

# MIGRATION, AGRICULTURE AND RURAL TERRITORIES IN THE MEDITERRANEAN

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The climatic, financial and political crises that have characterised the last decade have compounded a situation that was already quite stretched for Mediterranean rural areas and communities. The territorial polarisation which has accompanied the modernisation of the agricultural sector has materialised in increasing agricultural intensification in areas with higher potential for agricultural productivity (i.e. low plains, coastal areas), paralleled by a progressive abandonment of more marginal settings like mountainous areas, arid zones and islands where potential for agricultural intensification is structurally limited.

The implications on the related reconfiguration of agro-ecological and socio-economic landscapes have been dramatic. Family farming has become a decreasingly viable enterprise, while opportunities for and conditions of agricultural workers have been jeopardised by growing mechanisation on higher potential areas and land abandonments in lower potential ones. Though with different rates and modalities, such processes have led to an important movement of populations out of rural areas. A common feature of most rural communities throughout the region today is the emigration of rural youth in search of a more promising future elsewhere. As a result, rural communities and agricultural enterprises increasingly face demographic problems and the related implications in terms of workforce availability and generational renewal (Campagne and Pecqueur, 2014; Leavy and Hossain, 2014; Nori, 2016).

Population decline and related socio-economic desertification is particularly acute in marginal territories whose abandonment holds substantial potential risks in terms of natural hazards and socio-political insecurity, especially under volatile climatic and political conditions. Migratory patterns from and to these territories carry several implications for sustainable regional development, thus representing a major concern for citizens, scientists and policy makers alike (Zdruli, 2011; CIHEAM, 2016; EC, 2015).

## Context

The Mediterranean is characterised by a rich but fragile resource base with acknowledged diversities in terms of natural endowment. In recent decades, the region has

undergone important environmental changes mostly triggered by fast and asymmetric population growth and an increasing exposure to climate volatility. These processes have accompanied and induced important shifts in policy frameworks and political paradigms, whose implications have been dramatic for rural territories and populations, with significant differences on the diverse shores of the region (Zdruli, 2014; Carella and Parant, 2014; UNDP, 2015).

In agricultural terms, only 14% of regional land is suitable for crop production, with averages of 34.4% for northern EU Mediterranean region (EUMed) and only 5% for countries in the southern and eastern shores (Middle East and Northern Africa, MENA) where water availability represents a main limiting factor. About two thirds of the regional territories are either mountainous, isolated or semi-arid lands, also referred to as “marginal” as they present structural constraints when it comes to agricultural intensification. This North-South asymmetry has been historically reinforced by different development patterns, including economic growth, population dynamics and socio-cultural structures. Such diversity and complementarity has also shaped political and commercial relationships between the different areas of the region (Braudel, 1985; Lazarev, 2008).

In the last four decades, regional population has increased dramatically, reaching over 500 million people today. This is a primary factor that contributed to the reshaping of resource management and governance structures alike. Demographic trends present diverging patterns, between an ageing population in the Euro-Mediterranean, and fast-growing population rates on the African and Asian shores. Furthermore, economic and political crises have also triggered in-migration to the region from other areas of the globe. Intense climate change contributes to amplifying the vulnerability of rural livelihoods and the differentiation amongst communities with diverse natural resource endowment. The Mediterranean is considered the second world region that is highly exposed to climate change impacts. Following a phenomenon that originated in its southern shores, the region is becoming hotter and drier, with relevant implications on the health of ecosystems, animals and people alike (IPCC, 2014). The increase in temperature is predicted to negatively affect agricultural yields and food supply regardless of other factors. Average reduction of rainfall is projected at 4% in northern shore countries, and 27% in southern ones. Drought events are also becoming regular on EU shores, where every second year is predicted as potentially dry by 2050 (Mombiela, 2010).

Policy framework has also played an important role in the restructuring of agrarian landscapes. Following decolonisation in the 1960s, most MENA countries promoted domestic self-sufficiency through the support to and the organisation of producers with the aim to stimulate and control supply and to favour value chains integration. Dramatic changes took place in the aftermath of the drought events that stroke the region in the 1970s, ringing an alarming bell for food security paradigms. Within a globalised trade framework and following “structural adjustment” indications, the policy setting changed to an increasing reliance on food imports to serve the needs of a growing urban population. Public expenditure in support of rural livelihoods was curtailed, and subsidy and investment schemes were diverted accordingly (WB,

2009; INRA, 2014). In the MENA region, agriculture remains a main source of livelihood for a large number of local populations. Its rural territories have an abundant workforce and are characterised by family farming with limited pro-capita productivity rates and high vulnerability to climatic and economic volatility.

