RURAL/ITER PROJECT
Leonardo da Vinci Transfer of Innovation
RURAL/ITER LdV TOI Project
Reintroduction upon Rural Agricultural Lands of Innovative Training for Entrepreneurs on Return
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STATE-OF-THE-ART ON EMPLOYMENT OPPORTUNITIES IN EUROPEAN RURAL AREAS

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ΠΕΡΙΦΕΡΕΙΑΚΟ ΚΕΚ
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1. Political background: the CAP evolution

The Common Agricultural Policy (CAP) governs agricultural policies and programs for the EU's 27 member countries. Established in 1962, the CAP's objectives are:

- increase agricultural productivity
- ensure fair living standards for farmers
- stabilize markets
- ensure the availability of food
- provide food at reasonable prices. (Article 39 of the 1957 Treaty of Rome)

These aims were achieved primarily by interventions in commodity markets. To prevent imports from undercutting the high internal prices, the EU levied variable tariffs on imported agricultural products. Export subsidies were used to eliminate the resulting surpluses of agricultural products. During the 1970s and 1980s, the CAP accounted for 70% of the total EU budget. As a result, the CAP was criticized by EU trading partners for distorting world markets.

Since 1992, the EU has implemented policy changes regarding the CAP towards support that is more market-oriented and decoupled from current production and prices; the changes also reduce the budgetary costs of the CAP and bring EU agricultural policy in line with World Trade Organization (WTO) rules and restrictions. More recently, the evolution of the CAP has been influenced by objectives like maintaining the quality of rural life, improving the environment, and protecting animal welfare. (Johnson et al.; 2009; p.3,4).

With the Agenda 2000 reform and the European Council of Luxemburg, MFA became a policy concern at national and European level. The European Union made sustainability and multifunctionality key objectives of its CAP. Agriculture and rural areas are viewed not only as producers of agricultural commodities but also as producers of environmental and social goods.

The reorientation is expressed in the so-called 'European model of agriculture' which was described by the European Commission (2002) as:

- A modern and competitive farming sector, capable of occupying a leading position in the world market, while safeguarding domestic producers' living standards and income.
- A sustainable, efficient farming sector that uses hygienic, environment-friendly production methods and gives consumers the quality products they desire. A farming sector that serves rural communities, reflecting their rich tradition and diversity, and whose role is not only to produce food but also to guarantee the viability of the countryside as a place to live and work, and as an environment in itself (Knickel, Kröger; 2008; p.2).

2. Current Situation and Perception of European Farmers

The agriculture market has considerably changed over the last years and many great challenges lie ahead of European farmers: providing enough safe food of high quality to a growing world population, reducing dependency on fossil fuels, playing an increasingly important part in environmental protection and maintaining the high value of European landscape and playing a vital role in keeping the social and territorial cohesion in rural areas. There is a sort of reconfiguration of rural identities, through a change of activities of traditional actors or because of new actors. Rural areas are no longer automatically strongholds of farmers but increasingly represent multiple realities in which farming has to co-exist alongside with other land-uses and interests. While food production in the future is likely to rise, the future of the next generation of farmers is uncertain. At present the profile of farmers is ageing. More than 50% of EU holdings are run by farmers over the age of 55, and 25% by farmers over the age of 65.

In contrast only 7.6% of EU farms are run by people under 35 years of age. Farms run by young people are on average more profitable and young farmers are more willing to adopt innovative solutions and use environment-friendly farming methods. Young farmers will be responsible for the future of the European farming sector. However, the structural and political changes in European agriculture are imposing new burdens on young farmers, including high installation costs, resulting in heavy debt, a lack of available holdings and an insufficient training (European Parliament; 2008; p.13). Making technological and logistical improvements involves more than purchasing equipment and machines and that, for improvements to be made, adequate research and access to research findings are essential.

Although the agriculture market situation has definitely become more complex, there are possibilities for European farmers as sellers of goods and services. Furthermore, the recent financial crisis underlines the need to invest in a real economy that is not part of some sort of fragile bubble but directly linked to the territory. The value of businesses is increasing and it is therefore necessary to have access to capital that offers young agro-entrepreneurs the chance to develop concepts for sustainable farming. New strategies of how to invest into the next generation of farmers need to be developed. Support is needed to assure that a generation change is possible in the European landscape.

3. Trends and Tendencies of European Agriculture

The development to generally supervised, documented, exactly steered and in the whole company precisely integrated production processes in the last decades becomes clear in technical terms like ‘precision farming’ and ‘precision livestock farming’. Industrial monoculture-farming is one side of modern European agriculture.

But there are also other ways of preserving the farm and to generate income. There are ‘back to the roots-tendencies’ of agriculture. There is an ongoing redefining of what is agriculture, what is its goal and who needs agriculture and why.

The close connection between production and food (socially sustainable) becomes more and more important. Seasonal regional food is produced in an environmentally sustainable way. Regional products and services have a face, scenery behind, and provide a relation to the food, to the regional landscape, society and economic structures (identification, authenticity).

Very important for future success in agriculture are the specific advantages of the regions. Farmers have to care for the surroundings and to counteract the estrangement of the society from the agriculture. A consciousness for high quality and environment and animal friendly agrarian production is needed. Farmers have to stress the non-profit achievements of agriculture. These points can be the base for cost-covering prices and for competitive agriculture.With the necessary foresight, the factors of production can be preserved, as well as long-term care draughts and sensible material flows can be developed. Not everything, but a lot of economic success, added value and independency is all about the perception of agriculture in the society. The perception is primarily shaped by the way of everyday living and working of farmers and their families. Farmers create varied values. Sustainable Economy with the nature produces not only food and raw materials of high quality. Farmers are part of a very regional and energy-efficient circular flow economy. In a comprehensive and basic sense peasant work is a cultural added value. It is at the same time pattern-pedagogic for our modern industry and service society (Gottwald; 2003; p.1).

The direct, amicable contact of farmers with customers, occupational colleagues and business partners is crucial. Image care takes place every day. It is up to the farmers that the already reached image change is lasting.Very important for the future of European Agriculture will be community based efforts – responses, considerations, and involvement of the public, the public sector, economic development interests, non-agricultural businesses and civil organizations in issues related to the role, safety, quality, and sustainability of agriculture and its products in our communities. Agriculture is an integral component of economy, society, environment and community. Individual producers and producer groups can not do it on their own. Agriculture both influences and is influenced by community and economic developments.

4. Evolution of the training needs in agriculture in the XXI Century

Vocational Agricultural Schools and Faculties of Agriculture and Veterinary Medicine are considered the centre of knowledge for the development of agriculture in Europe and a peaceful planet, connected to a large extension system. The world competition, market opening and international trade agreement, changed the directives of the Common Agriculture Policy, also to avoid high payments for stocks of agricultural products. Since the beginning of years 2000 a new CAP was launched not supporting products anymore but farmers and their endangered permanence in the countryside. In the last years in Europe, as in the most developed world areas, new challenges are considered the sustainable use of soil and water, responsible measures against the climate change, multifunctional activities to maintain the population in the rural areas.

