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Immigrant Shepherds in Southern Europe

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Summary

This paper examines recent evolutions of agro-pastoral systems in the Mediterranean EU (EUMed), and problems faced following the territorial polarization and sectoral restructuring that the region has undergone in recent decades. In most southern EU regions the growing presence of immigrants has come to counterbalance the decline and ageing of the local rural populations and agricultural workforce. This paper specifically examines the presence, contribution and role of immigrant shepherds, who reached Southern Europe from other pastoral areas in the Mediterranean and provide skilled labour at a relatively low cost. Although this phenomenon seems to reproduce patterns of mobility that have characterized Mediterranean pastoralism in the last century, there are problems regarding the integration and training of such a workforce, which has to be undertaken in order to tackle the generational renewal of the sector – and of the rural areas within the European Union in general.

Foreword

At a recent conference on conflict and crisis in agriculture there were presentations from different regions of the globe. While participants from some countries stated that lack of water was constraining agricultural production (Egypt, Somalia), others maintained that in their country a lack of farm land was the limiting factor (Ethiopia), and others still stressed that in some African countries such as South Sudan vector-borne diseases are seriously affecting agricultural livelihoods.

The European case was somewhat different. There, decreasing populations and problems related to generational renewal have turned farmland into wasteland. Against this background, the EU's Common Agricultural Policy (CAP) was discussed, which, despite its political and financial commitments, does not seem to deliver adequately when it comes to supporting the agricultural sector and sustaining rural livelihoods.

Indications from the field are that today an important component of the agricultural workforce within the EU is composed of foreign workers, that is, people who have emigrated from poorer southern and eastern regions to live and work in the European countryside. In many parts of Europe, these workers with their skills, their flexibility and their adaptability have come to play a large role in agriculture, and their labour greatly contributes to the resilience of the EU's agricultural sector in difficult times, as they help to tackle the social and economic imbalance of the rural labour markets by filling the gaps left by national populations.

Today's debates need to address adequately such dynamics in order to come up with solutions that may accommodate the different needs, interests and capacities. The interfaces between agriculture and migration are fruitful not only in academic terms, but – and more importantly so – as regards socio-economic and political developments.

Agricultural Developments

The polarisation of development policies and investments that has characterized recent decades has widened existing disparities and inequalities between and within territories, as a series of economic, social and demographic indicators attests (Lazarev, 2008; OECD, 2012). The modernization of the agricultural sector following the global incorporation of local economies has contributed to the **intensification of social and spatial differentiations in the rural world.**

Agricultural modernization has mostly come in the form of a) intensification of land use in areas of high potential, and b) the progressive abandonment of lower potential/marginal areas.[1] Overall these processes have greatly contributed to the expulsion of large parts of the rural population, and they have changed power relations in the countryside. The number of small and medium farms has consistently declined, while the living conditions of agricultural workers and their prospects, have dwindled as mechanization proceeded and rights were curtailed.

In the Mediterranean region intense environmental change[2] has amplified the vulnerability of rural livelihoods and driven the differentiation amongst regional communities whose natural resources are historically distinct. As a consequence, climatic and demographic factors are having visibly different impacts on territories and populations (Braudel, 1985; Lazarev, 2008; Zdruli, 2012; Carella, Parant, 2014; UNDP, 2015). Among other things, this has resulted in the intensification of South-North as well as East-West migratory flows towards the EU.

The EU's Common Agricultural Policy (CAP) is a pillar of the European Union, and its finances account for about 40% of the overall EU budget. After its initial mandate to rebuild agriculture and food production in Europe in the aftermath of World War II, the CAP has been reformed over time to better take into account different aspects of European rural livelihoods. Subsidies have helped soften harsher living conditions for rural populations and compensate for the rural-urban income divide. Since the 1990s, the CAP «welfare

1 Such abundance/scarcity or higher/lower potentials are defined purely in terms of productivity, that is, without considering the quality of products or the ecological value of the environment.

2 The Mediterranean is considered the region second-most affected by climate change (IPCC, 2014), as well as the one with the highest degree of demographic growth (Plan Bleu, 2004; MPC, 2015).

system» has taken on a more multifunctional perspective. The reform of 2013 states that agriculture should *not only deliver high quality food but also help to manage our environment and fight climate change (EU, 2013).*

Despite its «rural welfare system», the European countryside is becoming more and more depopulated, many rural communities are socially marginalized, and the degradation of natural resources has affected a number of regions (EU, 2011; 2012). Compared to neighbouring urban areas, the living conditions in rural areas of the EU are tougher, the quality of basic services and facilities is inferior and their availability limited, and employment opportunities and income is less (60% as on average per inhabitant for the EU-27) (EU, 2011b).

Declining and shifting livestock farming in the EUMed[3]

Four main trends characterize the region (all of which can also be seen in the EU as a whole, yet they are much more pronounced in the EUMed): 1. a decrease of agricultural activities; 2. the disappearance of small farms; 3. an ageing population and 4. a concentration of farming in areas with a high potential. Livestock farming is intensified, while more extensive methods see a decline – and this has implications for social, ecological, territorial, as well as nutritional factors.

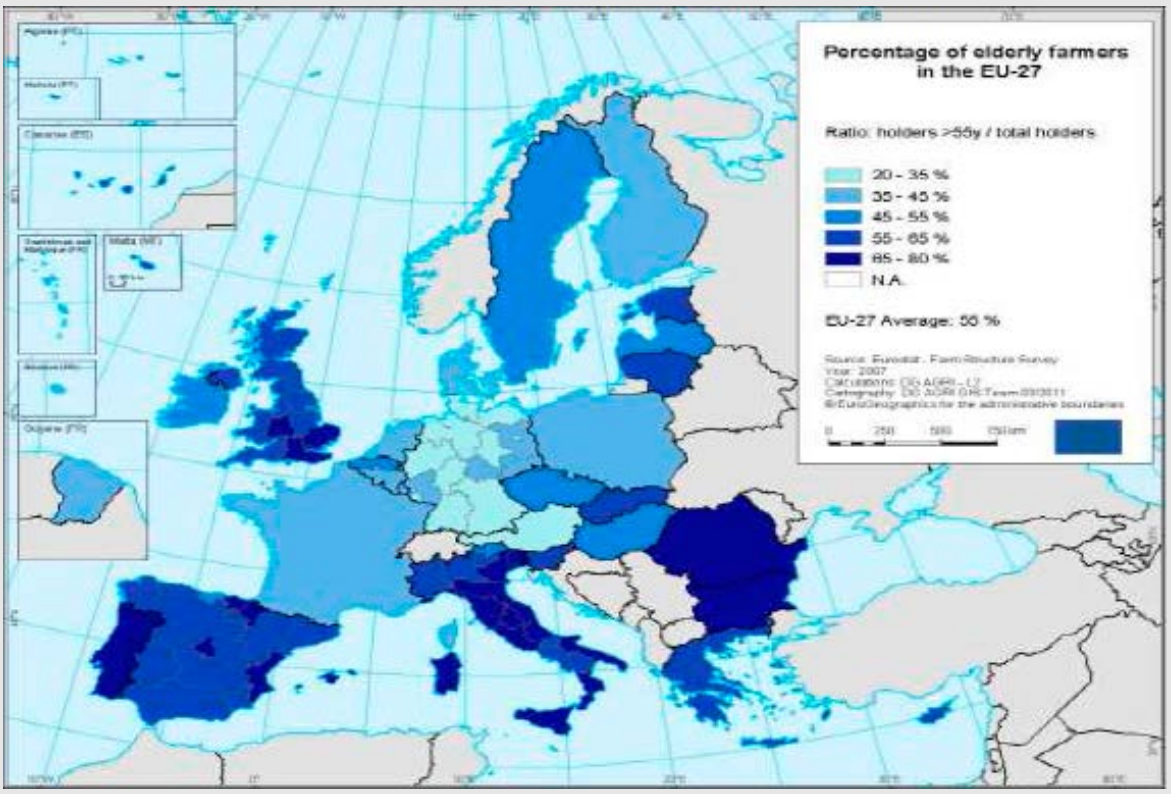
Spain: *In 2010, there were 989 800 agricultural holdings in Spain, a 23.1% drop compared to 2000 – and thus much in line with the trend for most EU countries. In 2010, the Utilised Agricultural Area (UAA) decreased by 9.2% compared to the previous census. Employment in agriculture declined by 8.7% between 2000 and 2010, dropping from 2.4 million to 2.2 million. However, in 2010, 9.8% of the economically active population of Spain was still employed in agriculture. The number of livestock farms decreased by 40.9% over the 2000–2010 period, that is a drop from 414 500 to 245 160, and thus a much higher rate than in other types of farming. Large cattle and pig farms have increased their numbers of livestock, while sheep farming decreased by 21% and goat farming by 13%.*