In Europe, since the 1960s, agricultural governance is managed through the Common Agriculture Policy (CAP), which is a main pillar of the EU. The budget of the CAP accounts for about 40% of the overall EU budget. After its initial mandate to recover agriculture and food production in the aftermath of World War II, the CAP has evolved over time through successive reforms to better take account of different aspects of European rural livelihoods. Subsidies from such a policy have come to contribute filling the gap between harsher living conditions for EU rural dwellers, and to compensate the rural-urban income divide. While this has decreased with recent reforms through its financial support to EU agricultural producers and exporters, the CAP has also played a non-negligible role in the restructuring of agriculture in neighbouring MENA countries (Lovec, 2015; EP, 2018). This was also the case with the recent implementation of the Instrument for Pre-Accession Assistance in Rural Development (IPARD) programmes aimed at harmonising the agricultural sector in eastern European countries.

Thus, regardless of which Mediterranean shore, a common feature is that in recent decades most rural youth have often been seeking better income and employment opportunities away from their origin communities. Throughout the region, emigration increasingly represents a key component of livelihood strategies for many rural households (Deotti and Estruch, 2016; Farinella et al., 2017). The phenomenon could be indicative of failures in the institutional and/or market spheres, whereby agriculture does not provide for decent and sustainable livelihoods. Somewhere, it might also be conceived as an adaptive measure to ease human pressure on a dwindling resource base and to alleviate rural unemployment. Emigrating might also represent a response to the collapse of traditional institutional structures and mechanisms due to the growing pressure of the above-described processes (Zuccotti *et al.*, 2018; Nori, 2018).

Overall, the Mediterranean represents an appropriate observatory to assess rural migratory patterns through a regional perspective, and a relevant setting to explore the interfaces of agriculture and rural development with migration studies. At the crossroads between three continents and with significant mobility of people following different trajectories, rural migrations are not new to the region. However, today, this phenomenon is of unprecedented intensity and scale, with implications for the socio-economic, environmental as well as political settings in areas of origin as much as areas of destination (Baldwin-Edwards, 2004; IOM, 2010).

Recently, these dynamics are being investigated. On the one hand, a large part of existing literature focuses on the communities of origin whereby emigrating represents a key economic strategy for rural households to expand, diversify or protect local livelihoods. Implications on origin communities are relevant in economic as well as social terms, with controversial effects of remittance investments, exposure to technological innovations and the reconfiguration of class, gender and

generational cleavages (Massey *et al.*, 1993; Vargas-Lundius *et al.*, 2008; Mahdi, 2010; Lenoël, 2014; Sampedro and Camarero, 2015; Zuccotti *et al.*, 2018). On the other hand, literature concerning migratory patterns in areas of destination has mostly focused on immigrant workers in high potential areas and intensive agricultural systems, characterised by a demand for seasonal, low-skilled manpower as part of the restructuring of the agro-food value chains, and the related economic and socio-political implications (King *et al.*, 2000; Baldwin-Edwards, 2004; Pugliese, 2011; Ortiz-Miranda *et al.*, 2013; Gertel and Sippel, 2014; Corrado *et al.*, 2016).

In order to contribute to addressing existing gaps, this work sheds light on immigration in Euro-Mediterranean marginal territories, a phenomenon that has helped counterbalancing the rural exodus that is particularly acute in these areas. The growing presence of foreign communities in Euro-Mediterranean mountainous areas, arid zones and islands is critical in redressing problems related to the shortage of qualified workers and the decline and ageing of the local population.