In this context the vocational secondary and tertiary education are evolving in all the EU countries in the new Millennium aiming at implementing the traditional technical disciplines with special courses for new profiles of roles and competencies oriented to i) quality and organic food sector, with specific specializations in wine, olive oil, cheese, ham, ii) tourism in rural areas, iii) customer services for gardening, landscaping and natural environment keeping, iv) alternative use of RES to the fossil fuels for farming (carbon dioxide reduction and energy efficiency), v) innovative internet based information and communication tools for marketing and commercialization, vi) farm management based on business planning and sustainable agriculture. With the implementation of traditional courses with offer of innovative competencies the vocational secondary schools and universities try to attract students interested to this kind of new profiles. This tendency has the consequence to i) meet the training needs of farmers already fulfilled in training courses managed by the professional associations, ii) implement the theoretical studies with practical experiences based on non-formal and informal acquisition of skills and abilities in collaboration with social partners.

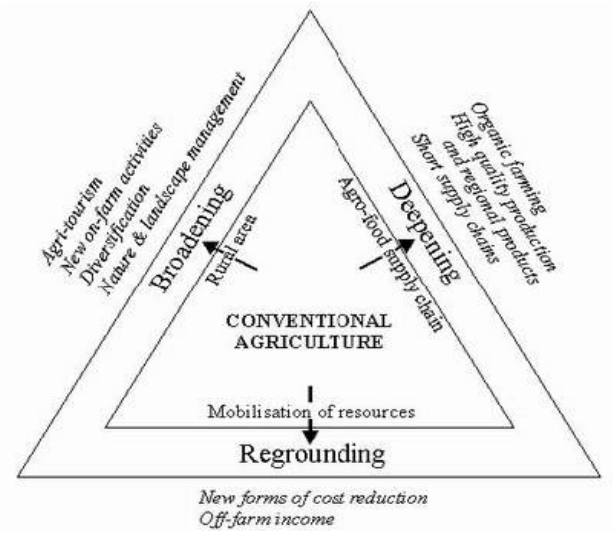
In this way vocational schools and universities aim also at reducing the existing gap between the education system and the work market. The training services managed by the professional associations and other institutions accredited for lifelong learning to farmers and agricultural workers, are engaged to fulfill all kind of practical needs from agricultural enterprises. In the last years, more remarkably during the last two Rural Development Plans 2000-2006 and 2007-2013, the CAP measures for settlement of young farmers were able to tackle the growing ageing of farmers, with an increasing participation of females.

The evolution of the courses for young farmers, also including skills for marketing and innovative trends in agriculture, has given strength to the interest of youngsters for quality products, environmental measures, animal welfare, RES use for farming, outdoor tourism in compliance with the objectives of the EU CAP reform and generational turnover.

5. Main emerging innovative trends in agriculture

The reduction of chemicals in agriculture will be acted with compulsory measures in the EU since 2014, as main objective of the agro-environmental measures and voluntary certification performed in the last years. The integrated agriculture will improve more sustainable agronomic techniques of the farmers. Therefore also the conventional agriculture will be focused on careful application of environmental standards. The most relevant efforts of the last years in many European countries have been addressed to improve quality food products (organic farming and regional products) and diversify business with multifunctional activities (rural tourism and agro-tourism, tourism services at farm, gardening and landscaping, use of renewable energy sources). The “triangle” of this changing framework in the rural areas was represented by J. D. van der Ploeg, Professor of Rural Sociology at Wageningen University, as a symbol of the new “rural development”, emerged for the first time during the Conference of Cork in 1997. The conventional agriculture, with a base of mobilization of resources, aiming at enlarging the productive means and merge farms to reduce the production costs, is considered under this vision with a strong impulse to “deepening” (quality improvement) and “broadening” (new multifunctional activities).

Figure 1 – Three paths of multifunctionality



Source: van der Ploeg et al. (2002)

Organic farming is one of the most successful innovative trends in agriculture since more than 40 years. Among arable crops, cereals represent the most important category with 1.2 mio ha in 2007, i.e. 18.3% of all EU organic land. The largest producers are Italy and Germany. The vegetable sector amounts to slightly more than 90 000 ha (1.4% of the total organic area). EU organic permanent crops amount to 0.55 mio ha (8.3% of total organic area), the largest part located in six Member States (Italy, Spain, Greece, Poland, France and Portugal). For animal production the organic sector tends to develop faster for the species which can be fed on the basis of grassland and roughage (cattle, sheep and goats) whereas for pigs and poultry feeding is a more complicated operation since grain and protein rich feedstuffs are necessary. Hence, in 2007 2.7% of the cattle herd is organic in the EU. For sheep and goats, the corresponding shares are 3.5 and 5.0% respectively.

On the other hand, only 0.5% of the EU pig herd is raised organically. In 2007 there were 2.4 mio heads of certified bovine animals, the largest producers being Germany, Austria, the United Kingdom and Italy. Germany is the largest dairy producer with more than 0.1 mio cows. However, the Member States with the largest share of certified organic cows in the total number of cows are Austria (15.6%), Denmark (9.6%) and Italy (3.2%). The organic pig herd amounted to 0.9 mio head in 2007, the largest producer is Germany with almost 0.2 mio heads. The ovine sector is dominated by two Member States, Italy and the United Kingdom, which stand at a par with each 0.85 mio animals in 2007, representing together 52% of the entire EU organic herd (3.4 mio heads). In the poultry sector, there were 19 mio heads in 2007, of which 6 mio in France, the leading Member State. Multiple evidence and aggregate figures indicate that the growth of demand for organic products in the EU outpaces the growth of supply by the organic agro-food sector. In these conditions, it is no surprise that trade between Member States and imports from third countries would increase at a fast pace. Intra-EU trade and imports from third countries would represent an important part of domestically consumed organic products in most Member States. Poland and Bulgaria, as well as Cyprus, could develop organic farming and animal production in own countries by increasing training for farmers and allocating resources from the agro-environmental measures included in the rural development plans.

Another kind of innovative multifunctional activity developed in the rural areas of some European countries since more than 30 years is **agro-tourism** or rural tourism, for tourism activities developed in rural areas by non-farmers. Special laws have been created to license farm stays and fix quality standards for accommodation.

Very important is the role of female entrepreneurship: women as heads of agro-tourism farms make up an increasing percentage share in many EU countries. Many of the agro-tourism farms are also licensed for food service and their number is increasing rapidly and many offering tasting of own farm products. Many farm stay sites also offer sports, recreation and cultural activities.

A more specific accommodation activity is that performed by the so called **school or educational farms**. They provide didactic-educational services about agriculture or environment related topics and include both theoretical and practical activities about plants, animals, cycle of seasons, phases of cultivations and food processing. Customers are mostly primary and low secondary schools. At the national level educational farms are mostly disciplined by agro-tourism laws in the EU countries, as well, in some of them, by regional laws. Specific kind of educational farms are the **social farms**, with various programs supporting persons with mental and physical disabilities, base on pet therapy, hippo-therapy, gardening therapy.

Nursery, gardening and landscaping are innovative trends developed by farmers mostly coming from industrial crop or tobacco production and specialized in ornamental plant, fruit growing or market gardening, also offering services for garden design and maintenance, park and landscape design for private and public customers.

The **green economy**, based on activities respecting environmental measures, mainly addressed to production of energy from **renewable energy sources** (**RES**), has been developed in Europe and all over the world in developed countries, since the last 10 years, also pushed by incentives due to Kyoto protocols objectives. In agriculture the green economy has started to involve more and more farms in all the main typologies of sources: biomass, biogas, bio-fuels, solar thermal and photovoltaic energy, wind energy. Limitations of land occupation with photovoltaic panels and wind mills have arrived in some EU countries since a couple of years due to landscape protection.

