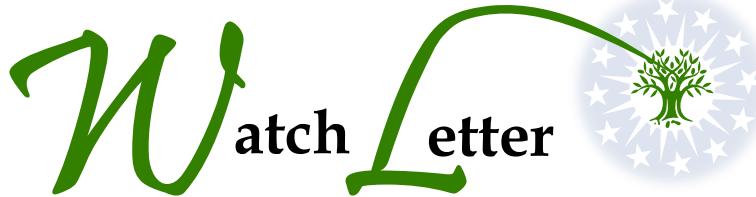


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# Rural Development in the Mediterranean Countries

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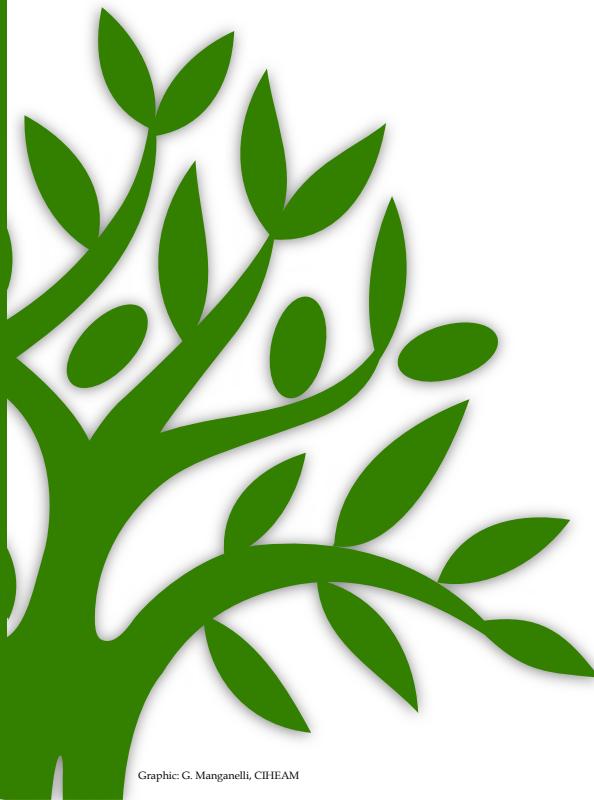
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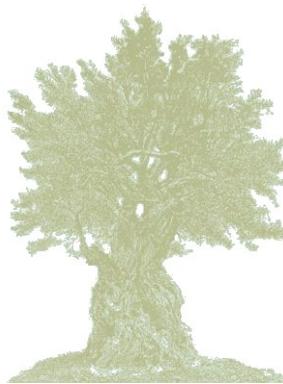
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# Agriculture: a powerful tool of rural development in the current economic crisis

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## Introduction

Although agriculture was perceived for long time as one of the most vital economic sectors, today its significance for the economy has severely downgraded and challenged since agriculture's contribution to GDP has substantially reduced and agriculture's employment reached the lowest levels. The small share of agricultural GDP to the economy's GDP is easily interpreted by policy makers as a signal to alter drastically growth strategies focusing mainly to non-agricultural activities and sectors. Thus, efforts towards reviving rural areas via agricultural activities are either totally suspended or undermined with devastated effects upon the rural economy.

The onset of the current economic crisis signaled to policy makers and to the society that development policies must be re-examined and reassessed in order to identify new development hints within this new economic environment. Thus, the role of agriculture and of the whole agro-food chain in rural development is again revisited and attract the interest of policy makers and scholars. Agro-food chain is the only chain in the economy that can bring together and integrate numerous of economic activities, can connect hundreds of local enterprises with thousands consumers and producers, offering a unique opportunity to rural development, which consequently can reinvigorate the region's economy and the whole national economy.

Rural development around a dynamic and effective agro-food chain offers economic stability, though not a spectacular growth like the construction sector, social coherence and a sustainable growth path. This holds particularity for the Mediterranean countries with their multi-crop agro-production structure and mild climate which allows them to produce and trade highly demanded products, like fruits, vegetables, nuts, olive oil etc. Unfortunately these unique features, which offer a balanced rural development, have undermined over the last two decades depriving rural areas from a powerful development tool.

Nowadays, after experiencing this devastated economic crisis, where relentless enterprise closures was witnessed driving the unemployment rates to unprecedented levels, a reorientation of the economic development is required giving high priority to competitive agro-food start-ups benefiting the whole rural area. To illustrate the effectiveness of this development reorientation in the Mediterranean countries let's showcase the Greek crisis which started from 2009 onwards and attracted the media all over the world.

## Agriculture's potentials in the economic crisis

In the current global turbulent period, where Greece and the world's economy are going through, agriculture's role is reexamined and agro-food sectors are called to play an enhanced and determinant role. This new enhanced role goes beyond its traditional one, as a provider of food only, but also as a significant provider of income, employment, environment protection, and social cohesion though a gradual decline in terms of direct contribution to output can be noticed. Within this framework agriculture in Greece is called to become a stimulator of the country's economy and to drive the whole economy to a stable development path. Thus, any effort towards the revitalization and development of agriculture will have multiple impacts and benefits for the whole economy.

One of the most important potentials of agriculture is its indirect interconnections with all other sectors in the economy, a feature that most times is undermined. Thus, important connections and impacts with upstream and downstream industries, which induce significant interlinkages in the economy generating high output and new employment effects, are missed. An expansion of agriculture's output will induce the output, income and employment levels of sectors such as food, textile, chemicals, machinery, seeds, packaging, etc, and services sectors (transportation, trade, etc). The abandonment of cotton

and tobacco (both major crops for the Greek agriculture) cultivation in Greece after the introduction of decoupled payments forced thousands of people to unemployment due to closures of processing industries.

**Table 1: I-O multipliers and elasticities of the Greek economy**

Sector	OM	EM	IM	OE	EE	IE
Agriculture	1.64 (25)	1.26 (49)	2.05 (12)	0.0192 (15)	0.0149 (27)	0.0261 (12)
Forestry	1.47 (34)	1.22 (52)	1.39 (42)	0.0005 (57)	0.0037 (50)	0.0084 (36)
Fish	1.44 (39)	1.33 (44)	1.79 (22)	0.0037 (39)	0.0093 (35)	0.0219 (18)
Food and tobacco	1.72 (18)	3.58 (6)	2.04 (14)	0.0776 (3)	0.1012 (3)	0.0691 (4)
Textiles	1.26 (53)	1.23 (51)	1.36 (45)	0.0143 (17)	0.0158 (24)	0.0193 (23)

Source: Loizou et al., (2012)

OM= Output multiplier; EM= Employment multiplier; IM=Income multiplier; OE=Output Elasticity; EE=Employment Elasticity; IE= Income Elasticity

Numbers in parentheses indicate the rank of food sector among the total number (62) of sectors.

An indication of the magnitude of the indirect impacts is given by the so-called Input-Output (I-O) multipliers and elasticities. Such measures are shown in table 1 that were calculated using the 2010 Greek national I-O table by Loizou et al., (2012). Though agriculture is not ranking in the top sectors its indirect impacts are enough high to affect the rest of the economy's sectors'. In terms of I-O elasticities agriculture and especially food sector rank higher as this measure takes into account the sector's share in final demand (Mattas and Shresta, 1991). Agriculture's multiplier (1.64) indicates that with an increase by one monetary unit in its final demand the whole economy's output will be increased by 1.64 monetary units. On the other hand output elasticity (0.0192) indicates that an increase in the final demand of agriculture by 1% the whole economy's output will be increased by 0.019%. The corresponding multipliers and elasticities for the food sector are 1.72 and 0.0776 respectively, among the highest values for the whole economy (table 1).

The role and importance of agriculture in a turbulent period, especially for rural areas, can also be seen through its multifunctionality. As argued by Sinabell (2009), several outcomes and spillovers are produced by agriculture, besides the production of food and fibre. This role of agriculture beyond the traditional one, contribution to rural development and to the generation of environmental and amenity services, is acknowledged and recognized (OECD, 2005; Van Dijk, 2001). Agro-tourism, rural (women) entrepreneurship, production related to tradition etc. were activities that preserve rural areas from abandonment and contribute to the growth of the countryside. Through this framework small family farms manage to survive and become an alternative for people returning from urban areas due to the economic hardness. Extensive farming and family farms posses' special characteristics that are proved important in the current period, especially in the Mediterranean region.

Statistical data (ELSTAT, 2012) of the last 2-3 years signal a major change in the Greek agriculture. Despite the decrease of subsidies, after the 2008 economic crisis, the agricultural production started increasing again. Moreover, provisional data for 2012 indicate an even further increase in agricultural employment, production and exports signaling to policy makers that a such ignored sector can serve in this dismal time as an engine for the whole economy. Agriculture in 2000 was attracting the 17% of the country's labour force and in 2008 only 10.9%. Despite this sharp decrease in the employment contribution of agriculture the Greek share (11.7% in 2010) is still much higher than the corresponding EU average (about 4.7%). The same upward route follows employment in agriculture, an increase by more than 1% from 2008-11, as agriculture absorbs employment and many people return back to rural areas and agriculture. In addition, in 2012 exports of agricultural products reached €24 billion, about 12% of the country's total GDP, the highest share from 1981 (when Greece joined the EU).

## Concluding evidence

Finally, can the crisis in Greece offer adequate evidence that agriculture "passed" the economic crisis test and can play the role of the stabilizer for rural areas and the economy? After 2009 with the emergence of the economic crisis in Greece, significant changes were observed in the Greek agriculture:

- The employment share of the sector demonstrates an upwards trend, especially for the years 2010-12, a spectacular movement towards agriculture was recorded and a willingness of people to be engaged in agriculture was observed. Last estimations by the Greek Ministry of Rural Development and Food showed the intention of about forty thousand people to return back in agriculture and rural areas from the big urban centers. Data indicate that rural areas with tradition in agriculture are those that absorb the majority of the returnees', Crete, Notio Aigaio and Thessalia are the regions with the highest shares;
- A promising picture is the fact that a significant number of those people turned to agriculture are mostly educated young farmers and first starters; thus, directly and indirectly supporting the viability of rural areas;
- New and dynamic crops (fruits, vegetables, medical herbs, super foods, etc) highly demanded by international markets attract the interest of the farmers today and not only crops that are subsidized, and the worst over the last years a subsidy culture among farmers was developed ignoring the competitiveness and productivity.
- A significant increase in agro-food exports is observed supporting the country's trade balance and budget deficit. The spectacular increase of the Greek agricultural exports is revealed in the study of the Panhellenic Exporters Association (<http://www.pse.gr/>). According to their data exports of agriculture and food related products from 2010 to 2011 increased by 4.2% (and imports increased by only 2.2%); for the first 10 months of 2012 exports were increased by 9.5% compared to 2011 while imports decreased by 5.2%. Greece is among the 5 leading suppliers of agricultural products among 26 EU and OECD countries. It is the first supplier of 35 agricultural products for 14 countries, the second of 35 agricultural products for 17 countries and the third of 20 agricultural products for 13 countries. For example 38% of Italy's imports in fish products are coming from Greece, 19.9% of Australia's imports in preserved fruits and vegetables are coming from Greece; the same holds for Poland (49.7%), Italy (39.4%) and UK (28.1%) for apricots, cherries and peaches respectively. Among the main competitors of the Greek products are mainly other Mediterranean countries such as Spain, Italy and Turkey.
- The demand for agro-food products has been substantially less affected by the economic crisis compared to other products (from manufacturing and services). For example, new cars sales in Greece (January-August 2012) faced a radical reduction of 42%, (7.1% in the EU).

Conclusively, there is an encouraging sign that the Greek agriculture which has been based for long time on EU subsidies could be transformed to a competitive agriculture, due to the current crisis, offering a relief to the whole rural economy.

## Bibliography

- ELSTAT-Hellenic Statistical Authority (2012). Economic Accounts for Agriculture. [www.statistics.gr](http://www.statistics.gr)
- Loizou E., Chatzitheodoridis F., Michailidis A., Tsakiri M. and Theodossiou G. (2012). Energy sectors' dynamics in the Greek economy. Paper presented in the 4th international conference EBEEC, Sofia-Bulgaria, May 11-13, 2012
- Mattas, K., and Shresta, C. (1991). A new approach to determining sectoral priorities in an economy: input-output elasticities. *Applied Economics*, 23(1), pp. 247-254.
- OECD, (2005). Multifunctionality in Agriculture: What Role for Private Initiatives? Paris.
- Sinabell F. (2009). Roles of Agriculture in the Rural Economy. An Exploration Exemplified by Austria. Dissertation an der Universität für Bodenkultur, Wien. <http://franz.sinabell.wifo.ac.at/publikationen.html>
- Van Dijk, G., (2001). Biodiversity and multifunctionality in European agriculture: Priorities, current initiatives and possible new directions. In: Buguña-Hoffmann L. (ed.), Agricultural Functions and Biodiversity, European Centre for Nature Conservation, Tilburg.



# The Mediterranean: a potential for strong and innovative collective action to achieve food security

**Nora Ourabah Haddad, Denis Herbel<sup>1</sup>**

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The Mediterranean region is endowed with a wealth of assets, thanks to its geostrategic position, rich history and cultural and agricultural potentials. Despite this potential, the Mediterranean region and in particular its Southern and Eastern shores, faces a number of challenges which have partly led to the recent social upheavals. Continued population growth, urbanization, and rising incomes are all global challenges which will likely continue to put pressure on food demand. International prices for most agricultural commodities are set to remain at 2010 levels or higher, at least for the next decade (OECD-FAO, 2011). The Mediterranean basin, in particular its Southern and Eastern shores are equally affected by these challenges.

Some 60 to 70% of the Middle East and North Africa's (MENA) poor population lives in rural areas. The latest estimates indicate that about 95 million rural people in the region live on less than US 2\$ a day, and about 65 million live in absolute poverty, without the minimum requirements for basic survival<sup>2</sup>. Also, more than 50% of the food consumed in the MENA region is imported, making it the largest food importing area in the world<sup>3</sup>.

Collective action through institutional arrangements such as Producer Organizations and cooperatives can constitute a response to the many challenges facing the region given the range of services that they offer to small producers and the positive trickle down effects that they produce on rural economies. Why are so many small producers still facing severe barriers to accessing input and output markets, information, infrastructure and other assets? What are the needed conditions in order to make sure that these organizations contribute to achieving food security, reducing poverty and improving livelihoods? What is the role of strategic partnerships to maximize their impact on economies?

## High food prices did not benefit small producers

The impact of the 2007-2008 global food price crisis was particularly severe in the region, notably in countries such as Egypt, where poverty affects 27% of the rural population, Morocco, Algeria, where almost two thirds of the poor live in rural areas and Tunisia where over 8% of the rural population is still living below the poverty threshold<sup>4</sup>. And yet, this upward trend in food prices instead of worsening poverty in the region, leading to social unrest, could have been an opportunity for small producers, which represent 43% of the total population<sup>5</sup>. Unfortunately, in general, small producers in many developing countries were not able to take advantage of the high food prices in order to invest, meet food security, increase their income and improve their livelihoods.

The main reason for this lack of supply response from small producers is due to the numerous constraints that they face including lack of access to natural resources, markets and other productive assets such as inputs, markets and opportunities as well as financial services, information asymmetry and lack of access to knowledge and voice in policy making. The capacity of small producers from developing countries, including those in Southern and Eastern shores of the Mediterranean, to respond to growing food demands in local, national, regional and international markets depends mainly on their ability to overcome these constraints. This requires a transparent market system in which the rules of the game are clear and where small producers are actively involved.

<sup>1</sup> This article is based on a FAO-IFAD publication: "Good practices in building innovative rural institutions to increase food security" by Denis HERBEL, Eve CROWLEY, Nora OURABAH HADDAD, Maria LEE. Additional inputs have been provided by Mauro BOTTARO, Charlotte GOEMANS, and Carina HIRSH from ESW FAO division.

<sup>2</sup> IFAD in the Near East and North Africa Region, IFAD, 2011.

<sup>3</sup> World Bank, Sector Brief, Agriculture and Rural development in MENA.

<sup>4</sup> CIHEAM (eds), Atlas of Mediterranean agriculture, food, fisheries and rural areas, 2010 Edition of Mediterra, CIHEAM, Les Presses de Sciences-Po, 2010.

<sup>5</sup> World bank, op.cit

## The two phases of Agricultural development policy

Historically, agricultural development policy in developing countries has gone through two main phases. The first one marked by state led development policy promoted state intervention as a response to market failure. The second, characterized by the market led model (Kristen et al. 2009) promoted the role of the private sector and the market while recognizing state failure. In reality, neither one nor the other of the two models managed to overcome the food security challenge. In fact, one of the main lessons to be drawn from the last four decades is that market/state dichotomy is an oversimplification (Stiglitz, 2004). We must look at the role of the State and the market in a much broader way (Martinez Nogueira, 2008). Martinez Nogueira claims that there is a new emphasis on collaboration and a more sophisticated understanding of the development process. The public sector has shifted to become more open towards civil society (for profit and non-profit private organizations) and the market is more reliant on the quality of institutions. Stiglitz (2007:27) adds: "*While markets are at the center of any successful economy, government has to create a climate that allows business to thrive. It has to construct physical and institutional infrastructure...in which investors can have confidence that they are not cheated*".

