Integrating immigrant workforce in European pastoralism: reality, policy and practices

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Abstract. This work addresses the relevance of immigrant communities in a specific agricultural sector, extensive livestock husbandry – pastoralism. This activity provides a primary source of employment and income specifically in inner and remote rural areas, where intensive farming systems are unfeasible. Trends in the last three decades indicate severe decrements of pastoral farms and herds throughout Europe, and specifically in its southern flanks. Shortage of skilled and motivated shepherding workforce ranks amongst the main triggers of these processes. In Mediterranean Europe, inflows of international immigrants have importantly contributed to fill these gaps, providing critical, though temporary, solutions to the labour market shortcomings. This work questions the opportunity to integrate immigrant shepherds in the process of generational renewal for Euro-Mediterranean pastoralism, and the effectiveness of existing experiences concerning institutional and technical support for these processes. This poses further policy and research questions about the potentials for immigrant communities to contribute to sustainable patterns of rural development.

Keywords: pastoralism, migration studies, inner areas, Mediterranean, animal husbandry.

JEL codes: D81, F22, J15, J43, J81, N5, N50, O35, Q56, Q12, R23.

1. INTRODUCTION

International migration studies traditionally address mostly urban settings; nonetheless the interest for migrants that inhabit and contribute to rural communities has grown in recent times, particularly in Europe, where estimates suggest that over 5 million international migrants currently live, though actual numbers are likely to be even higher (Bock et al., 2016; Nori, Triandafyllidou, 2019; Rye and O’Reilly, 2020).

When turning interest to rural settings, the focus of the academy has mostly been on the role of international migration in intensive agricultural systems, such as horticulture and food processing, where migrant labour force makes up an important share in manual, low-skilled positions (Martin, 2016). Data and interviews have been sourced through the EC Marie Curie project TRAMed - Transhumances in the Mediterranean (2015-2018), and the related works undertaken with Farinella D., Ragkos A. and López-i-Gelats F. respectively in Italy, Greece and Spain.

1 The chapter is part of the European Research Council (ERC) project PASTRES (Pastoralism, uncertainty and resilience).
This phenomenon is particularly visible and investigated in Mediterranean Europe, on the one hand due to the relevance of agriculture in the national economies, and on the other to the direction of migratory flows, whereby in few decades the region has converted from one of emigration to a transit one, to a land of immigration (Ortiz-Miranda et al., 2013; Gerteiland Sippel, 2014; Corrado et al., 2016; Nori et al., 2019).

In order to fill these gaps this work proposes a different perspective, that looks into the dynamics reconfiguring the agrarian world in inner, mountainous and island settings, where capital-based production is less effective and thus considered marginal for mainstream and more frequently addressed intensive farming systems. These areas cover a large part of the Euro-Mediterranean region and present specific features and dynamics. In these settings, pastoralism – the extensive rearing of mostly sheep, goats and cattle that make use of natural and semi-natural grasslands – provides critical contributions in supporting employment and income of local communities.

This work illustrates how pastoralism in mountainous regions of Greece, Spain, southern France and Italy is similarly reliant on access to migrant labour. Pastoralism provides an intriguing perspective on the processes that have reconfigured the agrarian world, as it embodies the contradictions of an agricultural practice increasingly appreciated by society but decreasingly practiced by local people. In order to disentangle the mutual-dependency relationships between pastoral farmers and immigrant shepherds, semi-structured interviews to both groups have been undertaken between 2015 and 2018 in different pastoral regions in Italy (Triveneto, Piedmont, Abruzzi), Greece (Peloponnesus, Thessaly), Provence-Alpes-Côte d’Azur (PACA) region in France and Catalan Pyrenees in Spain (Nori, 2017). The outcomes have then been framed within a critical assessment of the processes related to the reconfiguration of the agrarian world in Mediterranean Europe. More information could be sought through the TRAMed project².

2. MODERNIZATION AND GLOBALISATION OF THE AGRARIAN WORLD

The modernization process that unfolded in the aftermath of the Second World War has pushed agriculture towards more market-oriented and capital-based patterns. The resulting incorporation of rural economies into a globalized system has contributed to the intensification of social and territorial differentiations in the agrarian world (van der Ploeg, 2008; Ortiz-Miranda et al., 2013).