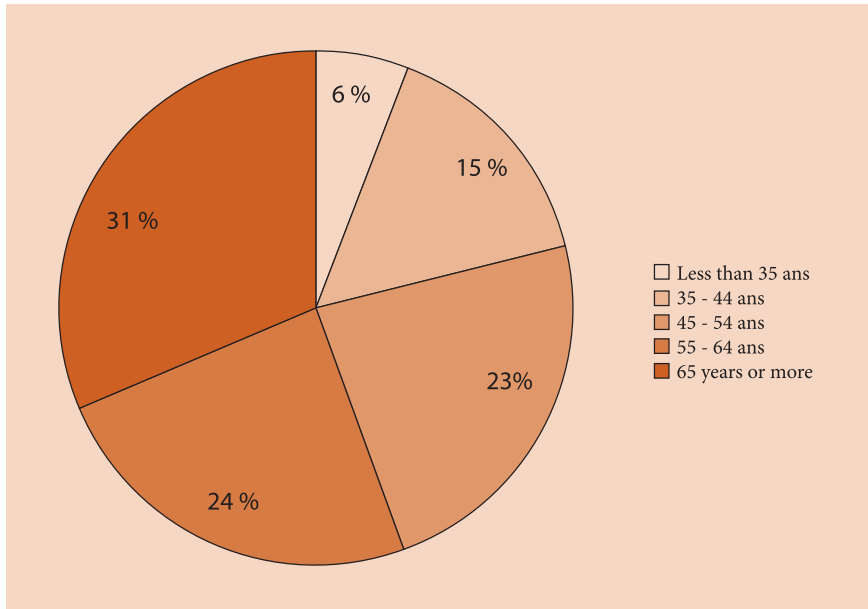
## Reconfiguring agriculture in Europe

Agriculture provides the basic source of employment and income for a mere 5% of the EU population, while overall rural population approximates 20% of the total population, who inhabit about half of the EU territory (Eurostat, 2015). Compared to neighbouring urban settings, rural areas in the EU are characterised by harsher living conditions, inferior availability and quality of basic services and facilities, and lower opportunities for employment and income generation (40% less as an average) (EC, 2011b). In such conditions, living and working in the countryside often represent an unattractive option for local youth, who seeks livelihood opportunities elsewhere. Outmigration of local youth contributes to the ageing of rural communities with related problems of workforce availability and generational renewal for agricultural enterprises and rural villages alike (EC, 2011b; Farinella *et al.*, 2017; EC, 2017).

European rural population continues to decline and many rural communities continue to be socially and politically marginalised despite the important investments in the rural welfare Europe has made through the CAP. With the aim to tackle negative social and environmental trends affecting the EU rural world, CAP support to agriculture and rural development is being reframed since the 1990s within a more multifunctional perspective. The emphasis on the wider rural context in which farming operates and its role in managing matters related to environment and climate informed the 2013 reform and it is also present in the documents introducing the forthcoming one in 2020. Specific mention is today made of “generational renewal that should become a priority in a new policy framework”, and tailored schemes that must be developed to “reflect the specific needs of young farmers” (CE, 2017, p. 23). The same document also mentions CAP efforts to play a role in “helping to settle and integrate legal immigrants into rural communities” (CE, 2017, p. 26).

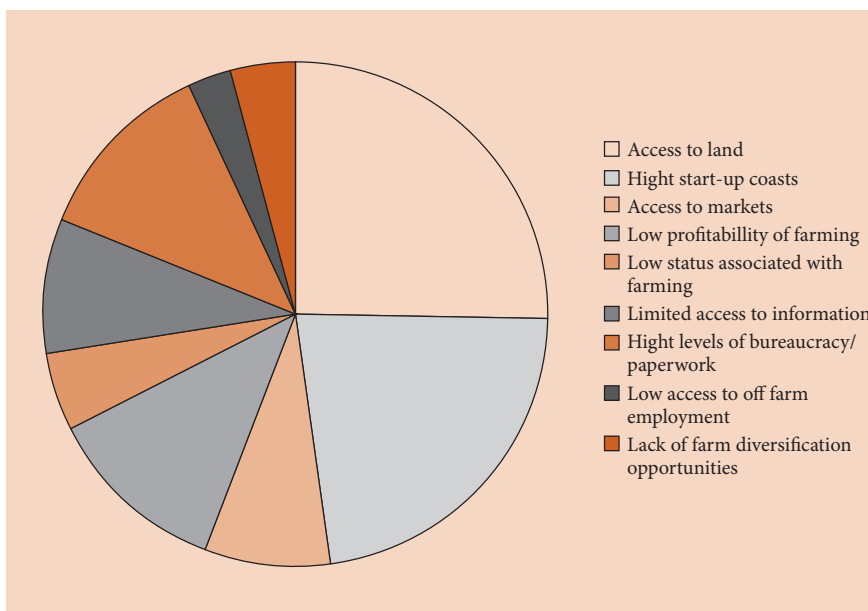
While rural population decline is visible throughout Europe, it is more specific to its Mediterranean shores. Indeed, Euro-Mediterranean countries face specific social, economic and cultural challenges when it comes to agricultural production and rural