Italy: *In 2010, there were 1 620 880 agricultural holdings in Italy, the second highest number in the EU-27 (after Romania). However, in 2000 there still were 2 396 274 farms, so, in the meantime, about a third of them has gone out of business. Between 2000 and 2010, the number of people working in agriculture dropped by 14%, or from 4 million to 3.4 million. Nonetheless, in 2010 the Italian agricultural labour force was one of the biggest in the EU-27 and still represented 14% of Italy's economically active population. Between 2000 and 2010, the number of agricultural holdings with livestock decreased dramatically (−65%), from 627 200 to 217 330. Only the larger farms – those with 500 or more LSU – recorded a 9% growth, while all other categories saw a drop, with the smallest sizes losing the most.*

3 Source: EuroStat

Greece: *In 2010, there were 723 010 agricultural holdings in Greece, and 94 050 farms had ceased their activity between 2000 and 2010 (−12%). The agricultural labour force also decreased from 1.4 million in 2000 to 1.2 million in 2010 (−15%). Although figures are contested, in 2010 there were about 2.4 million LSU, a 5.2% decrease from the 2.5 million in 2000. The number of holdings with livestock decreased by 30% to 273 160 in 2010; about 119 800 farms with animals ceased their activities or sold their livestock between the two reference years.*

Figure 1: Relative importance of elderly farmers in the EU-27, 2007



Source: EuroStat

The problem of farm succession in the EU[4]

Farm succession has become an urgent matter for all European countries who care about farming, good food, rural development, public health and the environment. Farmers do indeed feed us, keep rural areas alive, support our health with the good food they grow, and they maintain the landscape and natural habitats. Yet ageing farmers have difficulties to motivate their children to take over the farm, and they are often disconnected from a rising group of new entrant farmers. Preliminary research has shown that precise data on farm succession is lacking and that, in many countries, adequate tools for facilitating the succession process are absent or insufficient.

4 Source: European Network for Farm Succession Conference meeting in Brussels, 2015

The restructuring of the rural world carries dramatic implications, leading to the agro-ecological and socio-economic desertification of marginal territories (Plan Bleu, 2004; Campagne et al., 2009; Zdruli, 2011). While the causes of rural emigration are context-specific, existing studies indicate that, principally, young people turn their back on rural areas and agriculture to look elsewhere for better income and employment opportunities (Deotti, Estruch, 2016).

Mediterranean Rural Migrations

There is a substantial **influx of foreigners into the EU countryside and into agriculture,** and this has helped to counterbalance the «rural exodus». Today, in many parts of the EU, foreign workers – both legal and illegal – make up a huge portion of the agricultural labour force and thus a relevant part of the rural population.

While this phenomenon is noticeable throughout Europe, it is most pronounced along its Mediterranean rim. Euro-Mediterranean countries (EUMed)[5] face specific challenges when it comes to agricultural production and rural development. Recent accession countries in the southeast such as Romania and Bulgaria show similar trends. Behind this are several interrelated factors:

- Agriculture and rural areas are of great importance to these countries. Until recently, half of the people employed in agriculture and two-thirds of farm holdings within the EU-15 were concentrated around the Mediterranean (EU, 2012).
- In large parts of these countries it is neither feasible, nor does it make economic sense to intensify and mechanize agriculture. Much of the land is mountainous and seasonal changes tend to be very pronounced.
- Traditionally, the EUMed has been a region of emigration, and only recently migrants headed north began to arrive – and sometimes stay.[6] Immigration to the EUMed countryside started in the 1980s and has grown since then at a very fast rate. This shift has been especially evident in Spain, Italy and Greece (King et al., 2000; de Zulueta, 2003; Schmoll et al., 2015).
- Labour markets in EUMed rural areas are often limited, with agriculture and domestic work as the main sectors that employ migrants without regular contracts.

5 With EUMed we mostly refer to Spain, Italy and Greece, with France and Portugal showing slightly different migratory dynamics.

6 In Spain, the first law concerning immigration dates from 1985, in Italy from 1986 and in Greece from 1991. Similar trends show up in Ireland and Scotland, both of which have only recently become countries of immigration (Jentsch and Simard, 2009).

To date, **immigrants are over-represented** in **many parts of the EUMed's rural areas** and, according to official data, they constitute over one-third of the workforce in the agricultural sector (Table 1; Kasimis, 2009; Caruso and Corrado, 2015). This trend will likely continue and accelerate, due to a. the relentless out-migration of local populations; b. demographic patterns of migrants' communities (i.e., average age, fertility rates); as well as c. the recent influx of refugees crossing the Mediterranean.

Table 1 : Recent demographic trends in the Euro-Mediterranean countryside

Spain	France	Italy	Greece	
9.8	4.8	7.9	20.8	% rural/active pop. in 2008
56.4	41.9	62.2	57.2	% older > 55 years 2008
19.1	n.a	19.4	17.0	% immigrant workforce in 2008
24.0	n.a	37.0	> 50.0	% immigrant workforce in 2013

Source: Eurostat, 2008; INEA, 2014; OMT, 2014; OPI, 2014.

The table shows that the presence of migrant labourers in the agricultural sector has **increased dramatically throughout the recent financial crisis.** Without the influx of migrants many farms would have disappeared during the crisis. Evidence suggests that the majority of migrant workers from the 2004 accession states have found employment in rural areas of the EU, rather than in the more traditional destinations of migration, with considerable numbers registered in peripheral regions such as highlands and islands (Jentsch and Simard, 2009). Immigration has thus been a key factor in making agriculture and the rural world more resilient and sustainable, as it has enabled many farms, farming-related enterprises and rural villages to weather difficult times (Kasimis, 2009; Sampedro, 2013; Collantes et al., 2014; Nori, de Marchi, 2015; Colucci, Gallo, 2015).

In this way, rural areas of the EUMed region have become a safe haven for a precarious, migrant workforce, as access to food, accommodation and employment can be easier in the countryside. The literature shows that, over the last decade, urban areas have become less attractive to immigrants to the EU, as unemployment and poverty have increased (Jentsch and Simard, 2009; Kasimis, Zografakis, 2012; Caruso, Corrado, 2015). However, such grey areas in rural regions are also the setting for illegal practices and exploitation (OECD, 2012).