The Common Agricultural Policy (CAP) and its comprehensive reforms through time have importantly contributed to steer this process. CAP is one of the founding policies of the European Union; it accounts for about 40% of the EU budget and represents an important component of farmer’s revenue. The role of this rural welfare is essential to maintain rural areas populated and farming communities productive. This policy is, however, increasingly criticised for its limited impacts in reversing critical dynamics affecting rural territories, including social exclusion, ageing and depopulation, which represent matters of increasing concerns for European citizens, scientists, and politicians alike (Eurostat, 2016; EU, 2017).

The constant decline in the number of agricultural farms and the ageing of its operators suggest in fact that CAP conspicuous financial investment and policy engagement are not adequate to guarantee the permanence and reproduction of critical farming systems (Farinella et al., 2017). Eurostat Figures (2016) clearly indicate that current conditions do not seem attractive and/or enabling for new generations to take over the challenges of producing food and managing natural resources in Europe. About half of the farming population in Greece, Spain and Italy is older than 50 years.

A key driver that has helped to contain these processes in recent decades is the significant inflow of immigrants, who presently constitute an important proportion of the agricultural workforce in Europe. Immigration has importantly contributed to compensating the social and economic imbalance of the agricultural labour market, helping to buffer the constant decrease of the local population (Kasimis, 2010; Sampedro, 2013; Collantes et al., 2014; Colucci, Gallo, 2015).

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² EC Marie Curie project TRAMed: https://cordis.europa.eu/project/id/326814/reporting/it

3. A PASTORAL PERSPECTIVE FROM THE EURO-MEDITERRANEAN REGION

The reconfiguration of the agrarian world has followed specific patterns and carries specific implications in different geographical and ecological settings, with significant implications on local socio-economics. Agricultural modernization has led to the expansion of monoculture in lowland areas and the progressive abandonment of several rural settings less suitable for intensive agriculture due to agro-ecological features, the nature of the terrains or their geographical location. In the mountainous, islands and inner territories that cover large parts of Mediterranean Europe, pastoralism provides a most effective production system, and a main local source of labour and revenue.

Greece, Spain, Italy altogether concentrate the largest portion of extensively bred small ruminants in Europe (39% of all sheep and 67% of all goats in 2016), and are the main producers of small ruminants’ meat and dairies, which are often relevant components of local culture and economy, and the related value chains (i.e. Italy’s Pecorino Romano, Greece’s Feta and Spain’s Manchego cheese). These products have however become commodities in international markets and within global agro-food chains, and therefore subject to international competition and price volatility (Farinella, 2019; Nori, 2019; EC, 2020).

Moreover the extensive grazing of ruminants contributes importantly to managing local landscape and ecological resources of rich and fragile territories through a range of socio-ecosystem services, including cultural identity and biodiversity conservation, and also contributes to support the tourism industry (D’Ottavio et al., 2017; Varela et al., 2018; Nori, Luisi, 2019). In these territories, in fact an active human presence does not hold a merely economic dimension, but the “multifunctional” role of people is critical for the maintenance of landscapes, ecosystems and societies, with important socio-political and environmental implications (Desjardins et al., 2016; Nori, Farinella, 2020).

Yet, the growing societal appreciation of pastoral high quality food products and socio-ecological services does not seem to translate into any growth or improvement for the sector. On the opposite, current Figures and ongoing trends attest to significant declines in the number of pastoral farms, flocks and operators throughout the region, with relevant implications on the local economy, demography and land use alike (Nori, López-i-Gelats, 2020).

The reasons and drivers of this phenomenon reside basically in the important economic squeeze pastoralists have faced in recent decades, which implies aspects of farm viability as well as social prestige for this sector. The intense restructuring pastoral production systems have undergone results from their incorporation into global agro-food chains, as well as form the growing dependence on agricultural policy support schemes. The products of extensive livestock systems have to compete on international markets with those sourced from more intensive production systems or those imported from other regions (Kerven, Behnke, 2011; Nori, 2019).

To keep up with such stiff competition, pastoral farms have progressively restructured their farms, with relevant implications on farm management, production economics and labour regimes. The support schemes related to CAP subsidy systems have provided significant incentives to the enlargement of production scale and investments in modern technologies (either animal feed, or health, genetics, machinery, etc...).

