

PACTORES



Pastoral ACTORs, Ecosystem services and Society
as key elements of agro-pastoral systems in the Mediterranean

Pastoral Policies in the Mediterranean Region



Report
November 2021

Author: Michele Nori

Expert team at CIHEAM Bari: Roberto Capone, Francesco Bottalico, Hamid El Bilali,
Giovanni Ottomano Palmisano, Gianluigi Cardone, Antonia Acquafredda

Author: Michele Nori

Expert team at CIHEAM Bari: Roberto Capone, Francesco Bottalico, Hamid El Bilali, Giovanni Ottomano Palmisano, Gianluigi Cardone, Antonia Acquafredda

Acknowledgements

This work is financed by the Italian Ministry of Education, Universities and Research (MIUR) in the framework of PACTORES (*Pastoral ACTORs, Ecosystem services and Society as key elements of agro-pastoral systems in the Mediterranean*) project (<http://www.pactores.eu>) within the ERANET-MED program (project code: ERANETMED2-72-303).

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Abstract

Throughout the Mediterranean, much likely as in the rest of the world, agro-pastoral systems are being increasingly integrated into wider societal dynamics, and environmental uncertainties get progressively complemented by those generated in the market and policy domains. While ecological challenges pastoralists face are quite well known and analysed, those affecting their socio-political, institutional as well as economic dimensions have received less attention and understanding.

This piece provides a critical analysis of the evolution of policies and legislations impinging on rangeland management and pastoral development in the different flanks of the Mediterranean, and of the underpinning narratives, with a view to support a better informed and more consistent policy framework. The Common Agricultural Policy of the European Union is paramount in defining evolving and shrinking pastoralists' room for manoeuvre, not only in Europe but also in neighbouring countries, through the Pre-accession for Agriculture and Rural Development (IPARD) addressing eastern Europe, the Balkans and Turkey as well as the European Neighbourhood Partnership for Agricultural Development (ENPARD) that informs EU relationships with most Maghreb and Mashreq countries. In the Middle East and North Africa (MENA) region, despite a quite un-harmonised and diversified ideological and institutional setting, agricultural policies in the different countries seem to converge to a very similar and consistent framework. Throughout the region, the growing compliance with policy measures, institutional regulations and legislative rules have exposed agro-pastoral farms to increasing degrees of uncertainty and dependence on public subsidies, loan schemes and market prices, making their navigation decreasingly sustainable.

Particularly in the Mediterranean, where pastoralism is embedding local cultures and landscapes, the process of institutionalisation has not been beneficial for agro-pastoralists. The results of ill-informed policies, socio-cultural biases and distorted interests have been unsurprisingly deceiving; despite substantial political and financial investments, agro-pastoral systems across the regions actually suffer from similar patterns and trends, as their constituencies are shrinking, their socio-economic conditions worsening and their ecosystems degraded.

In order to redress these dynamics, the policy framework should once and for all appreciate pastoralism as the most effective system to maintain a productive and sustainable human presence in the mountainous areas and drylands of the Mediterranean region. Accordingly, public investments and support systems should better account for the specificities and potentials of extensive livestock production, and operate with a view to adequately redress and compensate for farms and people who decide to invest their life and profession in producing food in harsh areas and difficult conditions, while also providing society with important public goods and positive environmental externalities, which are hardly acknowledged and prized by market mechanisms.

Far from representing another adverse domain that complicates and constrains pastoralists' capacities, policy-making should redress existing endeavours in order to translate positive principles into effective supporting practices in the field, and adapt the legislative, financial and administrative mechanisms accordingly.

Introduction - an asymmetric region

[The Pactores project](#) evolves from the acknowledgement that, despite potentially good intentions, the policy framework has poorly succeeded in supporting sustainable food production, natural resource management, and rural livelihoods in agro-pastoral settings. This stems largely from the fact that most policymaking does not recognise or incorporate the specificities of agro-pastoral resource management and its economic and ecological potentials. Despite acknowledged scientific developments and civil society efforts to redress this biased vision, most policy and administrative domains remain in fact persistently and obstinately unfavourable to extensive livestock producers.

Accordingly, Pactores stands amongst the many endeavours that aim at pushing agro-pastoralism high up the regional agenda for a sustainable Mediterranean as this would provide relevant strategic options to tackle ongoing societal challenges – from food security to landscape and biodiversity preservation to climate change mitigation and adaptation. In such a perspective, Pactores demonstrates the strategic links between sustainable livestock systems, healthy rangeland territories, and overall societal well-being. These show the consistency and sustainability of pastoralism as effective and resilient resource management, specifically in agro-ecological settings where other forms of food production and resource management would not be feasible.

As to task 4.4 of Pactores, this work focuses on the policy and legislative frames concerning pastoral areas and production systems in southern EU (EUMed) and MENA (Maghreb and Mashreq regions), which constitute a largest part of the Mediterranean region, and the main area of concern for Pactores, with a consistent amount of available, accessible and reliable literature materials. The focus is mainly on small ruminants, sheep and goat production systems, as these show a better cost-benefit ratio in extensive breeding, and are therefore indicative of pastoral systems, which are mostly found in mountainous, inner and dryland settings, where other forms of agricultural production are less feasible.

Following an analysis of the regional context and its sub-regional specificities, the work evolves by analysing the evolution of the policy perspectives informing decision-making processes that influence livelihood in agro-pastoral areas. The conclusions highlight major controversies as well as inconsistencies, together with room for potential redressing. These are finally elaborated in the final recommendations.

Important processes and trends are transforming the rural world throughout the Mediterranean region. At the crossroads between three different continents, the region ranks amongst the most exposed to climate change and characterised by environmental changes and shifting human pressure, spurred by demographic trends and migratory patterns. Ongoing processes are contributing to reconfiguring interests, capacities and relationships amongst countries, as well as amongst communities, especially on the rural-urban and generational divides. While in the EU the number of people engaged in the primary sector has decreased steadily in the last five decades, agriculture still proves to be the main source of employment and income for a large number of MENA communities.

Overall the recent sustained economic growth has not translated in equally-shared benefits, and rural populations increasingly suffer from lowering salaries, limited access to basic services and poor political representation. Today, a livelihood based on producing food and managing landscapes does not seem such an exciting undertaking for the youth in the Mediterranean, and this poses a major policy question (Nori and Farinella, 2019). These are domains of priority concern, as the sustainable management and governance of rural territories carry relevant

consequences on wider societal dynamics; a healthy rural world is a vital asset for the Mediterranean.

As a result, the Mediterranean agrarian world and farming systems have undergone significant changes on the southern and northern shores alike, with significant implications for the sustainable rural development of the region. As a matter of fact, such processes take place on a rich but fragile resource base, the second world biodiversity hotspot with acknowledged limitations in terms of land, water, and food production, particularly in the mountainous and dryland settings where agro-pastoralism represents a major livelihood source. The commoditization of agriculture, trade liberalization and overall global integration have posed important challenges to traditional agro-pastoral systems in the region, which have to confront the competition of producers who operate under more favourable conditions (including technologically) in increasingly volatile markets.

As it will be assessed, the policy domain has played a major role in these transformations, by at times constraining, contrasting and supporting agro-pastoralists capacities and potentials. The policy framework in the EU as well as in most MENA countries has ambiguously supported on the one hand rural income and livelihoods through direct financial injections, while on the other hand it has contributed to importantly broadening the exposure of agro-pastoral communities to market dynamics, without adequately accounting for the socio-environmental services they provide, and that for other agricultural systems are defined as 'externalities'.