Migrants represent today an important part of the population in marginal EUMed territories (i.e., mountains, drylands, islands). In these areas, human presence supports not only traditional agricultural practices, it also upholds the whole local socio-economic fabric. (King et al., 2000; IOM, 2010; Azzopardi, 2012; Mahdi, 2014; Desjardin et al., 2016). For example, immigrants make up about 10% of the working population in most landlocked communities of central Italy, and their children amount to about 20% of the school population (SNAI, 2015). The presence of migrants in such numbers means that a number of basic services are being upheld in mountainous areas of the EUMed, where otherwise

they would disappear.[7] In addition, migrants help to rehabilitate local housing, conserve the rural landscape and preserve traditional ways of living (SNAI, 2015).

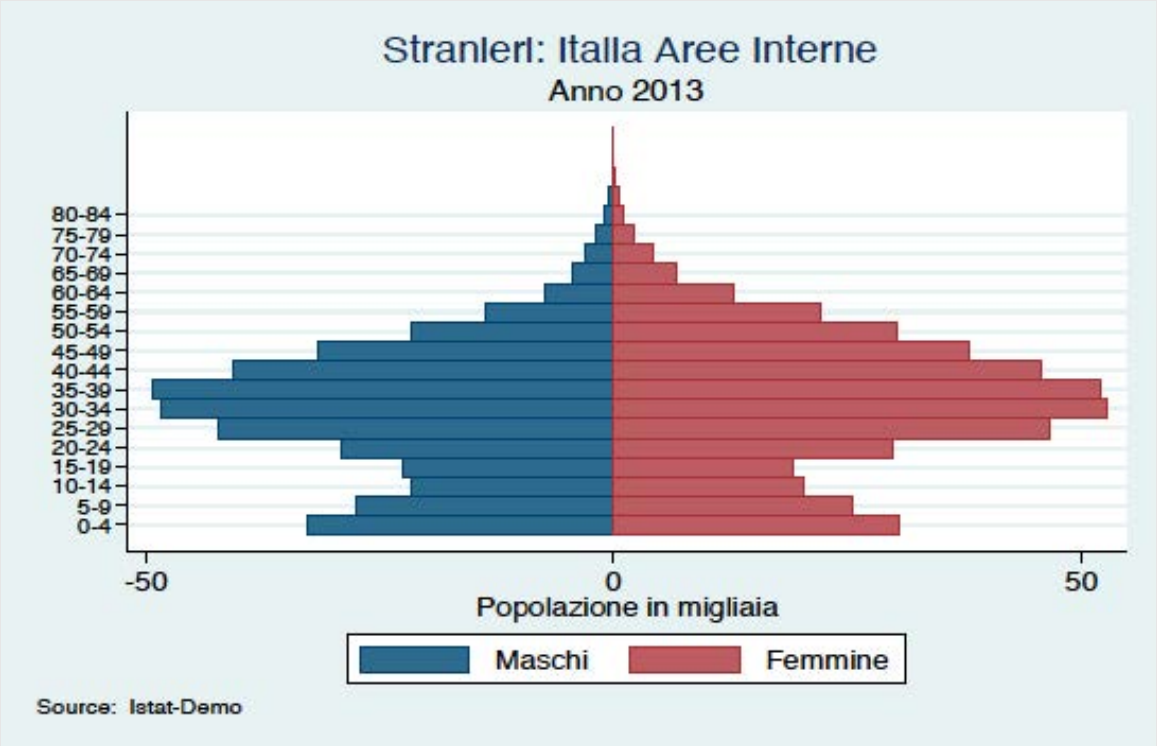
Migrant communities are also involved in construction, caregiving and in other domestic services. Their work thus enables elderly residents to stay in their villages, and it provides other local people with an opportunity to find jobs outside the house. (De Lima et al, 2005; Kasimis, Papadopulos 2010; 2013; Osti, Ventura, 2012; Mas Palacios, Morén-Alegret, 2012). The presence of migrants helps **maintain remote villages and marginal communities** (INEA, 2009; Kasimis, 2010; Osti et Ventura, 2012). The demographic structure of migrant communities suggests that their relevance will increase over time (figure 2).

Earthquakes, people and livestock

The earthquake, which hit mountainous regions of central Italy in August 2016, showed the importance of livestock husbandry – the few people that remained in the area during the following winter were mainly livestock breeders.

The earthquake also put a spotlight on the number of foreigners living in these mountainous communities, as many of them were among the victims (the official immigrant count for the area was 11.4% in 2015).

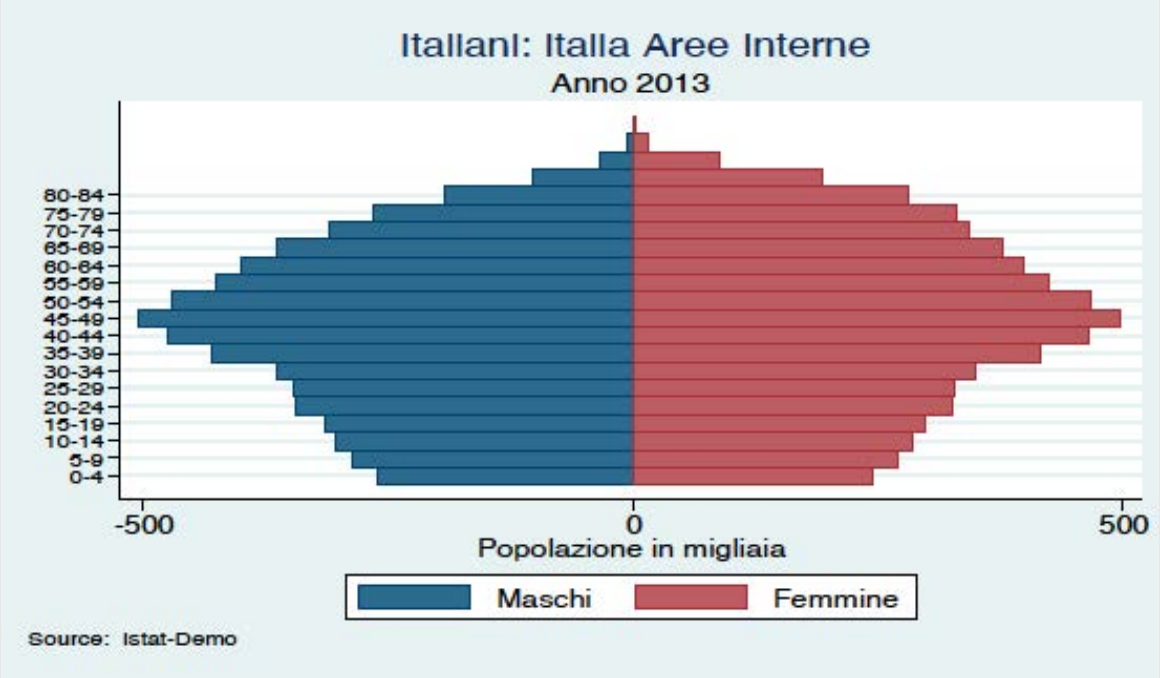
Figure 2a: Demographic figures in local and migration population in internal areas of Italy



Source: SNAI, 2015 – *(blue for males, red for females)*

7 Data on primary schools and healthcare for islands and mountainous areas of Greece, Spain and Italy are to be found in Kasimis, 2010; Collantes et al., 2014; SNAI, 2015.