**Graph 1 - Farmer population skewed towards older farmers**



Source : Eurostat, 2013 (CE, 2017, p. 22).

**Graph 2 - Main factors constraining involvement of agricultural newcomers to the EU**



Source : EIP-AGRI (2016, p. 15).

development, as reflected by the contributions of agricultural and rural tourism to the national GDPs, as well as by the fact that half of the agriculturally employed population and two-thirds of the farm holdings of the EU-15 were concentrated in the five Euro-Mediterranean countries (Eurostat, 2015).

Current rates of rural population decline are particularly worrying in these countries, where agriculture is losing 2 to 3% of its active population per year. Today only one every ten farmers across the Euro-Mediterranean region are younger than 35 years, while the percentage of population aged over 65 represents more than 20% of those inhabiting rural areas. Portugal leads the group with 22.7% of its rural population in this age group, followed by Greece (21.4%), Spain (21.1%), Italy (20.9%) and France (20.8%). All in all, in Euro-Mediterranean countries, agricultural labour force is older than in any other sector of the economy. These figures lead to serious concerns about an increasingly ageing and dependent population in many rural areas, and the structural consequences including land abandonment, depopulation, and lack of services, which will further reduce their attractiveness (Dollé, 2011; EC, 2012; EC, 2013b; Collantes *et al.*, 2014; Camarero and del Pino, 2014).

## Rural resilience

A key factor that has effectively helped counterbalancing the rural exodus in the Euro-Mediterranean region is the relevant proportion of immigrants that have come to inhabit and operate its countryside in recent decades. This inflow significantly contributed to tackling the social and economic mismatch of the labour markets by filling the gaps left by the local population (Kasimis, 2010). Today, in many parts of the Euro-Mediterranean region, foreign workers – both regular and irregular – make up a large part of the agricultural labour force and constitute a relevant part of the rural population. According to official data in 2013, immigrants constituted more than one-third of the agriculture salaried workforce in Spain, Italy and Greece (Table 1). This pattern has further evolved during the recent financial crisis, and it is likely to continue and accelerate in coming years due to the intensity of immigration flows and the rate of local population decline, together with the demographic trends of an ageing community versus a younger one with higher fertility rates.

**Table 1 - Recent demographic trends in Euro-Mediterranean countryside**

Spain	Italy	Greece	
9.8	7.9	20.8	% rural/active population in 2008
56.4	62.2	57.2	% older than 55 years in 2008
19.1	19.4	17	% immigrants on waged labour-force in 2008
24	37	> 50	% immigrants on waged labour-force in 2013

Source: Eurostat (2015); Sampaio and Carvalho (2013); Caruso and Corrado (2015).

Typically associated to emigration, in few decades Mediterranean Europe has turned into an area of transition for migrants heading North and eventually a destination in its own right. Immigration to Euro-Mediterranean countryside started in the 1980s and expanded since then at a fast rate. During the recent financial crisis, intense immigration has represented a key factor of resilience for the agricultural sector and the rural world, as it has enabled many farms, rural villages and agricultural enterprises to remain alive and productive throughout difficult times (Sam-pedro, 2013; Collantes *et al.*, 2014; Caruso and Corrado, 2015; Schmoll *et al.*, 2015; Nori, 2017).