Assessing the policy frame in the Maghreb and Mashreq

The relevance of sheep and goat farming in MENA

The Maghreb and Mashreq (Middle East and North Africa) have vast areas of steppe and desert favourable to pastoralism due to prevalent arid and mountainous conditions. The climate is typically very hot and dry, characterised by low annual precipitation and high evaporation rates. Pastoral areas in this region are comprised of high-altitude mountains, the Mediterranean coast, and the Sahara Desert. MENA agro-pastoral systems exhibit accordingly a large range of diversity, from cattle herds in semi-arid areas to sheep and goat flocks in arid ones and camels in nomadic ranges (IFAD, 2003; FAO, 2021).

In these regions livestock economies are strategic for ensuring national food security, and also for alleviating poverty for significant portions of the rural population. It also helps alleviate rural poverty and ensures national food security. It is the prevalent form of savings as living assets for the poor; livestock products are an important source of income for rural women, who rank among the poorest livestock keepers. Livestock help reduce vulnerability to external shocks and increase smallholder resilience (Ates and Louhaichi, 2012).

Animal production and rangeland management are therefore high priority issues for national and regional politics. Livestock trade and marketing are also important economic drivers, as the demand for animal protein consumption has grown steadily since the 1960s, spurred by a fast-growing, wealthier, and increasingly urban population, and is projected to double in the next decade (WB et al., 2009; Ates and Louhaichi, 2012; Mohamed et al., 2019). Understanding the political economy underlying livestock management, production and trade is therefore critical to understanding the broader policy framework in most MENA countries

In most MENA countries herding communities hold a strong identity that often crosses national boundaries and border frontiers, as pastoralists represent important regional constituencies,

such as the Berbers or the Bedouins, but are often minorities in national politics. Some groups are primary actors in longstanding conflicts, such as the Sahrawi and Kurds fighting for political independence, Sinai Bedouins struggling against central State control or the Palestinian Bedouins resisting the military occupation. Pastoral communities display a strong attachment to their territory and an important reliance on customary social networks and governance systems. These domains have proven problematic for central States, as these provide flaws to their legitimacy in and control on peripheral areas, including border regions. Main policies have therefore focused on disarticulating and reducing the power of local customary institutional structures, while also seeking to incorporate pastoral communities into national economies, with the dual intention of enhancing the availability of animal products for the burgeoning urban population and providing opportunities to sustain rural income and livelihoods.

The regional political frame is characterised by significant tensions and disputes amongst most neighbouring countries. These frictions have long affected pastoral mobilities and trade networks. The recent conflicts that have ravaged the region – the wars in Iraq, Syria and Libya - and the longstanding political tensions, affect pastoral communities in their production and exchange capacities. On the other hand, the administrative, economic, and political differentials that characterise different State governance accrue local economic, social and political uncertainties to transnational communities, making border crossing a ‘value-adding’ activity, as it provides opportunities for trade and networking (Sinjilawi and Nori, 2005; Lazarev, 2008; Meddeb, 2012; Daoud et al., 2016).

Pastoralists as providers of animal proteins

Such a fragmented and conflictive policy framework has hindered the establishment of a coherent regional economic integration, as well as the definition of a common regional policy frame for agricultural and rural development. However, differences between national policies have been ironed out as development trajectories have converged over time, despite different ideological and institutional approaches. The main differences between the policy frameworks of MENA countries relate mainly to the legacy of the colonial experience, their positioning during the Cold War (i.e. socialist versus more market-oriented ideologies), and the importance of mineral revenues (from oil, gas or phosphates) for each national economy, as this directly reflects on their respective purchasing power in world food markets, and the need to rely on international cooperation. While a comprehensive, common regional policy for agriculture and food production has not developed, policy trajectories in this domain have recently been very much aligned among MENA countries.

Following decolonisation in the 1960s, most MENA countries promoted domestic self-sufficiency through support for producers’ prices and inputs, as well as with measures aimed at organising and controlling producers and value chain agents. This policy setting was dramatically reconfigured by the severe drought events that have struck the region as from the 1970s, highlighting both the vulnerability of local rural livelihoods and the fragility of national food security systems. Rural populations in most countries underwent dramatic losses and an intense reshaping of livelihood patterns, particularly in arid and semi-arid areas, including through an important resettling of herding households (Karrou et al., 2007). State support during those times aimed at ensuring populations’ access to basic items, including production inputs for rural communities. Eventually, as it will be assessed, such emergency measures have been converted into structural production strategies through systems of subsidies and loans, with relevant implications for the evolution of local farming systems.

Since the late 1980s, agricultural policies in most countries have started converging under the auspices of the Structural Adjustment Program (SAP) regime, which importantly contributed to reshaping State engagement and the institutional setting throughout the rural world, and specifically in remote and inner rangelands. Through major cuts and reorientations of the State budget, the SAP measures have contributed to undermining the already inefficient public infrastructure and service provision in rural areas, thus further weakening the social contract between the State and pastoralist communities.

The new policy framework established by SAP paradigms hinged on market liberalisation, resource privatization, and diverse forms of rangeland encroachment. Public expenditure from either State budget or international organisations was allocated to large, intensive farming systems (i.e., large irrigation schemes, poultry intensive plants, dairy cattle), while support to rural smallholders and drylands communities was curtailed (Alary, 2006; Dutilly-Diane, 2006; Dukhan, 2017). The focus on increased production benefited large producers at the expense of rural smallholders who were negatively targeted by national policies and international support, especially those inhabiting drier and remote rangelands (Nori, 2019).

Subsequent waves of economic restructuring in the 1990s included market deregulation and economic integration into global trade; agreements with the World Trade Organisation (WTO) and the EU increased most countries' reliance on food imports with a view to serving the needs of a growing and diversified urban population (INRA, 2015; Nori, 2019). The restructuring of the agricultural sector further contributed to crowding off important portions of the rural population towards urban peripheries, thus adding pressure on the territorial setting and also triggering migrations to other regions (Gertel and Breuer, 2007). The scaling down of state support schemes and finances left most producers exposed to market dynamics without adequate buffering nor negotiation skills, or power.

MENA countries today remain largely and increasingly deficient in food products. The livestock sector is no exception, and in order to meet a growing consumption demand from a limited and volatile production setting, State policies pursue, on the one hand, the intensification of livestock production and, on the other hand, an increasing reliance on import trade in food and agricultural inputs, including livestock feed. The increasing reliance on market exchanges to meet countries' basic needs is an important concern for national policy, as these are the pillars of the country's food security and thus of State legitimacy.

The high reliance and increasing dependence on market exchanges to satisfy countries' basic needs are the main elements of concern for national politics as these address the pillars of national food security and thus of State legitimacy. Under a general regime of market liberalisation, value chains involving livestock (as much as those involving cereals) remain firmly under State control. In most countries, policies to sustain food self-sufficiency and protect domestic markets are considered essential to ensure social stability; price support measures, food subsidies to consumers, quota systems and trade barriers are implemented accordingly (IFAD, 2003; Alary and El Mourid, 2005; Dutilly-Diane, 2006).

Overall, the systems established to control domestic food production and its market supply have proven unviable for most national treasuries, especially those of countries such as Tunisia without direct mineral revenues, and risky for all, as they expose national food security to the volatility of the international trade arena. Apart from its economic costs, this system has proved unsustainable in other aspects as it contributed to detaching producers from their resource base by breaking the strategic connections between the production and reproduction dimensions of

agricultural systems, as will be analysed below. On the other hand, these measures made cross-border transactions significantly valuable, as opportunities change from one side to the other of the frontier (Meddeb, 2012; Nori and Baldaro, 2017).