Figure 2b: Demographic figures in local and migration population in internal areas of Italy



Source: SNAI, 2015 – *(blue for males, red for females)*

So far, studies were mostly focused on the exploitation of often low-skilled, seasonal migrant workers employed in intensive farming in high-yielding areas (King et al., 2000; Pugliese, 2011; Ortiz-Miranda et al, 2013; Gertel, Sippel, 2014; Corrado et al., 2016). However, there also exist specialized, high-skill sectors, in which immigrant communities play a relevant role. This is **the case with livestock farming,** where the foreign workforce is increasing both in quantitative and qualitative terms. The commitment and know-how of immigrant workers allows EUMed livestock producers to remain competitive. In Italy, for example, immigrants play an important role in the production of Parmesan, Fontina and Pecorino cheeses. To an extent, such contributions have been studied for intensive production systems (Lum, 2011; INEA, 2009), however, extensive livestock farming remains mostly underneath the radar.

Migrant Shepherds

Marginal lands such as mountains, drylands and many islands make up about one third of the region. Herding, which makes use of natural grazing, is one main form of farming feasible in such areas. Pastoralism provides a relevant perspective on Mediterranean food production and natural resource management. Extensive grazing is still predominant for meat production, while dairy farms often use semi-intensive methods. Although there is a lack of precise data, it can be assumed that more than half of the flocks of small ruminants (sheep and goats) in the EUMed rely on open grazing for a significant period of the year.

Table 2 : The sheep sector in EUMed countries (rounded data for 2010)

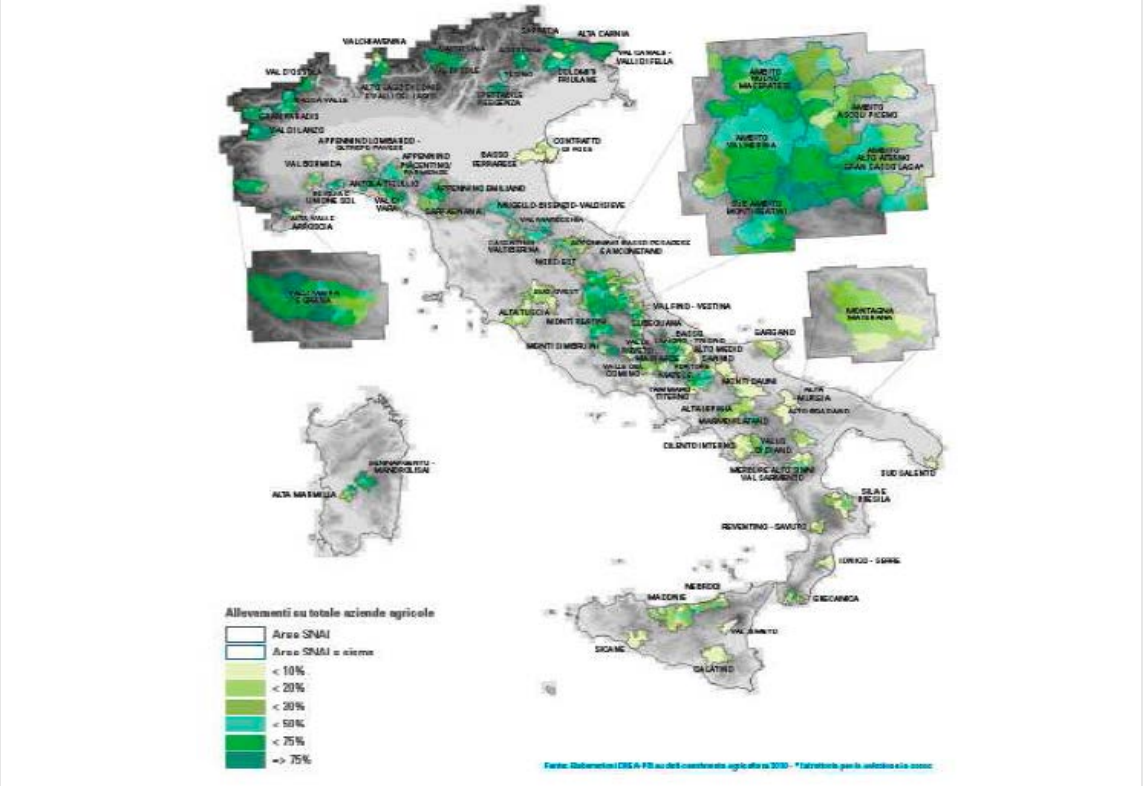
Country	No. of sheep farms	Size of sheep flock	% meat production	% milk production
Italy	50.000	7.5 millions	35%	65%
Spain	110.000	22 millions	82%	18%
France total Fr. Mediterranean	35.000 8.000	6 millions 1.5 million	70%	30%
Greece	200.000	9.5 millions	15%	85%
Total EUM		40.5 millions		

Source: ISTAT, 2010; INE, 2013; Magrama, 2013; CIHEAM, 2011; Thales, 2014 ; Laore, 2013

Transhumance

In the Mediterranean, breeding sheep and goats is often associated with the practice of transhumance, that is, the seasonal migrations of flocks, which makes it possible to adapt flocks' productive and reproductive performances to the rhythm of the seasons and the availability of pasture – mountain pastures during the summer and coastal areas or valleys in winter. This system makes the best use of the agro-ecological diversity and the marked seasonality in the region and complements other, sedentary agricultural activities. Transhumance has been instrumental to the Mesta system in Spain and the Dogana in Italy, which both form the basis of a lucrative trade in wool.

Figure 3: The relevance of extensive livestock husbandry in Italy



Source: SNAI, 2015 – *(The darker the colour, the higher the percentage of livestock farms in areas where, between 1980 and 2010, around 30% of agricultural land has fallen fallow (with peaks of 50% in higher altitudes).*

The multifunctional character of agro-pastoralism manifests itself in the wide range of goods and services provided alongside the production of quality food. Apart from economic and ecological aspects, Mediterranean pastoralism is helping to manage public goods, while supporting cultural heritage and territorial identity. These socio-ecosystem services benefit not only pastoral communities, but also those living in farming areas, urban centres and coastal regions, as all of them benefit from nutritious animal proteins and related value chains as well as from environmental services (IFAD, 2016).

– Mediterranean pastures are rich in terms of biodiversity, and they are the result of long-standing, intricate interactions between humans and nature. Livestock grazing also contributes to soil-water systems and to the natural renewal of vegetation, thus providing an effective way of storing CO_2 in the soil.

Pastoralism and Natura 2000

In 1992, the European Union created the Natura 2000 programme, establishing a network of 26,000 protected areas encompassing 750,000 km² – almost a fifth (18%) of the EU's territory. The programme aims to preserve the species and habitats and is the largest endeavour anywhere in the world for safeguarding and protecting biodiversity. Many protected areas, as defined by the High Natural Value (HNV) framework, are characterized by sheep farming, and of the 231 land habitats listed, 58 require grazing for conservation.