6. Training needs for innovative trends in agriculture

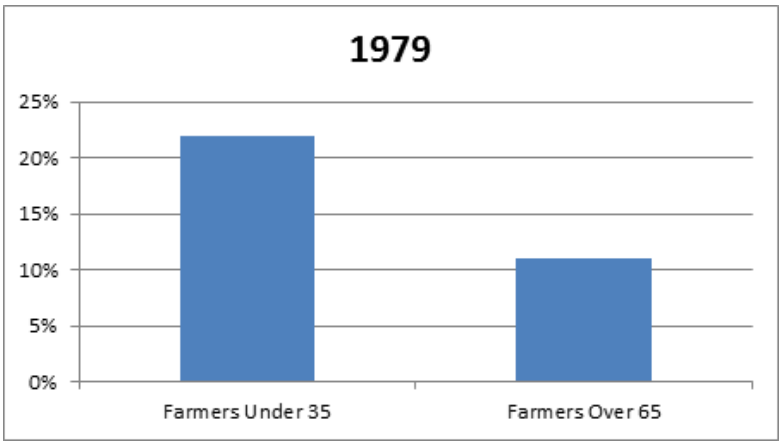
Conventional agriculture (crops, animal husbandry, industrial production like tobacco and sunflower) based on intensive and specialized cultivation and breeding has still very important figures in all the EU27 countries, but the so called commodities are strongly in competition with old and new world producers and in difficulty to maintain their competitiveness, also in view of decrease of direct subsidies and respect of the EU Directives on reduction of pollutants and good practices. Mediterranean cultivations, permanent such as vineyards, olive groves, fruit trees, or yearly like vegetables, are still very important, but with problems mainly due to difficulties to find workers. Organic farming, agro-tourism and other kind of multifunctional activities, farm traditional products with direct selling and tasting, use of renewable energy sources, have growing increase rates in many EU countries. The measures included in the last two Rural Development Plans 2000-2006 and 2007-2013 have stimulated this trend also enhancing short food supply chains, integrated and organic farming, diversification of farm activities and environmental measures.

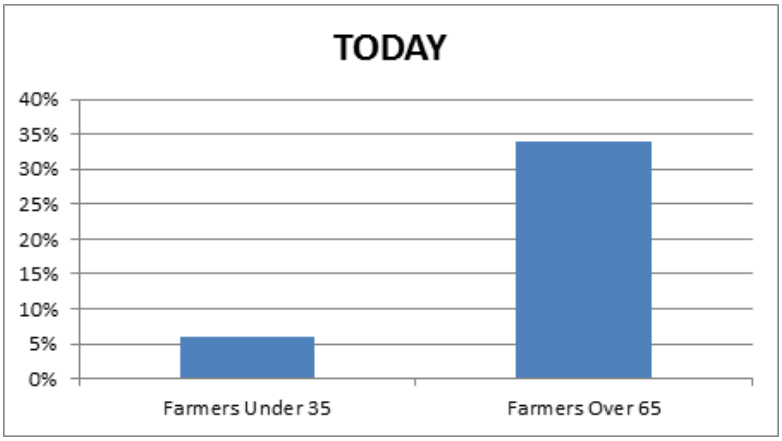
From the 1st pillar the young farmers settlement was a strategic measure to commit youngsters in agriculture. Nevertheless growing ageing of farmers is still one of the most serious problems in all the European countries, even if similar problems related to unemployment of youngsters concern other economic sectors in many EU countries. The change of training needs is a consequence of the growing interest for innovative and multifunctional activities in agriculture. The importance for the youngsters to be connected with the world communication emphasizes the problems of digital divide in the countryside where the use of the broad band is almost everywhere limited. This is the reason why groups of municipalities in many countries are planning networks of signal repeaters.

7 .Overview of current situation for young farmers in the EU (2007 and 2011)

The Current Situation in EU Agriculture has as its main attributes the increase of new entrants to farming in Mediterranean since 2008 financial crisis and the continuing decrease in young farmers entering the sector across Europe though as well. It also depicts some stats from (2007) which indicate that only 6% of farmers in the EU27 are under the age of 35,1/3 are over the age of 65. It is also remarkable that in 1979, there were twice as many farmers under 35 as there were farmers over 65 – now there are five times as many farmers over the age of 65 than under 35.

Graph 1 Percentage of farmers under 35-over 65 (1979-today)





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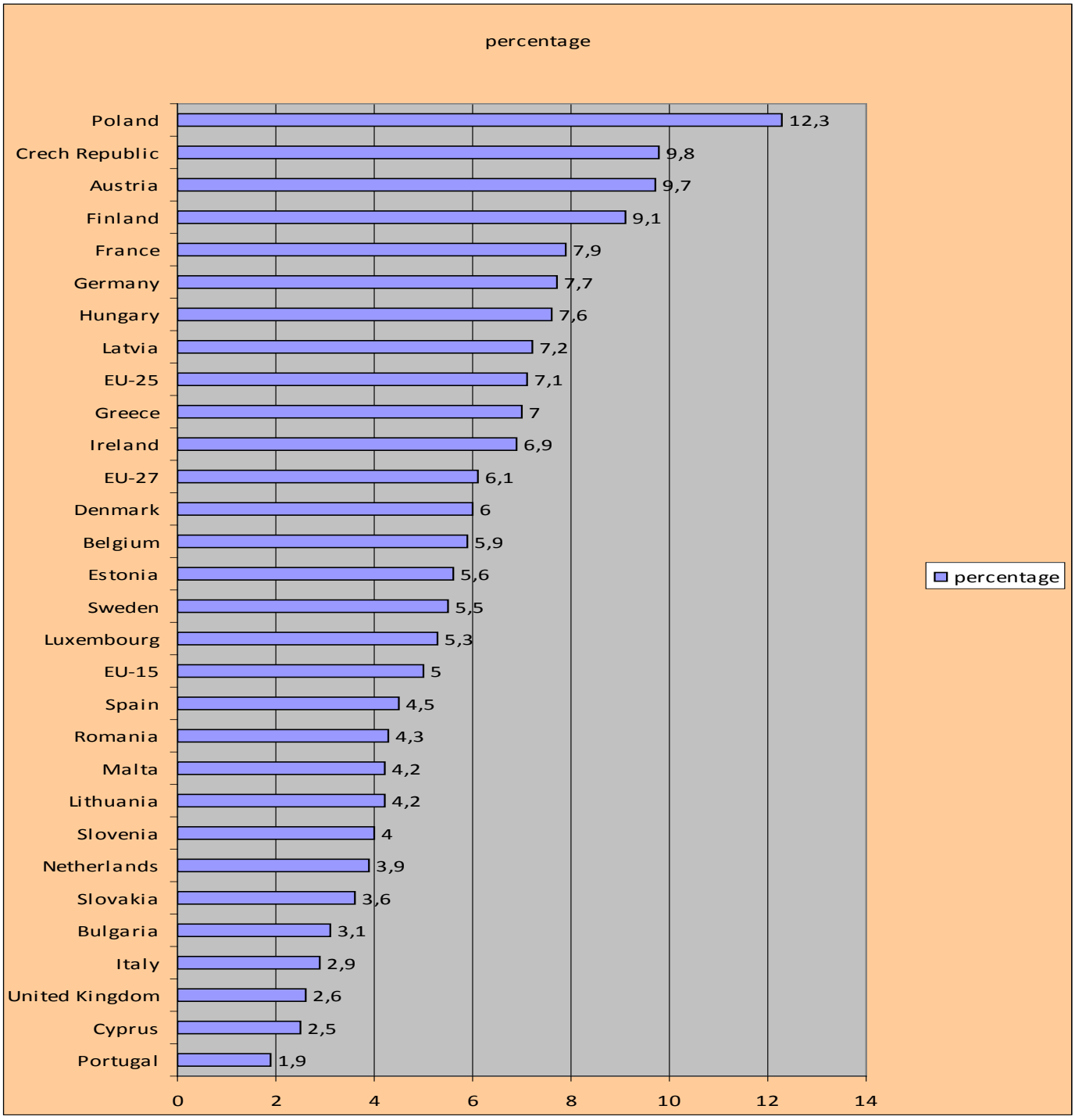
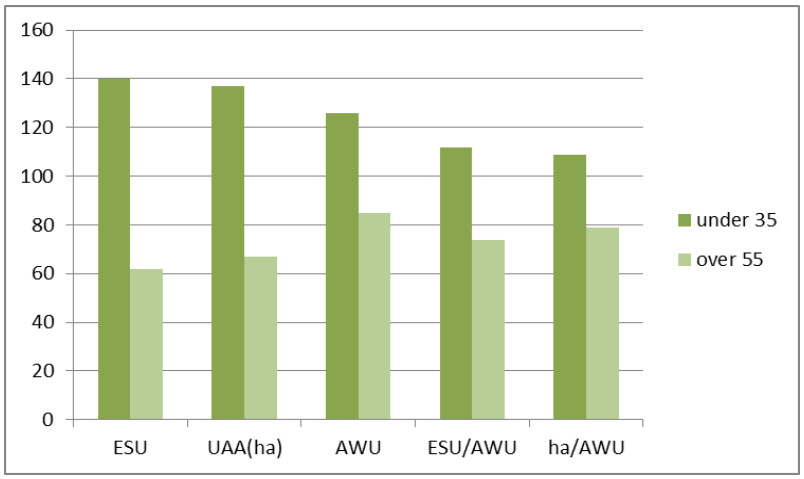
Graph 2 Percentage of farmers under 35 in Europe (2007)