The intense incorporation into State-led schemes (subsidies, loans, and input supply) and market-driven mechanisms has importantly reconfigured the operational perimeter of pastoralists in most MENA countries and contributed to grossly reducing their economic and political autonomy. State-assisted commoditisation of livestock products had become a main production objective for most pastoralists, who are fundamentally **conceived as mere livestock producers having to comply with satisfying the demand of an increasingly demanding population** (Bourbouze, 2000; Gertel and Breuer, 2007; Daoud et al., 2016). The economic squeeze and the degree of dependence resulting from State schemes and market dynamics are so dramatic (also refer to Figure 2) that under normal circumstances, ewes are described as «*mangent avec l'argent*» (feeding on money) or «*à se manger l'une l'autre*» (eating each other) (Rachik, 2009:82) or «*la brebis mange sa soeur*» (an ewe feeds on her sister) (Chattou, 2016:141). Thus, in crises such as a drought or sharp price drops, it is only through State aid or emigrants' remittances that herders can support their livelihoods and the needs of their herds (Elloumi et al., 2006; Nori, 2019; Pappagallo, 2021).

The reconfiguration of pastoral farming in MENA countries

Though at different paces and along different trajectories, the reconfiguration of pastoralist communities within the evolving institutional dimension has taken place across the MENA region through three intertwined and complementary dimensions, whereby a) pastoralists have been (re)organised, b) their resources have been transferred, and c) their livelihoods have been increasingly integrated into the broader economic and political arena.

To ensure their social and territorial grip in remote and inner drylands, following independence, most States have engaged pastoral communities in **formal organisations**. Aimed at supporting national identity and State legitimacy, this has been a strategy pursued to scale down customary institutional structures, often by co-opting local elites and leaders, and through forms of petty remuneration, public employment schemes or tolerance for informal economic arrangements. In the example of Syria, Assad's patronage networks have allowed the State to become the major source of employment amongst rural communities (Dukhan, 2017).

From the pastoralists' end, these evolutions have been used as forms of collective action for lobbying and influencing political decision-making. Pastoral communities have made instrumental use of formal organisational arrangements to better respond to ever-changing policy and economic conditions, specifically to facilitate access to public services and support, including to receive relief in times of drought. Forms of patronage and State support in terms of subsidies, loans, and provision of production inputs have eventually become the main drivers of agricultural modernisation, and of pastoral institutional incorporation. With producers increasingly relying on external inputs, financial schemes and technical assistance for both their production and marketing strategies, pastoral organisations have often been a main prerequisite for enjoying these forms of public support (Nori, 2019).

Organisational arrays followed countries' different political and ideological trajectories. In Tunisia and Algeria, the cooperative systems boomed, then busted, whereas in Syria and Iran it remained for longer. Morocco, Egypt and most Gulf countries set in place other, more liberal structures for pastoral communities. These institutional arrangements aimed at dismantling pre-

capitalist forms of organisation (tribes, clans, local elites) by replacing them with modern institutions, while also extending the outreach of State agencies and services amongst producers. With their extended and embedded articulations, the Sheep and Goat Breeders' Union (SGBAT) in Turkey and the Association Nationale des éleveurs Ovins et Caprins (ANOC) in Morocco provide the strategic social infrastructure to facilitate government outreach in terms of resource provision (Giray et al., 2015). Over time, however, mere administrative features have been superimposed by customary and social affiliations through organisations defined as *ethno-lignagers*, whereby the State recognises degrees of local identity and autonomy (Belhedi, 1989; Lazarev, 2008; Nori, 2019b). These evolutions have also been perceived as a strategy to allow and justify State disengagement in dryland territories, in line with SAP dictates (Rae et al., 2001; Bessaoud, 2005; Elloumi et al., 2006; Chattou, 2016; Nori, 2021).

Along with the reorganisation of pastoral communities and their herding systems, **control over rangelands** became a contested arena where local communitarian and central State agendas collided. Rangelands are, in fact, the asset around which pastoral livelihoods and economies were structured and socially organised. Central States with the support of international organizations have in most cases pursued the control of dryland steppes and communities, through programs of sedentarisation and individualisation of land rights (Abaab et al., 1995; Bourbouze, 1995; Bocco, 2006; Mourid, 2007). Institutional arrangements often placed rangelands under the responsibility and control of Forestry Ministers, departments and officers, whose main agenda was typically to curtail access to grazing pastoralists, and to ensure institutional arrangements that favoured more exclusive land rights.

Driven by the changing institutional environment, legislative measures, direct investment and local political economy, individualisation of land rights and conversion to crop farming have also been pursued by local elites, who secured their land rights at the expense of local communities (Ben Saad and Bourbouze, 2010; Kreuer, 2011; Nori, 2019). Unequal land distribution and insecure land tenure are today recognised by most MENA scholars as the main shortcoming in the regional and country-level policy frame (Alary et al., 2005; Ates and Louhaichi, 2012; Mohamed et al., 2019).

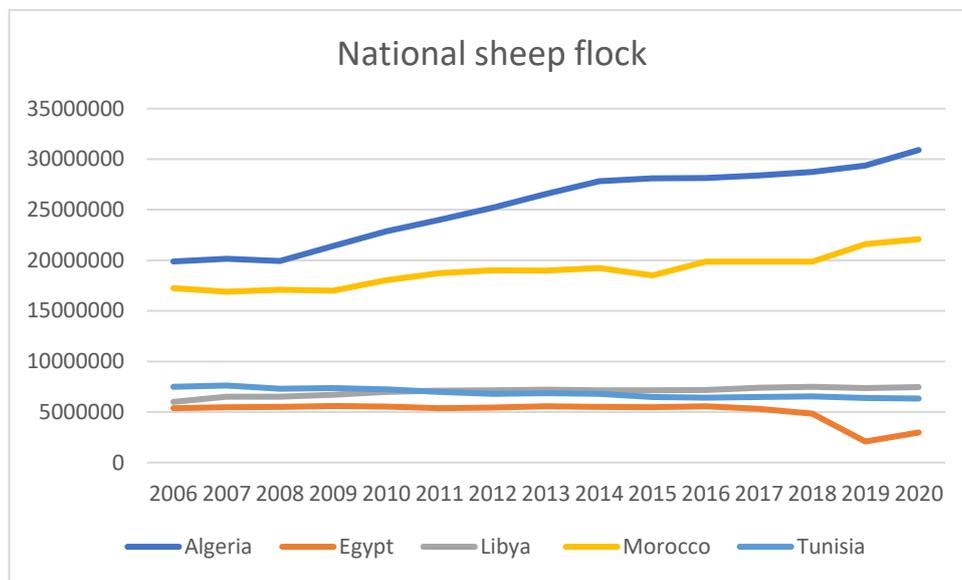
Mobility patterns followed accordingly, as the free movement of livestock over time was severely restricted by the hardening of international and administrative boundaries that cut across pastoral routes and by policy initiatives aimed at herders sedentarisation and conversion to more intense farming. Support from international organizations and technological advancements have been instrumental in reshaping territories and resource use in patterns defined as 'inverted mobility' or 'mobile sedentarisation' (Bourbouze, 2000; Bocco, 2006; Rachik, 2009). Mechanised transport and water pumps have extended the ability of pastoralists to access and manage distant resources and market opportunities while staying in rural villages. Roadways, trucks, cars and motorbikes, mobile phones and the internet have contributed shortening the distances between herding households, range resources, and market opportunities (Gertel and Breuer, 2007; Bourbouze, 2017; Vidal-González and Nahhass, 2018).