– Agro-pastoralism has shaped the distinctive rural landscapes of Europe for thousands of years, from alpine pastures to dehesas, to patchwork landscapes of arable land and pasture, including important natural parks and reserves.[8] Although many types of land use are no longer essential to modern farming, typical landscape features should be maintained for environmental as well as for cultural reasons. Protecting the diversity of agro-pastoral landscapes plays a key role in safeguarding rural areas as a place to live, as well as for tourism. The complex interrelationship between pastoral and environmental management is reflected in Mediterranean landscapes that have become UNESCO World Heritage Sites (Chevennes, Dolomiti, Picos de Europa, etc…).
– In addition, pastoralism mitigates hydro-geological risks and natural hazards, such as flooding, landslides and fire. Well-grazed vegetation represents an important barrier to the spread of forest fires and reduces the fire risk for permanent crops such as olive groves.[9] The capacity of farmland to absorb excess rainfall and store flood-

8 A map of the region (and of the wider world) shows that most parks and nature preserves have developed out of pastoral areas, meaning pastoral resource management has indeed been capable of reproducing the natural resources over time.

9 Such as the Red de Áreas Pasto-Cortafuegos de Andalucía (RAPCA).

water will be increasingly important as climate change increases the risk of flooding in urban areas.

- Pastoralism is of great importance for marginal territories, as it provides a main source of employment and income, thus protecting livelihoods and stopping depopulation.
- There also is the valuable cultural heritage, such as adaptations to local ecosystems, the management of herds and pasture, practical knowledge of natural processes and of flora and fauna, habits and customs, traditions, norms and rules, and especially animal husbandry and processing skills, including the manufacturing of typical dairy products.

Pastoral cultural heritage

A series of projects and initiatives has been launched to enhance pastoral culture and contribute to its capitalization, such as the Virtual Museum of Transumanzia in Slovenia, the Museum of Transhumancia in Guadalajiar and in Aigüestortes in Spain, les Maisons de Berger and de la Transhumance in France, the Ecomuseum della Pastorizia in Val Stura and several Musei de la Transumanza in the Abruzzi, Italy.

- High-quality dairy products also reflect the relevance of pastoralism. Traditional Mediterranean pastoral products, often certificated as PDO/IGP, represent a key element of local territorial identity and are part of our intangible cultural heritage. Notable examples include typical island products such as the Graviera in Crete, Fiore Sardo in Sardinia, Mahòn in the Baleares, Paski in Peg, Toma in Sicily and, in mountainous areas, among others Fontina, Beaufort and Roquefort, Burlacco, Assisi, Belo Sirenje, Robiola, Idiazabal and other typical cheeses that stand for quality, healthy nutrition and tradition and that are, in many cases, promoted by the Slow Food Association.

For all of these reasons, pastoralism is increasingly held in esteem in Europe and elsewhere. However, such appreciation is not always reflected in market pricing, nor is it recognized by European policies. Consequently, although the image of pastoralism has improved, fewer and fewer European citizens are willing to engage in it.

An In-Depth Restructuring

Although the available data is not always consistent, medium-term trends indicate that EUMed flocks have declined by about 30% over the last two decades, and the size of the remaining flocks has grown dramatically in order to improve the cost-benefit ratio. The classic refrain everywhere is that *«20 years ago with a flock half the size of the present one*

we had a decent life, and we could even make savings and investments. Now, with a flock double the size, we can hardly make ends meet by the end of the year».[10]

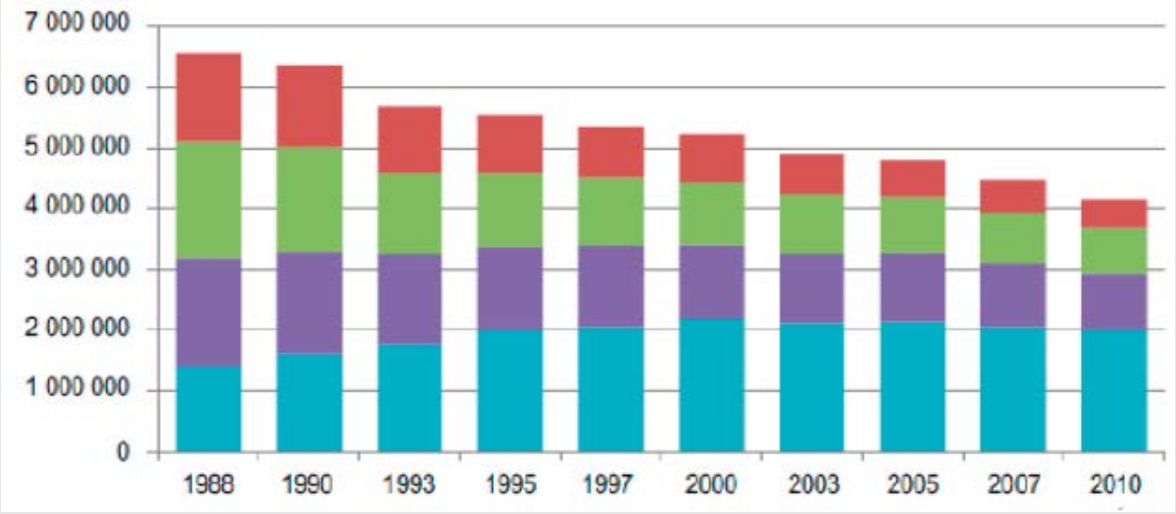
Table 3a/b: The size of sheep flocks, 1985–2016

Sheep	1985	1995	2003	2012	2016
Spain			23.500	16.339	15.963
Greece	9.606	9.269	8.745	9.213	8.735
Italy	11.293	10.668	7.945	7.182	7.285
Southern France				4.090	3.999

Goat	1985	1995	2003	2012	2016
Spain			3.200	2.637	3.088
Greece	5.874	5.180	4.926	4.293	3.990
Italy	1.189	1.373	945	976	1.026
Southern France				387	351

Source: EuroStat, 2016

Figure 4: Evolution of the number and size of sheep flocks kept for meat production in France, 1988–2010, including extensive and intensive farms



Source: IDELE, 2013 – *(The figures associated with the different colours refer to flock size: a) red 1-49; b) green 50-149; c) blue 150-299; d) light blue ⩾ 300).*

The main reasons for restructuring are agricultural and trade policies that have transformed not only the agricultural economy, but also rural society as a whole, with little regard for socio-cultural and ecological variables. The polarization of agricultural development has widened the gap between intensified production in the plains and coastal zones

10 TRAMed interviews: Josetxu Larraz, Fustiñana (Navarra) 4/15; F.lli Costa, Grotte di Castro (Lazio) 6/15.

and gradual abandonment of marginal areas (Gertel and Breuer, 2010). Pastoralism, a practice specifically developed for marginal ecosystems, will hardly be able to compete within a framework that is solely based on performance and productivity.

The Common Agricultural Policy (CAP) and pastoralism

Recent reforms of the Common Agricultural Policy (CAP) have promoted a multifunctional vision of agriculture. Thus pastoralists are now meant to manage natural resources, maintain landscapes, stabilize population levels and enhance the socio-economic development of challenging areas (Nori and Gemini, 2010; Beaufoy and Ruiz-Mirazo, 2013). Today, CAP subsidies play a significant for pastoral farms. Although it is not unusual to hear things like «a farmer today spends more time in the office than in the field»,[11] *or that «we are considered as mountain gardeners rather than producers of meat and milk»,*[12] *CAP subsidies are critical to the survival of this sector. Overall, CAP funding accounts for about 40% of the EU budget and, on average, makes up around 40% of the income of pastoral farmers. Without this support, sheep and goats would have disappeared in many places. Nevertheless, although the policy is essential for keeping those territories populated and productive, CAP does not guarantee the reproduction of these systems, as the decrease in the number of pastoralists seems to indicate.*

The restructuring of the sector has profoundly changed the size of enterprises and the nature of work, separating managerial from field tasks. Although pastoralism is commonly termed «extensive», the actual work of a shepherd is intensive, encompassing physical labour, technical savvy, managerial skills and expertise ranging from climatology to botany, to animal physiology, the behaviour of predators etc. (see Meuret, 2010). Most of the time a shepherd is exposed to harsh conditions, with limited access to services, little connectivity and few opportunities for leisure.