Overall, the degrees of uncertainty and dependency on volatile options have grown, and several farmers have decided to shut down their enterprise or could not find anyone to whom to pass it on. Those that remained in place have been mostly forced to expand their herd and re-organize land and labour resources accordingly with a view to adjust cost-benefit ratios (Mattalia et al., 2018; Nori, Farinella, 2020). Such restructuring has profoundly changed the size of the flock, the organization of the household and the relationship with the animals.

The management of most pastoral farms is today characterized by a marked separation between the administrative and the field work. On the one hand, it has to deal with increasingly complex technical and administrative requirements, in order to be compliant with policy demands and financial support measures; today you need an office to run a farm. On the other hand, the tending of the livestock has significantly increased, as flocks have grown and tasks and responsibilities increased. Work is intense and mostly reli-
Fig. 3. Trend for average sheep farm size (average of sheep number for farm) in Greece, Spain and Italy (years 1990-2016).


As a result of the geographical proximity, the collapse of the Albanian regime led in the late 1990s to the development of a circular migration and recruitment system of Albanian labourers. These events contributed significantly to repopulate and revitalize rural territories that were suffering socio-economic desertification, particularly in the Epirus mountains bordering the two countries (Kasimis, Papadopoulos, 2013). These early flows slowly opened the way to shepherds originating from Eastern Europe (Bulgaria and Romania) and more recently to migrants originating from neighboring war-torn regions. Today migrants represent about half of the pastoral salaried workforce in Epirus and Peloponnese, and about one-third in Crete. On one hand, the migrant workforce has supported the development of large, innovative and specialized dairy farms, while on the other it has contributed to the endurance of more traditional transhumance systems. As a substitute for family labour, the recruitment of migrants has allowed household members to pursue other activities or to look for employment outside the agricultural sector (Ragkos, Nori, 2016).

Since the UK left the EU, Spain remains the country with the largest sheep national flock in Europe; pastoral products are relevant in supporting local economies as well as national value chain, and in sustaining the tourism industry. In Spain immigration from several countries has also contributed to the labour reconfiguration of existing pastoral systems. Traditionally migrant shepherds originate from Morocco and Romania, but more recently also from Bulgaria, Ukraine, and further on from Sub-Saharan Africa and Latin-Americas. In the Catalan Pyrenees, international migrants constitute about half of the waged shepherding workforce (Nori, López-i-Gelats, 2020 – see below). The ratio of migrant to local shepherding labour drops to one in three in central Spain, Galicia, and Extremadura – where migrant labour is often from Portugal (Nori, 2017). Some of these workers have benefitted from some form of training in one of the country’s pastoral regional schools (Tab. 2).

<table>
<thead>
<tr>
<th>Region</th>
<th>% Immigrants on local salaried shepherds</th>
<th>Origin of most immigrant shepherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalonia</td>
<td>55</td>
<td>Romania, Sub-Saharan Africa</td>
</tr>
<tr>
<td>Comunitat Valenciana</td>
<td>70</td>
<td>Morocco</td>
</tr>
<tr>
<td>Aragón</td>
<td>60</td>
<td>Morocco, Romania, Bulgaria</td>
</tr>
<tr>
<td>Castilla-León</td>
<td>35</td>
<td>Romania, Bulgaria, Portugal</td>
</tr>
</tbody>
</table>

Pastoral products and landscapes are part of the visiting card of Southern France regions, from the Pyrenees to the Maritime Alps. Sector dynamics have evolved through a specific pattern, as an important process of immigration took place in the 1970s, with the arrival of urban citizens who were looking for an alternative lifestyle in mountainous pastoralism. Politicians and local authorities saw in this phenomenon of counter-urbanization an opportunity to revitalize territories undergoing forms of abandonment. In 1972, a pastoral law was passed (Decree 72-12) to facilitate access to land, to provide incentives to organize shepherds and farms and to invest public funding accordingly. These conditions favourably evolved into an enabling environment for pastoral farming for the incoming population (Meuret, 2010; Charbonnier, 2012).

Today in France those interested in the job of shepherding can find training opportunities in one of the specialized schools in the country (Tab. 2), and earn a salary up to two or three times higher than that of their neighbouring colleagues. These conditions have allowed French citizens from all sides, levels, and social groups to engage as pastoralists over the years. The presence of foreign shepherds is specifically associated to the large sheep flock, one in three salaried shepherds is an international migrant; Albanians have been replaced over time by Romanians, reported in 2016 at about a thousand employees in about 15,000 agro-pastoral farms, and more recently by Moroccans and Indians (Farinella, Mannia, 2017).