Policy efforts basically focused on stabilising and ensuring a steady and constant flow of inputs to the livestock system in order to control and intensify its production and ensure a more stable and growing output level (see Roe, 2019). No wonder this was accompanied and complemented by huge investments in water infrastructure and irrigation development in higher-potential areas – both key drivers of agricultural encroachment on rangelands' grazing potentials (Abaab and Genin, 2004; Elloumi et al., 2006; Azimi et al., 2020). Complementary to this, most MENA States engaged as well in establishing the physical and political infrastructure tasked with the supply of animal feed (forage, barley, and agricultural by-products), often imported from other

countries or regions. Lubricated by subsidies and loans, and organised through political connections and socio-economic relationships, the supply infrastructure is usually organised through arrangements involving diverse institutional levels that play on both public and private grounds, where State agencies intertwine with private operators and market agents (Nori, 2021).

From an exceptional measure to support herds in times of drought, animal feed supplementation became the main animal production strategy. While the provision of external inputs was justified to decrease producers' exposure during years of scarcity, this strategy provided significant incentives to retain greater numbers of animals, reduce their mobility and integrate agro-pastoral economies into changing institutional and market frameworks (Darghouth and Gharbi, 2011; Jemaa, 2016).

Figure 1 – Sheep population trends in the Maghreb countries (2005-2020)



Source: FAOStat dataset.

The modernisation that materialised by institutionalising the emergency and relief paradigm as the mainstream production system resolved the short-term objective of increasing production to serve the growing consumer demand. However, the long-term implications of such a development paradigm soon came to light. Feeding animals with imported and subsidised feed and selling their products in controlled markets made sense in short-sighted political terms, but it generated as well new forms of uncertainty and risks. Boosted by externally acquired production inputs, animal density grew continuously over decades (Figure 1) and detached significantly from local grazing potentials, as their size, structure and mobility stopped adjusting to inter-annual climatic variations. As a consequence rangelands underwent unbearable pressures, accompanied by the collapse of the institutional arrangements that traditionally regulated their access and use (IFAD, 2003; Alary et al., 2005; Alary and El Mourid, 2005; Bourbouze, 2017; Mohamed et al., 2019).

The burden for State structures, in terms of financing and managing this system grew unbearably in countries not enjoying mineral-related revenues for the national coffers. As a result, the economic costs of the continuous supply of production inputs (forage, feed, and water) was gradually transferred to the shoulders of pastoral households, and financing it eventually became the prerogative of family funding, often generated through non-farm sources or remittance flows (Rachik 2009; Schilling et al. 2012b; Boubakri and Kadija 2014; Chattou 2016;

Sadiki 2016). In compliance with SAP dictates, State-induced market integration of livestock producers reached its climax when it had become directly financed through private resources.

In a broader perspective, the decoupling of livestock feeding from rangelands' potentials and the growing reliance on external resources contributed to the **overall detachment of the production and reproduction systems**. While contributing, on the one hand, to a fragilisation of dryland ecosystems, on the other, it generated a dramatic dependence on State support and market-driven mechanisms, including on international trade and the global arena for the acquisition of production inputs. Altogether these dynamics held relevant consequences on local communities' capacities to control and manage the core pillars of their livelihoods as well as on their socio-economic conditions. Increasingly high production costs and growing indebtedness, coupled with the volatility of subsidy schemes and market prices, have led to the degradation of socio-economic conditions in most dryland settings (Dhia, 1995).

Pastoral households had to reorganise accordingly to tackle these new and evolving uncertainties; shifting livelihood patterns were marked by a more sedentary living of local populations and a strong preference for more remunerating and less-labour intensive activities (Nefzaoui et al. 2012). **In many peripheral rural communities outmigration became a mainstream strategy**. While this initially addressed mostly expanding urban poles, rural emigrations progressively targeted international routes and patterns (Zuccotti et al. 2018). The income generated and remitted by migrant members is now a relevant financial asset for most pastoral households, specifically to cope with crises (e.g. a drought event or an abrupt spike in the market), or either to take advantage of local opportunities (e.g. expanding the herd or acquiring land) (Elloumi et al., 2006; Nori, 2019). The distant migration of the young rural labour force has significant implications for local development in terms of family configuration, farm structure and labour regimes, including in gender and generational terms.

These evolutions contributed to in-depth, local overall processes of resource management, capital accumulation, and social mobility (Boubakri, 2005; Pappagallo, 2021). Social inequalities have widened as wealthier actors are better able to capitalise on State support, improved land investments and evolving opportunities; better positioned groups expand their herds and hire herders from impoverished families to capture lucrative market opportunities. On the other hand, individuals in lower economic strata and more difficult territories tend to lose out from these transformations (Bourbouze, 2000; Boubakri, 2002; Dutilly-Diane, 2006; Mourid, 2007). The mix of growing inequality, insecurity and dependency - together with a gradual detachment of State engagement in remote drylands - have likely contributed to the sense of precariousness and frustration that has triggered social and political tensions in parts of the region (FAFO, 2016; Daher, 2018).

Until the 1990s, the State involvement in the agricultural sector meant interventions such as price support measures, consumer food subsidies, production and area quotas, and trade barriers to support food self-sufficiency. While farmers often received subsidised inputs for credit, seed, fertiliser and fuel, they were also obliged to sell their output to State monopolies at fixed prices, which, depending on the country, were either below or above market prices. During the last decades the agricultural sector has been transitioning from being heavily controlled by the state to being largely influenced by market forces.

In the 2000s, a new policy framework began to evolve in which local communities are not just engaged in executing tasks or as passive recipients, but participate as active agents of change - although not everywhere at the same level. Promoted by international agencies such as ICARDA

and IFAD, forms of **community development planning** have become mainstream in political discourse as well as in investment programmes. The effort has therefore been to promote the decentralisation of responsibility and authority for natural resource management, with a clear emphasis on the community level. In addition to more traditional infrastructure schemes, specific investments have been made to support livelihoods, including through the provision of basic services and a focus on diversifying local economies. Throughout the region, specific concern in this regard has been devoted to gender and generational aspects and the wider inclusion of youth and women, particularly in the development of income diversification activities, including through the marketing of local products (Nefzaoui et al., 2007).

Table 1 – Main steps in evolving policy frameworks in the Maghreb and Mashreq regions

<i>Period</i>	<i>Process</i>	<i>Impacts</i>
Post-colonial development patterns 1960s	related to the heritage of the colonial experience, their positioning during the Cold War, and the relevance of mineral revenue	Most countries promoted domestic self-sufficiency through support of producers' prices and inputs and the organisation of production to stimulate and control supply and favour value chain integration.
Severe drought events 1970s	highlighting the vulnerability of rural livelihoods as well as the fragility of food security systems	State support aimed at ensuring populations' access to basic consumption and production items, including animal feed and vet services for livestock producers and the resettling of herding households. Emergency measures to support herd survival – these eventually converted to structural production strategies.
Structural Adjustment Program (SAP) 1980s	forms of market liberalisation, resources privatisation and, eventually, growing State disengagement	Public expenditure in support of rural livelihoods was curtailed, particularly for pastoral areas, leading from self-sufficiency to market dependency.
Subsequent waves of economic restructuring 1990s	market deregulation and economic integration into global trade; international trade agreements (WTO, EU) increased most countries' reliance on market dynamics	State support, subsidy and credit schemes, and huge investments in water infrastructure and irrigation development in higher potential areas.
More recently	More systemic and comprehensive approaches, taking into account social and ecosystem dynamics; Forms of community development planning; Local knowledge and participation; Resource access through pastoral codes (i.e., Tunisia).	