The European Commission's latest economic brief on generational renewal in European agriculture draws on these concerning statistics presented above, while outlining even more reason to attempt to reverse this demographic trend.

Young farmers perform better than older farmers.

Graph 3 : Performance of young and elderly farmers in the EU-27,2007



ESU:European Size Unit/AWU:Annual Work Unit/UAA:Utilised Agriculture Area

However, we should take this as indicative of just how much better they could perform if all European young farmers had the access to education, training, innovation and research they require.

Discussion

These statistics provoke two questions in accordance with the rest of the information. The first question is whether these figures cannot address the question of whether the number of young farmers across the EU27 has increased since 2008 (when the financial crisis hit) as it has shown to in countries such as Greece.Therefore, we need a new set of up-to-date statistics urgently.

The second question deals with the possibility that these are the problems across Europe as well as the evidence of the importance of young farmers to increased productivity, efficiency, and innovation in the sector; we need to find ways to mirror the employment flows found in Greece and other parts of the Mediterranean since 2008. Therefore, we must learn from the increased appeal of agriculture in order to convey it to those in other European countries, particularly the young and we must also, essentially, convey it to young people who are leaving rural areas as an attractive alternative to seeking a career in the city.

What is not contested, is the urgent need to improve producitivity alongside environmental protection and biodiversity conservation in the sector in order to secure sustainable food production for the future of Europe. This is most likely to be achieved by young farmers, and therefore the sector needs to be made as attractive as possible to young, educated and ambitious enterpreneurs.

Policy Recommendations

These concerning statistics are down to a number of factors – however, we know for a fact that many young people in Europe are eager to get into the sector and are well-trained and prepared to enter farming. Unfortunately, it is the barriers that stand in their way which can be blamed for the poor generational change in agriculture. To overcome these, young people need public support in several forms. In Europe, this public support should be enshrined in the Common Agricultural Policy (CAP).The most difficult challenge of a farmer's career is getting his or her foot through the farm gates:

- Access to land is a huge barrier for those attempting to enter the sector, particularly if they do not have a background in farming.
- Access to credit in the first years of a farmer's career can also be crippling, particularly when attempting to set up a farm from scratch or even to modernise one.
- High investments with low returns in the first years of a farmer's career is the third barrier – even once a farmer has got land, investments in the first years are so high with little to no return.

In order to address these challenges, the CAP reform must include several measures targeting young farmers specifically, in order to attract young new entrants to the sector and to make sure those already involved in farming can establish themselves with their own farms. These measures should be in both Pillars, so that when they are used in combination, they can address all the above challenges.Under Rural Development, 5% of any Member State's programme should be dedicated to measures for young farmers. In the past, Member States have had the choice of whether to implement measures or not – this has led to a lack of uptake across the board (apart from in France), and a wide disparity of support for young farmers across Member States, which is unacceptable. Therefore, not only should Member States be made to dedicate 5% to young farmers, but the co-financing ratio for measures under the young farmer subprogramme should increase from 50/50 (what it is now) to 80/20, with 80% being funded by the EU and 20% by Member States, encouraging governments to spend more on young farmers.

These measures under rural development should cover support in a nmber of areas, most important, in the form of installation aid: investment in physical assets. This helps young farmers have access to land and capital in order to try to start a farm. However, this support should also include specific young farmer support in advisory services, knowledge transfer, business development and co-operation.Under Pillar I, young farmers also need additional support because of the fragility of their situation. Direct payments in the CAP have the aim of providing income support to farmers, and therefore, young farmers should get an additional top-up of these payments for the first five years of their farm. This is because they are particularly vulnerable to price fluctuations and market volatility at this time, when investments are high, returns are low, and they need to keep their farm a float.

Young farmers, across all Member States, must be given a 25% top-up of these direct payments on an annual basis which should be funded by at least 2% of a Member State's national envelope of payments. It is essential that this top-up is implemented in all 27 Member States in order to guarantee a level playing field for young people entering the sector across Europe. Of course, such

support should be given only according to adequate agricultural education and training and the presentation of a business plan.

These measures in combination will go some way to achieving generational change in the sector and attracting new young entrants to agriculture. The global demand for food is growing at an concerning rate and looks set to continue, while the demand for high-quality, safe food is also growing at home. On top of that, the demand for meat is growing faster than anything else, with huge markets opening up in China for high-quality European products. European young farmers are productive, efficient, and able to meet many of these challenges – if they were given the chance.

Measures need to be impelmented across Europe in order to secure an increasing number of young farmers in the sector, thereby innovating EU agriculture and increasing its productivity and competitiveness, while simultaneously ensuring a more sustainable use of resources in the sector.