Conversely, the rural world has indeed played a relevant role in enhancing the resilience of immigrant communities by providing a safe haven where immigrants sought refuge during harsh economic periods. Evidence suggests that during the last decade, EU metropolitan areas have been less attractive to immigrants as the crisis expelled a consistent workforce from the secondary and tertiary sectors (Kasimis and Zografakis, 2012; Colucci and Gallo, 2015). The majority of immigrant workers from the 2004 accession states have found employment in EU rural areas rather than in the traditional migration centres, with important proportions registered in more peripheral parts, for example the highlands and islands (Jentsch and Simard, 2009). Green areas provide newcomers with easier chances to access basic livelihood sources and employment opportunities. They also offer degrees of non-visibility and informality that help accommodating a number of immigrants, while also enabling illegal practices and situations of harsh exploitation. According to the OECD (2012), in the Euro-Mediterranean region, agriculture is the main sector where immigrants are recruited without a regular contract. Several studies point out the fact that the largely informal contractual relationships and the precarious working conditions that characterise rural areas involve extended practices of illegal hiring, low wages, high workloads, and suboptimal working and living conditions – involving dramatic social costs (Colloca and Corrado, 2013; Gertel and Sippel, 2014). These factors undermine the social acceptance and the sustainability of agricultural systems, and also represent critical constraints to the integration of foreign workers in the Euro-Mediterranean agrarian world.

The contribution of immigrant communities is proportionally more consistent in marginal territories where there is a natural resource base with limited options for agricultural intensification. Remote and physically isolated areas are associated to lower income opportunities, limited availability of social, cultural and institutional services and to an endemic decline of local population, with evidence of seasonal and permanent migrations (Jentsch and Simard, 2009; Kasimis, 2009; Osti and Ventura, 2012; SNAI, 2015; Milan, 2016). These conditions represent major obstacles for viable and sustainable rural livelihoods, pushing many young people to abandon their community thus worsening the shortage of qualified workers and compromising the future prospects of these regions.

Natural resource management in these settings is typically associated to agro-sylvo-pastoral practices, which provide for quality products and for important social and ecosystem services alike. Experience shows that neglecting resource management in

such territories holds substantial potential risks for the wider society; should agricultural practices be abandoned, the reduction of ecosystem management associated to local farming, grazing and forestry accentuates the large potential for fire, landslides, flooding and other natural hazards (Nori, 2009; Moreira *et al.*, 2016; Ragkos and Nori, 2016), as demonstrated by the dramatic flooding and fire events that have been hitting the region in last decade.

Pastoralism, the extensive livestock husbandry of mainly sheep, cattle and goats is a typical practice that characterises large parts of these territories. Pastoralism is associated to typical meat and milk products and related value chains and services, such as cheese making, landscapes, festivals and agro-tourism that are important components of local cultural heritage and territorial identity. In recent decades, pastoral farms have witnessed an important reconfiguration of the shepherding workforce, from family members to a salaried one, and eventually from local workers to foreigners. Today, as local young people seem to be decreasingly interested in working as shepherds, large parts of Euro-Mediterranean region pasturelands are in fact grazed by local flocks accompanied by foreign shepherds. Immigration has proved to be a strategic resource to overcome the human resource problems for this traditional practice embedded in regional culture and territories, but decreasingly practised by Europeans.

## Declining and shifting livestock farming in the Euro-Mediterranean region

A brief overview of the evolutions and changes that Euro-Mediterranean agriculture has undergone in recent decades is proposed with a specific focus on the dynamics that have affected pastoral systems. Data from the latest 2000 and 2010 Census in Spain, Greece and Italy are utilised together with data sourced from the TRAMed project. Through an analysis of the reconfiguration of human and natural landscapes in marginal territories, a consistent framework is provided to assess the contribution of immigrants to maintaining and reproducing European rural societies.

In line with the common trend recorded in most of the EU countries, in Spain there were 989,800 agricultural holdings in 2010, a 23.1% drop compared to 2000. In the same decade, the land utilised for agricultural purposes decreased by 9.2%. Employment in agriculture dropped by 8.7% between 2000 and 2010, passing from 2.4 million to 2.2 million, still representing about 10% of the economically active population and the number of agricultural holdings with livestock decreased by 40.9%, from 414,500 to 245,160. These figures attest that farms, which suffered the largest decrease, were those with a smaller size. Large farms with (more intensive) cattle and pigs have increased livestock heads, while sheep and goats decreased by 21% and 13% respectively. As the presence of shepherds is increasingly needed to take care of flocks in areas where natural predators are encroaching, the inflow of immigrants issued from a variety of countries has played a great role in enhancing the reproduction of several pastoral systems in the country. In the northeastern parts of the country, in the Pyrenees, immigrants constitute about the half of the salaried shepherding workforce. Together with more traditional Moroccan and Romanian



shepherds, more recent trends indicate a growing presence of natives from Bulgaria and Ukraine, together with increasing Sub-Saharan and Latin-American workers. This figure decreases to one in three workers in central Spain flocks in the Castillas, as well as in Galicia and Extremadura, where Portuguese workers are also said to operate (Nori, 2018). Some of these workers have been trained in one of the 6 pastoral regional schools present in the country.