A critical perspective on MENA policy framework

The institutional and market dynamics in support of stabilising and intensifying livestock production in the region have fuelled policies that prove inconsistent in addressing the long-term needs of rural producers and ecosystems. Pastoralists in MENA are mostly regarded as

basic suppliers of animal products, and receive public support accordingly. Repeated attempts have been made to convert herding communities into stable and controllable producers through their incorporation into State and market mechanisms. This explains to a good degree the rationale behind most public funding that supports capital- rather than labour-intensive farming systems. The retrenchment of public engagement and the consequent polarisation of development dynamics have carried significant implications for the ecological, economic, as well as socio-political spheres. Particularly in the arid and remote pastoral regions, the longstanding degradation of local livelihood dynamics holds substantial risk potential in terms of natural hazards and social insecurity, especially under volatile climatic and political conditions.

Herd management and livestock mobility patterns have profoundly reconfigured, and while livestock moves are increasingly limited as feed and water are brought to them, the mobility of family members has escalated, through migratory flows that are expanding and intensifying. The economies of most pastoral communities in MENA countries are diversified and often sustained by non-agricultural incomes and remittances, and their livelihoods are increasingly shaped by processes unfolding outside the realm of animal production and very often also outside regional boundaries. The transformation of the institutional, social and territorial landscapes generates new opportunities as well as tensions along ethnic, gender, and generational cleavages, and contribute differently to how pastoralists face uncertainties in the region.

As in other parts of the world, development approaches aimed at peripheral communities and marginal territories are adaptations of mainstream visions designed for intensive production in high-potential areas, rather than being tailored to mountainous or dryland settings, and negotiated with the involvement of local communities. More broadly, the policy framework that informs governance of rangeland and pastoral systems in the region has mostly evolved to serve others' interests - the State, consumers, international agendas, rather than arise from and support the well-being of local communities.

Accordingly, institutional and economic arrangements have not necessarily been aligned with the interests of pastoralists, for whom the reconfiguration of land, livestock and labour regimes has generated challenging uncertainties and weakened their ability to steer the transformations in their livelihoods. As a result, the recent history of policy making, investments and interventions in MENA drylands is one of strained economic development, stressed community networks and degraded ecosystems. The erosion of pastoral knowledge and skills, the loss of landscape biodiversity, the diminished capacity to cope with climate change dynamics, and the broader social and environmental implications of the political and economic marginalisation of drylands could have significant implications for the entire MENA region and societies.

Assessing the policy frame in Mediterranean Europe

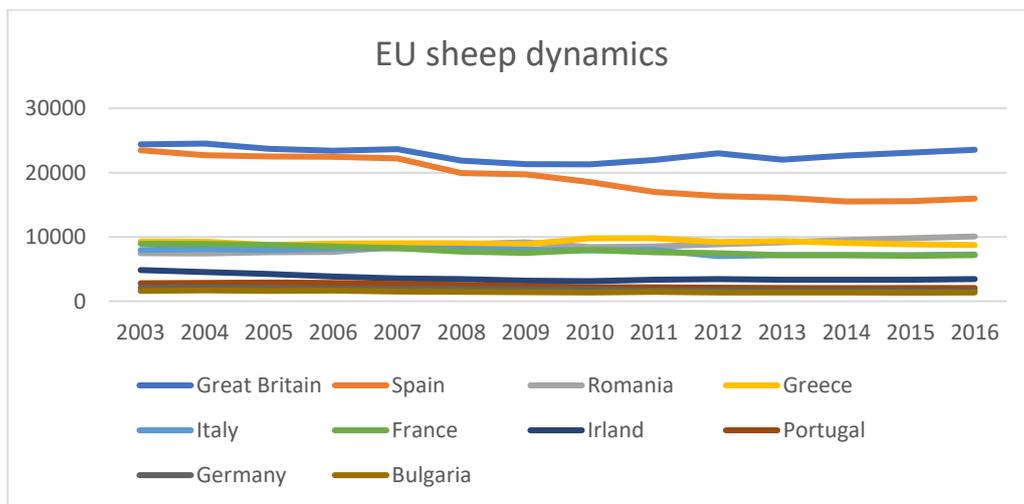
Sheep and goat farming in Europe: an homogeneous diversity

Europe has a wide and diversified set of extensive grazing livestock systems. About one-fifth of agricultural land in the EU is devoted to extensive livestock breeding; these are mostly concentrated in southern Mediterranean Europe, including the Balkans. Throughout Europe, the land under grazing management covers several tens of million hectares. In central and eastern Europe, nearly seven million hectares of the Carpathian Mountains are covered by open semi-natural grassland habitats; in the Iberian Peninsula, there are over three million hectares of wood pasture, whereas France alone counts about ten million ha of grazing lands (FAO, 2021).

Across the continent, pastoralism shows a specific added-value and comparative advantage in harsh territories, mostly in mountainous areas, drylands, and islands where the alternative costs for land and labour make this a convenient option compared to other forms of land use (EC, 2018). Sheep and goats are reared predominantly in these settings, particularly in southern EU countries, due to their capacity to adapt to harsher soil and climate conditions. Without small ruminants, huge disadvantaged rural settings (defined as the Less-Favoured Areas, LFAs) in Europe would be abandoned and become fallow, with significant ecological consequences. Cattle, pigs, and equines may also be reared in extensive ways, but their significance in pastoral terms is lower than that of small ruminants.

About 80% of the European sheep and goat flock is concentrated in Spain, Italy, Greece, and southern France (EU, 2018; Nori and Farinella, 2019), which present a wide range of biophysical conditions that cover main types of pastoral systems in the Mediterranean EU region (EUMed). Out of approximately 100 million sheep and goats in Europe, about a half are raised in pastoral systems (EU, 2018). The typical pattern includes grazing systems based on the use of permanent pastures, especially in upland and mountain areas also through forms of sylvo-pastoralism. Mostly due to Common Agriculture Policy (CAP) incentives and animal health issues, the European sheep population has been growing steadily during the 1980s; it has then been constantly falling since the early 1990s, and this tendency has increased over recent decades, though with different pace in the diverse countries.

Figure 2. Sheep flock dynamics in main EU countries, 2003-2016 (000s)



Source: EU, 2021

Pastoralists as guardians of less-favoured but high-nature valued areas

The policy framework in Europe, quite distinctively from those of other regions, recognizes the multiple values of pastoralism, and its contributions in terms of cultural heritage, environmental management and territorial cohesion. And **it has specifically issued a set of principles and policies to protect pastoral practices in Europe**. The principles delineated in the Common Agricultural Policy (CAP) are implemented through the subsidiarity principle that characterizes EU governance. This implies that different institutional levels play diverse and complementary roles whereby the more immediate and local level (often the national or local one) is supposed to have better capacities to implement the principles dictated in the EU Directive (Caballero et al., 2009; Nori and Gemini, 2011).

As one of the founding policies of the EU, the was established in the Treaty of Rome of 1957 to increase productivity, enhance farmers' income, stabilise markets, and ensure food supplies and

reasonable prices for consumer. For the first two decades it mainly spurred agricultural production within a framework of agricultural modernisation and the development of the global agri-food chain, prompting serious concerns over market distortions and environmental implications. Subsequent CAP reforms have taken into increasingly account evolving societal concerns for a more sustainable and multifunctional perspective of EU agriculture. As will be assessed, CAP reforms need to be embedded in a broader policy framework that also includes trade agreements, changes in public attitudes and societal concerns, especially regarding environmental aspects. To date CAP remains a strategic pillar of the EU and the main overarching policy regulating rural development that engages a substantial share of the overall EU finances (about 40 per cent of the total budget in 2018).