8. The RURAL/ITER project

The RURAL/ITER project aims to address the ageing farm workforce and the ongoing flow of young people out of the countryside as a serious challenge to the sustainability of the European rural economy. In Communication from the Commission of 21 December 2006 entitled "Employment in rural areas: closing the jobs gap" [COM(2006) 857] from 8.5.2007 is stated: "In order to successfully adjust production structures in the Member States, it is essential to improve competitiveness and environmental sustainability and to boost jobs and growth. The problem is that many farmers still do not have the necessary skills in terms of innovation, diversification, bioenergy production, provision of environmental services and development of local services. For this reason it is imperative to promote research and development, vocational training, advisory services and innovation". To rear these objectives, the European Commission promotes the first settlement of young farmers, supports female entrepreneurship and encourages new economic activities on farms. The expected result of the RURAL/ITER project is a Training System addressed to young and female farmers, as well as persons with work experience from other economic sectors, aiming at exploiting rural areas according to more competitive, sustainable and innovative, activities. The essential objective of the RURAL/ITER System is to provide young farmers of all skills and competences they need to adapt their farms to the multifunctional

concept, preparing them to create new ideas and put them into practice (Lifelong Learning Programme Leonardo da Vinci; 2008; p.2). The project wants to transfer the training system developed with a previous project 'Naturaliter' in seven countries to other countries, such as Portugal and Greece, with a serious ongoing economic crisis, by providing opportunities in farming and multi-functional rural activities. Also a benchmarking with case studies based on innovative trends in agriculture from modern farming countries such as Belgium, Germany, the Netherlands will be provided by the European Council of Young Framers (CEJA), specifically during a workshop for testing the new training products and a conference to discuss the perspectives for European farmers in future.

The final RURAL/ITER Training System should provide, specifically addressed to young, female and "second chance" farmers, with all basic knowledge and specific competencies they need to adapt, or to build up their own agro-enterprise, according to the most innovative trends in agriculture (Lifelong Learning Programme Leonardo da Vinci; 2008; p.5).

Besides the direct target groups addressed by the project an indirect target group is represented by institutions, decision-makers and organizations dealing with agriculture at European, national and local level. The expected impact will be the job keeping and the making up of new rural workplaces; it can in this way contribute to stop the rural areas exodus, support the generation turnover, give to young and female farmers more chances and create entrepreneurship framework suitable to give opportunities also for persons attracted to live in the countryside coming form other work experiences. On the long term enhanced economic diversification could make rural areas more attractive and more competitive.

9. Greek situation

Over the last few years, the economic crisis has become a reality that threatens the social cohesion in the entirety of the European Union and beyond. It has hit Greece particularly hard, where a time of deep recession has set in. At the same

time, the future is not looking bright for other Mediterranean countries such as Spain, Portugal or Italy either – alongside France and Ireland.

In this difficult economical economic situation, the job market has been heavily affected with uncertain consequences accompanied by a tendency for large parts of the economically active population to be increasingly marginalised.

Among the EE15, the before-mentioned countries which are in the most significant economic danger at presence also reflect a bigger decline in employment between the second quarter of 2008 and the second quarter of 2010.

It is worth mentioning that as far as the average size of holdings run by young farmers is concerned,there is wide disparity between Member States in terms of size of holdings, but on average young farmers do manage bigger farms.As far as the percentage of female young farmers is concerned, it is estimated that the percentage of female young farmers in the EU-12 is around 25-30% on average.

More specifically this decline has as follows[1]:

Table 1 Change in Employment between 2nd quarter 2008/2010

COUNTRY	CHANGE%
SPAIN	-9,6
ITALY	-2,4
GREECE*	-3,4 (-16,8 up to 3th trimester 2012)
IRELAND	-12,0
PORTUGAL	- 4,7
EE 27	-2,3

[1] European Foundation for the Improvement of Living and Working Conditions (2011) Shifts in the job structure in Europe during the Great Recession

*For Greece regarding the latest elements the decline is up to 16,8 % for the 3th trimester 2012

Simultaneously, agricultural activity and the primary sector in general is one of the few sectors which is able to meet high rates of derogation regarding 10.7% employment

The following table[2] shows remarkable changes in the Greek job market in terms of paid employment in 2008-2009 which characterise agriculture as the sector with the second highest increase in employment:

Table 2 Change in paid employment, by economic sector, 2008–2009

Sectors	**Total**	
	Paid employees	**(%)**
Construction	-30,013	-10.7
Manufacturing	-20,017	-5.0
Other service activities	-7,668	-14.5
Financial and insurance activities	-6.314	-14.5
Electricity, natural gas, steam supply and trade	-5,320	-15.1
Health and social work	-4,240	-2.2
Mining and quarrying	-3,780	-23.0
Art, Entertainment and Recreation	-3,704	-8.5
Public administration &defence, compulsory social security	-3,294	-0.9
Transport and storage	-1,587	-1.0
Accommodation and food service activities	-1,041	-0.5
Administration and support service activities	-849	-1.3
Activities of extraterritorial organisations and bodies	-640	-37.1

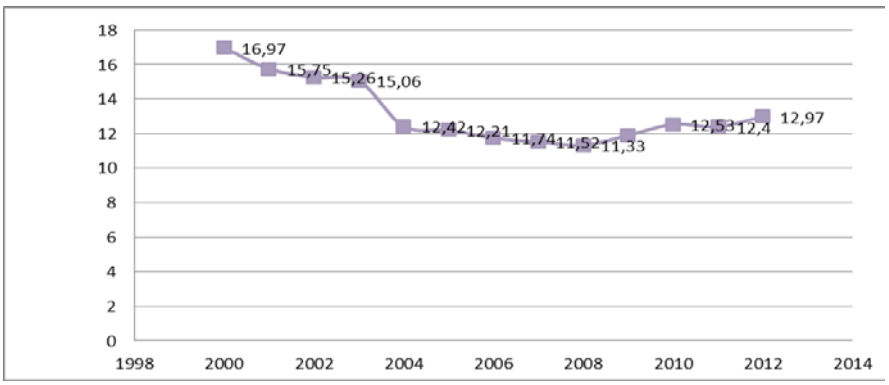
[2] Kritikidis, G., 'Changes in paid employment 2008–2009' (in Greek, 675Kb PDF), in *Enimerossi*, No. 166, Athens, INE/GSEE-ADEDY, November 2009

Real estate management	-169	-10.9
Water supply, sewerage and waste management	331	1.2
Wholesale and retail trade, repair of motor vehicles	564	0.1
Professional, scientific and technical activities	3,865	3.8
Information and communication	6,048	9.1
Education	6,278	2.1
Agriculture, forestry and fishing	6,812	17.0
Domestic services	12,515	18.4
Total change in paid employment	-52,277	-1.8

In Greece after a decline of employment in the agriculture up to 2005, the decline is decreased perceptibly up to 2008 in order to it follows a strong derotation.

According to the elements of PASEGES (Panhellenic Confederation of Unions of Agricultural Cooperatives), the employment in the primary sector of economy the last decade decreases until 2008, especially in the first five-year period (2000-2004) which recorded loss of 167 thousands workers. Next period (2005-2008) slowed down perceptibly the fall of employment, with loss 37 thousands of places of work, amounting in 2008 at about 516 thousand working at agriculture.From 2008 until 2012 (average of the first three quarters) we observe a continuous increase of the percentage of employment in the agricultural sector, with almost a pause in 2011 (-0,1%), in comparison with the working population in Greece. Although, the labour force in agriculture decreased by 25.350 people the share of the labour force in the agricultural sector increased by 1, 64% (11,33% in 2008 and 12.97% in 2012).This increase of the percentage is very important, despite the decrease in absolute numbers because due to the economic crisis in Greece almost all the other sectors of economy faced a reduction both in the workplaces and in their share in the labour market. It is a common aspect and belief that the agricultural sector will help the economy and the country under some structural changes that must be adopted.