In Greece, the number of agricultural holdings amounted to 723,010 in 2010, as 94,050 farms had ceased their activity since the year 2000 (-12%). Agricultural labour force had decreased accordingly from 1.4 million in 2000 to 1.2 million in 2010 (-15%). The livestock sector contributes for 28.3% of the total added value of Greek agriculture, and it has been particularly affected by recent declining trends. Although figures are contested, there were about 2.4 million livestock units in 2010, a 5.2% decrease from 2.5 million in 2000. Livestock farms decreased to 273,160 in 2010, about 30% less than a decade before, as about 119,800 farms with animals ceased their activities between the two reference years. Farming of extensive small ruminants is the most important livestock production system in the country. Apart from local income and national GDP, agro-pastoral systems are very important in social as well as ecological terms, as they provide the main source of employment of the rural population and the main patterns of landscape management in many internal and island territories of the country.

A massive influx of rural immigrants to Greece took place in the early 1990s, with the collapse of the Albanian regime and the consequential opening of borders. The consistent proportion of Albanians who came to live and work in mountainous villages of Northern Epirus significantly contributed to the restructuring of the extensive livestock sector and more in general to the local social, economic and demographic fibres (Kasimis and Papadopoulos, 2005). These early flows slowly opened the way to shepherds originating from Eastern Europe (Bulgaria), and more recently to workers from Asia (India and Pakistan). In the Epirus and Peloponnese, immigrants represent today about half of the pastoral salaried workforce; in Crete they account for about one third (Ragkos *et al.*, 2014; Nori, 2018).

By providing a skilled workforce at a relatively low cost, immigrant shepherds have importantly contributed to the maintenance of the predominantly familial character of agro-pastoral enterprises and to ensuring their reproduction (Ragkos *et al.*, 2016). Due to the shortage of family labour, the recruitment of immigrants has enabled women farmers to maintain their domestic role, and to younger household members to continue studying and/or looking for employment opportunities outside the agricultural sector (Papadopoulos and Roumpakis, 2009; Ragkos *et al.*, 2016). On the one hand, these contributions have enabled the development of large, innovative and specialised dairy farms thanks to the schemes proposed by the CAP, while on the other hand they have also enabled the maintenance of more traditional transhumance systems that characterise pastoral resource management in certain parts of the country.

In Italy, there were 1,620,880 agricultural holdings in 2010, a value which was the second highest among the EU-27, after Romania. Since the number of holdings

recorded in 2000 was 2,396,274, in one decade roughly one out of three farms ceased its activity. During the same period, the number of persons working in agriculture dropped by about 14%, from 4 to 3.4 million. Nonetheless, in 2010 the agricultural labour force still represented 14 % of the Italian economically active population, with an already important proportion of immigrants. In 2013, a Coldiretti research indicated that “Italian agricultural products are in the hands of foreign workers, accounting for about 25% of the total number of employment days in the food industry. [...] Foreign workers are contributing in a structural and critical way to the country’s agricultural economy and are a much-needed component in ensuring the excellence of Italian food in the world.”

Within the 2000-2010 time frame, the number of agricultural holdings with livestock decreased drastically (-65 %), from 627,200 to 217,330, with the smallest size farms scoring the highest decline. As much as in other sub-sectors even in livestock husbandry, the salaried workforce is largely and increasingly composed of immigrants due to the difficulty of recruiting local interested people. While the presence of foreigners is well reported in more intensive livestock farming, their contribution is also critical in the agro-pastoral ones. Apart from taking care of grazing herds and flocks, immigrants also play a relevant role in the dairy processing industry (Box 1).