Indeed, it is suggested to look beyond this dichotomy by not only combining those two approaches but also recognizing the "missing link": the indispensable role of collective action and its inclusion in every development policy (Marshall, 1998). "*Efficient market organization not only involves more but also better linkages between different economic players*"(Poole and de Frece, 2010:3).

The state led development policy period (1960's-1980's) was marked in several countries, by the failure of many producer organizations and cooperatives, which were considered as an extended arm of the public sector rather than organizations owned and controlled by the producers themselves (World Bank, 2008). Given that small producers were not asked to express their opinions and make decisions but rather apply imposed choices, this period was marked by organizational failures and member exit. The main lesson to be drawn from decades of organizational failure in producer organizations and cooperatives in many developing countries is that producers including farmers, fisher folks, livestock keepers and forest user organizations must be able to act and make autonomous decisions. These organizations fail when external actors such as governments, donors, NGOs and other development actors impose an organizational model as an instrument for their own development policies and values (Develtere, 1994).

The good news is that the past decade saw the emergence of a variety of producer institutional arrangements, all over the world, and in particular in developing countries including in the Southern and Eastern Mediterranean sub-region, in response to small producers' constraints to better respond to crisis situations. These have allowed small producers to overcome the numerous barriers mentioned before, while enabling them to enter markets and gain voice in policy making (World Bank, 2008; Develtere et al., 2009).

## Innovative Producer Organizations and cooperatives can provide critical services

By providing an array of services, these organizations can increase farmers' incomes and improve their food security and livelihoods. These services range from enhancing access to and management of natural resources, accessing information, technologies and facilitating participation in policy making processes (see Annex).

### *Access to and management of natural resources*

Producer organizations, cooperatives and other institutional arrangements can regulate access to and help improve the management of natural resources for small farmers. For instance, some institutional arrangements such as mediation committees have improved smallholders' access to and management of natural resources. In Morocco, for example, the FAO project called "Projet d'appui au plan national d'irrigation économe au Maroc, projet pilote dans le périmètre de Doukkala" aims at increasing performance and productivity of water in major irrigation schemes in Morocco. The project is based on a consultative approach with professional organizations such as water user associations and agricultural producer associations. This enables to gain an understanding of use of natural resources in the region and to develop more efficient irrigation schemes for local farmers, reducing considerably the negative impacts of irrigation practices on the environment.

### *Accessing input and output markets*

Producer organizations and cooperatives, when they are efficient and well governed, can also enable small producers to increase their access to markets and productive assets, while reducing transaction costs. By acting collectively through their organizations, small producers are able to access seeds, fertilizers and financial services. Institutional arrangements such as input shops (in order to purchase inputs collectively) and warehouse receipt systems (in order to access credit collectively) have increased their access to markets and productive assets, while reducing high transaction costs.

In the West Bank, FAO is supporting - jointly with the Ministry of Agriculture, Trade and Women's Affairs - 84 women's associations (approximately 900 women farmers). These women's associations enabled women farmers to link to national and international markets, playing a crucial role in local agricultural development<sup>6</sup>. Such results show that women's associations have a much higher productive potential than individual women producers. Hence the promotion of women only producer organizations to improve livelihoods. It facilitated linkages between producers and potential buyers, which resulted essentially in the development of value chains, especially in a context of high mobility restrictions as in Palestine. Another interesting FAO program in Morocco called "Renforcement des capacités institutionnelles pour le développement des produits de qualité de montagne - Cas du safran" aims at developing the value chain of saffron and its institutional support. With the development of a denomination of origin and intersectoral links, the project directly involved local rural organizations, enabling local farmers' access to national and international markets of saffron.

#### *Accessing information and knowledge*

Efficient and well governed Producer Organizations are essential in building small producers' skills, providing them with appropriate information and knowledge while helping them to innovate and adapt to changing markets. Some of them enable producers to build their capacity to analyze their production systems, identify their problems, test possible solutions and eventually adopt the practices and technologies most suitable to their farming systems. The Rural and Agricultural Development Communication Network (RADCON) in Egypt illustrates an innovative way of building and disseminating knowledge among farmers. RADCON is a community-based information and communication system, combining videos, TV, Internet and radio systems. It provides a tool to enable family farms and their communities in dispersed areas to link with and benefit from an interactive information system that integrates extension, research and private and public sector information and service providers. The information shared includes local experiences, problems, traditional practices and successful stories provided by rural people. These are communicated through downloadable radio and TV programs<sup>7</sup>.

#### *Facilitating small producers' participation in policy-making*

Another powerful contribution of producer organizations is their ability to help small producers voice their concerns and interests in policy-making processes. Multi-stakeholder platforms and consultative forums are good examples of mechanisms for small producers to discuss the design, formulation and implementation of public policies. The FAO Regional Office for the Near East (FAORNE) assisted the government of Egypt in formulating its sustainable agriculture development strategy 2030 and the business plan for its implementation. Producer Organizations, including cooperatives and traders of agricultural products, were involved as key stakeholders. As a result, the strategy and its plan of action have clear strategic orientation and planned actions for promoting and strengthening POs and cooperatives in policy making for agricultural development.

#### **Key ingredients for effective and well governed producer organizations**

There are key ingredients that allow organizations to become effective and representative of the interests of small producers while achieving food security. Several conditions are needed to enable the success of producer organizations and cooperatives. A recent collection of 35 good practices of innovative producer institutional arrangements are documented in an FAO-IFAD good practice based publication entitled "innovative rural institutions to Increase Food security (Herbel et al., 2012). These success stories from various developing countries suggest a radical shift in handling organizational development. A needs' based approach in which small producers are encouraged to express and define their needs, preferences and agenda, replaces the former top down based approach. Besides, the findings of this publication show that successful organizations and institutional arrangements are the result of interdependent relations that small producers develop and engage in.

These three steps are vital for an efficient and sustainable institution building process to thrive. This process is incremental and nonlinear; in fact it is not to be interpreted as sequential steps following a specific sequence. Each organization embodies and develops the different relationships according to the context and their members' specific needs. They form the basis of their social capital as follows:

- **Bonding: a critical step towards building autonomy and a vision (intra-group relations)**

Through bonding relations, small producers build close ties of solidarity at the grass-roots level. They develop common and shared values and rules as well as common objectives and shared vision, which allow them to make informed choices. While bonding can be initiated by external support, evidence shows that any such initiative would be more sustainable if carried out by the actors themselves, in a bottom-up approach.

<sup>6</sup> Dalla Valle (FAO), Palestinian Women's Associations and Agricultural Value Chains, FAO 211. <http://www.fao.org/docrep/013/al807e/al807e00.pdf>

<sup>7</sup> May Hani (FAO). Rural and Agricultural Development Communication Network for Development, FAO, 2010

- **Bridging relations: a critical step towards building cooperation among similar producer organizations (inter-group relations)**

Bridging relations connect these groups together to form larger networks in the form of unions and federations of producer organizations and networks. Through bridging relations, small producers enhance their access to assets and increase market and bargaining power.

- **Linking relations: a critical step towards full participation of small producers (inter-group relations)**

To reach full effectiveness, these organizations must link with more powerful economic and policy actors, such as business corporations and the government. Relations with economic actors are important for small producers to not only access markets but also to negotiate fairer commercial conditions. Collaboration with policy makers is important to allow small producers to participate in policy making and influence decisions. This is essential for creating the enabling environment and conditions for these organizations to develop in a sustainable way.

### **For a renewed and innovative multi-stakeholder partnership with producer Organizations and cooperatives.**

In both developed and developing countries, there are examples of innovative and successful producer organizations and institutional arrangements that have helped small producers to overcome their barriers and face shocks and crisis. However, they too often remain limited in scale and scope. The main challenge is to build on these success stories in order to catalyze sustainable rural and agricultural development. In order to scale up these successful initiatives, it is necessary that relevant stakeholders come together in innovative partnership arrangements, while defining clear roles and responsibilities. These innovative partnerships will allow for a better definition of an enabling environment for producer organizations to develop and thrive.

In a world where several hundreds of millions of people still suffer from hunger and poverty, no single organization or sector can overcome this challenge on its own. Therefore, collaboration through sound partnerships, where various stakeholders including governments, research and academia, producer organizations and cooperatives, private businesses, NGOs and social movements, women, youth and indigenous people's representative organizations come together to join forces, each with its expertise and comparative advantage, has become a necessity.

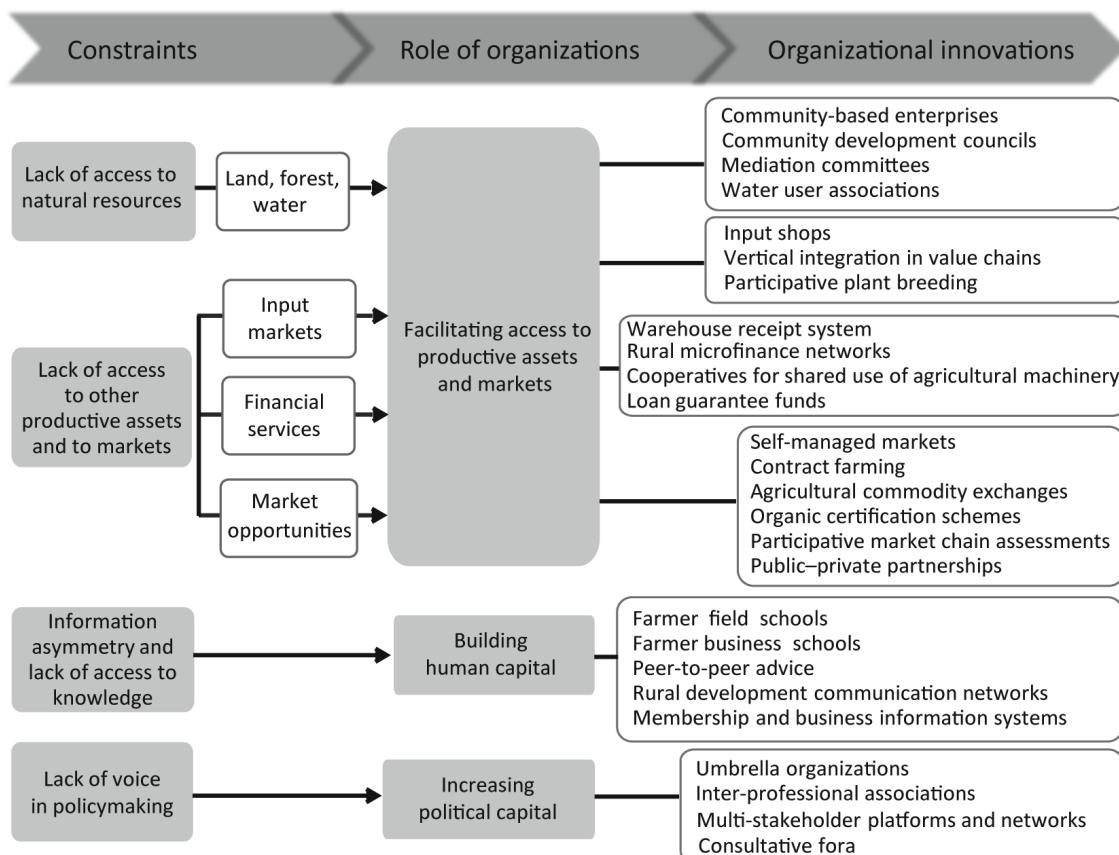
The donor community and NGOs should facilitate the development of existing Producer Organizations and cooperatives rather than introducing new organizations. Governments need to address the needs of existing small producers and their organizations. Their support must be responsive rather than directive, investing in supporting these organizations to become effective.

Thus, governments should be encouraged to support the development of an enabling environment for producer organizations and cooperatives to develop and thrive. This enabling environment includes various dimensions ranging from the provision of a conducive policy environment, the establishment of a transparent legal framework, appropriate economic and business incentives as well as fora for policy dialogue between governments, producer organizations and other key stakeholders. Allowing small producers to permeate and actively participate in the market by "fully playing the game" and by enabling them to express themselves to improve "the rules of the game", will help build their ownership as well as the effectiveness of this process. This will help create the conditions for these producers to meet growing food demands and achieve the sustainable development of rural areas.

The FAO Director General renewed his commitment to strengthen FAO's relations with key stakeholders including research institutions such as the CIHEAM, without which the organization will not be able to reach its mandate of ending hunger and achieving food security. Partnerships with various state and non-state actors help increase FAO's outreach and influence by using complementary expertise and technical capacity that will help deliver its mandate. They allow for the building of synergies that will leverage resources and maximize impact in ending hunger and reducing poverty. In the framework of their strengthened and strategic partnership, FAO and the CIHEAM'S main challenge would be to develop and showcase concrete joint actions while enhancing synergies and building on respective comparative advantages and complementarities. In particular, FAO and the CIHEAM should engage in joint collaboration aimed at facilitating the development of participatory policy processes and dialogue platforms involving producer organizations, national governments and other relevant stakeholders. These processes should help the development of policies that are supportive of thriving, equitable and economically viable producer organizations that would serve the needs of their member producers in view of achieving food security and poverty reduction. Both organizations, together with other actors, should explore innovative ways of engaging with one another using multi-stakeholder based partnership approaches that could serve as innovative models and vehicles for increased food security, poverty reduction and hunger eradication.

## Annex

### A broad array of producer organizational innovations



Source: Herbel et al., 2012

## Bibliography

- OECD-FAO (2011) *OECD-FAO Agriculture Outlook 2012-2021* [online], OECD-FAO, Rome.
- Stiglitz, J. (2004) *The roaring Nineties*, Penguin Books, London.
- Martinez Nogueira, R. (2008) *New Roles of the Public Sector for an Agriculture for Development Agenda* [online], background paper for the World Development Report, World Bank, Washington, DC.
- Marshall, G. (1998) *Dictionary of Sociology*, Oxford University Press, New York, NY.
- World Bank (2008) *World Development Report 2008 : Agriculture for Development*, World Bank, Washington, DC



# Rural development in Egypt after the 2011 Revolution

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Improving the Egyptian agriculture is a difficult task requiring a clear vision and concerted efforts from every kind of specialists. In order to gain popular support for the development efforts, there is also a need for a confidence building strategy to provide the population with a safe and stable environment. Moreover, a participatory approach should be established to create partnerships between the private sector, civil organizations and governmental institutions, each of them contributing to the necessary efforts with their respective competences. This paper will successively tackle six areas where efforts are required to make the Egyptian agriculture more sustainable.

## **Preservation of old agricultural land**

The first priority is the preservation of farmland in the Nile Delta and Valley to maintain the cropping area. A total ban on building in the farmland areas is highly needed. If we first look at the Egyptian farming potentials, the traditional agricultural land resources in the Nile valley and Delta continue to be infringed by construction projects. Besides, the unauthorized efforts to make it more and more barren on a daily basis (estimated 150 thousand acres were lost during the years 2011- 2012) must be stopped to prevent further losses. Meanwhile, this paper argues that there should be a plan for providing appropriate alternatives to the urban expansion of villages and cities while maintaining the agricultural area, which will not be replaced once lost.

## **Improvement of old irrigation systems**

The second important point is the development of on-farm irrigation systems in all agricultural land resources. Indeed, considering the limited and fixed water resources in Egypt and the need to reclaim more and more lands to feed the increasing population, a solid program for the rationalization of irrigation system is highly needed. Implementation of on-farm irrigation can enhance water use efficiency at the farm level from the present value of 50% to at least 80% while using modern systems. Currently, for 5 million acres about 58 billion cubic meters of water is necessary. Thanks to this 30% water saving, about 10 billion cubic meters would remain available to reclaim 3 additional million acres of land. This would create more than 5 million direct jobs in agriculture as well as more job opportunities in services and investments associated with the agriculture sector. In this regard, and giving that the average ownership in old lands of Egypt is less than one acre for 70% of the Nile delta, it is impossible to improve irrigation by using either laser leveling or modern irrigation systems. Water management could be improved through the aggregation of small farms in larger units. In this purpose, cooperatives and farmers' associations, by separating the ownership from the practical management, would lead up to an improvement of the on-farm irrigation systems and the creation of farmers-owned investment companies. Under this system, the new law would allow for a modern representation of farmers.

## **Land reclamation projects:**

The past land reclamation projects were designed to distribute the new lands to jobless individuals and new university graduates. The average area allocated per capita was about 10 acres during the eighties and decreased to 5 acres latter. The fragmentation of land ownership and the lack of capital and experience of the owners resulted in the failure of a large number of new land owners to achieve economic productivity. Therefore, the new lands should be integrated into holding companies where the recipient, who is both shareholder and owner, leaves the cooperative's management to qualified specialists able to make it work as a successful economic entity. Such cooperatives could contribute to the food industry and participate in the highly competitive agricultural exports. Cooperatives could then impose agricultural rotation using appropriate crop patterns to maintain the fertility and productivity of lands, to eventually increase the farmers' incomes.

### **Self sufficiency of food**

The third priority consists in achieving more economic self-sufficiency in food crops, especially cereals. It is very important to maintain the highest level of productivity and quality to ensure availability of food locally. As for the most imported products in Egypt, wheat, considered by many as the main food component, self-sufficiency could be achieved by improving storage, transportation system, the baking industry, and more importantly the distribution system.