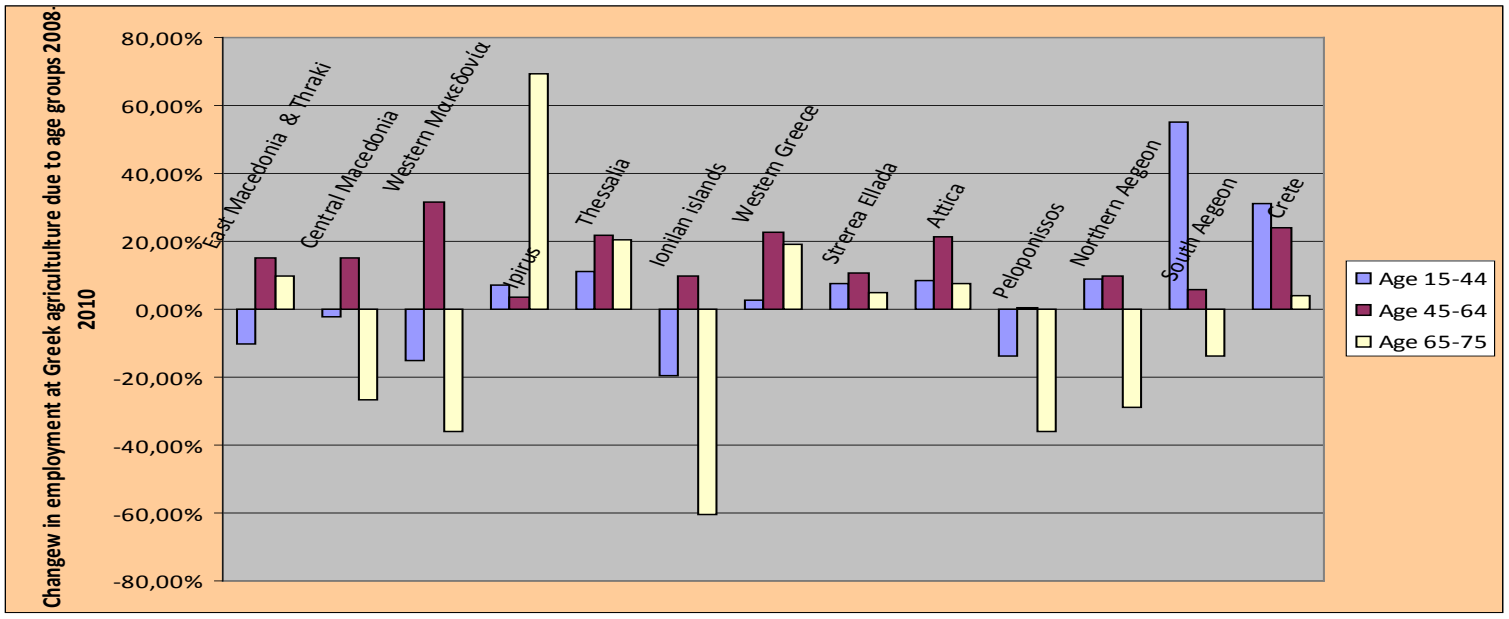
Graph 6 Annually percentage change of employment in the Greek agricultural sector (2000-2012)



The points of interest in terms of the qualitative characteristics of increased employment in the primary sector largely concern the geographic distribution of the increase, the sectors of activity in which new places of work arose, and, in particular, the age groups in which they were reported.

The analysis of employment in three basic age groups (15-44, 45-64 and 65+) is presented in the following table. We conclude that the employment increase mostly concerns the intermediate age group. In the youngest age group, the change is almost marginal in some places, however, important differentiations exist between regions.

Graph 7 Employment changes at agriculture in the Greek Regions at the period 2008-1010, according to age



Source: http://eap-dem.pblogs.gr/erefna-ths-paseges-gia-thn-apasholhsh-sth-gewrgia-2011.html

The increase in employment of the younger age group (15-44) in Southern Aegean (+55%) and in Crete (+31%), is accompanied by significant decreases in employment among sectors such as tourism and other services, implying that an increase in rural activities result from a transition of workers from sectors that have been particularly affected by the economic crisis.

The most significant employment increases within the rural sector can be found in Western Macedonia, Crete, Western Greece and Thessaly. These concern the intermediate age group, with increases in employment varying from 32% to 22%, which connects the entry in the rural activity with the weakness of integration of in position work as long as is elongated the duration of unemployment in certain branch of secondary mainly sector.

10. Italian situation

Before analyzing the Italian situation of "farmers classified as young farmers, women and from previous other working experiences", it is relevant to mention that the access to the land, in Italy, has traditionally taken place through the legal instrument of property. Land property is transmitted through generations and this has caused pulverization and fragmentation of properties.The pressure on the land, still relevant, has always kept the prices of agricultural land at very high values (Tables 3 and 4). Transactions rarely occur, generally for relatively small quantities of land, and the prices remain very high. For a newcomer, without abundant financial resources, the prices of a farm, including home and some other buildings, are almost prohibitive. In some regions (Tuscany, Piemonte) and for some specific areas, the prices are even much higher.

Table 3- Value of land in Italy (000euro)

Year	Arable	Pasture	Horchards	Olive	Vineyards	Average
1994	12,7	5,1	28,0	11,5	17,8	11,5
2000	15,6	5,9	29,0	12,1	23,3	13,7
2004	18,3	6,5	30,6	12,5	28,3	15,8

Source: Povellato, 2006

Table 4 – Value of land in Italy in 2011 (00euro)

Area	Mountain		Hill		Plains	Total
	Inland	Coast	Inland	Coast		
North West	5,4	26,0	24,1	78	35,0	25,1
North East	29,4		43,4	31,3	46,5	41,7
Centre	7,7	10,3	11,3	17,1	19,9	12,4
South	6,8	10,0	10,7	16,5	15,1	11,6
Isles	5,9	8,8	7,7	10,6	15,0	9,3

Source: INEA

The other major instrument favouring access to the land, the lease (for periods of various lengths) was almost ignored until 1982, when a National Law introduced elements of modernity and flexibility into this type of contract. In these last decades, finally, the number of farmers who expand their size thanks to a contract of land lease has risen. In 2011, 38% of the total Italian agricultural area was leased, compared to 28% in 2003 (+60%), but in France the land lease goes up to 70%, in Germany reaches 64%, in Sweden 45%.

It must be however considered that normally the lease is used to increase the size of a pre-existing farm in property. In 2006, less than 5% of the farms were completely managed with a lease contract.

Young farmers

One of the goals established by EU for the Rural Development Program 2007-2013 was to increase the number of farmers under 35 and to improve the ratio between the number of farmers under 35 and the number of those over 55 (DG Agriculture and Rural Development 2006).

In Italy, in 2010, the farmers (head of a farm) under 35 years were about 5% of the total. The ratio between the number of farmers under 35 and the number of those over 55 was 0.08, meaning

that there was almost one young farmer for every 10 old ones. This ratio has improved during the last few years, since it was 0.04 only in 2007.