Restructuring has hardly improved the living conditions of shepherds, yet their workload has increased. This has contributed to making the work less attractive for new generations, and the children of shepherds mostly opt for other pursuits. In 2007, a report for the Pastomed programme stated that there was a *«very high rate of over-55 year olds compared with those under 35 years of age […], and in many areas elderly people outnumbered the younger ones by a factor of ten!»* (Pastomed, 2007:18). According to Slow Food, the agricultural products of extensive livestock farming are critically endangered (dairy products rank highest on this list, followed by meat specialities produced in many parts of Southern Europe). The main risk factor? – the lack of pastoralists (Essedra, 2015).

11 TRAMed interview with Roberto Funghi, Florence (It) 2/16

12 Brisebarre, 2007; Nadal et al., 2010.

In this situation, immigrant workers have often offered a lifeline. Despite CAP subsidies and restructuring (by way of extensification, intensification, diversification etc.), immigrant shepherds have provided livestock farms in marginal EUMed areas with a skilled workforce, and at a relatively low cost. Without them, many pastoral farms would have gone out of business by now (INEA, 2009; Nori and de Marchi, 2015).

Table 4: Features of agro-pastoral systems in Crete and Sardinia

	Crete	Sardinia
Population	0.630 million	1.663 million
Sheep	1,1 million [13]	3.15 million
Farms	4.800 [14]	11.213
Average size – animals/flock	229	280
Transhumance	13% of flocks	
Breed	Autochthonous breeds	Sardinian, milk focus
Production focus	Multifunctional	Pecorino Romano cheese
Dairy processing	25% at local mitata level	Mostly through industries
Marketing	Mostly via co-operatives	Industry controlled
Cheese market certification	4 PDOs	3 PDOs
Percentage of immigrants shepherds	30%, mostly Albanian and Bulgarian	20% mostly Romanian

Source: Farinella et al., 2017

The **typical profile of migrants,** who work as shepherds in the EUMed region, is that of a male, aged between 25 and 40, and a native of a South-East European or Mediterranean country (predominantly Romania, Morocco, the Republic of Macedonia and Albania) but more recently also from Asia (Pakistan, India), sub-Saharan Africa (Ghana, Senegal) and, in Spain, even from Latin America. Most of them have a rural background and experience with extensive livestock breeding. History, language, and migrants' networks have shaped the different migration patterns. Romanians are found mostly in Italy and parts of Spain, Moroccans in parts of Spain and southern France, and Albanians in Greece. Immigrant shepherds are valued for their endurance, flexibility and adaptability, and in that they accept working conditions and a salary most locals reject.

Breeders tend to prefer young shepherds to experienced ones because they are more likely to learn the local language and, generally, tend to be more pliable. Breeders often praise foreign farm workers for their hardiness, saying things like, *« […] they are like us 60 years ago»* (Nori et López-i-Gelats, 2017). However, some breeders are concerned that workers from abroad lack the sensibility necessary to manage forestry resources, properly deal with wildlife or respect farmed as well as conservation areas.

In Greece, the massive influx of immigrants from Albania since the 1990s has contributed significantly to the restructuring of extensive livestock farming in the mountain villages of

13 This figure also includes goats (approximately 70% sheep – 30% goats)

14 Estimate of the true number of farms (i.e. co-located farms are counted as a single farm)

Epirus and elsewhere (Kasimis and Papadopoulos, 2005). Migrant workers have helped to maintain the familial character of farms and their reproduction (Ragkos et al., 2016). Recruiting immigrants has also been decisive in transforming traditional farms into large innovative and specialized dairy farms, which developed following changes in CAP policy. Through the employment of foreign workers total production cost was maintained (labour accounts for less than 10% of total cost). This, in turn, gave local women the opportunity to maintain their domestic role, and enabled the younger generation to continue with their education and / or look for employment outside agriculture (Ragkos et al., 2016).

In Italy, migrants make up a large part of agricultural wage labourers. A study by the National Confederation of Independent Farmers (Coldiretti) indicated in 2013 that *«in Italian agriculture […] foreign workers account for about 25 percent of the total number of working days […]. Thus foreign workers are contributing in a structurally decisive way to the country's agricultural economy and are an indispensable component in ensuring the global primacy of Italian food.»* In many areas of the Apennines, as well as the Alps the increasing numbers of carnivores that prey on sheep and goats has lead to a renaissance in shepherding, and the work is often done by Romanians (Nori and de Marchi, 2015). In Abruzzo, an area with a long pastoral tradition, official data indicate that Macedonians and Romanians make up about 90% of paid shepherds (Nori, 2015). However, immigrants also play an important role in dairy processing.

Migrants and «made in Italy» Fontina[15]

«In Valle d'Aosta, almost 75% of the labourers employed in cattle breeding are foreigners. Since the vast majority of these animals are dairy cows for producing ‹Fontina›, we can safely say that cheese is produced mainly by immigrants. In 2014, 303 non-EU workers (predominantly Moroccan) and 335 EU workers (predominantly Romanians) were employed, together with several irregular workers (around 100). These labourers do not compete with locals, who have given up on such jobs long ago. […] The number of foreign workers has more than doubled over the last two decades. Formerly they were almost exclusively Moroccans, but in recent years they have in part been replaced by Romanian shepherds.»

«Immigrant workers have developed considerable contractual power that allows them to negotiate payrolls of around 8–10,000 euros per season. Local breeders also pay bonuses in order to retain good shepherds. However, the job is very hard and conditions are difficult – the first milking takes place at 4 am, and while 60% of mountain pastures have road access, only 30% has electricity.»

In Sardinia the use of foreign labour (in particular Romanians) reflects the structural problems of the sheep farming, such as the low profitability of milk, the dependence on Pecorino

15 Interview with Stefano Trione from CREA www.dislivelli.eu/blog/migranti-in-alpeggio.html

Romano, a cheese widely exported to the USA and subject to the volatility of markets, as well as the difficulty of recruiting local people willing to live and work in the field. Immigrant shepherds are often employed at medium-sized farms (500+ sheep), and they are a critical resource for family farming enterprises (Farinella and Mannia, 2017).

The nationality of foreign shepherds in Spain is more varied. Moroccans and Romanians have been active for some time, and there seem to be Portuguese in Galicia and Extremadura. In the northern mountainous areas of the country there are immigrant workers form sub-Saharan Africa, as well as some from Latin America. In part of the Pyrenees, a recent trend seems to be to hire shepherds from Bulgaria and Ukraine. Shepherds are increasingly needed in areas where predators have begun to encroach on flocks. Some foreign shepherds have received a degree of training at one of the six pastoral schools that exist in Spain.