An interesting example in case for Sardinian pastoralism is also represented by the migratory phenomenon that affected the island by mid-1900, when hundreds of pastoral households emigrated from the western, mountainous portions (basically Barbagia and Ogliastra) to the hilly regions of mainland Italy (Tuscany, Latium, Umbria). That migratory process took place at the interface of three intertwined and complementary processes: the collapse of the sharecropping system in central Italy; the imbalances of the agro-pastoral economy in Sardinia; and the evolving favourable conditions of Pecorino Romano value chain (Nori, 2021). The outcomes of such processes allowed the revival of pastoralism in central Italy, under new conditions, but through a process that was intensively supported by institutions, though credit systems, incentives, facilitations, organizational support and capacity building initiatives (Nori, Baragliu, 2021).

By the late 1970s, Sardinian sheep represented over half the total provincial flock in Siena and Viterbo. While it is difficult to quantify this fluid phenomenon, indications from research in the province of Siena (Solinas, 1989) report that by the 1980s, 1,256 people originating from Sardinia had immigrated and settled there: 340 pastoral families who, by that time, owned a total of 16,000 hectares and about 100,000 animals, with an average of about 300 animals per farm. The situation and figures are similar for the neighbouring province of Viterbo, with 350 families and over 80,000 sheep of Sardinian origin by the late 1980s (Menna, 1990); between 1970 and 1990 the provincial sheep flock almost doubled its consistency thanks to the Sardinian contributions (Fig. 4).

Indications from the different euro-Mediterranean countries thus show a) the relevance of pastoralism for local economies and landscape management; b) the growing relevance of the immigrant workforce for the permanence and reproduction of this strategic practice, c) the significance of an appropriate policy framework to enhance the integration of newcomers into existing pastoral dynamics.

![Fig. 4. Changes in sheep numbers, Viterbo province, 1881-2017 (in 000s).](source: Chamber of Commerce, Viterbo.)
4. PROFILING IMMIGRANT SHEPHERDS

The typical profile of migrants who have come to work as a shepherd in EU Med region is that of a male, aged between 25 and 40, native of a country of the Mediterranean (predominantly Romania, Morocco, Albania or northern Macedonia). Nonetheless the number of salaried shepherds coming from further inlands is increasingly reported, particularly from Asia (Pakistan, India), sub-Saharan Africa (Ghana, Gambia, Senegal) or even Latin America (particularly in Spain). Refugees from conflict areas are also employed as shepherds at times, with cases of Syrians in Lebanon and Turkey, of Afghans in Turkey and Greece, and sub-Saharan migrants in Italy and Spain. Though not necessarily from pastoral areas, the large majority comes from a rural setting and has direct experience in livestock breeding (Nori, 2017).

History, language, and the networks of migrants have shaped the different migratory patterns. Romanians are mostly found in Italy and parts of Spain, Moroccans in parts of Spain and southern France, and Albanians in Greece. Immigrant shepherds often arrive alone, but they are part of networks of neighbours or relatives. These networks represent strategic assets, as these enable shepherds working in distant and isolated locations to remain in touch with their mates, and to share information and opportunities, accordingly, including on job-related matters. Romanians workers are particularly known for their close and effective networks, which can source workers and opportunities as needed. At times though, these networks present problems of intermediation with exploitative mechanisms (Nori, Farinella, 2020).

Average immigrant shepherds work individually and live in isolated sheepfolds, often in remote areas far from villages and with limited means to move. Cases exist in certain areas where shepherds are seasonal workers, who tend to return home or to work elsewhere when the peak season ends (i.e. once the transhumance or the intense milking periods are over). Although some of them had previous experience in extensive livestock rearing, the type of work they were looking for was not limited to this domain. Contractual arrangements are often quite informal and precarious. Conditions of illegality, limited rights, scarce salary and poor living and working standards represent typical features of workers operating in this grey context, on the margins of a rural world that is already marginal on its own (Pittau, Ricci, 2015; Nori Farinella, 2020). Salary rates normally range between 600 and 1,000 Euros per month, for a full-time engagement, with very limited free time and little holiday. In addition to the salary bed and board are often provided by the farm, though often associated to the sheepfolds.

This arrangement enables farmers to underpay workers and to maintain forms of control on them (Farinella, Mannia, 2019).