Immigrants constitute today about two thirds of the pastoral salaried workforce in most Alpine and Apennine pastures, where the growing presence of predators has contributed to the reincorporation of shepherds in many internal areas of the country (Nori and De Marchi, 2015). In Abruzzo, a region with an important pastoral tradition, official data indicate at about 90%, the rate of Macedonians or Romanians of the total salaried shepherds (Nori, 2015). In Sardinia, where agro-pastoral land use covers most of the island’s territory and where the stock of small ruminants represents over 40% of the national one, one every three salaried shepherds is a foreigner, representing a crucial resource for the reproduction of the family farming enterprise (Farinella and Mannia, 2017; Nori, 2018). In the 1990s, Albanian, Macedonian and Moroccan communities that started working as shepherds have been replaced by Romanians in the 2000s. More recent trends indicate that as Romanians are scaling up or moving elsewhere thanks to the recently acquired EU citizenship, they are being substituted by shepherds coming from Eastern Europe, sub-Saharan Africa as well as Asia.

#### Box 1: Italian cheeses made by immigrants

Italy is a country where *Made in Italy* agro-food represents a strategic sector and plays a significant economic role in the fields of agricultural export and the tourism industry. The case of Italian cheese is representative of the contribution of immigrant workers to the globally recognised excellence of this sector. Apart from the better-known case of the Sikh community regarding the Parmesan cheese (Lum, 2011), and the Bengali communities with regards to the buffalo mozzarella, foreign communities also play a strategic contribution in the value chains of Fontina and Pecorino cheeses, which are produced in pastoral settings. In Valle d’Aosta, almost two thirds of the workers employed in cattle breeding are foreigners. From taking care of the local breed cattle to the processing of milk in alpine huts (*malghe*), they

largely contribute to the production of the famous Fontina cheese that is typical of the region. Formerly almost exclusively Moroccans shepherds, in recent years they have been partially replaced by Romanian ones. Data from 2014 reported that 303 non-EU workers (predominantly Moroccans) and 335 foreign EU workers (predominantly Romanians) were employed, together with several irregular workers (around 100) (CREA, 2014). These labourers have more than doubled over the last 2 decades, representing to date about more than two thirds of the salaried shepherding workforce. Living and working conditions are quite harsh. This is the main reason why local inhabitants do not seem interested in undertaking this work. In such terms, immigrant shepherds do not compete with local workers, and their contribution can therefore be considered as essential in keeping the traditional system of breeding alive and vital for the production of Fontina DOP (Stefano Trione; personal communication).

In Sardinia, the use of foreign workforce reflects the structural problems of the Sardinian sheep dairy system, marked by low milk profitability and dependence on Pecorino Romano, a low-cost cheese, subject to price volatility, as well as the difficulty of recruiting local people willing to live and work in the countryside. Foreign shepherds are mostly Romanians who work in medium-sized sheep farms (around 500 sheep and intensive milk production); they obtain an accommodation on the farm and accept working conditions and salaries usually rejected by local people. They have a clear temporary migration project with the aim to earn money and go back to Romania. Overall, in terms of generational renewal, the impact is very limited as the transition from manual labour to entrepreneurship and livestock ownership shows very low rates for immigrants. However, there are exceptional cases where immigrant shepherds look into opportunities to set up their own flocks, and/or cooperate amongst themselves or with local ones in sharing land, subsidies or credit assets (Farinella et Mannia 2016; Farinella *et al.*, 2017).

There are similar figures and trends in Portugal and France, although the dynamics of immigrants' shepherding workforce have followed different patterns and trajectories. There are also similar figures and dynamics in other agricultural sub-sectors in internal areas of southern Europe. For example, workers from Eastern Europe and the Balkans account for about 40% of the forestry workforce in central Italy, and in many cases they provide a crucial contribution to maintain longstanding local, traditional silvicultural systems (Cicerchia and Pallara, 2009; Luisi and Nori, 2017).