Here we note that the loss of wheat during the trade and manufacture processes reaches 15-20% out of 8 million tons of locally produced goods. This amounts to approximately 1.5 million tons, worth about four billion pounds a year, equivalent to half of the cost of establishing silos to store nine million tons. To address this problem, substantial investments in the building of silos to store wheat in controlled conditions is necessary to replace open-store storage yards that result in 10% loss out of the total losses calculated from the farm to the fork. A reliable agricultural extension system, maximizing the productivity of cereals of the unit area could be achieved through a specific research work. Revising the wheat flour subsidy that make it cheaper than the animal fodder, and preventing the leakage of flour and bread to the black market are among the possible solutions to the wheat shortage issue.

Another dimension is the increase of agricultural exports and of value-added agricultural industries which today only represent a small percentage of the overall agricultural production. Exports could thus be doubled in volume without reducing the availability of commodities in local markets. Regarding this issue, attention must be paid to the importance of agricultural investments abroad, especially in cooperation with Sudan and Nile basin countries. About the livestock production, fisheries and poultry must be the basis of food protein due to the difficulty of providing feeds to large animals such as cows and buffalos, which consume large amounts of water. Added to this, there is a growing need for developing food safety legislations and authority controls. Integrated plant for animal production and manufacturing should be built while keeping in mind that large farms for livestock production are more reliable as a source of meat than animal farms.

### **Human capacity building**

The fourth and most important point that must be addressed is the human resources involved in agriculture. Farmers, scientists and investors, all of them deserve help and support in one way or another. The farmer needs to have a health insurance and a crop insurance (takaful) as well as producer support, reliable inputs and a market information system. This can be achieved through the cooperative system democratically administered and closely linked to applied sciences Institutes and their scientific centers of excellence. It is a fact that agricultural scientific research suffers from a severe shortage of funds, a lack of opportunities for young scientists to study abroad and an inefficient system of communication and information exchange, which is conditional to the development of the agricultural extension system.

### **Land reclamation and land use planning**

The fifth point I wish to outline here is the amendment of the agricultural investment system in major projects such as the Toshka (in the southern part of Egypt ) and Al-Salam Canal (in north Sinai). Successful investments in these areas won't be obtained if the government repeats the mistakes of the past by refusing a further fragmentation of land ownership. This may be achieved through the establishment of holding companies and offer the beneficiary's shares, instead of distributing the lands to small area ownerships. These companies will then invest in the development of modern agricultural systems and added value industries. This approach could prevent the fragmentation of land over time due to the local inheritance system. New land reclamation projects should focus on mild climate in the northern part of the country to save the irrigation water and improve productivity. Investments in the new lands could be offered to skilled investors provided that they agree to create partnerships between their own business and small growers deprived of any startup capital. Eventually, the principal investor may provide the infrastructure for an area of about 10-30% of the land to be offered to poor landless farmers.

### **Legislations and sector reform**

A sixth point focuses on the agricultural legislation and policy reform that need to be modified to fit the present global changes impacting both the regional and the international arenas, including the prospects of climate change, a growing threat to the agricultural production. Agricultural policies must be adapted to cope with the fragmentation of the agricultural property issue and low farm incomes that have two main consequences: the farmers' emigration and the shift from productive lands to urbanization. Indeed, there is an urgent need to start an agricultural sector reform program aimed at developing the Egyptian villages while raising environmental, health, and social awareness. It is crucial to increase the farmers' incomes to maintain the agricultural activities that suffer from the high input costs and low yield revenues. This could be achieved through microfinance projects made available to small farmers with a priority given to agricultural projects targeting veal and poultry production. More productive and eco-friendly fish farming is technically possible, through aquaculture projects where fish has a very high water use efficiency.

## Conclusion

Agricultural development in Egypt is a really difficult challenge. And yet, there are many proposals that have already been studied in the course of preparing the Sustainable Agricultural Development Strategy implemented up to the year 2030. The Strategy resulted from four years of collaborative efforts of a group of prominent scientists from several universities and research centers. It outlined five-year plans for different regions in Egypt, including detailed operational programs taking into account the regional climatic zones. The Strategy took in consideration the demographic and natural characteristics of different regions and drew some specific development programs including the cost of implementing the projects and the role of Government or private sector or the self-financing of peasants. This strategy comprises an Executable plan which includes the establishment of an evaluation and follow-up system aimed at ensuring a good governance of its implementation that for sure will effectively contribute to agricultural development for a better future.





# Research and innovation strategies for rural development in Portugal

## The small fruits and the extensive systems cases

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Portugal is a small southern European country, on the western periphery. The Atlantic and Mediterranean influences shape the society, agriculture, forestry and rural areas. Nowadays, it faces a severe debt crisis, economic recession and high unemployment. The structural disadvantages, the diversity of climate and soils and the deficit of agro-industry complex, make Portugal a good example for the discussion of public policy innovation, research and rural development.

The crisis is an opportunity for the agriculture and, on the other hand, the sector reduces the crisis' effects and contributes for the economic recovery. In 2011, the primary sector contributed positively for the economic growth and the installation of young farmers increased. The agriculture also has been important for employment in rural areas.

### The Portuguese context

The Portuguese territory covers about 92100 km<sup>2</sup>. It has two autonomous regions: the Azores and Madeira archipelagos (3,4% of the territory). The population of 10,6 million inhabitants is concentrated in the coastal zone. The gross domestic product (GDP), in 2011, was 171 € billion (source: INE). The utilized agricultural area (UAA) is 3 668 thousand hectares: 32% of arable crops; 19% of permanent crops and 49% of permanent pasture (INE, 2011).

In the last 10 years, the agricultural landscape changed into more extensive agricultural production systems. Agriculture represents 1,4% of the GDP and the main productions are: vegetables (17,4%), fresh fruits (17,3%), wine (5,7%) and milk (11,4%) (GPP, 2012). The small-sized farms continue to prevail; 80% of the agriculture employment is family labor; farmers averaging 63 years old, only have practical agricultural training (INE, 2011). But, on the other hand, two thirds of the UAA is managed by farms larger than 50 hectares, and 27% of the farms' UAA are managed by holdings as a legal entity (INE, 2011). Due to the external deficit of the agro-industry complex [4,2 € billions (GPP, 2012)], Portugal needs to increase its production to substitute imports.

The forestry sector is very important due to the external market (2,4 € billions of positive external trade balance), the level of employment (1,8% of the total employment) and the territorial management. The main products are: pulp paper, cork and wood. The forest land is 3175 thousand ha and the main species are: maritime pine (27%), eucalyptus (23%), cork oak (23%) and holmoak (15%), (AFN, 2010).

### The research and innovation strategy

The main and general challenge for Portugal is to increase the competitiveness of its economy, fight against unemployment, reduce the risk of poverty and territorial/social exclusion and promote an environmental-friendly and resource efficient economy (COM, 2012). This is also the challenge for the rural development, with the integration of the territorial cohesion.

The transfer of knowledge and the innovation must be at the center of the rural development strategy (*idem*). This means a smart, sustainable and inclusive development, according to the « Europa 2020 » strategy [COM(2010) 2020 final] and the Portuguese National Program of Reforms (PNR 2020).

For several years, two critical problems have been identified in agricultural research and development: 1) the great dispersion of human and material resources, due to the large number of R&D units, with low critic mass, and the prevailing system of research funding by competitive programs without priority settings or activities coordination; 2) the need to bring research to agricultural practices, promoting research that addresses the needs and most relevant issues and rapid transfer of this knowledge to the productive sector (Moreira, 1998). The European Innovation Partnership (EIP) on "Agricultural Productivity and Sustainability" [COM (2012) 79 final] responds precisely to these critical issues. The

<sup>1</sup> The views expressed in this article are the sole responsibility of the authors and do not necessarily reflect the view of the INIAV, I.P. (National Institute of Agriculture and Veterinary Research).

agricultural EIP promotes the stakeholders involvement, brings the scientific community closer to the agriculture practice, and covers the whole innovation chain, from research, diffusion of scientific results, until the development of products, processes and systems and their integration into the production system.

The agricultural EIP will be primarily implemented through the Common Agriculture Policy (CAP) as well as EU Research and Innovation policy ("Horizon 2020"). The rural development program (2nd CAP pillar) supports several actions, including "cooperation", "knowledge transfer", "advisory services", "information actions", "investment", and "business development". The main objective of "Horizon 2020" is to provide the knowledge base for innovation. These policies must be complemented by other policies, at national or EU-level, namely Cohesion and Education Policy. In this (necessary) diversity of policies, the coordination of actions is critical.

The strategy success depends on the capacity to mobilize the stakeholders. Thus, the agriculture organizations, local development and inter-professional organizations have more responsibilities on the stakeholders' participation and dissemination of knowledge and information. Another important factor is the implementation of research projects involving R&D institutions, agriculture producers and industries, sector associations and entities of local development.

The aggregation of resources and efforts should follow smart specialization strategies, to create synergies, more efficient use of resources and increased effectiveness of the programs. This is the greater challenge due to the real impact on the formation of the operation groups, the leadership of these operational groups, the priority settings and, the consequent funds allocation. The national strategy should contemplate the development of product innovation lines, at all stages of the production chain (p.e. wine or olive oil sector), and territorial development dynamics.

There is no doubt about the fundamental role of education and training on the innovation chain (the capacity to absorb knowledge and turning it into economic value) and productivity growth. Regarding agriculture and rural development, this issue becomes more relevant because one of the most significant weaknesses is the low level of farmers' education and training (COM, 2012). The governance of training should involve the participation of all stakeholders and, in some cases, should contemplate the tutor possibility. The training programs should be more demand driven (for example, through the use of a voucher modality). We would also like to stress the incorporation of the social capital framework into the research and innovation strategy. This perspective is aligned with the conceptual base of the agricultural EIP.

## **Two cases: fruits and extensive systems**

Portugal should increase the production of tradable goods with high added value, contributing to the reduction of the external deficit. The vegetable and fruits production are increasing and we have good examples of internationalization such as pears (54 € millions), small fruits (36 € millions) and tomato for industry (25 € millions) (SIMA, 2013). The wine is a traditional and very relevant exportation sector (675 € millions) (IVV, 2012) and the olive oil exportations are increasing (215 € millions) (SIMA, 2013). The small fruits are a good example of a novelty, dynamic, exporter and innovative sector. The extensive systems – montado, pastoralism, traditional olive groves, and others - occupy two thirds of Portuguese mainland. These systems are important due to their geographic extent, but also due to their relevance to the territorial wealth creation, employment generation, the supply of local small agro-industry units and their role in the nature conservation.

### **The small fruits**

Small fruits are becoming an important crop in Portuguese agriculture. From the beginning of the present crises the interest for small fruit farming increased exponentially mainly on blueberry in the North of the country. The quality and taste of Portuguese berries are distinguished by the European retailers and represents one of the highest European export prices.

Strawberry was the first berry crop to be developed in Portugal and its success was mainly due to the advance in breeding at UC Davis with cultivars well adapted to the Mediterranean climate. New protected cultivation techniques, mainly tunnels, started to be widely used in the South of Europe and berry growers add a high income since they were able to export for the European off season markets. In raspberry, Oliveira et al. (1998) developed a production technique also for late-season production with primocane-fruited cultivars well adapted to all mild winter climatic regions. With this technique it is possible to grow during the autumn/winter period profiting from the high off season market prices. New techniques are now being developed, namely the substrate culture with plants grown in pots for plant growth manipulation under greenhouses. These advances have led to an increase in productivity and a better use of resources. Integrated pest management is now a reality in almost all berry farms. Moreover, berries have a high social importance with the use of skilled workforce, and employing large number of pickers which represents more than 60% of annual farm costs.

Berry farms in Portugal are completely different from north to south. In the north berry farms are small (from 0.5 to 1.5 ha) normally with berries grown in open field, low inputs and low returns. The fruit is sold to local markets to freeze or process. In the south, the farms are large (10 to 50 ha) with all crops under protected cultivation with high investment costs and high

inputs. The work is done by immigrant pickers and high trained technicians. The fruit is sold fresh to the export market. This duality on the production systems must be taken into account on the innovation specialization strategy.

Since the late 1980's, National Institute of Agrarian and Veterinary Research (INIAV) have developed several R&D projects at its experimental farm in the southwest coast of Portugal leading the research on berry production technologies. There are major challenges for berry production related with climatic changes, new pests, higher temperature extremes and destructive weather events. Labor is an important issue in the berry industry being a positive thing in the north but a problem in the southern part of the country. The shifting towards bigger companies can be a problem for small producers, and local development, but organic farming is increasing worldwide and local markets with specific regional cultivars are becoming popular. However, berry consumption is increasing due to their high levels of health-promoting compounds, and these attributes can have a positive effect on future sales and therefore income for the growers.

### **The extensive systems**

Understanding the articulation mechanisms of rationalities for landowners/managers and the systems' valences is the core issue in the study and perception of the dynamics of rural development, related to the extensive production systems. Thus, the definition of research strategies related to these systems, must be based on their relationships with the rural society, the land ownership, the small business/project, the environmental and natural resources conservation.

On the grazing systems, the research strategy should focus on the economic productivity without modify the extensive characteristics of the system and promoting its sustainability. In the traditional olive growing, research should be oriented to the efficient management of the small olive groves because almost all of the farms are very small. It is also important to study the genetic characterization of traditional varieties and the value added by the olives oils produced from these olives trees. On the montado system, the research should be focused on the study and implementation of management models that conciliate the conservation of natural resources with the economic needs of local populations. The strategy's core should be the research into the causes of cork oak and holmoak sudden death and to find solutions for the recovery of the declined montado systems, on large areas in the South of Portugal.

On the small business/rural development, defined by the articulation between extensive systems and agro-industry, research priorities should be oriented to the search of efficient models for small businesses and how to diffuse them on the rural territories. Other important issues are the innovative products with raw materials from the extensive systems, and the new production methods of the well-known traditional products with market demand. The research on the development conditions and the implementation of traditional products with proven economic quality are critical for the extensive systems' economic sustainability, especially those with certified origin denomination. From the environmental perspective, efforts must be focused on the conservation of natural resources besides economic activity. This means, to prioritize the study of the economic valorization of the ecosystems services and the multifunctionality (largely present in the Portuguese extensive systems). Finally, the climate change effects (impacts, mitigation and adaptation), along with the efficient use of fossil energy, the carbon sequestration and the biodiversity conservation are critical issues, transversal to all strategies.

### **Bibliography**

- AFN, 2010. 5º Inventário Florestal Nacional. Apresentação do relatório final, SEDRF, 7 de setembro de 2010.
- GPP, 2010. Internacionalização dos Sectores Agro-Alimentar e Florestal: caracterização, incentivos e restrições, barreiras, casos de estudo, orientações e medidas. Julho 2010.
- GPP, 2012. A Agricultura na Economia Portuguesa: envolvente, importância e evolução recente – 2011. Dezembro 2012.
- INE, 2011. Recenseamento Agrícola 2009 - Análise dos principais resultados.
- COM (2010) 2020 final. Communication from the Commission: EUROPE 2020. A strategy for smart, sustainable and inclusive growth.
- COM (2012) 79 final. Communication from the Commission to the European Parliament and the Council on "The European Innovation Partnership "Agricultural Productivity and Sustainability".
- COM (2012). Position of the Commission Services on the development of Partnership Agreement and Programmes in Portugal for the period 2014-2020. 06 November 2012.
- IVV, 2012. Informação de Mercado.
- Oliveira, P.B., Oliveira C. M., Machado, P.V., Lopes-da-Fonseca, L. and Monteiro, A.A., 1998. Improving off-season production of primocane-fruited red raspberry by altering summer-pruning intensity. HortScience 33: 31-33.
- SIMA, 2013. Newsletters.



# La construction en Algérie d'un dispositif de suivi/évaluation innovant pour la politique de renouveau agricole et rural

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Le ministère algérien de l'agriculture et du développement rural (MADR) possédait, au lancement de la politique de renouveau agricole et rural (PRAR) en 2009, une multitude de systèmes d'informations (SI) développés séparément sur nombreuses années, au fur et à mesure de ses besoins. Un diagnostic détaillé de ces systèmes avait révélé notamment un fort cloisonnement des SI, des systèmes de sécurité insuffisants, l'absence de standards dans les données et les supports et l'incapacité des systèmes à rendre compte valablement des résultats de la PRAR. Seul le système d'information du Programme de soutien de Renouveau Rural (SI/PSRR) disposait de données organisées, normalisées et interconnectées, mais son implantation a rencontré de nombreuses difficultés.

Cette foison de systèmes d'informations pêchait par son manque de cohérence, de complémentarité et de synergie. Sur la base de ce diagnostic, avec l'assistance technique de la Banque Mondiale<sup>1</sup>, la construction d'un système de suivi & évaluation (S&E), participatif et inscrit dans une culture dite de gestion axée sur les résultats, a été engagée en 2012. Ce dispositif de S&E devrait structurer les différents services du MADR et à terme, l'ensemble des acteurs économiques publics et privés intervenant dans la mise en œuvre de la PRAR. Pour l'édification de ce système, nous avons opté pour une approche originale et innovante, dénommée « Learning by doing », apprendre en faisant qui consiste à « partager nos savoirs, partir de nos expériences et nos connaissances, pour bâtir un nouveau savoir commun ».