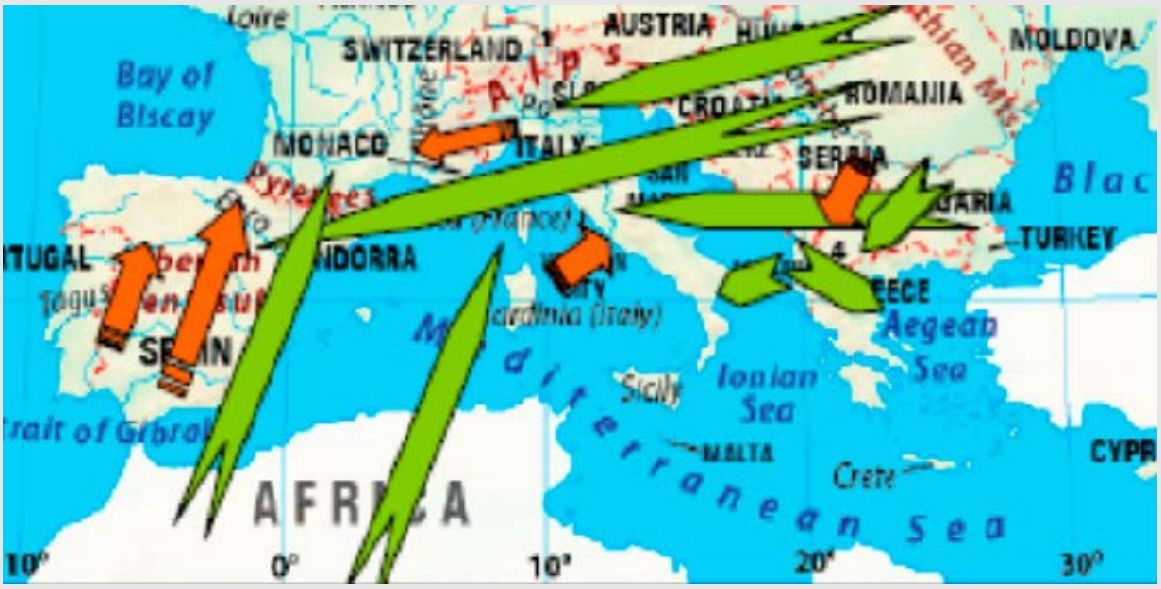
Though strange it might seem, **a generational change accompanied by an ethnic one is nothing new to the region.** During the 19th and 20th century Sardinians colonized abandoned pastures in central Italy, southern Spanish herders moved into the Pyrenees, northern Italian shepherds migrated to Provence and Switzerland, Vlachs and Arvanite shepherds live all over Greece and Kurdish shepherds can be found in several regions of Turkey (Lebaudy, 2010; Meloni, 2011; Nori, 2016). These communities have contributed substantially to keeping pasturelands in use and productive. It is not surprising that most immigrants, who work as shepherds, come from other parts of the same Mediterranean ecosystem, as mobility and migration are integral features of pastoral systems.

Table 5: Migration of shepherds throughout the Mediterranean in the 20th century

Region	End of the 1800	1950s	1980s	1990s	2000s
Provence	Italy and Spain	Morocco and Tunisia			Romania
Sardinia		*Emigration from Sardinia to continental Italy*	Morocco and Tunisia	Albania, Macedonia	Romania
Pyrenees	Neighbouring valleys	Andalusia		Morocco	Romania, sub-Saharan Africa
Turkey		Kurdistan		Afghanistan	

Source: own chart

Figure 5: Trajectories of past (red) and present (green) patterns of shepherds' migrations



Source: TRAMED

Eventually, many of these shepherds did become livestock owners, thus contributing to the survival of pastoralism. In comparison, present-day migrants have seen little socio-economic upscale movement, that is, foreign-born shepherds have not transitioned from labourers to owners of livestock. The main goal of many of the more recent migrants is to earn some money and invest it in their native region.

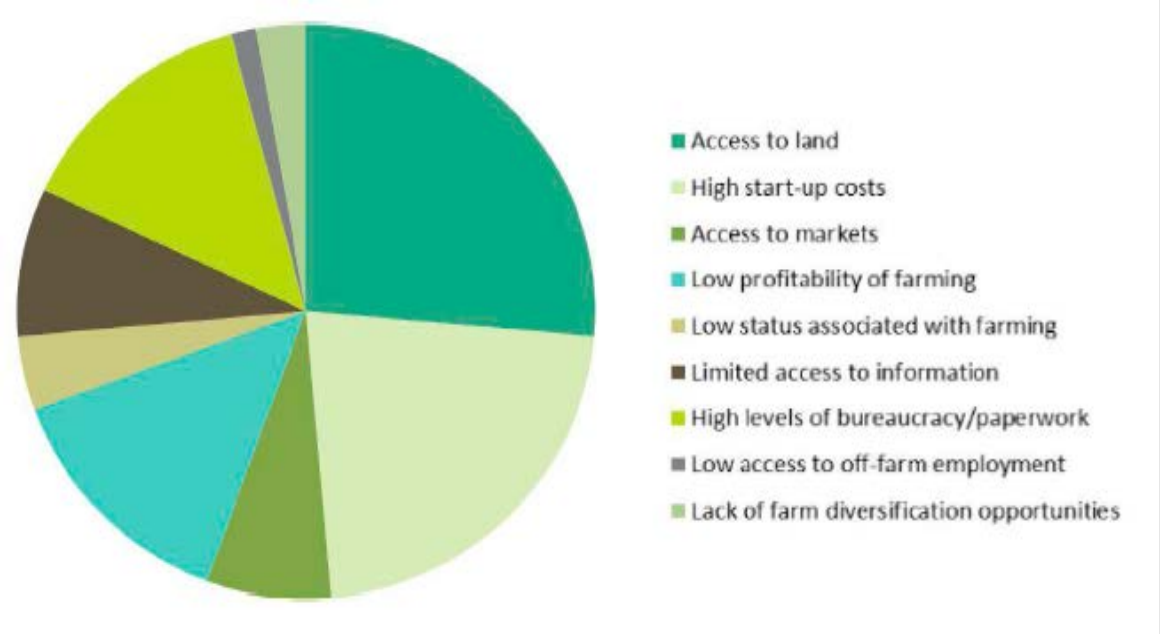
Wages for full-time work often range from between 600 and 1000 euros a month, with very little free time. In addition to the salary workers receive accommodation on the farm. For some regions there are reports of one group replacing another, and it is most often Romanians that come in, as Romania's recent accession to the EU facilitates administrative formalities and makes Romanians more mobile than non-EU citizens. In several areas these shepherds are seasonal workers who return home over winter. Recruitment happens exclusively by word of mouth. Romanians are known to have effective networks, and they will look for additional workers, if needed, or even for replacements for those who quit or do not work out. *«We are organized and, upon demand, we can find additional workers through our networks – mostly from our villages in north-eastern Romania. There, everybody used to keep sheep. Most households produced their own cheese, which is where we have learnt our trade. We know how to deal with sheep.»*[16] However, these networks also mean that sometimes individuals will work as agents, exploiting others.

The workers are often employed on an informal basis and conditions tend to be precarious, including illegality, limited rights, low pay and poor working conditions. All of this adds

16 Interview with Fiorino in Triveneto, April 2015.

to a situation, where lack of financial resources and limited access to land and credit will eventually drive them out of this sector. The situation is exacerbated by constraints related to residence permits, business licenses and citizenship rights, including compliance with CAP procedures and rules (for example, access to pasture and animal health requirements).

Figure 6: Main factors constraining agricultural newcomers to the EU



Source: Final Report EIP Focus Group on new entrants (2016)

In this context, workers often see little chance for improving their socio-economic conditions. They will remain for a few months or years, switching between farms in search for more comfortable living and working conditions, yet they will not become a permanent part of the sector.