The permanence in the area of destination is also constrained by problems in accessing land, subsidies, credit: these are further exacerbated by constraints related to residence permits, entrepreneurial licenses and overall citizenship rights, including compliance with CAP procedures and rules, which would enable them accessing precious financial support. In this context, shepherd workers see little chance for improving their conditions, and for graduating socially and economically. Over the course of time, most prefer to look for opportunities elsewhere, in other economic sectors, rather than becoming livestock farmers on their own right (Nori,Farinella, 2020). Accordingly, the majority of interviewed immigrant shepherds send and reinvest their revenue in their home communities, at times on the purchase of family land and livestock, with the hope they will one day get back. They rarely see the option of remaining in the sector or in the country, as most express their intention to return to their origin areas.

It is interesting as well to look at immigrant shepherds from the perspective of the employers. Nori and López-i-Gelats (2020) provide an interesting case in this respect, through dedicated semi-structured interviews with 20 stockbreeders in El Pallars region, Eastern Pyrenean region of Catalonia, where Spain borders with France and Andorra. In that region Romanian is currently the most abundant community amongst immigrant shepherds, although the presence of shepherds originating from Bulgaria and Ukraine has been also observed, together with a growing presence of Latin-Americans, Asians and sub-Saharan Africans.

Apart from reported communication and socio-cultural challenges (e.g. Orthodox or Muslim in predominately Catholic societies), immigrant shepherds are generally appreciated for their technical skills, as well as for their endurance, flexibility and adaptability, in that they accept the working conditions and salary generally rejected by the local population. Another quality that stockbreeders stressed they look for is rusticity, that is, the capacity of the worker to adapt to a hard lifestyle. They are like us 60 years ago is a widely repeated sentence (ibid.).

Local stockbreeders claim that working with shepherds of European origins simplifies cultural relations and communication, and their technical skills are often more pertinent/appropriate to the local context. They also argue that they prefer employing young immigrants, as they are more susceptible to learning Catalan and Spanish and more readily accept and follow rules,
5. POLICY AND PRACTICES

Recent CAP reforms have tried redressing some policy shortcomings, by shifting public support accordingly from remunerating productivity to a multifunctional vision of agriculture, which recognizes and support pastoral environmental practices in managing ecological resources in marginal territories (Kerven, Behnke, 2011; Nori, de Marchi, 2015). Increasing concern is also attributed to consumer as well as environmental health, including animal welfare, which also rank positively for extensive livestock breeding.

While CAP principles seem quite favourable to pastoral farming, the reality on the ground tells a different story, and Figure 2 seen above provides a quite neat and disheartening image of the current perspective for pastoralism in southern Europe. CAP schemes are in fact criticised for providing financial support to enterprises and through mechanisms that oftentimes keep extensive livestock breeders out of reach (Nori, 2021). CAP concerns are even less consistent when addressing the conditions and rights of immigrant labourers in agricultural systems, and major steps are yet to be done in supporting the inclusion, upgrade and integration of immigrant communities in rural territories, in economic as well as in social and civil terms (Corrado et al., 2018; Nori, Triandafyllidou, 2019). A more consistent policy environment should cast rural development within a wider, comprehensive frame that also includes labour markets, environmental issues, trade agreements as well as migration policies.

Important initiatives that invest in sustainable pastoralism, also through the integration of its immigrant workforce, exist though at the local level. Several experiences and practices have evolved in recent years in many Euro-Mediterranean regions under the label of “pastoral schools”. Through strategic investments in human resources and capacities, these schools pursue the overall aim of contributing to generational renewal in pastoral areas. Accordingly, technical skills and knowledge management are often associated with specific initiatives aimed at enhancing access to land, credit and subsidy schemes, so to provide a comprehensive package to support the transition to the entrepreneurial level, and become pastoral farmers on their own right.

These initiatives are typically funded through regional schemes, often with financial contributions from the EU, and mostly target specific local animal breeds, products and services. Pastoral schools provide a potential venue for a longer–term integration of the shepherding workforce, including immigrants. Most pastoral schools are located in France and Spain (Tab. 2), although these exist in Switzerland as well, and efforts are ongoing in Italy as well.