## Contexte national

La PRAR a bénéficié de la part de la plus haute autorité du pays, d'une attention particulière et le secteur a été proclamé pour la première fois, comme un secteur économique et prioritaire. A ce titre, il a bénéficié dans le cadre du plan quinquennal 2010-2014, de budgets stables et conséquents pour la mise en œuvre de ses programmes. Pour la première fois aussi, la politique agricole et rural du pays repose sur un cadre de référence<sup>2</sup> et d'analyse élaborée avec l'ensemble des parties prenantes. Ce travail de concertation a permis de retenir 17 thèmes considérés comme les fondamentaux de cette politique. Ces thèmes ont été regroupés autour de deux objectifs globaux. Premièrement, il faut relever le défi de la sécurité alimentaire (devenue un enjeu de sécurité nationale) des ménages. Deuxièmement, il s'agit d'assurer un développement humain équilibré, sans exclusion, ni marginalisation, dans des territoires ruraux revitalisés. En outre, trois autres objectifs spécifiques caractérisent les principaux changements que cette politique veut engendrer. Il s'agit :

- d'une autre manière de gouverner le secteur agricole et rural (responsabilité des acteurs, privés et publics) ;
- d'une croissance économique internalisée, soutenue et durable (responsabilité du secteur privé) ;
- d'un renouvellement et une efficacité accrue des outils de gestion publique (responsabilité de l'administration).

Ce dispositif de S&E devrait mesurer l'impact de cette politique sur les objectifs stratégiques énoncés ci-dessus et renseigner sur les évolutions engendrées par les réformes profondes initiées depuis 2009.

## Nécessité de construire un dispositif de suivi évaluation

Le groupe de travail a donné l'orientation suivante. Le S&E est défini « comme un ensemble d'outils d'information intégrés à la gestion d'une organisation pour qu'elle s'améliore de manière continue ». Les objectifs d'un système de S&E sont nombreux: optimiser l'utilisation des ressources, améliorer la réalisation des actions, comprendre et apprendre, rendre compte, améliorer la performance à travers l'efficacité, la durabilité, l'équité, la pertinence et l'impact, dynamiser et enfin évaluer, contrôler et réajuster. Le système de S&E permet de collecter, traiter, analyser, corriger et communiquer l'information utile afin d'agir pour atteindre, réussir les résultats prévus. C'est ainsi que la mise en œuvre de la PRAR avec son nouveau cadre de référence énoncé ci-dessus, ne trouvait pas son pendant pour suivre et évaluer les effets et les

<sup>1</sup> Cette assistance technique de la Banque Mondiale est déclinée en 2 phases successives: une 1ère phase de construction du système (en cours) et une 2ème phase de mise en œuvre aux niveaux des structures à différents niveaux hiérarchiques.

<sup>2</sup> Le Renouveau agricole et rural en marche, revue et perspectives, mai 2012 ([www.minagri.dz](http://www.minagri.dz)).

impacts de cette politique, d'où la nécessité de réformer et de moderniser foncièrement les SI existants et de les héberger dans une architecture rénovée et prospective, qui servira de socle à la mise en place du dispositif de S&E.

Le dispositif S&E en construction repose sur les principes suivants :

- Une approche ascendante donnée au flux d'information pour le S&E, qui part de l'unité de base du développement du secteur agricole et rural, soit l'action d'investissement portée par l'exploitant, l'association et l'opérateur économique ;
- Un système simple, qui va à l'essentiel des principes de gestion, et compréhensible par les acteurs ;
- Une structure dynamique et ouverte pour permettre d'intégrer les ajustements et les nouvelles activités dans des contextes changeants ;
- Les données collectées doivent servir et être utiles avant tout à ceux qui les ont collectées.

#### **Caractéristiques de l'approche : « Apprendre en faisant ».**

Le système de S&E est en cours de construction par des représentants des différentes structures et niveaux hiérarchiques (central, wilaya et local) du MADR. Il regroupe aussi en son sein, des cultures propres aux profils d'acteurs (organisations interprofessionnelles, chambres d'agricultures, cadres de l'administration, instituts de formation), ainsi que des compétences dans plusieurs métiers des SI (statistiques, gestion, informatique, ingénieurs, économistes, communication). La mise en œuvre de cette approche innovante mais relativement ardue à mettre en place, requiert quelque préalables et notamment un encadrement expérimenté et disponible pour que le groupe puisse fonctionner le plus harmonieusement possible et construire les éléments du système, et ce, aussi bien lors des différents ateliers, que des activités entre deux ateliers. Un service électronique de partage, d'échange d'informations et de renforcement des capacités du groupe a été créé à cet effet.

La mise en place de cette organisation constitue l'assise de cette approche. Elle vise à atteindre 4 résultats :

- l'institutionnalisation de la fonction S&E;
- l'outillage de la coordination d'un groupe de travail pour le développement continu des outils;
- la construction des interfaces pour le déploiement des outils une fois construits;
- la conception technique et informatique.

Les caractéristiques de cette équipe de 40 personnes sont la complémentarité et l'interdépendance entre les sous-groupes thématiques et le fait d'être une structure ouverte et dynamique faisant appel à la responsabilité et à la créativité. Les avantages de cette structure sont le fractionnement des tâches en petites unités gérables pour un individu avec des soutiens de proximité dans son sous-groupe mais sans perdre de vue le système global en construction. Les principes de fonctionnement sont un engagement volontaire et une « doublure » pour assurer la continuité.

La construction du système se fait par les membres du groupe, qui se portent volontaires pour réaliser les différentes tâches. Celles-ci apparaissent au fur et à mesure des ateliers du groupe au cours desquels une compréhension partagée du système de S&E se construit progressivement. Les référentiels internationaux ont été consultés pour assurer l'alignement des indicateurs du secteur agricole et rural et inscrire l'engagement de l'Algérie dans ces mécanismes d'évaluation. Les expériences nationales réalisées avec la Banque mondiale et le FIDA ont été capitalisées notamment en ce qui a trait à l'approche participative de la gestion à la base et l'application systématique du S&E dans la gestion de projet. Les valeurs nationales sont prises en compte pour façonner des outils de gestion adaptés à notre image et notre réalité.

Quatre Wilayas ont été choisies pour comprendre comment fonctionne ou pourrait fonctionner le système de gestion des soutiens de l'État. Ces projets sont représentatifs des différents types de soutiens apportés par l'État. Un premier projet porte sur le développement rural intégré réunissant une dizaine d'activités portées par les individus ou des associations et visant l'intégration intersectorielle et l'instauration d'une dynamique de développement à l'échelle d'une localité. Ensuite, un second projet concerne l'aménagement d'un bassin versant sur plusieurs communautés, incluant des initiatives locales et des activités d'autorité publique dans la gestion des ressources naturelles. Ensuite, deux autres projets apportent un soutien au renforcement du capital productif d'exploitants agricoles dans deux filières d'intérêt au niveau national (une plus orientée sur la substitution d'importation en céréales ; l'autre davantage tournée vers la valorisation et à terme l'exportation notamment pour l'huile d'olives).

## Principales innovations

Par rapport à l'ancienne organisation, les principales innovations recensées sont les suivantes :

- *Cadre de résultats de la politique de renouveau agricole et rural, et de ses programmes de mise en œuvre :*

Une plus grande lisibilité et visibilité nouvelles des soutiens apportés sur le terrain, avec des indicateurs d'effets et impact tangibles et gérables. Il met en lumière les rôles et responsabilités des différents niveaux de management dans l'analyse des données des différents axes de ce cadre de référence, ainsi que les possibilités de convergence entre les entités souvent cloisonnées.

- *Intégration des parties prenantes dans la mise en œuvre de la PRAR :*

Les premiers résultats du groupe de travail confortent l'idée selon laquelle une approche participative assure une meilleure prise en compte des besoins en information des différents acteurs, leur mobilisation croissante envers la PRAR, une plus grande convergence entre les acteurs et une meilleure efficacité d'ensemble.

- *Standardisation des données pour les systèmes de S&E /statistiques/SI :*

La construction du dictionnaire des données et de la nomenclature des activités permet de réviser les données et structures en usage dans le secteur agricole et rural depuis 50 ans, pour y intégrer les nouvelles dimensions telles que le développement rural, la gouvernance, la gestion durable des ressources naturelles. C'est aussi l'occasion de construire un langage commun entre les différentes parties prenantes. Cette nomenclature sera utilisée pour paramétriser les applications informatiques de S&E.

- *Conception du système d'information agricole et rural (SIAR)*

Le groupe SE a précisé les modalités de gestion des soutiens au secteur et clarifié les rôles des parties prenantes dans la mise en œuvre des actions. Ces deux éléments structurent les dispositifs de collecte et utilisation des données, et l'architecture du SIAR en construction.

- *Accompagnement de la mise en œuvre du système de S&E des programmes*

La pertinence des questions soulevées pendant la construction du système de S&E, tout comme les questions soulevées à la lumière d'une meilleure lisibilité des résultats, ouvre la porte à la construction de divers mécanismes de formation continue.

## Conclusion

En résumé, l'innovation ou les innovations dans la construction de cet édifice sont nombreuses. Tout d'abord le focus qui est fait sur l'action à la base, au niveau des unités d'exploitation et du territoire, niveau duquel démarre le flux d'information qui remonte vers les différents niveaux de management en toute transparence, en utilisant l'approche participative.

D'autre part, la gestion axée vers les résultats va immanquablement améliorer l'efficacité et les performances de l'administration à tous les niveaux et rendre compte aux populations cibles ainsi qu'aux citoyens de l'utilisation des fonds publics et donc apporter plus de transparence et de responsabilité. En outre, et c'est peut-être le volet le plus important pour la durabilité de ce futur outil de gestion publique, l'utilisation de l'approche « apprendre en faisant », qui implique les principaux artisans et futurs utilisateurs dès le lancement du « chantier », permet d'ores et déjà de constater, une plus forte implication et motivation des personnes ressources qui en seront les futurs gestionnaires.

Enfin, ce cadre de S&E est d'autant plus solide et structurant qu'il s'intègre dans un édifice plus grand car d'autres chantiers sous-jacents, qui vont venir conforter ce dernier, sont actuellement en cours. Ils sont bien entendu fortement connectés dans leur élaboration à ce dernier. Il s'agit du renforcement de capacités des services de statistiques agricoles à tous les niveaux, et des différents systèmes d'information en cours de rénovation et de modernisation, qui seront interconnectés et partagés et aboutir, in fine, à un seul et unique système d'information inscrit dans la loi d'orientation agricole et dénommé « Système d'Information Agricole et Rural (SIAR) ».

L'ensemble de ce vaste mouvement d'interconnexion entre les statistiques agricoles, les SI, le S&E et la formation devrait devenir à moyen terme un puissant outil de gestion publique, capable de mesurer et d'évaluer les effets et performances ainsi que les impacts de la PRAR et de contribuer au développement continu des acteurs du secteur agricole et rural.



# Innovative strategies on rural development of mountainous territories of south-eastern Spain

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## Innovation and endogenous development

Concerning development, innovation could be defined as any improvement in the state of knowledge which can be applied to generate economic and social changes of various kinds (Calatrava, 2011). The innovation procedure therefore involves new or improved knowledge, new applications of that knowledge, and inducing changes with these applications. From a strictly business perspective, innovations would transform knowledge into production benefits. Innovations are, at that respect, not only technological but also organizational, dealing with internal organization and management of available resources, both within the company and in relation to markets (marketing channels and strategies, niches, customers, etc).

Moreover, the establishment of social intangibles favourable to development processes require innovations (often referred as institutional) concerning aspects like social climate, individual attitudes and local network for cooperation, etc. Rural areas tend to have with respect to urban ones traditional shortcomings regarding the organizational and institutional territorial body. They often present what is called "innovative dualism" (Calatrava, 2011) when may have a significant potential for economic competitiveness against a sharp institutional weakness that will limit, if not corrected by innovations that generate the adequate social changes, the appropriate use of endogenous resources. This fact will make the institutional innovations, aimed at strengthening the "institutional architecture" and social cohesion, to play an important role in rural endogenous development, particularly for depressed territories.

To reach territorial endogenous development, the local society has to be organized in a system of actions on the territory, able to produce locally managed marketable goods and services. This needs a permanent generation of ideas and innovations (both technological and institutional), which constitute the "local innovation system". The local innovation system can only occur in what is called a "local innovative mean" (Aydalot, 1986). Its existence requires the interaction of the following elements (Vazquez, 2002; 2007):

- A territorial unit with existing resources and / or potential (productive territorial dimension);
- Local actors (individuals, companies, local authorities, research institutes and training organizations, associations of various kind, etc), institutionalised through relationships and social, commercial, technological, administrative or political contacts;
- A permanent collective reflection and acquisition of knowledge about their own reality, to provide and determine the most appropriate generation of innovations to value their resources.

The combination of these three elements transforms a territory into a local innovative mean, and this conversion will be the engine of local endogenous development. Any item of the territory may be changed into a factor of development through the adoption of appropriate innovations. Thus, various local products, traditional ways of manufacturing, housing, landscape, architecture, historical figures linked to the area, relevant historical facts, flora, fauna, rivers and water features, topography, food traditions, festivals, rituals, people, images, knowledge about agricultural work, etc. (Calatrava, 2011). An innovative action in an area may not be in another.

The need for innovation in a territory at a given time is highlighted by the analysis of so-called "territorial competitiveness factors." It is the key to determining the endogenous development potential of a territory and to carry out its planning. Factors or resources can be divided according to their degree of specificity, from "quite specific" to "fully generic". The more specific a resource or an asset the greater its potential for market competitiveness.

With respect to rural development, apart from the above-mentioned importance of the institutional innovations, we must emphasize the relevant role of innovations promoting networking within and between territories, and innovations related to environmental management. Indeed, in rural territories the economic activities, including agricultural and agri-food, are usually made by very small companies that can hardly devote part of their capital to knowledge generation and innovation, so that the organization in innovative networks aimed at transferring knowledge and ideas between territories

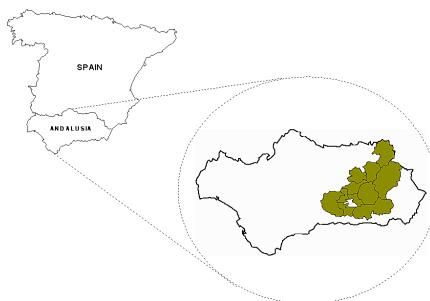
are vital in rural development processes. On the other hand, the territorial dimension of rural areas is much higher than in urban areas, and most of the global ecosystem is, therefore, in rural areas. Proper environmental management is also key in rural development, both for productive purposes and for environmental protection and conservation, and therefore it is generating innovations which allow the improvement of such management.

Mention has to be made of the innovations based in the use of new information and communication technologies (ICT), of great importance in any endogenous local development process, but that acquire a key relevance in the development of rural areas, as its adoption, can to some extent break the traditional isolation and remoteness of rural areas compared to urban areas, particularly with regard to access to information and knowledge, and access to markets. From this basic outline of the innovation in the endogenous development of rural territories, we will comment on the innovative nature of the development processes taking place in the mountainous areas of south-eastern Spain.

### **Innovations and endogenous development in the mountain territories of south-eastern Spain**

The mountainous areas of south-eastern Spain, located in Andalusia, called the Betic Massif (Macizo Bético), is a mountain range with intermountain valleys and high plateaus. The region, with much of its surface above 1000 meters, has strong climatic and soil constraints for the development of a productive agriculture but nevertheless abounds with mountains of olive groves, vineyards, almond trees, grasses and Mediterranean forests, and the reduced irrigated valley produces excellent late-season fruits and vegetables. Cattle are basically made up of sheeps in the north and goats throughout all the region. The sheep are mainly composed of local breed Segureña, superbly adapted for meat production. The goat is mostly Murciano-Granadina race, known worldwide for its hardiness and excellent suitability for milk production. The Betic Massif contains eleven LEADER-PRODER territories. These are disadvantaged areas suffering, at the time of onset of LEADER programs, a continuous and severe rural exodus (the figure below shows a scheme of location of the region).

**Outline of Spanish Betic Massif location**



Local Action Groups (LAG), managing the LEADER-PRODER programs, have been operating in the region during the past two decades, trying to mobilize local society to act on the territory for development. These programs have led to the generation of numerous innovations of various kinds. The economic results of the implementation of these innovative strategies have not been truly spectacular, in terms of income and employment generation, although they have mitigated or reduced, to some extent, the existing rural exodus at the beginning of the nineties. Rural tourism is the productive sector that has presented a more positive economic impact, even in relative terms to the nation evolution.

As an example, table 1 shows the evolution, between 1998 and 2008, of the relative indexes (Spain 100,000) for industry, trade, tourism and economic activity as a whole for the LEADER territory of Guadix-Marquesado, centred and very representative of the region. Of note is the relative decline in the index of industrial activity, and the clear increase in tourism. The relative index of overall economic activity has declined slightly, indicating that the evolution of the Guadix economy has been below that of the Andalusia and the entire country. The evolution of the indexes has been calculated for other LEADER-PRODER territories of the Betic Massif obtaining similar results.