The fact that a generational change is accompanied by an ethnic one is not new to the region. Over the last century, Mediterranean pastoralism has witnessed Sardinians colonising abandoned pasturelands in central Italy, southern Spanish herders moving to graze the Pyrenees, northern Italian shepherds migrating to Provence and Switzerland, the moves of Valachos and Arvanites flock and shepherds throughout Greece and Kurdish shepherds in several regions of western Turkey (Lebaudy, 2010; Meloni, 2011; Nori, 2016). These communities have substantially contributed to keeping pasturelands of destination countries populated, alive and productive. Today, an important difference relates to the difficulties faced by immigrants to scale up from pastoral workforce towards livestock ownership and access entrepreneurial levels. The difficulties of socio-economic upgrading constrain the capacity of the incoming population to sustainably contribute to local agriculture and rural development in the longer term.

Apart from representing a main supplier of agricultural-related wage labour with overall positive effects of the local economy and territory, there is also evidence that immigrant communities contribute more in general to the social fibre of Euro-Mediterranean region communities inhabiting marginal territories. Foreign women often provide domestic work services and elders care-giving in these areas. These services enable members of local households to engage in the labour market, while also ensuring that local elderly remain in rural villages. Moreover, through higher fertility rates and their role in enhancing demographic growth, immigrant communities also play a relevant role in maintaining the provision of basic services in remote and poorly populated areas, such as primary schools and health centres.

Apart from their direct economic support, the presence of immigrants in these areas contributes to filling the gaps created due to the ageing of society and the associated decline in welfare services in communities that have been the primary targets of shrinking public budgets due to their low population density and political marginality (De Lima *et al.*, 2005; Kasimis and Papadopoulos 2005 and 2010; Osti and Ventura, 2012; Mas Palacios and Morén-Alegret, 2012; SNAI, 2015; Nori, 2017). In these territories, immigrants not only participate in productive activities, but they represent an overall strategic resource for the sustainability of local rural societies, providing a relevant contribution to repopulating remote villages, maintaining local landscapes and preserving traditions and local heritage (Kasimis *et al.*, 2010; Osti and Ventura, 2012; Nori, 2017).

## Conclusion

Migration is reshaping our societies, raising questions about the integration of newcomers into patterns of sustainable development. With push and pull factors in the agricultural and rural world, the Mediterranean region is therefore an interesting observatory enabling to assess the ways in which migrations are reshaping socio-cultural and agro-ecological landscapes, and the related implications and impacts on its different shores.

While problems of youth emigration and ageing population are common to rural areas across the globe, today, Euro-Mediterranean rural territories are home to many immigrant communities who significantly contribute to filling the gaps left by the local rural population, either in the labour market or in social settings. Today, immigrants (both regular and irregular) constitute a large part of the Euro-Mediterranean agricultural workforce. The contribution of foreign communities to the European agrarian world has been particularly significant during the recent financial crisis when the immigrant workforce has represented a key factor of resilience for many agricultural farms and rural villages.

Moreover, the presence of immigrants is proportionally relevant in many marginal areas where the decline and the ageing of the local population are more acute. In Euro-Mediterranean remote territories and isolated communities, immigrants often constitute a vital asset for local economies and societies. Through their skilled labour needed to undertake agro-silvo-pastoral activities, they provide a relevant contribution to keeping these territories alive and productive and to maintaining the local

social fibre. At a time when society seems afraid that immigration challenges and undermines local culture and traditions, evidence shows instead that in many rural areas in Europe immigrants play a key role in maintaining and reproducing local societies and their embedded heritage.

Nevertheless, the limited recognition of these contributions, the high levels of illegality associated to poor living and working conditions and the related social costs, represent main constraints to the fair integration of foreign workers in EU agricultural and rural worlds. Very scanty prospects for improvement and low rates of socio-economic upgrade undermine the ability of the incoming population to contribute to local sustainable development.

Enhancing the integration of immigrant workers in non-temporary, longer-term positions in the Euro-Mediterranean agrarian world provides an interesting opportunity to revitalise depopulated rural areas and to enhance agricultural activities lacking skilled, motivated and young workforce. Adequate policy choices and strategic investments are needed to ensure that this phenomenon brings mutual benefits to all stakeholders, so as to reflect the Europe 2020 vision for a “smart, sustainable and inclusive development”.

Sustainable agriculture and rural development cannot be merely the result of subsidies, schemes and incentives, but rather the outcome of a comprehensive, integrated policy framework, including the review of agricultural, trade, migration and labour market policies. The forthcoming CAP reform should consider these options, as a young and motivated workforce is a key asset for a healthy and vital agriculture and for a resilient rural world.

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