Relationships that often lack formal contracts and scant prospects for bettering oneself are typical for much of Euro-Mediterranean agriculture (Pittau and Ricci, 2015). This reflects the complex and contradictory nature of immigrant's presence in rural regions – in that foreign agricultural workers are willing to accept working conditions and wages usually rejected by local people, which, in turn, however means that their presence will only be temporary (Corrado et al., 2016). This undermines the ability of the incoming population to contribute to the sustainability of agriculture. Cases, where shepherds have become livestock owners, are rare exceptions, however, they represent important opportunities, which need to be built upon.

Becoming a pastoral entrepreneur

There are examples of foreign shepherds who have succeeded in becoming livestock owners and farm managers. Mario, a Romanian shepherd, came to Italy ten years ago. Initially, he worked without contract or insurance. Seven years ago, he got a contract, and this made him eligible for Italian citizenship, which is needed in order to register as an entrepreneur and legally own a flock. With his savings he was able buy a few animals each year, which he kept together with the flock of his employer. Recently, he and his employer have been talking about jointly managing a co-owned flock. They plan to share costs and responsibilities, as well as the profits. With an established business, Mario will be able to bring his wife and children to Italy.

Yet oftentimes, this is a lose-lose situation. Migrant shepherds do not improve their socio-economic position, while elderly livestock owners do not find people capable of taking over their farms once they retire. Consequently, flocks disappear, marginal lands are abandoned, and this results in a loss of quality products and services.

Conclusions and Reccomendations

Migration is reshaping our societies, and hence it is also raising questions about how to integrate newcomers into patterns of sustainable development. In a time, when society seems afraid of the influx of migrants, fearing that it may challenge and undermine local culture and traditions, evidence shows that instead, in many rural areas of Europe, immigrants play a key role in maintaining and reproducing local societies and their embedded heritage. Migrants' contributions to two basic societal functions, namely the production of food and the management of natural resources, are in fact increasingly acknowledged. Moreover, the migrant workforce has provided European agriculture with the labour needed to survive and develop in difficult times, thus enhancing the resilience of the agrarian world.

This is most obvious around the Mediterranean, a region where agriculture is not only a strategic socio-cultural, economic and environmental asset in terms of food production, employment and income, but also regarding ecosystem and landscape management – and this at a time, when the region is facing major challenges such as economic restructuring, climate change and demographic change.

If we succeed in better integrating migrant workers into the agrarian sector of the EU, that is, in a way that is not just temporary but offers them long-term perspectives, this will create development opportunities for depopulated rural areas, as well as for agricultural activities suffering from a lack of available labour. Adequate policies and strategic investments are needed to ensure that this phenomenon mutually benefits all stakeholders – and reflects the vision of a Europe 2020, that is, of a Europe that is *smart, sustainable and in-*

clusive. The upcoming CAP reform should consider these options, as a young and motivated workforce is a key asset for healthy and vital agriculture and for a resilient rural world.

Pastoralism provides a representative case study in that it is an important agricultural activity in those marginal territories, which make up about a third of the European countries bordering the Mediterranean, and it is a traditional practice embedded in regional culture. Here, migrant shepherds provide a qualified workforce at a relatively low cost, thus helping to preserve part of our natural and cultural heritage, which is suffering from a lack of Europeans willing to work in such areas.

Generational renewal through ethnic substitution is not a new phenomenon in EUMed pasturelands. However, today immigrants face barriers that often prevent them from climbing up the social ladder by becoming livestock owners and entrepreneurs, and such barriers hamper the capacity of migrants to make pastoralism sustainable in the long term.

Local authorities and policy makers need to recognize the potential that may be unleashed, if today's immigrant shepherds get the chance to become tomorrow's livestock keepers and dairy entrepreneurs. Here lies the future of pastoralism in the region. To achieve this, three main issues need to be addressed:

1. Facilitate networking of livestock breeders and immigrant shepherds by establishing safe and reliable platforms for sharing information, building trust and managing contractual arrangements;
2. Upgrade the pastoral training systems in the region and facilitate immigrant's access to it, in order to let the newcomers adapt their technical skills to local conditions and also as a way to enhance their integration;
3. Reform policies and legal frameworks to make it easier for migrant workers to gain citizenship – and thus participate fully in the sustainable development of these areas, and also reform the CAP in such a way as to facilitate the integration of newcomers.

In the end, sustainable pastoralism can not merely be the result of subsidies, schemes and incentives, rather it has to be based on a comprehensive, integrated policy framework, including the review of agricultural, trade, migration and labour market polices. The viability of shepherding, the attractiveness of mountainous areas, the profitability of extensive livestock production along with efforts to support integration of foreign shepherds are key challenges for the future of an ancient activity that is vital for Mediterranean identity and for the resilience of its territories (Nori, 2015).

Appendix

Table a: The presence of immigrants in Euro-Mediterranean pastoralism – Italy

Region	Main product	% of foreigners among paid shepherds	Main countries of origin	Average wage, €/month	Source
Abruzzi	Milk	90%	Macedonia, Romania, Albania	800	Coldiretti, 2013
Triveneto	Meat	70%	Romania	800	TRAMed
Piedmont	Meat and milk	70%	Romania, Moldavia	800	TRAMed; INEA, 2009
Val d'Aosta	Dairy cattle	70%	Romania, Morocco	2,000	INEA, 2009; Coldiretti, 2013
Sardinia	Milk	35%	Romania, Morocco	500–600	Mannia, 2010; TRAMed
Calabria	Milk	35%	Kurdistan, Pakistan, India	500–600	INEA, 2009

Table b: The presence of immigrants in Euro-Mediterranean pastoralism – Greece

Region	Main product	% of foreigners among paid shepherds	Main countries of origin	Average wage, €/month	Source
Thessaly	Milk	50%	Albania, Bulgaria, Romanian Vlachs	400–600	Thales, Domestic
Peloponnese	Milk	40%	Albania, Bulgaria, India, Pakistan	400–600	Thales, Domestic
Crete	Milk	35%	Albania, Bulgaria, India, Pakistan	400–600	Thales, TRAMed

Table c: The presence of immigrants in Euro-Mediterranean pastoralism – France

Region	Main product	% of foreigners among paid shepherds	Main countries of origin	Average wage, €/month	Source
Provence	Meat	Mostly during winter for large flocks	Romania Morocco, Tunisia	1,400	TRAMed; Fossati, 2013
		65% Mostly on summer pastures	Other regions of France or northern Europe	1,500–2,500	TRAMed; Meuret, 2010
Pyrenees	Milk	Few salaried shepherds	Quite a limited phenomenon		Meuret, 2010
Maritime Alps	Meat	20%	Romania		TRAMed
Corsica	Milk and meat		Morocco		Terrazzoni, 2010

Table d: The presence of immigrants in Euro-Mediterranean pastoralism – Spain

Region	Main product	% of foreigners among paid shepherds	Main countries of origin	Average wage, €/month	Source
Valencia Community		70%	Morocco	600	AVA, 2009
Catalan Pyrenees	Meat	55%	Romania, sub-Saharan Africa	600–700	Nadal et al., 2010
Aragon Pyrenees	Meat	60%	Morocco, Romania, Bulgaria, Ukraine		TRAMed
Andalusia			Romania, sub-Saharan Africa		TRAMed
Castillas	C. Léon meat C. Mancha milk	35%	Morocco, Romania, Bulgaria, Portugal		TRAMed; Plataforma
Basque country	Milk		Romania	1,000	TRAMed
Galicia			Portugal		TRAMed
Extremadura			Portugal		TRAMed

Source: see last column.

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