In rural tourism, activities that have been carried out so refer to lodging, tourism infrastructure, heritage recovery, including cultural and gastronomic, promotion, etc.. Of a particular interest are the innovative projects of rehabilitation and revaluation of cave houses for tourism, which affects mainly the northern and eastern territories of the province of Granada. With respect to other non-tourism local services, innovation has been more important in those of social nature than in those related to the economic system. Innovative projects related to the environment have been diverse, ranging from the management of protected areas (infrastructure and equipment, points of interpretation, environmental education, etc.), to waste management, and renewable energy production, mainly wind and solar and to a lesser extent, agroenergy.

Table 1:- Evolution of the Relative Economics Indexes of the Guadix-Marquesado District (1998-2008 period)

	District of Guadix		Andalusia		Spain
	1998	2008	1998	2008	
Industry I.	36	29	10,662	11,389	100,000
Trade I.	61	62	15,762	16,521	100,000
Tourism I.	19	26	16,275	18,501	100,000
Econ. Act. I.	50	46	12,644	13,594	100,000

Source: Calatrava and Gonzalez-Roa (2011), Raw data from La Caixa: Anuarios Económicos de España

As regards to industrial activities, projects are frequently agroindustrial and relate primarily to the production of olive oil and wine and to a lesser extent to cheese, lamb and sausages and meat industries. Innovations frequently refer to both production processes of new or previously existing products, using techniques aimed at increasing quality, and strategies of territorial identification of products, trying to add value through differentiation by origin. There have also been innovations in the ways of marketing products (increased of proximity markets and short channels, channels focused on rural tourism, teletrade etc.). Quite important has been the induction of innovations by exogenous firms that have endogenized their services and/or products and adapt their manufacturing and business strategy to local processes of endogenous development. This has been increasingly frequent in industries such as agroenergy and wine, for example.

Despite this limited economic performance, development programs have had considerable social success mobilizing the population to the generation and adoption of institutional innovations, inducing the growth of associations in the field of business as in cultural activities and associations of any kind. This has done much to change the mentalities of the local players, involving women and young people, for the collective decision making process, built new capacities, etc.

The endogenous development processes have also induced a strong sense of a separate territorial identity, arising from characteristics and issues that are specifics to each territory. Linked to these effects is the increasing interest of the local inhabitant in learning about their historical, cultural and artistic heritage and exploiting it. This highly positive social impact of development programs in the territories of the Betic Massif was analysed for the case of Guadix, by Ceña and Calatrava (2006). The perception by local society itself of the changes occurring in their territories has been analysed by Delgado et al (2006) and by Calatrava and Gonzalez Roa (2011 and 2012). Based on surveys conducted in 2009, these last study shows how the local population of two of the LEADER territories considered, perceives and greatly appreciates the social changes in the last decade, environmental somewhat less, and much less makes an assessment of the economics.

In summary it can be concluded that the innovations that have been generated in the processes of development within the mountainous territories of south-eastern Spain, have induced more social changes than economic ones, with the exception of the service sector, due to the increase of rural tourism, and, to a lesser extent, the increasing of some agro-industrial activities. Social changes occurred relate mainly to the consolidation of territorial identities, the increased cooperation and partnerships, and the creation of a social climate and a local institutional architecture that have to favour development. This imbalance between social change and economic progress is not at all, in our opinion, as negative as it might seem, because the territories that constitute the region suffered from an innovative dualism that the action of LAG have succeeded, to a considerable extent, correct, thus facilitating the future endogenous development of the region.

## References

- Aydalot, P. (1986): « L'aptitude des milieux locaux à promouvoir l'innovation » in Technologies Nouvelles et ruptures régionales ». Ed. Económica. Paris
- Calatrava J. (2011): "La innovación en el desarrollo endógeno de los territorios". Curso Internacional sobre Desarrollo Rural y Agricultura Sostenible. INIA-AECID, Cartagena de indias (Colombia) Septiembre. p 53.
- Calatrava, J., Gonzalez-Roa (2011): "Social Ex-post evaluation of local development programs: application of a Contingent Valuation approach to the Guadix-Marquesado LEADER area (Spain)". 122nd EAAE Seminar: Evidence-based agriculture and rural policy making: Methodological and Empirical challenges and policy evaluation. Ancona (Italy). February 17-18.
- Calatrava, J., Gonzalez-Roa (2012): "Social evaluation of LAG's activity: application of a Contingent Valuation approach to the mountainous district of Sierra Mágina in south-eastern Spain" 28 International Conference of Agricultural Economists. Foz de Iguazú (Brasil). August 18-24. p 18

- Ceña, F. y Calatrava, J. (2006). "L'expérience LEADER dans une zone rural de l'Andalousie (Espagne): Organisations locales et transformations socioéconomiques ». Séminaire sur les politiques nationales de développement rural en Méditerranée. El Cairo. Febrero. Options Méditerranéennes 71, CIHEAM, 101-113.
- Delgado M., Ramos E., Betel A. (2007): "Nuevas tendencias en evaluación de programas de desarrollo rural: Un proceso de auto-evaluación en el altiplano de Granada". Revista Española de Estudios Agrosociales y Pesqueros 213. 11-40
- Vázquez, A. (2007). "Sobre la diversidad de situaciones y complejidad del concepto de desarrollo endógeno", en García-Docampo (ed): Perspectiva teórica del desarrollo local. Ed.Netbiblo.
- Vázquez, A. (2002). Endogenous development. Routledge, London.





# Promouvoir l'innovation durable et la qualité dans l'agriculture méditerranéenne Le cas de l'Observatoire tuniso-italien SERVAGRI

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La collaboration entre les clusters transfrontaliers de PMEs du secteur agroalimentaire, en vue d'améliorer la qualité et la sécurité des produits et des services issus du savoir-faire local, permet d'en augmenter la valeur ajoutée et donc de les rendre plus compétitifs sur le marché euro-méditerranéen. SERVAGRI est un réseau tuniso-italien mis en place afin de développer des stratégies innovantes visant à intégrer les filières productives agroalimentaires et de valoriser les productions traditionnelles, dans le respect des principes du développement durable. Il est construit selon le modèle de cluster, autrement appelé « district productif transfrontalier », un mode d'organisation reconnu pour favoriser la compétitivité des productions et des entreprises, et dont les retombées sociales, notamment au niveau de l'emploi, sont largement positives.

En Tunisie comme en Italie, le dualisme reste fort entre l'agriculture moderne et les formes traditionnelles pratiquées par les petites exploitations. Les initiatives de modernisation, capables de se positionner dans un projet de développement ambitieux, à la fois intégré, durable, et couvrant une zone géographique locale et régionale, sont encore rares. Les compétences et la qualification des entrepreneurs sont insuffisantes, ainsi que les connaissances et les initiatives pour le transfert de savoir-faire et de pratiques innovantes importés d'autres pays. En outre, le manque d'acteurs capables de représenter les intérêts et besoins des terroirs empêche la mise en œuvre d'une collaboration fructueuse entre universités, opérateurs du secteur et autorités compétentes.

Pour remédier à ces difficultés, il est nécessaire de définir des modèles de développement euro-méditerranéen communs afin de fournir des éléments pour une stratégie globale sur la base de l'analyse des besoins locaux. Cette initiative devra d'une part soutenir la création de réseaux systémiques régionaux favorisant la diffusion du savoir-faire d'excellence et des meilleures pratiques. De l'autre, elle permettra de mettre au service du monde rural, conçu en relation avec les zones de consommation urbaine, les résultats de la recherche appliquée, et respectant les identités locales et de l'égalité des chances.

## L'Observatoire SERVAGRI

Dans le cadre actuel de la libéralisation croissante des échanges commerciaux, le partenariat transfrontalier SERVAGRI vise à contribuer à la création d'un système de qualité et de sécurité de la production et de la distribution agroalimentaire en Méditerranéen. Ce dernier ambitionne de dépasser les peurs de la concurrence entre pays riverains du Nord et du Sud et de miser sur la complémentarité des agricultures régionales. Un tel objectif pourrait être envisagé en mettant au point des politiques productives et des politiques de l'offre synchronisées et mutuellement complémentaires en termes de variété, de saisonnalité, de gamme, de rapport coûts-qualité et de services. Par ailleurs, une stratégie marketing devra valoriser la diversification des productions et élargir les calendriers de leur disponibilité sur les marchés des deux côtés du bassin méditerranéen.

Le lancement des activités de l'Observatoire, inauguré à Tunis le 21 septembre 2012, a été marqué par la mise en place de quatre actions pilotes : un programme de formation pratique sur le terrain à l'oléiculture, un projet similaire concernant l'apiculture, et un troisième sur l'agriculture biologique. La quatrième action pilote, subordonnée au bon déroulement des précédentes, a pour objectif d'étudier et de promouvoir la filière courte. Les finalités des premiers trois projets pilote sont de plusieurs ordres, dont celles d'accroître la capacité productive des agriculteurs des zones concernées par le projet<sup>2</sup> en termes de quantité et de qualité, à travers la formation pratique des acteurs de la chaîne de production (producteurs, techniciens, opérateurs). La formation s'adressera à la fois aux techniciens, aux néo-agriculteurs et aux agriculteurs. L'Observatoire prévoit également de créer un réseau de relations entre producteurs tunisiens et siciliens et entre différents acteurs, du public comme du privé, opérant dans les milieux concernés en Sicile et en Tunisie. D'un point

<sup>1</sup> GAL Eloro est le créateur et chef de file du projet ([www.galeloro.eu](http://www.galeloro.eu)), en partenariat avec APEL, Tenmya 21, Eurispes Sicilia, CISS, CIA Siracusa et avec ADDCI en tant qu'associé (<http://www.servagri.eu/index.php/fr/projet-servagri/partenariat>). Il s'agit d'une société consortiale publique-privée (49% de participation d'institutions publiques locales et 51% d'associations privées de catégorie) sans but lucratif, née grâce au programme d'initiative communautaire LEADER, qui favorise le développement intégré et durable en milieu rural dès sa constitution (1998), et qui s'occupe aussi de supporter des actions de coopération aux niveaux interterritorial, interrégional et transnational : dans ce dernier domaine, GAL Eloro a commencé une très stricte coopération avec la Tunisie dès sa création, en y réalisant une série de projets cofinancés par l'UE ou par des institutions publiques régionales.

<sup>2</sup> A voir, les gouvernorats de Béja et Bizerte en Tunisie; et la province de Syracuse en Italie.

de vue qualitatif, il s'agira de tracer un cadre de qualité des produits ciblés de la zone transfrontalière concernée à travers une recherche appliquée spécifique, mais aussi d'améliorer la production unitaire, le standard qualitatif, les conditions hygiéniques et le niveau sanitaire des productions locales, leur stockage et conservation, jusqu'au packaging du produit fini. Enfin, il s'agira de promouvoir la qualité des produits agricoles auprès des structures « ho.re.ca. »<sup>3</sup> de la zone concernée, ainsi que d'améliorer le marketing pour les exportations (à travers, par exemple, la substitution d'une partie des exportations en vrac par des exportations sous forme conditionnée, assurant une plus forte valeur ajoutée).

Les trois actions pilotes parvenues à terme, et une fois obtenue une mise en conformité des mentalités et pratiques dominantes sur les méthodes et les modes de production aux règles de qualité, dont celle de la traçabilité exigée par les marchés internationaux, le projet suivant sera celui d'organiser un marché de la filière courte au milieu urbain. Les résultats de la formation pratique, des essais sur terrain et de la transmission de l'innovation de processus pourront y être constatés ainsi que le lancement de la marque de qualité commune SERVAGRI. Il va de soi qu'avant de parvenir à cet objectif, ce dernier projet sur la filière courte aura dû atteindre ses objectifs. Ces derniers comprennent la proposition et l'entrée en vigueur d'une loi nationale valable à niveau transfrontalier sur la « filière courte », d'une loi fiscale sur la vente directe de produits agricoles et d'une législation harmonisée sur les standards de qualité. Par ailleurs, le programme en question vise à favoriser la formation d'associations de producteurs, la promotion des partenariats public-privé, stimuler un intérêt de la population urbaine pour les produits locaux, avec une attention particulière portée sur l'organisation de rencontres entre consommateurs urbains et producteurs ruraux. Enfin, il s'agira de créer une charte de qualité SERVAGRI avec le lancement d'une marque garantissant la sécurité alimentaire, ainsi qu'une série de règles à suivre par les entrepreneurs agricoles impliqués.

Les deux premières actions, lancées entre novembre et décembre 2012, ont engendré une forte participation des acteurs à toutes les séances pratiques, elles-mêmes gérées par des experts internationaux. Grâce à cela, l'Observatoire SERVAGRI a reçu le plein appui des institutions publiques régionales et étatiques, encourageant par-là la poursuite de ses actions démonstratives.

### **Qualité et durabilité, outils essentiels dans le futur de la coopération**

Parmi les caractéristiques innovantes de l'Observatoire SERVAGRI se trouvent des objectifs de long terme, tels que l'intégration des systèmes socioéconomiques et environnementaux locaux, la revalorisation de l'offre de biens et services, et enfin la coordination stricte entre les offres locales et internationales. La valorisation de la production agroalimentaire, stimulée par les activités de l'Observatoire, est fondée sur une stratégie qui ne peut se réaliser qu'à la faveur d'une réorganisation des filières agroalimentaires. Il s'est de plus avéré nécessaire de renforcer la sécurité sanitaire des aliments, leur traçabilité et la création d'un label de qualité. Enfin, l'encouragement des exportations et des investissements dans les créneaux porteurs complète cette série d'exigences et de critères essentiels pour la durabilité, au moins en termes d'accroissement de la valeur ajoutée.

L'avenir de l'Observatoire SERVAGRI, à partir du moment où il aura acquis sa pleine autonomie financière et de gestion, comprend un nouveau projet, toujours dans le cadre du programme IEVP CT « Italie-Tunisie » 2007-2013<sup>4</sup>, issu de l'expérience acquise par les partenaires responsables. Ce programme, dénommé « SERVAGRI HUB », vise à renforcer le rôle de l'Observatoire en tant que catalyseur de micro-entreprises durables gérées par des jeunes et des femmes dans les nouvelles économies<sup>5</sup> au service du secteur primaire de la zone transfrontalière. Le but sera de lancer une pépinière de micro-entreprises pour rendre l'agriculture et le secteur agroalimentaire du bassin italo-tunisien capables d'affronter la concurrence mondiale, et enfin d'assurer croissance et emploi, cohésion territoriale et développement durable des territoires cibles. Nous irons, ainsi, promouvoir le développement intégré de ces micro-entreprises innovantes grâce à une campagne de marketing territorial. Celle-ci aura pour objectif d'orienter et de valoriser la diversification, de rationaliser et harmoniser les chaînes concernées et d'organiser une offre conjointe d'un panier de biens et services complémentaires entre eux et immédiatement reconnaissables.

De même, le transfert innovant de savoir-faire aux micro-entreprises produira un bassin de jeunes et de femmes entrepreneurs en soutien aux besoins concrets du secteur primaire de la zone transfrontalière. La capacité de transfert transversal de savoir-faire dans la gestion de la pépinière sera fondamentale, à côté de la mise en commun des politiques de développement durable fondées sur les nouvelles économies ; celles-ci étant sans doute les mieux armées pour faire face aux crises cycliques et sont donc des acteurs essentiels du libre-échange euro-méditerranéen.

Dans ce cadre, quatre domaines d'activités sont prévus :

<sup>3</sup> Hôtellerie, restauration et catering

<sup>4</sup> Voir [www.italietunisie.eu](http://www.italietunisie.eu)

<sup>5</sup> Il s'agit ici de profiter des nombreux et très variés exemples d'excellence offerts par l'économie sociale, l'économie verte, celle créative et celle de la connaissance, pour les appliquer en milieu rural, à service de l'agriculture de qualité.

- sensibiliser des groupes cibles et développer la pépinière de micro-entreprises des nouvelles économies.
- former les jeunes et les femmes sans-emploi pour la création de micro-entreprises
- établir une coopération interinstitutionnelle favorisant la bonne gouvernance de la pépinière et le développement de politiques durables communes.
- mettre en œuvre un nouveau modèle d'affaires et de marketing territorial dont le rôle serait d'orienter et de valoriser la diversification de l'offre, rationaliser et harmoniser les chaînes de production concernées et organiser une offre conjointe d'un panier de biens et services complémentaires.