For most European livestock breeders, CAP plays a significant role; its financial support may represent about a half or more of their revenue, with trends and variations changing from one country to another depending on local measures and implementation (Nori, 2015; Fréve, 2015; Ragkos and Nori, 2016). The majority of farms would not be viable today without this public support, given that production costs are constantly rising, while prices of sheep and goat products remain mostly stagnant (EC, 2018). The incorporation of European herders into CAP modalities is nevertheless an ambiguous and controversial process: while pastoralists claim autonomy and independence, they also recognise that most farms would cease to exist without institutional support (*“sans les primes, c’est la mort du métier !”*, Fréve, 2015:7). The degree of dependency on CAP measures, mechanisms and funding is high and also implies that any change in the policy framework has a significant impact on the survival of the sector (EU, 2018; Nori, 2019; Bertolozzi et al., 2021).

Overall CAP mandate is to provide affordable food for EU citizens and a fair standard of living for farmers, to promote balanced territorial development and sustainable management of natural resources. Two key concepts informing CAP and helping operationalise its principles in pastoral settings are those of Less-Favoured Areas (LFAs) and High Nature Value (HNV) (Refer to PASTRES, 2021). **In such evolving context, pastoralists have been increasingly demanded to play their role in managing natural resources and maintaining landscapes in LFA and HNV habitats**, including supporting socio-economic development and stabilizing population in marginal settings (Nori and Gemini, 2011; Beaufoy and Ruiz-Mirazo, 2013; Nori and Farinella, 2019).

Accordingly, the European policy frame now recognizes that, through grazing, ruminants provide a broad set of environmental benefits, including soil stability, water cycle regulation, biodiversity maintenance, carbon stocking and increased resilience to climate change dynamics (Caballero et al., 2009; Keenleyside et al., 2014). EU remuneration for socio-ecosystem services evolves from the acknowledgement that important societal threats originating in natural settings – such as landslides, forest fires, avalanches, erosional processes and flooding – are mostly due to the growing abandonment of marginal territories, for which the decline in extensive farming systems is a main driving force. This is particularly the case for the Mediterranean EU countryside, a sophisticated mosaic of intertwined human-nature relationships, increasingly challenged the evolving climate change scenarios (EU, 2020).

Table 2. Main steps in CAP Reforms

<i>Year</i>	<i>Policy principles</i>	<i>Implications</i>
introduced in 1962	In the first two decades it mainly spurred agricultural production within a framework of modernisation and the development of the global agri-food chain; CAP concern is to ensure	Excess food supply, market distortions, environmental problems, and consumer

	adequate income for producers while maintaining food accessible to consumers.	concerns about health and quality
1970s Mansholt reform	Incentives for the modernisation of agricultural holdings, towards less and larger farms. Subsidy systems to compensate producers operating under difficult circumstances; quota system in dairy production was then introduced in 1984.	First steps out of overproduction and towards environmental concerns
1992 Mac Sharry reform	More multifunctional perspective and concern for environmental protection, food safety, land health, and animal welfare.	Concepts of HNV and LFA; remuneration of environmental services
	Specific incentives for small-scale farmers and for those operating in inner, disadvantaged, remote or poorly connected areas, with a view to countering depopulation and abandonment.	Compliance with intensifying EU engagements in world trade organizations
2003 Fischler reform, part of the EU Agenda 2000	New focus on sustainability; cross-compliance with environmental objectives, support of multifunctionality and rural development; decoupling of direct payments from production through the single payment scheme.	From euro to livestock head to land hectare; important decline in flock consistency
2014 Çiolos reform	Introduced 'territorial' dimension, which specifically addresses the social dimension of the rural world and recognises that several challenges affecting rural livelihoods are driven by factors that are external to agriculture; important shift for pastoralists from livestock producers to environmental stewards.	Focus on three long-term CAP objectives: viable food production, sustainable management of natural resources, and balanced territorial development
2020 Reform European Green Deal	Voluntary eco-schemes, further evolution of the environmental and climate-related concerns; focus on farmers' organisation, participation, and capacity building.	2020 vision for a 'smart, sustainable and inclusive development'; 'Farm to Fork' approach

Initial CAP support led to excess food supply and related market distortions and environmental implications, which eventually induced CAP reforms to better account for different aspects of agriculture within a more sustainable and multifunctional perspective, including specific requirements for environmental protection, food safety, and animal health and welfare. Thereafter, CAP support has increasingly been conditional on compliance with requirements associated to a different set of standardised measures, defined through time as eligibility rules, greening requirements, agro-environmental measures, good agricultural and environmental conditions, and – most recently – voluntary eco-schemes.

A fair analysis of the EU policy frame for agriculture and rural development should take into account the wider European policy context as well as national and international engagements and commitments. When it comes to pastoralism, two main influential policy domains that have impinged on their institutional setting are those relating to trade agreements and the related marketing of livestock inputs and products, and those concerning the environment and governing the natural resources used by pastoralists.

Since the 1990s, the EU has further accelerated the **process of integration into global market** dynamics through the engagements with the World Trade Organisation (WTO) and other international and bilateral policy trade frameworks. Together with monetary union, WTO and regional trade agreements have deeply facilitated the circulation of agricultural inputs and products. For pastoralists this has meant a further intensification in market competition, as, on

top of the livestock products issued from European intensive systems which feed their animals of cheap imported inputs - they also have to compete with those originating from other world regions, specifically New Zealand, Australia, and South America, where production conditions and costs differ widely. Marketing of pastoral products is moreover increasingly challenged by as well by the shifting attitudes in European dietary patterns, with significant decrease in small ruminant's meat consumption on the one hand.

Intra-Community trade in live animals amongst EU countries exists as well, mostly depending on pricing and quality aspects, as well as on shifting consumption patterns. Ireland and the United Kingdom are major exporters of sheep to France, Romania exports to many south-western countries, and Italy and Spain move small ruminants in different directions. EU countries also export at an increasing rate to other neighbouring regions such as the Middle East and North Africa during specific seasonal festivities (EC, 2018). Another common feature to most EU pastoral farms is the difficulty in meeting production/operating costs, which have been constantly increasing in the last three decades, particularly those related to feed and energy (EP, 2008).

Whatever the value chain – meat, milk, or dairy products – **access to market represents a challenging aspect of pastoralists' economy** because it requires several constraining conditions, including local processing sites, local abattoirs, milk collection points, and dairies able to connect with consumption basins (Pastomed 2007). The alternative is to undertake on-farm processing and direct marketing – an option fraught with difficulties for most pastoral producers due to inflexible implementation of hygiene regulations. The standards, certifications, and regulatory adjustments set by WTO agreements and imposed by EU policies are expensive barriers that affect market access and undermine the survival of small independent producers. Value chains have reconfigured accordingly, with power relations bowing in favour of large industries, traders, retailers, and distribution corporations while farmers and rural producers have become the main shock absorbers.

Another policy domain that significantly impinges on pastoral resource management and livelihood patterns is related to environmental care and biodiversity protection. Apart from the establishment of Natural Parks forged out of pastoral areas (Nori and de Marchi, 2015), a main issue of concern for European herders is the **coexistence with large carnivores**, whose population has been growing dramatically in most mountainous areas where there have been specific programs to reintroduce and protect them.

