



Agricultural research in the Mediterranean region

From environmental & social
issues to scientific challenges

“Centrality of Mediterranean agriculture” – *S. Abis*

1. “Agriculture is the most important activity in S&E Med countries and the main area in which innovation and knowledge are needed”
2. “Efforts of EU-Med cooperation should be focused on the potential instabilities related to natural resources, climate change and agricultural production”
3. “Small-scale farmers represent a crucial segment, producing the bulk of food production in many Med countries”
4. “Social and territorial cohesion is an absolute priority : no rural development without dynamic agricultural policies and no agricultural development without rural vitality”

Issues for agricultural research

Mediterranean agriculture is facing with a particular acuity most of the problems of the world agriculture

But :

- Currently, there is no common research instrument (or tool) linking EU & MENA Research (AR & AR4D) institutions
- Many AR MENA national systems pay little attention to family farming (small scale)
- “Mediterranean agric. research”, mainly in MENA countries, is insufficiently organised and funded to cope with the agronomical issues at stake.

Challenges for Mediterranean agronomical research (1/3)

- 1. *Strengthening scientific cooperation with MENA countries:***
 - Identify the best potential scientific partners to address quickly and efficiently the research issues
 - Increase capacity building and strengthen the agricultural research and agric education systems in MENA countries
 - Promote/strengthen a regional scientific system/organization to plan and encourage a lasting regional cooperation
- 2. *Food security (in terms of quantity and quality):***
 - Increase local food production (availability, access and adaptation)
 - Promote technological innovation & agro-industrial development
 - Increase local food competitiveness (FQ, FS,...) vs imported food products
 - Use AR system to develop better informed agricultural policies.



Challenges for Mediterranean agronomical research (2/3)

3. *Sustainable management of water & soils :*

- Preserve availability & quality of agric. soils and water
- Increase and maintain water and soil productivity
- Identify the socio-economical keys for adoption of technological innovation
- Contribute to a territorial approach and to collective management of natural resources (especially water)

4. *Animal and plant health :*

- Strengthen the epidemiologic regional control network with performing tools (REMESA network)
- Develop efficient regional response system to treat emerging sanitary threats (trans boundary Pests & Diseases)
- Strengthen research on livestock and crop protection (gene resistance), local/regional vaccine production, ...



Challenges for Mediterranean agronomical research (3/3)

5. *Production systems and climate change adaptation :*

- Optimise the cropping systems and livestock systems to adapt to climate change
- Promote a sustainable intensification of crop and livestock production systems preserving environment
- Analyse the social & economical factors affecting smallholders practices and transformation (adoption of innovation)

Indirectly, AR & AR4D must contribute to create rural employment & jobs for an important young population.



4 Proposals to improve the impact of European actions... 1/3

1/ Promote integrative research programs on:

- Food systems/Nutrition/Health (local & traditional food vs import°, competitiveness, nutritional Q, local processing)
- Soil/Water/Plant complex (Glob.Chg & soil properties, optimization of water availability for plant, plant adaptation,...)
- Territorial approach for a sustainable management of natural resources (water, soils, wild & useful biodiv. , land policy, decision support systems, ...)





4 Proposals to improve the impact of European actions... 2/3

2/ Develop EU-Med **R4D platforms in partnership** on important Mediterranean themes & needs, like :

- Water & Soils management
- Plant genetic improvement
- Livestock & animal health management
- Fresh & salted water sustainable aquaculture
- Modelling and open data-bases



4 Proposals to improve the impact of European actions... 3/3

3/ Promote an efficient ***sub-regional organization*** (SRO) dedicated to agronomical research, to help define a collective scientific agenda and lead international calls

4/ Support & strengthen the ***Research capacities*** in MENA countries about agriculture (higher & professional levels) : grants, e-learning courses, MOOCs, secondments, creation of a Euro-Mediterranean PhD platform, ...

Some sources of information...



- EU (FP7) ERANet documents : ARIMNet & ERANet-Med. 2014
- ARP PARME – 2011 : prospective study about research in partnership in Mediterranean region (130 experts mobilised, various disciplines, from 60 institutions from 10 countries, financed by ANR-France)
- Position papers on research in Mediterranean region : CIRAD & INRA 2014; AllEnvi 2014; CIRAD 2013
- TransMed Program funded by ANR : action plan 2014 & 2015

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Thank you for your attention

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