### **Conclusion**

En démarrant et en fondant leur action sur les besoins partagés par les sphères publique et privée par le biais de modèles actifs de partenariat public-privé (PPP), les activités de l'Observatoire SERVAGRI auront un fort impact transnational. En effet, ce dernier a pour objectifs de promouvoir l'ouverture des territoires à travers la mise en œuvre d'une gamme de produits et processus découlant d'une méthodologie de travail conjoint, construire un réseau permanent transfrontalier permettant d'améliorer la qualité globale et la compétitivité des entreprises et productions, et dont l'impact social sera positif, aux niveaux de l'emploi et de la qualité de vie des populations locales. Dans ce contexte, un modèle de gestion dérivant de la mise en réseau des opérateurs économiques des secteurs agricole, agroalimentaire et des nouvelles économies, sera enclenché pour construire et promouvoir un modèle compétitif et innovant de développement conjoint et intégré du secteur primaire de qualité des deux pays. Ceci sera grâce à l'implication d'activités durables, et parce que l'ensemble des nouvelles micro-entreprises ira constituer un bassin d'offres communes italo-tunisiennes des biens et services.

Par rapport aux initiatives réalisées ou en cours, la proposition globale de l'Observatoire SERVAGRI est fortement innovante grâce à la diffusion des nouvelles économies dans les territoires concernés mais également grâce au démarrage d'un modèle de gestion des mesures de marketing territorial. Ce dernier découle de la mise en réseau des opérateurs des secteurs agricole et agroalimentaire avec ceux des nouvelles économies, dans le but de créer et promouvoir des produits/services spécifiques à l'appui de la production primaire et de sa commercialisation (agro-crèches, agro-jardins d'enfance, fermes sociales, fermes didactiques, agro-hospices, agro-maisons de soins, agro-logistique, etc.). Le caractère innovant réside, en d'autres termes, dans l'intégration des PME agro-alimentaires avec celles des nouvelles économies, dans la promotion intégrée des productions avec leurs services innovants, entraînant une forte valorisation des terroirs et des travailleurs migrants, ainsi que des typicités identitaires des terroirs. L'Observatoire SERVAGRI, à moyen et long termes, pourra ainsi renforcer son rôle de propulseur de micro-entreprises durables gérées par des jeunes et des femmes dans les nouvelles économies à services du secteur primaire de la zone transfrontalière considérée, en propageant et en enrichissant les instruments du district productif dans tout le bassin méditerranéen.



# A territorial approach through an Inclusive growth in the Mediterranean

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In the following paper we tried to underline the needs of inclusive growth in Mediterranean in terms of territorial issues and balance of economic growth within the countries. We decided to focus on the foreign investment location regarding the economic scattering on the lands. Thus, we will consider the tools Mediterranean states use or not to allocate foreign direct investments (FDI) on their territory and the inclusive impact by a mapping of South Mediterranean investments. We will conclude by a case study of a Gulf country using FDI to promote territorial development.

Within the framework of the modernization and the development of the south-Mediterranean economies, many international organizations offered their advice to drive the policies. The opening and the competition are in a market economy, the "alpha and the omega" of the success for the economic transitions. Therefore the increase in foreign trade and the intensification of the FDI<sup>1</sup> are often considered the main tools of economic success<sup>2</sup>. If the growth target is undeniable, and even sometimes reached, the current debates concern the inclusiveness of growth. By inclusive growth<sup>3</sup>, the economists understand the capacity of the economic dynamism "to include" the whole population in the productive system so that they can reach decent standards of living. It also refers to inclusive issues related to environment and territorial challenges (in particular through the inclusion of all the populations living on territories that benefit, in an uneven way, from the fruits of the growth). It is a model of economic development that is not only answering the maximization of the cost / profit ratio, but a model able to meet the expectations of various stakeholders by giving them an active role to play, and not only a passive posture via the redistribution *a posteriori*.

Moreover, the States have the responsibility to balance the territorial development by avoiding some rural area without any economic growth. They need to include all the economic resources scattered within the lands and to create a decentralized growth in order to make all the territory part of the development process. Thus, we will consider the inclusive part of the economic growth as the territorial development that balances the lands in Mediterranean countries. Our hypothesis is that the public policy to attract FDI and support the growth can be used as a territorial tool to balance the growth within the lands.

## Opened economy and inclusive growth

Yet, if the definition of inclusive growth is accepted by all the experts, the means to reach it sometimes diverge. During the 2012 FEMISE<sup>4</sup> Annual Meeting, various economists discussed the notion of inclusive growth in the Mediterranean. They came to the conclusion that the distribution of growth by the only market was not optimal in terms of inclusivity. The World Bank<sup>5</sup>, during the FEMISE Annual Meeting, advocated that growth will become inclusive through liberalization. Flexibility, in particular within the labor market, and the opening outside, will ensure a growth bringing, in fine, the necessary jobs creation for the whole population. Moreover, if we follow this idea, the concentration of growth on a limited geographical point should create inflation and stimulate the spread of investment within the territory if the production factors are flexible.

Some Mediterranean economies, such as Egypt, are characterized by an important rural structure which often implies a weak productive economy. We can suppose that the exposure to more competition could possibly grow towards mergers, innovation and more productivity. Nevertheless, it is essential to study the modalities of these policies that will lead to more openness. If we admit that the brutal and little prepared opening to the world competition of traditional economies

<sup>1</sup> Foreign direct investment and development, Theodore H. Moran, Institute for International Economics, 1998

<sup>2</sup> Does foreign direct investment promote development? Theodore H. Moran, Edward M. Graham and Magnus Blomström, Institute for International Economics, 2005

<sup>3</sup> UNDP definition : <http://www.ipc-undp.org/pages/newsite/menu/inclusive/whatisinclusivegrowth.jsp?active=1>

<sup>4</sup> FEMISE is the « Forum Euro-Méditerranéen des Sciences Economiques », Euromed Network of Economic Institutes, financed by European Commission

<sup>5</sup> World Bank Definition : <http://siteresources.worldbank.org/INTDEBTDEPT/Resources/468980-1218567884549/WhatIsInclusiveGrowth20081230.pdf>

leads to more destruction than positive restructurings<sup>6</sup>, a field of public policies remained ignored until now: the long-term regulation policies of openness. It might be because of the world doctrine carried by the lessors and the international organizations. The results of these policies urge to think about economic policies that would bring more inclusive growth on all the territories.

We seem to admit the possibility of public intervention for a progressive opening to ensure the transition<sup>7</sup> in the short term. But it implies in the long term the negation of the role of the policy makers on the driving of the economic flows coming from the outside. It is supposed that rational economic actors on a flexible, open and competitive world market will bring an optimal allowance of the resources for all the territories. Yet, within the framework of the Mediterranean region, we can wonder about this optimal allowance of the flows of investment, at the level of its territorial meshing.

It is a burning question if we consider the recent events of political transitions that reflect socioeconomic needs. It is the low economic productivity, that often motivated Arab Springs (except the Gulf region where both movements are more characterized by religious issues for Bahrain and Yemen), because national economies were not sufficient to satisfy the populations. South-Mediterranean woke up by asserting its political and socioeconomic needs. Despite the fact that many actions have been undertaken in this region for several years, the populations are nevertheless brought to arise in the street. Maybe it seems necessary to assess our actions in this region. We heard about regional integration, about vast market to ensure outlets and Euro-Mediterranean opening. All this to be based on a greater interdependence of the Euro-Mediterranean economies, the relations allowed by the flows of FDI, those same that must allow the modernization of economies.

This is why cooperation programs concentrated their work on the development of FDI in the Mediterranean, with a certain success<sup>8</sup>. The flows of investments in the Mediterranean region increased during the last decade<sup>9</sup>. If we consider this interconnection with the world economy through FDI a success for the Mediterranean, two points of evaluation can be raised to analyze the inclusive dimension of these investments: the spill-over effect on the domestic investment, and their participation to rebalance the economic growth at the territorial level. We will focus the territorial division of flows. What do we understand by tools kit from lessors to stimulate FDI in Middle East and North Africa (MENA)? After ten years of experiments with these policies, can we say we should adapt some of these tools?

### The doctrine besides the Mediterranean policy

Among the advice lavished by international organizations, let us note the particular role of the OECD and the World Bank. Both of them promote, with a lot of efficiency, a similar doctrine of political economy for the MENA region; OECD with its MENA<sup>10</sup> program and the World Bank via its ranking "Doing Business" within IFC<sup>11</sup>. This doctrine is strong thanks to its practical aspects, with a shape of tools kit which it transposes into every country, allowing easily an international comparison of advances of reforms. It is the concept of "Good governance" of the World Bank Institute.

The proposed public policies are based on the idea that the public actors have to organize and ensure the conditions of an open and competitive market. A favorable regulatory and financial framework would thus be key to stimulate investment, and the widest international opening would attract investors in order to counterbalance the lacks of local investors<sup>12</sup>. Among the tools proposed by lessors, we find (i) a stable and little binding legal framework for companies; (ii) the possibility for companies to easily extract profits and capital from FDI; (iii) the capacity to invest by becoming owner of the whole capital of the subsidiary created. Besides all these benefits, lessors also recommend:

- the creation of an autonomous agency that would deliver the authorizations of investments and that does not exercise, apriori, any control;
- the ratification of the international conventions of insurance and protection of the investors;
- the privatization of the branches of industry where public operators used to have monopoly;
- a legal framework keeping competition on the market competitive in particular on procurement contracts;
- a liberalized financial sector;

<sup>6</sup> Does foreign direct investment promote development? Chapter 9, Bruce A. Blonigen and Mao Grace Wang, Institute for International Economics, 2005

<sup>7</sup> Foreign direct investment and development, Chapter 9, policy implications for developing countries, Theodore H. Moran, Peterson Institute for International Economics, 2011

<sup>8</sup> On going evaluation of the project « Invest in Med », EuropeAid : <http://www.animaweb.org/uploads/bases/document/InvestinMed-FinalReport.pdf>

<sup>9</sup> +362.4% of FDI within Southern Mediterranean between 2000 and 2010, to compare with economies in development (+141.3%), economies in transition (+947.9%) and developed economies (-45.6%) according to UNCTAD Database

<sup>10</sup> <http://www.oecd.org/mena/>

<sup>11</sup> <http://www.doingbusiness.org/>

<sup>12</sup> Cadre d'action pour l'investissement : panorama des bonnes pratiques, OCDE, 2006

- an efficient public governance which means a reduction of public spending<sup>13</sup>.

The last proposals from the World Bank, within the framework of the partnership of Deauville to go with the economic transition after the Arab Spring, resume the same postures, with the liberalization of trade and services, the opening for the agricultural goods, the standardization of the regulations and so<sup>14 15</sup>.

We would forget almost that Arab Springs were preceded by massive strike actions in the mining, off-centered regions compared with the big metropolises and the urban territories concentrating the economic growth. One of the main challenges face by the MENA region is to find a solution to this territorial inequality. First it is necessary to ensure the political transitions by answering the socioeconomic emergencies, but it is, in the medium and long term, a whole model of development that needs to be reinvented, or at least to be adapted for more territorial equity.

The projects of investments have to take on inclusive dimensions, in the social, environmental and territorial aspects<sup>16</sup>. The territorial development is a national challenge that only the public authorities can bear the responsibility of. The History of the Mediterranean, in its external relations in particular with Europe, was made on the maritime coast. Therefore, for decades we notice a strong capital-intensive concentration on the coast, or in the case of Egypt throughout the Nile, while numerous populations live in the heart of territories<sup>17</sup>. The theory would like that the prices increasing with the capital-intensive concentration, the actors scatter gradually towards territories abandoned and by consequent cheaper. Now, the reality of markets makes that price is rarely the only stimulus of the economic activity, and the capital-intensive concentration sometimes leads, in spite of cheap land prices, to obtain efficiency for an investment, rather than in the less concentrated zones. This fact is due to previous investments that now authorize qualities of infrastructures and a more productive economic structure.

### **A mapping view of investments and supports for growth**

A close look at the geographical data on foreign investments from the private sector since 2003 in the south-Mediterranean region, allows supporting the thesis of a strong concentration of FDI along the coast and the Nile, in the detriment of the inside lands, that are nevertheless more populated<sup>18</sup>. These FDI contribute strongly to the economic growth of these countries. Therefore it would be urgent to distribute them better on the territory. In addition, clusters, incubators and other science parks are very often concentrated on the coast, even if it is less true in Tunisia, but very right for Algeria, Morocco and Egypt<sup>19</sup>. On the one hand, public financial and operational means to support economic growth are thus extremely concentrated in the coastal regions and the big cities. On the other hand, proactive development policies such as Science Park, clusters, center of valorization, incubators, are not sufficiently present in rural zones to have real effects. The public mapping of the economic development tools in the Mediterranean clearly reflects these choices of territorial fracture, both investments and public tools being stuck on few territories close to the coast.

It is necessary to design proactive public policies regarding investments and the development of the private sector. We do not have to discuss whether the recommendations of the lessors about a frame supporting the market are right or not. They are efficient but not sufficient<sup>20</sup>. The public authorities cannot be content with establishing a good business climate, let the market deciding alone the allocation of investments. Transparent rules must be established to underline national priorities and their allocation on the territory. Financial and land supports, plus public-private partnerships can go towards this direction to drive private sector actors of the towards areas where they would not have gone by themselves.

### **The study case of Emirates**

The Arab world is characterized by a rich diversity of development stories; in those, one case needs to be studied: the United Arab Emirates. Structured around seven Emirates that have their own governments, the Federation of United Arab Emirates is characterized by a strong heterogeneity: dense zones in terms of investments, companies and workers are close to almost empty zones. Emirates have built their development on international opening and massive FDI for several years. They implemented numerous free zones. Beside the country is very well classified in the "doing business" ranking of the World Bank and follows closely the recommendations of the OECD on business climate and protection of the investors<sup>21</sup>, with

<sup>13</sup> OECD Investment Policy Reviews, Tunisia 2012, Morocco 2010, Egypt 2007

<sup>14</sup> Trade, investment and development in MENA, World Bank, IBRD World Bank, 2003

<sup>15</sup> From political to economic awakening in the Arab world : a Trade and FDI Report for Deauville Partnership, World Bank, 2012

<sup>16</sup> Socially responsible investment : what strategy for Mediterranean, ANIMA Investment Network, 2011

<sup>17</sup> A political economy of the Middle East, Alan Richards and John Waterbury, Westview Press, third edition, 2008

<sup>18</sup> Mediterranean Map of FDI, incubators and clusters, ANIMA Investment Network : <http://www.medmaps.eu/mapview/ANIMA/>

<sup>19</sup> <http://www.medmaps.eu/mapview/ANIMA/>

<sup>20</sup> Emergence en Méditerranée : Attractivité, IDE et délocalisations, Hakim Ben Hammouda, Nassim Oulmane et René Sandretto, L'Harmattan, 2009

<sup>21</sup> UAE ranking in Doing Business, IFC/World Bank : <http://francais.doingbusiness.org/data/exploreconomies/united-arab-emirates>

certain success<sup>22</sup>. However, Emirates constitute an interesting laboratory to investigate in terms of the policies implemented. Indeed, the seven Emirates did not get the same options. They all implemented the same liberal framework and opened up to the international stage. But the Emirate of Dubai differs by a very interventionist public policy when it is a question of directing the investors on what the government considers strategic (business sectors and priority territories). In this way the Emirate of Dubai concentrates the majority of the thirty six free zones of United Arab Emirates, but with a territorial strategy regarding the sectors of investments. This strategy is established by the Dubai government to avoid a useless competition between free zones and to drive companies in a dynamic of territorial planning<sup>23</sup>.

It is quite different in the other Emirates that preferred to establish several free zones on their territory, but without sectorial specializations, leading to sterile competitions between public institutions of the same government, and depriving the public policies of tools to develop all the concerned Emirates. The economic model of Dubai is not to be taken as a model either. Indeed it suffered from real estate crises, but also from a social model we do not want to duplicate. However, the strong interventionist will of Dubai authorities lead to a more harmonious territorial distribution the poles of growth, in comparison with Abu Dhabi, which is economically less diversified, and with economic activities more concentrated on the seashores. This strategy of free zone, clusters and other forms of places dedicated to essential sectors of development, with public installations and heavy public investments can help in the economic take off of rural zones too often forgotten in growth policies. The case of Algeria is very relevant on that point: vast territory where the international investments concentrate on the seashores, as well as the public policies of support for the private sector, via clusters, science parks and supports to innovation<sup>24</sup>. Despite the fact that Dubai is hardly recognized for being a rural territory, its development strategy of abandoned areas through the implementation of free zones and sectorial clusters could be transposed into inland regions in the Mediterranean. Egypt is in the same case as Algeria, with large spatial territory and economic growth focused along the coasts and the Nile<sup>25</sup>.

### **How to readjust the policy in Mediterranean?**

Such a public strategy takes place by devolution of certain economic policies, in particular for the support of the investors and the promotion of territories and sectors. This way, even if the initiative is relatively recent and needs to be later evaluated, Morocco introduced an ambitious process with its national agency AMDI and the creation of structures that can be assimilated to "local relay", the so-called CRI. It is certainly by forms of multi-levels governances<sup>26 27</sup>, gathering central actors and local actors, that States and regions can establish multiannual strategies of development. These strategies will be based on sectors identified on territories, and meshing of public policies to promote and drive the investors on these matrix sectors / territories. It supposes an upstream dialogue between territorial, national and even regional actors (to avoid a useless competition between countries of the same integrated regional market) to bound the strategic recognized sectors on a territory. The division of economic sectors between territories in logic of integrated market would make the investors opt for this territory / sector matrix. If the participative governance in the territorial scale is indispensable, it is also necessary to lean on a regional platform dedicated to this logic of economic integration to begin such a dialogue. From this platform, in connection with the territorial actors, the lessors could support the creation of the sectorial clusters, by investing massively in their development and their logistic interconnection. The Southern Mediterranean States still cannot afford to begin a massive strategy of free zone such as Dubai did. This is why the lessors should focus their efforts on this strategy.