In other countries, such as France, Germany and Poland, the ratio young/old farmers is however much better, being respectively 0.20, 0,22, 0.52.

Data from the 2010 Agricultural Census indicate that farm heads up to 39 years were 9.9% of the total, with 62% of the holdings managed by people over 54 years of age. Considering other categories (family members, members of cooperatives and employed farm workers) the relevance of young people in the Italian farms grows only slightly, to 10%.

Table 5 – Farm heads and workers in Italy, 2010

Age class	Farm heads		All workers	
years	no.	%	no.	%
<40	152.367	9,9	161.716	10,0
40-54	433.468	28,1	855.782	52,8
>54	955.288	62,0	603.386	37,2
Total	1.541.123	100,0	1.620.884	100,0

Source: Cagliero and Novelli, 2012

The presence and relevance of young farmers is not homogenously distributed over the Italian territory; in the Islands (Sicily and Sardinia) and in the North-Western Regions ther share of young farmers is higher than the average, whereas in the Centre and in the North East the situation is unbalanced.

It must be however noticed that in Italy there is a strong debate about the validity of the census data, since there is a contradiction between the number of “farms” counted by the census and the number of operating farms holding a VAT number, necessary for all market relationships.

The agricultural census lists about 1,630,000 holdings, but the number registered at the CCIAA (Chambers of Commerce, Industry, Artisans and Agriculture) is only the half, about 829,000. If we accept the hypothesis that young people are present only on farms where an acceptable income can be achieved (as has been demonstrated by several locally limited surveys), the relative weight of relatively young people managing real farms grows to higher percentages.72 percent of the

young farmers are male. Almost all are Italians. Only 0.38% has other nationalities. Clearly, for higher classes of age the presence of non Italians decreases to almost zero.

Table6– Educational level of farm heads, in 2010

Age class years	Nothing	Primary	Middle	High	University	Total
			no.			
<40	351	4.278	60.444	71.117	16.177	152.367
40-54	1.915	41.493	217.262	142.377	30.421	433.468
>54	76.037	493.757	214.971	124.428	46.095	955.288
Total	78.303	539.528	492.677	337.922	92.693	1.541.123
			%			
<40	0,2	2,8	39,7	46,7	10,6	100,0
40-54	0,4	9,6	50,1	32,8	7,0	100,0
>54	8,0	51,7	22,5	13,0	4,8	100,0
Total	5,1	35,0	32,0	21,9	6,0	100,0

Source: own elaboration on ISTAT data provided by Cagliero and Novelli (2012)

Concerning education (Table 7), 10.6% of the farm heads under 40 have a university degree, 47% have completed a secondary school, but there is a huge number of young farmers who have only completed the first eight year of compulsory education (from 6 to 14). Compared with the education profile of the older categories, the new generations of farmers show a much better level. This means that the situation is better than it used to be, that there are many well educated young farmers and that the younger generations are better educated than the older ones, but still there is a dramatic need for permanent education and on the job training.The presence of young farm heads is growing also thanks to the European Union policy and to other funds made available by the Italian Government for this specific purpose. Within the First Axe of the Pillar II, also called Policy for Rural Development, all Regions have activated several actions, where young farmers are considered a priority target group.Since 1998, with National Law 441, the National Government has established the Osservatorio sulla Imprenditorialità Giovanile in Agricoltura (OIGA – Observatory on Young Entrepreneurship in Agriculture) at the Ministry of Agriculture, Food and

Forestry (MIPAAF, formerly MIPAF) to monitor the impact of European, national and regional policies (www.oigamipaf.org). With National Law 296/2006 a special Fund for the development of young entrepreneurship in agriculture was activated and up to February 29, 2012 almost 30 million euros have been used to finance micro-projects, applied research and development projects, scholarships for further education, participation in national and international fairs, etc. OIGA has been suppressed with Law 135/2012 and its functions transferred to the competent office at the Ministry. As far as the women farmers are concerned, the 2010 Italian Agricultural census has counted almost 500,000 women as farm heads (Table 7), with almost 52% over 54 years of age, and only 8.9 under 40.

Table 7– Women as farm heads in Italy, 2010

Age Group (Years)

Area	<40	40-54	>54	Total
North West	4,408	9,033	21,315	38,321
North East	3,483	14,532	33,435	58,059
Centre	6,697	22,991	50,623	80,311
South	14,840	75,629	143,750	239,748
Isles	6,469	23,198	49,039	81,408
Italy	44,128	148,948	256,703	497,847

%

Area	<40	40-54	>54	Total
North West	11,5	23,6	55,6	100,0
North East	6,0	25,0	57,6	100,0
Centre	8,3	28,6	63,0	100,0
South	6,2	31,5	60,0	100,0
Isles	7,9	28,5	60,2	100,0
Italy	8,9	29,9	51,6	100,0

Source: Own elaboration on ISTAT data

It must be noted that almost 179,000 women (36% of the total) are concentrated in the age groups with 65 and more years and this again could open a discussion about the quality of the

data. The Census overestimates the number of farms and by consequence a large number of people are indicated as farm heads, without any clue with reality3.

A recent survey made public by COLDIRETTI4, a major farmers' union in Italy affirms that in the third quarter of 2012 there were 294.618 women as farm heads (60% of the amount indicated by the Census).

According to COLDIRETTI, about 29% of Italian farms are managed by women (and this would bring the number of Italian farms to 1.016,000 (2/3 of the census, but far more than the farms registered with the CCIAA).

In this same quarter, about 406.000 women were employed as farm hands.

Farmers with previous other working experiences

First of all, it must be stated that there is a total absence of data about the phenomenon of adult people leaving their previous working experiences to become farmers. In the Census questionnaire this type of information is not considered and consequently it is not possible to quantify the extent of this movement of people.

On the qualitative side, several categories have been described (Giaré 2009, Caggiano, Giaré e Vignali 2009, Milone e Ventura 2009):

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[3] Even one of the Authors of this document, owner of a small plot of 2,200 m2, abandoned by years, has been thoroughly interviewed during the Census operations and, against his own will, was counted as a "farmer".

[4] In Italy, there are three major Farmers'Unions: COLDIRETTI representing small and medium family farms, traditionally with strong links with the Catholic church; CIA – Confederazione Italiana degli Agricoltori, also representing small and medium family farms, derived from the merging of several leftist organizations, with share-croppers, landless labourers, etc.; and CONFAGRICOLTURA, representing large farmers,

Since the mid-70's, informal groups of young people, often without any specific education or training, who occupied abandoned lands; in most cases, they have then evolved into formal cooperatives and have received a long term lease contract;

- In more recent years, cooperatives of unemployed young people have been established and supported to cultivate agricultural estates, mainly in Southern Italy, which have been confiscated by the State from condemned mafia members;
- Adult professionals, often with a university degree and a well affirmed professional life, who freely decide to change their lifestyle, sell their activities, purchase a farm and become full time farmers. Within this category, it is possible to meet many non Italians, who have mainly moved from other European countries;
- Adult part-time farmers, normally employed in non-agricultural activities, who have lost their job and come back full time to farming, while they wait for an economic revival;
- Young people, sons and daughters of farmers, sometimes with a good level of education, who decide to enter into farming and then receive from their relatives the control (partial or total) of the operation.