The status of carnivore predators in Europe is protected by the Convention for the Conservation of European Wildlife and Natural Habitats, also known as the Bern Convention, signed in the early 1980s, when many of these predators were under threat of extinction. To make this Convention operational and to equip it with adequate instruments to safeguard animal biodiversity in its territory, the European Union drew up in 1992 the Natura 2000 network, and legislated on the protection of wolves, bears, wolverines, and lynxes (Nori and de Marchi, 2015). The populations of these predating carnivores have since grown steadily, with relevant implications for herd security and management, and the broader restructuring of land and labour patterns at farm level. As cases in the Alps, Apennines, Pyrenees, Epirus, Carpathian and other mountainous settings attest, the expanding presence of predating wildlife leads to the over-exploitation of areas that are securitised through specific investments (i.e., night pens, electronic devices, guard dogs, and so on), and the under-utilisation or abandonment of those remote from basic infrastructure and closer to predators (Meuret, 2010; ECR, 2019).

Overall, the growing, uncontrolled presence of carnivores is but one of the many ways in which pastoral territories have been encroached by competing interests and conflicting agendas. The fact that pastoralists are, on paper, recognised as managers of the landscape and custodians of

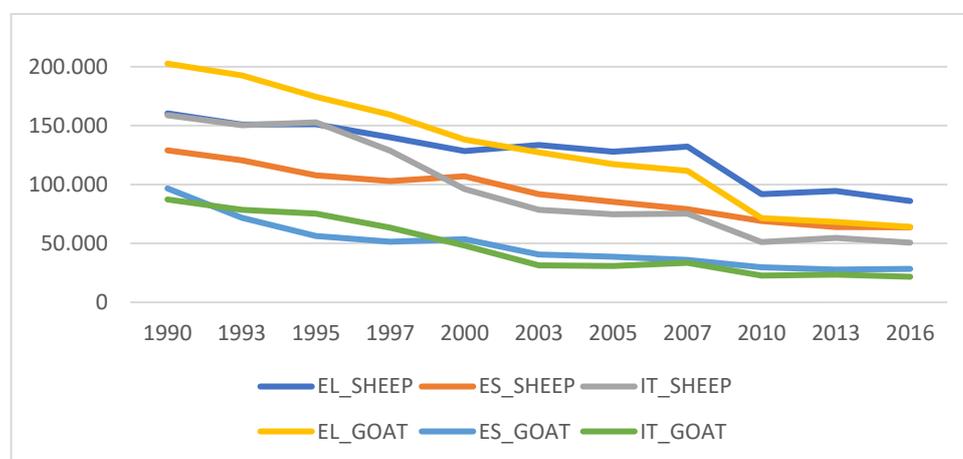
biodiversity means that they have to carry the burden of social and environmental responsibilities, while often benefiting in a limited way from fulfilling such roles.

The reconfiguration of pastoral farming in Mediterranean Europe

The growing reliance on market mechanisms and the liberalisation of trade exchanges have generated profound uncertainties in production patterns. CAP has played a substantial and ambivalent role in agricultural modernization through the restructuring of the global agri-food chain, which has furthered territorial polarisation (Nori and Gemini, 2011; Nori and Scoones, 2018; Nori, 2019). In spite of a stated concern for LFA and HNV, CAP 'rural welfare' is widely criticised for the inability to offset the negative trends affecting the agrarian world, particularly in its less-favoured settings where producers are increasingly dependent on subsidy schemes, and rural populations continue to decline, remaining socially and politically marginalised.

On the one hand, areas with higher potential for agriculture (i.e., low plains, valley bottoms, and coastal areas) have undergone intensification of production, while on the other, more marginal settings have witnessed a progressive abandonment (EP, 2008; Ragkos et al., 2017; Nori and Farinella, 2019). The living and working conditions in mountainous, island, or inner territories are today tougher, the quality of basic services and facilities limited, and opportunities for employment and income fewer. In these settings, family farming has become a decreasingly viable enterprise, and an unattractive option for local youth, as attested by the demographic ageing of rural communities and problems and generational renewal and socio-economic desertification. Trends and figures are particularly dramatic in Mediterranean pastoral regions, which lose about 30 per cent of their pastoral farms every 10 years (FAO database; EuroStat, 2016; Nori and Farinella, 2019; EU, 2020).

Figure 3 – Trends in small ruminants farms in Greece, Spain and Italy (1990-2016)



Map legend: EL = Greece; ES = Spain, IT = Italy
 Source: Nori and Farinella, 2019 on EuroStat data

The pillars of pastoral production systems - land, livestock and labour- have been deeply reconfigured by successive CAP reforms, with relevant implications for farm management, economic performance and livelihood levels. Pasturelands in Europe are currently subject to diverse patterns and tensions. Territorial polarisation implies the intensification of land use in certain areas and related over-grazing and degradational phenomena, while other pasturelands are increasingly abandoned, with under-grazing triggering shrub encroachment and land conversion into closed, woody areas amid expanding and forms of socio-economic desertification. Other pastoral areas are encroached by new economic interests and policy agendas and thus converted into natural reserves, tourist and leisure areas, intensive crop

farming, forestry plantations, energy suppliers (ie. dams, wind mills, biofuel farming), where pastoral producers are seldom part of the equation (MAA, 2018).

The reconfiguration of pastoral farm management has also carried relevant implications for workforce patterns and labour regimes. Another challenging aspect for European pastoralists is the decreasing availability of workforce. Difficult living and working conditions and poor economic returns make shepherding a poorly appreciated profession. While the average age of agricultural entrepreneurs is normally higher than any other economic sector, the figures for pastoral farms are higher than any other agricultural sub-sector. One-third of pastoral farmers are over 65 in Spain and over 60 in France, while in Ireland and the United Kingdom half of sheep farmers are over 55. In both old and the new EU Member States the average age of farmers is rising, and the change of generations is a long way off (Pastomed, 2007; EP, 2008; Nori, 2017).

Due to the decreasing availability of a **skilled and motivated workforce**, in recent decades most European farms have survived with the labour and services of foreign shepherds from neighbouring regions. The origin of the pastoral workforce has in fact changed from family members to salaried labourers, and lately from local to foreign workers, either from the EU eastern flanks (Romanian and Bulgarians have long fed the shepherding labour market in Italy, Greece and Spain), the Balkans (Albanians and North Macedonians especially in Greece and Italy), and Maghreb (especially from Morocco to Spain, France and Italy). Over time these flows are being replaced by migrant labour from southern African and eastern Asian regions (Nori, 2015). The growing presence of immigrants has come to offset the decline and ageing local rural population, providing European pastoral farms with a cheap and quite skilled labour force. While this phenomenon helps temporarily fill the vacuum, the immigrants' limited integration into the fabric of local communities threatens their scaling up as farm entrepreneurs, hence limiting options for a generational renewal (Kasimis, 2010; Nori and Farinella, 2019).

A critical perspective on the EU policy framework

The EU Common Agricultural Policy addresses the challenge of interfacing productivity with sustainability and multifunctionality, in an economic setting dominated by the market and framed by global trade agreements. CAP's institutional architecture represents an important driver of uncertainty for EU pastoralists, who must continuously navigate multiple, fragmented, and at times contrasting, rules, requirements, and risks as well as opportunities (Nori, 2019). As the CAP is reformed every seven years, the evolutions and changes affecting this policy frame have significant implications for pastoralists' production and livelihood strategies, whose practices and income largely depend on this public policy frame.