A new orientation in the development strategy of Mediterranean countries is needed. For more territorial inclusion, the policies of "good governance" and in favor of a better business climate should allow a framework inclined to the development process. But they should also come along with more interventionist policies, with clearly established objectives and measurement tools to estimate a posteriori whether the objectives of dispersal of the economic growth on territories are reached or not. At the end of the day, the States have the responsibility to balance the growth within their territory and should be more interventionist to spread the investment in rural areas. This way they could build strategic planning with the local actors' empowerment in order to identify the sectors for rural development and to make the investors in these sectors to focus on these areas, thanks to local clusters designed in this field.

<sup>22</sup> +1186.2% of FDI in UAE between 2000 and 2010 according to UNCTAD Database

<sup>23</sup> Dubai strategy : Past, Present, Future, Michael Matly and Laure Dillon, Harvard University, 2007

<sup>24</sup> <http://www.medmaps.eu/mapview/ANIMA/>

<sup>25</sup> <http://www.medmaps.eu/mapview/ANIMA/>

<sup>26</sup> Gouverner par contrat, l'action publique en question, Jean Pierre Gaudin, 2004

<sup>27</sup> Pourquoi la gouvernance, Jean Pierre Gaudin, 2008



# Comment reconvertis des exploitations productrices de tabac ? Retour sur une expérience locale en Tunisie

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La zone du projet bénéficie d'une pluviométrie élevée, ainsi que de ressources en eau souterraines et de surface (barrage). Des débouchés commerciaux existent pour les produits agricoles grâce au développement du pôle touristique de Tabarka. Ensuite, cette zone comprend 3 zones agro-écologiques: une zone forestière à couvert végétal dégradé où pâturent les élevages bovins et caprins en hiver ou zone 1, une zone de culture intermédiaire à forte pente, où dominent les sols lourds et empierrés ou zone 2 et, une zone de plaine à sols sablonneux, traversée par un Oued et limitrophe de la retenue du barrage ou zone 3.

Le morcellement du foncier est extrême à cause de la forte pression démographique et la taille des exploitations réduite (2 à 5 ha). Ainsi, la force de travail émigre de manière provisoire ou définitive à la recherche d'opportunités d'emploi dans d'autres régions du pays ou à l'étranger. Le système dominant est à polyculture-élevage. Des élevages bovin, ovin et caprin, dont, l'alimentation est basée sur le pâturage de la forêt, sont associés à des systèmes de culture, où la culture de tabac domine. Dans la situation qui prévalait avant le démarrage du projet, les superficies des cultures vivrières étaient très réduites à cause des pertes, occasionnées par les sangliers qui prolifèrent et qui sont de l'ordre de 90% de la production ; seule la culture de tabac n'est pas consommée par les sangliers.

Cette dernière s'est développée dans les zones montagneuses défavorisées du Nord-Ouest où l'enclavement empêche les échanges avec d'autres régions grâce à la présence d'une filière organisée. La Régie des Tabacs a établi des contrats de production avec les producteurs. La baisse du rendement, a entraîné, à partir de 1990, la diminution de la rentabilité de la culture et la réduction de la rémunération de la force de travail car le système de prix n'était plus attractif: à titre d'exemple, la rémunération de la force de travail est de 0, 3 Dinars Tunisiens (DT) /jour pour la culture de tabac et de 5 DT/jour pour la culture d'avoine.

Cinq critères ont été utilisés pour sélectionner les bénéficiaires des projets de reconversion, au nombre de 36 et provenant à nombre égal des 6 douars ciblés : (i) l'existence d'un certificat d'occupation de la parcelle et l'absence de conflits sur le foncier, (ii) le fait de résider en permanence dans la zone, (iii) l'existence d'autres sources de revenu au sein de la famille, (iv) la réputation de sérieux de l'exploitant et, (v) la disponibilité d'une main d'œuvre familiale.

L'approche adoptée a été participative et itérative. Les agriculteurs ont décidé: (i) des actions à mettre en œuvre, (ii) du choix des nouveaux bénéficiaires (iii) du choix des matériaux et des fournisseurs, (iv) des modalités de financement des actions et, (iv) du produit financier (montant et type) à adopter et des modalités de remboursement pour l'action de microcrédit. Les premiers bénéficiaires ont donné des conseils, apporté un appui technique et, quelquefois, financier aux nouveaux bénéficiaires, notamment, quand il a fallu verser une avance pour l'achat de certains matériaux.

La stratégie de mise en œuvre du projet consiste à ne pas cibler en priorité les producteurs les plus démunis mais, plutôt les agriculteurs disposant d'une certaine assise financière pour pouvoir engager dès le début des dépenses telles que l'achat de matériaux de construction ou le recrutement de la main d'œuvre : les producteurs les plus démunis obtiennent des bénéfices indirects puisqu'ils seront recrutés comme main d'œuvre. Pour optimiser les effets du projet, les actions ont été mises en œuvre de manière intégrée : les exploitants ayant bénéficié de l'action d'installation de clôture sont ceux qui ont bénéficié par la suite des actions de fonçage de puits ou construction de réservoirs d'eau et d'attribution de microcrédits.

Trois étapes majeures marquent la mise en œuvre du projet. La première étape s'est déployée du démarrage du projet à 2006. Une expérimentation a été conduite afin d'affiner le choix des actions à financer, ce qui a permis de se rendre compte que suite à l'installation de la clôture, la deuxième contrainte à lever était le manque d'eau d'irrigation, pour mettre en valeur les parcelles clôturées (irrigation jeunes plantations d'oliviers et développement des cultures irriguées d'été). Les changements marquants survenus dans la zone du projet lors de cette première étape comprennent l'aménagement de la piste goudronnée qui a ralenti la dynamique de mise en œuvre du projet et la mise en eau du barrage qui a conduit à exproprier nombreux d'agriculteurs de parcelles à sols fertiles situées dans la zone de plaine, et consacrées à la culture du tabac.

La deuxième étape a duré de 2007 à 2010. Un financement substantiel de l’Institut Français de Coopération a été accordé à l’ATCC et a contribué à étendre les actions du projet et de les diversifier. Il y a eu attribution de microcrédits pour lever les contraintes d’approvisionnement en intrants au début de la campagne agricole (location de tracteur pour la préparation du sol, achat de semences et engrais) en plus des actions d’installation de clôtures et d’aménagement de sources d’eau d’irrigation. Durant cette phase, l’ATCC a présenté le projet au Conseil Régional de Jendouba.

La troisième étape commencée en 2010 doit s’achever en 2013 après une interruption d’une année en 2009 causée par des difficultés de gestion interne au niveau local. L’action principale réalisée a été celle de l’aménagement de sources d’approvisionnement en eau d’irrigation en complément des actions d’installations de clôture mais, avec des financements limités. Les modalités de financement du projet étaient:

- pour les investissements dépassant les 2000 DT, l’ATCC a versé les montants nécessaires directement aux fournisseurs, notamment en ce qui concerne l’achat des matériaux pour la construction de la clôture (grillage, piquets, tendeurs) ;
- pour les investissements inférieurs à 2000 DT et, notamment la construction de réservoirs ou fonçage de puits, l’ATCC a financé les travaux en deux étapes sur la base de l’avancement des travaux en versant, directement, une partie du montant au bénéficiaire, et, ceci, après d’avoir établi une relation de confiance et, fait jouer le contrôle social au sein du groupe de bénéficiaires ;
- les agriculteurs ont, directement, bénéficié de micro-crédits individuels pour les campagnes 2007-2008 et 2008-2009. La garantie résidait dans le contrôle social apporté par le groupe de bénéficiaires ; le remboursement a été de 100% à une seule échéance, fixée à la fin de la campagne agricole.

70% des investissements pour l’installation de clôtures et l’aménagement de sources d’approvisionnement en eau d’irrigation ont été financé par des subventions tandis que la contribution des bénéficiaires s’élève à 30%, environ (main d’œuvre, matériaux de construction, achat de grillage ou de piquets supplémentaires...). Les actions ont été réalisées et achevées, mais parfois avec du retard à cause de contraintes conjoncturelles.

Dès la première étape, l’ATCC a essayé d’identifier les leaders potentiels dans le but de créer une organisation de bénéficiaires. Un comité provisoire a été constitué en 2006 et a fonctionné pendant près d’un an et demi. Le nombre de bénéficiaires étant restreint, les agriculteurs n’ont pas décelé un intérêt immédiat dans l’adhésion au Groupement de Développement Agricole ; ainsi les signatures de 51% des agriculteurs de la zone nécessaires n’ont pu être collectées. Au moment de la formalisation de la création de l’antenne de l’ATCC sur place, deuxième option choisie, les autorités locales ont recommandé d’intégrer dans le comité des personnes ne résidant pas dans la zone.

Les effets globaux du projet s’expriment à différents niveaux. En ce qui concerne le contrôle et l’accès aux ressources naturelles, le projet a induit un accès privatif aux ressources naturelles (terre et ressources fourragères) du fait de l’installation des clôtures. La Valeur Ajoutée Brute Agricole par exploitation a augmenté de 10% la première année, de 30 à 40% la deuxième année et de 50% la troisième année du projet. La tendance à l’abandon de la culture du tabac est avérée. Il y a eu transformation des systèmes d’élevage bovin basé sur le pâturage dans la forêt en systèmes mixtes (y compris de race importée) dont l’alimentation est basée sur le pâturage de la forêt pendant une partie de l’année et sur les fourrages produits sur les parcelles clôturées (foin d’avoine et fève ou foin naturel de sulla et de lupin). Le développement de l’arboriculture fruitière, sur les pentes (zone 2), et notamment de la culture d’oliviers est amorcée. Au niveau organisationnel, un groupe informel de bénéficiaires ayant bénéficié des différentes actions réalisées s’est constitué.

Les effets spécifiques et immédiats du projet sont multiples. Grâce à l’extension des superficies consacrées aux cultures vivrières (pomme de terre, oignon, légumes feuille, tomate, piment), notamment, dans les parcelles proches du lieu d’habitation, la production vivrière a augmenté et les besoins alimentaires des familles après la révolution ont pu être couverts, alors que les prix n’ont cessé de grimper sur le marché. La production avicole destinée à l’autoconsommation a, également, augmenté, car l’aménagement d’enclos limite les dégâts des prédateurs. Il y a eu intensification des systèmes de production (succession de deux cycles de culture sur une seule parcelle : avoine/pois chiche ou fève/tomate) et extension de la superficie consacrée aux cultures irriguées.

La production de foin ou de semences d’avoine destinées à la vente ont augmenté permettant, ainsi, de garder la taille du cheptel constante et de développer l’élevage ovin. Les conditions de vie des femmes se sont améliorées puisque la corvée de bois pour la réparation des clôtures sommaires a été levée avec l’installation des clôtures. Grâce au microcrédit, les producteurs, ont pu maîtriser le risque climatique et lever la contrainte de la préparation du sol des cultures d’hiver. Il y a eu extension de la superficie plantée avec augmentation de la production d’huile d’olive. Les financements disponibles et les modalités adoptées ainsi que le niveau d’organisation des producteurs déterminent fortement les étapes de mise en œuvre du projet. Le temps constitue une ressource au même titre que les ressources financières, humaines et organisationnelles car il permet d’évaluer toutes les actions de manière continue et de les ajuster rapidement. Les effets

d'une intervention ne sont durables que si cette action contribue à lever une contrainte majeure au niveau des exploitations agricoles. En l'occurrence, la principale contrainte est le manque de capital pour financer l'installation de clôtures, condition sine qua non pour la mise en valeur des parcelles.

Les effets du projet sont durables, notamment, ceux générés suite à l'installation de la clôture : dans le cas où les exploitations ont des moyens provenant d'autres activités, elles ont pu diversifier leur système de production et développer des cultures spéciales (cultures maraîchères d'été (pastèque, melon, haricot) ou arachide) dont le surplus a été commercialisé. Dans le cas contraire, la mise en valeur des parcelles clôturées permet de produire les légumes (pomme de terre, oignons, légumes à feuille) d'hiver et d'été (tomate, piment) nécessaires à l'alimentation de la famille. Il en résulte une limitation des dépenses.

La présence de certificats d'occupation n'a pas empêché les conflits sur la terre, entre les descendants, exploitants les parcelles, car le certificat était établi au nom du père. Il y a, donc, nécessité de mettre en place un cadre réglementaire permettant d'adopter au niveau local des mécanismes d'héritage et de contrôle durable du foncier en fonction des caractéristiques locales (zones agro-écologiques) et ceci, afin de promouvoir des exploitations agricoles viables et de développer des activités agricoles rentables.

Les activités du projet ont été ralenties par le manque de capacité technique et de gestion des bénéficiaires bien qu'il existe dans la zone un savoir-faire ancestral en fonçage de puits et en construction de réservoir d'eau. Ainsi, il n'a pas été possible de constituer une organisation à la base, avant la révolution de janvier 2011, car elle ne pouvait pas être totalement indépendante des autorités locales, par manque de capacité des bénéficiaires, à cause de l'inexistence d'un intérêt immédiat commun déterminé par l'existence de ressources financières et de la pluriactivité des bénéficiaires les empêchant de s'engager dans le travail associatif de manière continue. Il y a, enfin, un vieillissement de la population dans les zones de l'intérieur du pays, dont la tendance ne pourrait être renversée que si les territoires, tels que le secteur de Ouled Sidra, retrouvent une certaine attractivité grâce au développement des infrastructures, de la vie culturelle et, l'existence d'activités économiques rentables.





# Statistics

## Mediterranean Observatory ([www.ciheam.org](http://www.ciheam.org))

### Rural Population in Mediterranean Countries (Share in Total Population)

CIHEAM member countries	1960	1970	1980	1990	2000	2005	2010	2011
<b>Albania</b>	69,3	68,3	66,2	63,6	58,3	55,2	47,7	46,6
<b>Algeria</b>	69,5	60,5	56,5	47,9	40,2	36,7	28	27,1
<b>Egypt</b>	62,1	57,8	56,1	56,5	57,4	57,4	56,6	56,5
<b>France</b>	38,1	28,9	26,7	25,9	24,2	23,3	14,8	14,3
<b>Greece</b>	57,1	47,5	42,3	41,2	40,3	39,6	38,8	38,5
<b>Italy</b>	40,6	35,7	33,4	33,3	32,8	32,4	31,8	31,6
<b>Lebanon</b>	57,7	40,5	26,3	16,9	14	13,4	12,9	12,8
<b>Malta</b>	9,9	10,3	10,2	9,6	7,6	6,4	5,3	5,2
<b>Morocco</b>	70,6	65,5	58,8	51,6	46,7	45	43,3	43
<b>Portugal</b>	65	61,2	57,2	52,1	45,6	42,4	39,5	39
<b>Spain</b>	43,4	34	27,2	24,6	23,7	23,3	22,7	22,6
<b>Tunisia</b>	62,5	56,5	49,4	42,1	36,6	34,7	33,9	33,7
<b>Turkey</b>	68,5	61,8	56,2	40,8	35,3	32,7	29,5	28,6
<b>Other Mediterranean countries</b>								
<b>Bosnia &amp; Herzegovina</b>	81	72,8	64,5	60,8	57	54,7	52,3	51,7
<b>Croatia</b>	69,8	59,8	49,9	46	44,4	43,6	42,5	42,2
<b>Jordan</b>	49,1	44	40,1	27,8	20,2	18,8	17,5	17,3
<b>Libya</b>	72,7	50,3	29,9	24,3	23,7	23,1	22,4	22,3
<b>Montenegro</b>	81,2	73,1	63,2	52	41,5	37,8	36,9	36,7
<b>Syria</b>	63,2	56,7	53,3	51,1	48,1	46,2	44,3	43,9

