmentally sustainable farming systems to maintain natural resources and to increase production efficiency



**6/ NUTRITION AND HEALTH**  
To innovate in the Mediterranean food products based on Mediterranean diet heritage and to enhance the links between nutrition, physical activity and health



**2/ LAND AND WATER SUSTAINABILITY**  
To improve land and water sustainability in arid and semi-arid watersheds



**5/ PESTS AND PATHOGENS IN FARMING**  
To design and promote the adoption of novel approaches to reduce the impact of pests and pathogens in farming, including their consequences on human health



**7/ REDUCE LOSSES AND WASTES**  
To find context-adapted solutions to increase food and water chain efficiency and reduce losses and wastes



**3/ WATER GOVERNANCE SYSTEM**  
To elaborate and stimulate adoption of new policies and protocols for the governance of water management system



**8/ NEW AGRO-FOOD BUSINESS MODELS**  
To conceive and implement innovative, quality oriented models in agro-businesses as potential sources of new jobs and economic growth

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**Cross cutting themes and activities:**

- **SOIL SUSTAINABILITY**
- **FOOD SECURITY**
- **DIGITAL REVOLUTION**
- **SOCIO-ECONOMIC RESEARCH**
- **AND STAKEHOLDERS INVOLVEMENT**
- **CAPACITY BUILDING**

# Conclusion

- COP21 and COP22 were successful meetings of history and hope. COP21 devoted a significant part to agricultural issues and made it possible to conclude a universal agreement to this effect. This historic agreement invites us to act **quickly, well and collectively**.
- In the wake of COP21, COP22 also focused on issues related to **food security and adaptation to climate change**. It has positioned **Africa** at the heart of the debate, taking care to devote the role of **agriculture to poverty reduction** as a key pillar of the solutions to the fight against global warming and as a major component to the construction of peace.

**Thank you for attention**