6. CONCLUSIONS

The agrarian world is undergoing important transformations, which deeply modify the agro-ecological, institutional, economic, and human landscapes of rural territories. Visible outcomes of modernization and globalisation processes are the geographical as well as social polarisation of agricultural dynamics and the growth of an immigrant agricultural workforce. The relevance of such phenomena is particularly high in inner and remote territories, where human presence is critical not only to sustain the local economy, but also to support the social
tissue and the ecological management. Pastoralism traditionally provides a relevant to local livelihoods in these settings and thus offers an adequate perspective to assess and analyse social changes in the rural world.

In the Euro-Mediterranean region, global competition has forced most pastoral farms to restructure their practices, pushing towards an expansion of flock size, the intensification of its management and a reorganization of labour regimes. Although increasingly appreciated by society for the quality products and services they provide, pastoral practices are decreasingly attractive to local populations, and the need for shepherding labour is met increasingly by international migrants who provide a skilled workforce at relatively low costs. International migrants have thus become a strategic asset for pastoral farms, and for keeping marginal territories vibrant and productive.

Nonetheless, intense demographic decline, land abandonment and generational renewal pose notable challenges to the sustainable future of pastoral territories. Under current conditions, immigrant shepherds demonstrate a limited interest in graduating as stockbreeders and in stabilizing permanently in the host area. The limited formalization of contractual relationships, the low level of recognised rights and the limited prospects for socio-economic upgrading are interwoven drivers that characterize the constraints immigrants face in integrating locally and upgrading their status.

The recognition of immigrants’ contributions to agrarian development is growing, though at a limited pace, and still poorly translates into adequate policies, investments and initiatives. Lessons from the past indicate that the policy framework is critical in establishing an enabling environment that favours the social and economic integration of newcomers into rural settings. In difficult territories and remote communities this seems to be an unmissable opportunity for reversing ongoing depopulation and desertification. An adequate policy frame is therefore required, with a view to improve the profitability of this sector, its attraction for new generations, as well as its ability to integrate workers from different backgrounds, countries, cultures.

While CAP reforms are awaited in this respect, the experiences of pastoral schools provide interesting cases that evolve from local society and institutions with a view to tackling generational renewal shortcomings and including and involving the immigrant workforce. The evident mismatch between policy narratives and field practices as well as the ways agricultural policies could effectively translate into more sustainable pastoral farming and enhanced integration of migrant workforce represent fertile domains for future research actions.

Tab. 2. Initiative of pastoral schools in France and Spain.

<table>
<thead>
<tr>
<th>Centre</th>
<th>Training</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
<td><strong>France</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SupAGRO, Montpellier, Provence</td>
<td>Professional agricultural certificate qualified worker for sheep meat flocks</td>
<td>Since 1936 Duration 12 months</td>
</tr>
<tr>
<td>Reinach, La Motte Servoxel - 3 centres in the Rhône-Alpes</td>
<td>Multifunctional shepherding</td>
<td>Since 2004 Duration 6 months</td>
</tr>
<tr>
<td>CFPPA, Ariège-Pyrénées</td>
<td>Sheep and cattle dairy production Transhumant shepherding</td>
<td>Since 2006 Duration 6 months</td>
</tr>
<tr>
<td>Le Centre d’exploitation et d’expérimentation ovine, Digne</td>
<td>Qualified worker for sheep meat flocks, fodder crops and dairy animals with farm cheese processing</td>
<td>Since 1999 Duration 6 months</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escuela de pastoreo de Artzain en Gomiztegui, Basque country</td>
<td>Specialised in breeding the local Latxa sheep breed, and in the production of the Idizabal cheese</td>
<td>Since 1997 Duration 5 months</td>
</tr>
<tr>
<td>GRIPIA, Escola de pastores, Catalunya</td>
<td>Agro-ecological model</td>
<td>Since 2009 Duration 5 months</td>
</tr>
<tr>
<td>Campo Adentro, Picos de Europa, Asturias</td>
<td>Agro-ecological model Sperimental farm and cheese processing site</td>
<td>Since 2004 Recently expanded to Mallorca and Sierra Norte</td>
</tr>
<tr>
<td>Escuela de pastores, Andalucia</td>
<td>Focus on local breeds Shepherds and stockbreeders Training of trainers and tutors</td>
<td>Since 2010 Duration 4 months shifting location</td>
</tr>
<tr>
<td>Escuelas de pastores en Extremadura</td>
<td>Professional qualified worker for sheep production and processing</td>
<td>Since 2010 Duration 4 months</td>
</tr>
</tbody>
</table>
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