11. Portuguese Situation

In 2009 census, Instituto Nacional de Estatística (INE) surveyed and found 305,000 farms which is 111,000 less than in 1999. This situation tells us that in 10 years one in four agricultural explorations ceased their agricultural activities (INE, 2011:13). There is a need for training and agricultural policies to attract more people into farming and farming activities.In addition, a more global description of the agricultural situation will be described as it relates to farming. In this context, some general agricultural aspects identified by the Portuguese 2009 census are the following:

-Women account for one third of the farmers;

-The utilized area for agriculture has increased from 9.3 hectares to 12 hectares as a result of absorption of small farms to larger farms;

-The small-sized farms continue to prevail but 2/3 of the Utilized Agricultural Area is now managed by farms larger than 50 hectares;

-10% of arable land is left as bare soil during winter;

- The size of farms in Portugal is on average 5 hectares smaller than in the EU
- The average farmer is a male, aged 63, completed the 1st cycle of basic education
- has only practical agricultural training and works exclusively in activities on the farm about 22 hours per week" (INE, 2011 pp 3-4).

In order to confront the agricultural situation in Portugal, it will be pertinent to investigate innovative agricultural cases by young and women farmers as well as people coming from other experiences. Interestingly two important cases addressed by the social media in Portugal should be studied further by this project. In the Journal de Noticias (27-12-2012), it has documented a situation concerning a young farmer who completed an undergraduate degree in Marketing Management. José Carvalho has received recognition for his green house project producing hanging strawberries as "Mais Inovador da Europa".

The other young farmer with a degree in International Relations has opted to start up a cow-calf beef operation in southern Portugal as reported by Publico. These two young farmers can be important to develop case studies that glean information to complete and improve the RURAL/ITER training package. The social media has identified these young farmers and now the project must intentionally attempt to survey and interview them to complete case studies about these new entrants into agriculture and document the difficulties, problems and issues faced by these entrepreneurs.

These types of intentional interviews and surveys will enhance the research study information and strengthen the future training package developed by the project to assist young and women farmers as well as workers coming from other working experiences to be better entrepreneurs.

The report will now concentrate on a brief description of young farmers, women farmers and new entrants into farming.

Young Farmers

The level of instruction for Portuguese farmers is low with at least 22% of farmers with no education, while a majority completed only the first cycle. It has been documented that 8% of the farmers have completed secondary education or post secondary and only about 50% of these have completed higher education. The agricultural producers with less than 35 years of age - none of them are illiterate and more than 30% have completed secondary education or higher education. Illiteracy is a strong reality for those farmers with more than 65 years of age and a rare case if in this age bracket one finds someone with an undergraduate degree.

Only 21% of the farmers do this activity on a full time basis, while over 50% claim that their agricultural activity is part-time accounting for half of their work time. The majority of the couples depend on less than half their time in agricultural activities, meaning that only 13% work full-time in agriculture. The farm income for one-third of the farmers is dependent upon an additional source of income outside of their farm, as a worker for someone else or as an business person working in another activity. In Northern Portugal and the interior, where there is a scarce possibility to find additional work, there is less chance to find another source of income. In the analysis of farm families ,INE has determined that only 6% of the farms have income exclusively from agricultural activities.

In fact 84% are independent on outside sources of income such as pensions and salaries from outside of agriculture in such areas as the service sector (INE, 2011). Please see Table 9.

Table 8: Farm Head in 2009, by Sex, Age group, and Level of education

Sex and instructional level	Total		Age group (years)											
			< 35			35 a < 45			45 a < 65			>= 65		
	Nº	(%)	Nº	(%)	In the total (%)	Nº	(%)	In the total (%)	Nº	(%)	In the total (%)	Nº	(%)	In the total (%)
Total	297381	100	6845	100	2	22961	100	8	125658	100	42	141917	100	48
Men	204511	69	4946	72	2	15258	66	7	83207	66	41	101100	71	49
Women	92870	31	1899	28	2	7703	34	8	42451	34	46	40817	29	44
Educational level														
Nothing	65691	22	79	1	0	591	3	1	9635	8	15	55386	39	84
Primary	206156	69	4358	64	2	18058	79	9	103197	82	50	80543	57	39
Middle	12446	4	1427	21	11	2458	11	20	6301	5	51	2260	2	18
High	13088	4	981	14	7	1854	8	14	6525	5	50	3728	3	28

Source INE, 2011

Women Farmers

The INE in the agricultural census of 2009 lists a total of 297.381 holdings in Portugal, of which there are 92 870 women as farm heads (see Table 9). The agricultural farm head continues to be

dominated by men although women now represent about one-third of the total number of farmers from 1999 to 2009 and this group has grown by 8%. The age categories for women farmers are 34% with 45 years of age or more and only 28% are under 35 years of age. It must be noted that 40,817 women (29% of the total) are concentrated in the age group with 65 and more years of age (INE, 2011).

Farmers with other previous working experiences

In Portugal Francisco (2007) has documented the integration and assimilation of immigrants into rural areas to be closer to nature. The researcher stresses the importance of these new rural dwellers for agro-tourism and the need to reduce the exit of rural populations and the abandonment of agricultural holdings. In other context the new rural actors are constructing new paradigms in agriculture. These new rural dwellers are often times responsible for different territorial production while choosing multi-functional production systems. For example, the forestry and pasture areas allow for rural populations to combine tourism, while promoting hunting and fishing, renewable energy sources and radical sports. These situations require greater documentation and research.

Nevertheless, Covas and Covas (2011) have outlined some multiple categories of the new rural-urban actors as it relates to agriculture. The authors list some categories that give us qualitative information about these farmers with often times previous work experience or a dislocation to rural areas. The project can quantify and document these experiences for the training package. Some qualitative examples given:

- Rural dwellers considering carbon markets in their production system;
- New dwellers with other work experience that are investing in social and
- community gardens and assisting in contributing to institutional food;
- Previous work experience immigrants interested in alternative and organic farming;

- New farmers combining production with slow food eating service on the farm;
- The promotion of vertical or roof farming in urban areas;
- Adult rural dwellers that have degrees in other areas and invest in innovative farming systems;
- Entrepreneurs leasing arable land to exploit agricultural production.

12.Conclusions

This document on state-of-the-art of innovative sectors in agriculture, with relation to young, female and new farmers, coming form other work experiences, has analysed the importance of innovation and evolving trends in rural areas, that is not only production of commodities anymore, but also an active sector with high value added from research towards the production. The ongoing CAP measures 2007-2013 started to set up an evolution of 2nd Pillar measures, more addressed to sustainability and competitiveness of the EU agriculture, as proposed in 2003 Fischler's Reform. The crisis of sectors like tobacco or other industrial crops and milk production are still not solved and the mechanisms of decoupling and production quotas, related to the direct aids still maintain an uncertain situation for many farmers. However the future of the CAP after 2013 will be addressed to sustainability and competitiveness of the EU agriculture with a strong focus on environmental issues and multifunctional activities. Organic farming, agro-tourism and rural tourism, nursery, gardening and landscaping, farm management based on business planning and sustainable use of RES for farming activities can offer perspectives for the present and future generations of farmers and opportunities for the maintenance of populations in the rural areas.

It means that the training needs of farmers will be strongly stressed to get innovative competencies to manage the farms of the future, develop the green economy and work opportunities in the rural areas. Young and female farmers, as well as entrepreneurs from other work experiences, seem to be particularly creative, interested in new trends and protagonists of successful case studies.

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14. TABLE INDEX