Source: World Development Indicators - World Bank

### Rural Population in Mediterranean Countries (Number, in thousands)

CIHEAM member countries	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
<b>Albania</b>	1 116	1 458	1 769	2 091	1 790	1 528	1 245	1 018	844	684
<b>Algeria</b>	7 505	8 316	10 620	12 122	11 973	9 922	8 281	7 265	6 614	5 873
<b>Egypt</b>	17 338	20 760	25 237	32 129	38 697	45 935	51 665	53 634	52 468	49 412
<b>France</b>	17 417	14 694	14 396	14 712	13 643	9 275	6 875	5 873	5 354	4 839
<b>Greece</b>	4 759	4 176	4 076	4 182	4 424	4 405	4 170	3 760	3 354	2 961
<b>Italy</b>	20 124	19 052	18 755	18 910	18 679	19 243	18 218	16 326	14 431	12 626
<b>Lebanon</b>	1 100	999	736	498	524	544	531	502	461	412
<b>Malta</b>	31	31	33	35	30	22	17	14	12	10
<b>Morocco</b>	8 213	10 032	11 503	12 789	13 436	13 843	13 878	13 283	12 150	10 770
<b>Portugal</b>	5 778	5 314	5 599	5 170	4 713	4 216	3 653	3 111	2 611	2 139
<b>Spain</b>	13 209	11 476	10 203	9 586	9 564	10 467	10 287	9 575	8 777	7 943
<b>Tunisia</b>	2 637	2 898	3 192	3 455	3 458	3 553	3 639	3 514	3 220	2 887
<b>Turkey</b>	19 286	21 905	24 796	22 084	22 435	21 471	17 265	14 631	13 176	11 652
<b>Other Mediterranean countries</b>										
<b>Bosnia &amp; Herzegovina</b>	2 575	2 595	2 523	2 617	2 105	1 965	1 706	1 434	1 166	917
<b>Croatia</b>	2 825	2 493	2 186	2 076	2 001	1 870	1 694	1 474	1 256	1 061
<b>Jordan</b>	440	734	921	949	975	1 084	1 125	1 140	1 132	1 084
<b>Libya</b>	980	1 004	916	1 052	1 238	1 426	1 457	1 443	1 393	1 311
<b>Montenegro</b>	379	379	364	316	262	233	221	203	179	155
<b>Syria</b>	2 888	3 608	4 747	6 294	7 683	9 047	9 702	10 027	9 825	9 200

Source: UN, World Population Prospect

### Employment in Agriculture (% of Total Employment)

CIHEAM member countries	1980	1990	2000	2005	2010
<b>Albania</b>	-	-	71,8	58,5	42
<b>Algeria</b>	-	-	-	-	22
<b>Egypt</b>	42,4	39	29,6	30,9	26
<b>France</b>	8,4	5,6	4,1	3,6	2,9
<b>Greece</b>	-	23,9	17,4	12,4	12,5
<b>Italy</b>	14	8,8	5,2	4,2	3,8
<b>Malta</b>	-	-	1,7	1,7	1,3
<b>Morocco</b>	-	3,9	5,1	45,4	25,5
<b>Portugal</b>	27,3	17,9	12,5	11,8	10,9
<b>Spain</b>	19,3	11,8	6,7	5,3	4,3
<b>Tunisia</b>	33,4	-	23,7	-	20,5
<b>Turkey</b>	-	46,9	36	29,5	23,7
<b>Other Mediterranean countries</b>					
<b>Croatia</b>	-	-	14,5	17,3	14,9
<b>Jordan</b>	-	-	4,9	3,4	2
<b>Syria</b>	-	-	32,9	-	14,9

Source: FAOSTAT

### Population economically active in agriculture (Number, in thousands):

*Economically active population in agriculture (agricultural labour force) is that part of the economically active population engaged in or seeking work in agriculture, hunting, fishing or forestry.*

CIHEAM member countries	1990	2000	2005	2010
<b>Albania</b>	921	619	623	606
<b>Algeria</b>	1 906	2 716	2 996	3 171
<b>Egypt</b>	6 605	6 577	6 839	6 895
<b>France</b>	1 365	879	722	572
<b>Greece</b>	963	823	723	627
<b>Italy</b>	2 073	1 253	1 025	838
<b>Lebanon</b>	70	48	37	28
<b>Malta</b>	3	2	2	2
<b>Morocco</b>	3 267	3 376	3 218	3 049
<b>Portugal</b>	861	671	602	518
<b>Spain</b>	1 888	1 339	1 195	998
<b>Tunisia</b>	653	757	779	798
<b>Turkey</b>	10 734	9 539	9 028	8 392

Source: FAOSTAT



# MAI Bari

## S.O.F.I.I.A. PROJECT

The European project for guidance, support and training on entrepreneurship to immigrants in the agricultural and agri-food sector is a pilot project implemented by the Ministry of Food, Forestry and Agriculture Policy in partnership with the Ministry of Interior. It aims at improving employability and favouring access of third-country young nationals involved in agriculture to the labour market, through support, guidance and training actions directed to promote self-entrepreneurship in the agricultural and agri-food sector.

This project is co-funded by the European Fund for the Integration of Third-Country Nationals (EIF) - Annual Programme – Action 2 “Job-orientation and support to employability”, and the Ministry of Interior. It is implemented in Puglia region, in collaboration with the MAI Bari and Confcooperative Puglia. The S.O.F.I.I.A. project aims at testing an approach that combines active labour policies, social and development policies, through the involvement of different players of the world of entrepreneurship. This would generate a virtuous circle of territory-based cohesion that is crucial for future sustainability of the proposed actions. The support and guidance service for the creation of enterprises is provided through the one-stop shops distributed through Puglia region and managed by Confcooperative Puglia, an organization with an established experience in the matter of information to specific target groups.

## FISHINMED: Mediterranean Network of sustainable small-scale fishing communities

The overall objective of the project, involving Italy, Tunisia, Egypt, Lebanon, Greece, is to favour the social and economic development of small fishing communities by promoting the diversification of economic activities and the integrated enhancement of coastal territories. FISHINMED establishes “a Mediterranean network (Euro-Mediterranean Observatory) joining public and private institutions with a view to define common strategies” ([www.enpicbcmed.eu](http://www.enpicbcmed.eu)).

The setting up of such a shared system implies a closer inter-state cooperation to protect small fishing communities, in order to prevent migration and the uncontrolled exploitation of the sea and coastal resources and any damage to the social and cultural heritage. In addition, this system requires a strong interaction between different project areas, the constant involvement of project partners and associated structures as well as the stakeholders of different regions (bottom up approach).

Indeed, the Euro-Mediterranean observatory shall be an instrument of dialogue between the subjects involved and shall ensure the full sharing of the identified strategy. A common development strategy supported by the definition and transfer of knowledge and best practices will be defined. At the territorial level, regional working groups will have to report the specific needs of the territories and define shared strategies to enhance the multi-activity in the fishing sector. Lastly, bringing into action regional desks shall ensure the implementation and strengthening of development strategies for small fishing community.



### **Hydroflies Project**

On November 23, 2012, the kick-off meeting of the partners involved in the "Rational Management of Biotic and Abiotic Parameters in Hydroponic Cultivation of Tomato and Lettuce" (Hydroflies) took place at the premises of MAI Chania, which has been established on the basis of K3\_01\_03 on 15/10/2012 at Inter-Border Cooperation Programme between Greece-Cyprus 2007-2013, co-financed 80% by the European Union (ERDF) and 20% by National Funds of Greece and Cyprus.

The aim of the project is the development of closed hydroponics systems in greenhouses (recycling nutrient solutions) for two important vegetables, tomato and lettuce, grown in Crete and Cyprus, as well as farmers training to use them. Furthermore, the "Hydroflies" team will develop a mass rearing system for two important beneficial insects that will be used to control various herbivore pests such as Tuta absoluta, whiteflies and others in order to minimize the use of pesticides. Finally a management protocol for nutrient solutions and phytopathological problems will be drawn up for these crops especially for Crete and Cyprus microclimate, which can be used to implement a single certification for these products. By doing thus, we hope to increase the existing qualities of the products while maximizing their safety for their consumption. The public union participants are the Cyprus University of Technology (CUT), MAI Chania, the Institute of Olive Tree & Subtropical Plants of Chania (ELGO-DIMITRA) and the University of Crete (UC) which combine significant research experience in these issues, and through their direct cooperation in this proposal, their expertise will be transferred and developed directly through farmers in Crete and Cyprus. The transfer of knowledge to farmers will be achieved through the participation of the Municipality K. Polemidia (DIPO) in Cyprus and of MAI Chania and ELGO in Crete.



European Union



REPUBLIC OF CYPRUS

ΕΛΛΑΣ - Κύπρος 2007-2013  
ΕΠΕΝΔΥΟΜΕ ΣΤΟ ΚΟΙΝΟ ΜΑΣ ΜΕΛΑΝΟΝ

### **Irrigation of tree plantations**

A tree plantation was created in MAI Chania during 1998-1999 which was irrigated with the treated sewage effluent of the Institute. Fast growing Eucalyptus and other tree species were planted and they were irrigated and fertilized with the treated effluent. Apart from water irrigation various nutrients like Nitrogen, Phosphorus and others which were contained in the treated effluent resulted in fast growing of the trees. Residual pollutants which were contained in the treated effluent were decomposed by the soil microbes. Soil pollution was not detected.

The growth of the trees results in absorbance of CO<sub>2</sub> from the atmosphere through plant Photosynthesis. Therefore mitigation of greenhouse effect is detected. The requirements for sewage purification are not so strict related with the requirements in the case of sea or river disposal of the processed effluents. The solid biomass of the trees can be harvested and used as a biomass fuel for heat generation. The whole process presents various advantages particularly when disposal of treated sewage effluents is rather difficult and land is available for trees plantation. Another advantage of such a process particularly in semiarid areas is the reverse of soil desertification which is more acute in various Mediterranean regions. It is foreseen that such a process has many advantages and it can find various applications in Mediterranean countries.



# MAI Montpellier

## **France : étude sur les produits Bio dans la restauration collective publique**

La restauration collective représente un secteur de développement potentiel pour les produits bio. En effet, 73 000 structures de restauration collective publiques et privées distribuent 8 millions de repas chaque jour en France. Pour la seule restauration publique, ce sont 386,5 millions de repas par an en France dont 14,3 en région Languedoc-Roussillon sur l'année 2008. L'introduction des produits bio en restauration collective s'est accentuée depuis le Grenelle de l'environnement, une circulaire de 2008 incitant les restaurants collectifs publics à donner l'exemple, fixant le seuil de 20% pour 2012. La région Languedoc-Roussillon et Sud et Bio (association des syndicats mixtes régionaux concernés par les produits de l'agriculture biologique) ont demandé à l'IAM Montpellier de faire une évaluation de la situation.

2363 restaurants collectifs publics ont été recensés en région. 65% déclarent introduire des produits bio. Ce sont principalement les structures en gestion concédée plutôt qu'en gestion directe (72% vs 61%), ainsi que les plus grandes structures (80% des établissements servant plus de 1000 repas/jour vs 55% dans les moins de 100 couverts/jour) et les établissements d'enseignements par rapport aux secteurs du travail ou du médico-social (76% des structures vs 33% et 29% respectivement). Les produits bio achetés sont des produits frais (88%). Les produits phares sont les produits laitiers (yaourt, fromage), les fruits et légumes, les féculents (pain, pâtes, riz) mais aussi la viande (bœuf, poulet). La part des produits bio dans les achats totaux est très faible, loin de l'objectif des 20% : de 0,15% pour le pain à 7,3% pour les fruits. Pour atteindre l'objectif, il faudrait que la production locale en bio soit multipliée par près de 3 pour le lait, par 6 pour les yaourts, par 10 pour le fromage, par 600 pour le pain et que toute la production aille à la restauration collective. Il a été identifié 90 fournisseurs de produits biologiques, avec une multitude d'acteurs qui s'achètent et se revendent les denrées selon les besoins. Pour l'origine des produits, la Région est très présente pour les fruits (59% du total), les légumes (56%), la viande (58%) et le lait (40%). Toutefois 22% des fruits sont étrangers ainsi que 18% des féculents. Parmi les produits laitiers, yaourt, fromage et desserts lactés sont d'origine française (hors région) pour la presque totalité.

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## **Evaluation intégrée des systèmes de production agricoles au niveau régional**

Dans le cadre d'un programme de formation innovante lancée par le Secrétariat Général du CIHEAM, l'IAM Montpellier a mis au point un module sur l'évaluation intégrée des systèmes de production agricole en partenariat avec Montpellier SupAgro (France), l'Unité Mixte de Recherche -System (INRA-Montpellier), l'Ecole doctorale Sibaghe (Université de Montpellier 2) et le réseau d'excellence LIAISE. Une première mouture de cette formation innovante a eu lieu du 3 au 6 décembre 2012. Cette formation a trois objectifs principaux :

- La présentation des concepts d'évaluation intégrée des systèmes de production agricole au niveau régional (de la parcelle à l'exploitation) ;
- Le passage du concept au numérique : apprentissage et utilisation des modèles d'évaluation intégrée des systèmes de production ;
- L'utilisation des modèles comme outil d'aide à la décision : évaluation des politiques agricoles et des mesures agri-environnementales (cas de la Directive nitrate européenne a été choisi comme exemple).

Différentes approches de chaînes de modèles ont été présentées comme exemples conceptuels et numériques pour comprendre le rôle et l'utilisation de ces outils pour évaluer des politiques agricoles. Le cours international s'est déroulé sous la forme de cours théoriques (explicitant les concepts utilisés) et de séances de travaux pratiques pour concevoir et utiliser des modèles de culture et d'exploitation agricole. Ce cours a vu la participation de plusieurs intervenants français et internationaux (WUR, SupAgro, INRA, Lund...). Ont participé à ce cours 15 doctorants, post-docs, jeunes chercheurs français et internationaux (Costa Rica, Pologne, Qatar, Egypte, Liban, Maroc, Tunisie, Turquie, Antilles-Guyane, USA). Tous disposaient d'expériences professionnelles en agronomie, en agri-environnement, en économie agro-environnementale, ou en évaluation intégrée...

*Pour plus d'informations sur [www.iamm.fr/enseignement/fpc/offre/cours-specialises/IAAS](http://www.iamm.fr/enseignement/fpc/offre/cours-specialises/IAAS)*



# MAI Zaragoza

## **Networking activities**

- MAI Zaragoza promotes and supports several networks with the objective of exchanging research methodologies and results in areas of interest for Mediterranean agriculture and rural environments. During the spring of 2013, two of these networks will organise international meetings that will gather together scientists and specialists from the Mediterranean countries and other parts of the world for scientific debate and exchanges. The VI International Symposium on Almonds and Pistachios ([www.cebas.csic.es/almond\\_pistachio\\_2013](http://www.cebas.csic.es/almond_pistachio_2013)) will be held in Murcia (Spain) from 27 to 31 May 2013, organised by CEBAS-CSIC and ISHS, and with the collaboration of MAI Zaragoza. Furthermore, FAO-CIHEAM Sub-Network on Sheep and Goats Production system is organising its 8th International Seminar in Tangiers (Morocco) from 11 to 13 June 2013, on the topic "Technology creation and transfer in small ruminants: roles of research, development services and farmer associations" ([www.iamz.ciheam.org/tangier2013](http://www.iamz.ciheam.org/tangier2013)). This Seminar is jointly organised by MAI Zaragoza, FAO and INRA Morocco.
- MAI Zaragoza is also launching a new network on Food Safety, whose first coordination meeting will be celebrated in Zaragoza on 7th May 2013. The objective of this network is to lay the foundations for establishing a collaborative, technological and communication system for risk assessment of the main food-borne hazards and food safety management in the Mediterranean countries, in order to generate mechanisms of cooperation between different research groups, industries, technology centres and other social actors.

## **Training**

In the forthcoming months, MAI Zaragoza will organise three advanced short courses for professionals on the following topics: "Environmental Assessment of Livestock Production Systems", "Safety of Animal Products (Meat and Eggs)" and "Managing Forest Fires to Face Climatic and Socioeconomic Change". The first course is co-organised with the European Federation for Animal Science (EAAP) and the latter with the EU FP7 project FUME.

MAI Zaragoza has signed a Letter of Agreement with the International Wheat and Maize Improvement Center (CIMMYT), on behalf of the Generation Challenge Program, to host the Year 2 Training of the Integrated Breeding Multi-Year Course from 15-26 April 2013. A second module will most likely be organised from 1-12 July 2013. More than 70 plant breeders from 15 African countries and the US attended the first year training of this activity in July 2-13 2012.



## Latest publications on www.ciheam.org

### Options Méditerranéennes

- De Pedro E.J., Cabezas A.B. (Eds), *7th International Symposium on the Mediterranean Pig 2012*, Zaragoza: CIHEAM / UCO, 2012, Série A, n°101
- Acar Z., López-Francos A., Porqueddu C. (Eds), *New approaches for grassland research in a context of climate and socio-economic changes*, Zaragoza: CIHEAM / FAO / CITA-DGA, 2012, Série A, n°102
- Melgarejo P., Valero D. (Eds), *II International Symposium on the Pomegranate*, Zaragoza: CIHEAM / Universidad Miguel Hernández, 2012, Série A, n°103

### Briefing Notes

- *Qatar National Food Security Programme*, Lynne-Ann Abrahams, n°90, January 2013
- *Quelles nouvelles politiques agricoles et rurales en Afrique du Nord?*, Michel Petit, n°91, February 2013

### Watch Letters

- *Cereal issues in the Mediterranean*, n° 23, December 2012

### Currents events in Euro-Mediterranean Agriculture, Food and Environment

- *Press Review*, February 2013
- *Press Review*, January 2013
- *Press Review*, December 2012

### Mediterra

- 2009 Edition, *Rethinking Rural Development in the Mediterranean*, The Arabic version, CIHEAM-MAP Blue Plan, January 2013.

### CIHEAM Online Statistics

- *Series of statistics: Agriculture and Food in the Mediterranean Countries*, Matthieu Brun, CIHEAM, December 2012

### CIHEAM 50th Anniversary

- *CIHEAM, A Mediterranean Story (1962-2012)*, Ideaprint, Bari (Italy), December 2012