Unlike other regions in the world, the policy setting in Europe favours, in principle, extensive livestock-keeping by recognising its precious and irreplaceable role for several environmental, economic, and cultural benefits. Far from seeking to eradicate mobile pastoralism, the European Union explicitly attempts to preserve it, through economic subsidies to livestock farmers, and programmes aimed at marginal grassland areas. The EU recognizes in fact the precious and irreplaceable role of pastoralism, specifically in HNV and LFA settings, and acknowledges the fact that the public goods or socio-ecosystem services it provides are today not sustainable without remuneration (Kerven and Behnke, 2011; Nori, 2019). In remote and harsher agro-ecological settings, it must also contribute to ensuring the wider objective of territorial cohesion, as well as maintaining an active population and a vibrant socio-economic fabric. In such a perspective CAP subsidies are to be considered as forms of compensation to European producers who have been impacted by trade and policy agreements and arrangements, and rewards for the supply of public goods and socio-environmental services.

Despite growing societal appreciation and policy recognition, pastoralism is though poorly remunerated in social and economic terms, and as a consequence, it is decreasingly practiced by European citizens (Pastomed, 2007; Nori and Farinella, 2019; Pactores, 2021). The policy solutions and technical measures proposed seem to generate more trouble to pastoralists than effectively supporting their livelihoods and practices. Evidence attests that the decline of extensive livestock farming represents a major threat to specific landscapes, HNV habitats and local biodiversity across Europe (EP, 2008; Beaufoy and Poux, 2014, 2014; Essedra, 2014). Problems related to the generational renewal in pastoral farms provide an evident indicator of the policy failure in translating the provision of environmental services and public goods supply into fair societal appreciation and economic returns for pastoralists.

The 2020 "Farm to Fork" strategy, part of the wider European Green Deal, is designed to enhance the transition of the European food system to a fair, healthy and environmentally friendly one, in line with the 2014 objective of promoting a '*smart, sustainable and inclusive agriculture*'. Accordingly, the "Farm to Fork" strategy promotes a comprehensive approach that touches on many aspects of sustainability throughout the entire food chain, with a specific concern for environmental, climate and animal welfare. Extensive animal farming represents the most effective option as most climate and environmental negative impacts of livestock systems come from the feed production, transport, and use characterising intensive systems (EC 2020b).

In an economic context organised around trade liberalization and free market, CAP efforts to compensate for those producers who operate in difficult conditions, or that incorporate social and environmental externalities in their farming systems thus bearing higher production costs, seem quite, unsurprisingly, ineffective. In pastoral terms, if the milk or the meat of a local breed adapted to local conditions, and grazing on extensive mountain pastures depending on climatic vagaries has to compete with those issued from intensive livestock farming located in well-endowed and connected areas, from animals resulting from targeted genetical engineering, fed with imported inputs (forage, concentrates), and producing much higher quantities of standardised products – it is quite clear that the first succumbs in the shorter term, but the whole society will suffer from growing forms of unsustainability in the longer one. Someone might win the battle, but we all lose the war, as the implications of the latter on the environment and the climate are increasingly visible.

Policy efforts aimed at tackling these gaps should provide greater recognition to the professional profile of pastoral livestock farmers as multi-functional economic agents who get fair remuneration for the quality products (through the market) and the public goods (which should receive societal reward through policy funding) they supply. This would require greater consistency amongst policy choices at different levels, including trade agreements, labour market, environmental and climate-related policies, and a fair policy dialogue that includes pastoralists.

Regional analysis - A polarised setting

The Mediterranean region presents a quite diversified and polarised setting for pastoralism and pastoralists. Beyond contrasting agro-ecological conditions and climatic patterns, socio-cultural patterns, historical trajectories and political ideologies define quite different agro-pastoral systems, and very diverse operational perimeters for extensive livestock breeders. Pastoral farming represents a relevant source of food, employment and income for a large part of the MENA population, while this is not the case for EU countries, which have witnessed a steady decrease in pastoral constituencies in recent decades. Consumption patterns and market dynamics are evolving in quite opposite directions, whereby in MENA demand for sheep and

goat meat is on the increase, while in EUMed these are decreasing, and pastoralists mostly look at expanding dairy markets and tourist services. Broader trade dynamics are also on the opposite; while EUMed countries mostly concentrate on exporting most of their pastoral production, this falls behind consumption demand for MENA countries, which also often import large portions of animal feed inputs.

These diversities result in policy frameworks that have followed quite different trajectories. Albeit these vary consistently from a country of the region to another, some main, common patterns could be identified. Accordingly, a main divide characterizes the northern European shores from the southern and eastern ones – ie. Maghreb, Mashreq, Balkans and Turkey. Political narratives are very different, and extensive livestock keepers in Europe are today mainly perceived as multifunctional agents who basically receive subsidies in exchange for the socio-environmental services associated with their practices. While most MENA countries consider pastoralists as basic suppliers of livestock products, and receive public support accordingly, in the form of subsidies, loans or input supply schemes to support the intensification of their production system.

Agriculture and rural development policies in the EU are mostly framed within the larger Common Agricultural Policy and largely influenced by environmental concerns, in most MENA countries, as well as in the Balkans and Turkey, rangeland management is mostly governed through the lens of food production and forestry institutions, which are not necessarily aligned with the interests of pastoralists. Whatever the case, these evolving policy frameworks play an increasingly critical role in defining the strategic interfaces between the factors that constitute pastoralism, namely land, livestock and labour.

Across the Mediterranean region, levels of reliance on, compliance with and dependence on public support systems are now quite intense, shaping in important ways the opportunities as well as the challenges and threats faced by pastoralists. Costly as they are, neither the EU CAP premium and compensation system nor the MENA loan and subsidy systems have been able to close socio-economic viability gaps and significantly improve the living and working standards of pastoralist communities.

Overall, this process of institutionalisation does not seem to have been thoroughly beneficial for agro-pastoralists, who currently see their constituency diminishing, their socio-economic conditions worsening, and their ecosystems degrading. Particularly in the Mediterranean, where pastoralism is embedding local cultures and landscapes, the institutional and administrative levels at various levels are often biased and have been poorly advised. The outcomes have been unsurprisingly deceiving; despite consistent policy and financial investments, agro-pastoral systems throughout the region suffer from similar patterns and trends, indicating above all a serious erosion of their knowledge, skills, and overall natural and human resource base.

While it is indeed acknowledged that pastoral activities would show limited economic viability without public funding, it is also increasingly recognised that current political systems provide much greater and higher financial support to other agricultural systems, including intensive livestock farming. The policy that feeds them is therefore the same policy that stifles them. Undoubtedly, pastoralist producers and communities in most countries also lack adequate organisational capacity, institutional arrangements and the overall political capital to negotiate their rights and interests in broader institutional and social contexts.

Moving forward?

The main critique to the policy frameworks informing resource management and governance is that these have mostly evolved with a view to serve State-led and urban-based culture and perspectives rather than sprouting from and supporting the welfare of rural communities. This is visible in the fragmentation of different policies that impinge on pastoralists and on their resource base – including agriculture, forestry, environment, climate change, trade, value chains, and labour market.

Similarly, development approaches aimed at peripheral communities and marginal territories are often adaptations of mainstream visions designed for intensive production in high-potential areas rather than being tailored to mountainous or dryland settings and negotiated with the involvement of local communities. This explains to a good degree the rationale behind most public funding increasingly supporting capital rather than labour-intensive farming systems. While navigating these different policy dimensions, pastoralists must also account for the wider policy frame encroaching on their livelihood, including trade agreements, environmental concerns, food security and safety issues, shifting societal attitudes, and conflictive economic interests and asymmetric power relationships.

More broadly, the current policy frameworks show more concern for other societal domains, interests, and actors rather than focusing on addressing the needs and the rights of agro-pastoralists and their livelihood systems. This is remarkably the case when it comes to the marketing of their products, the protection of their lands, the encroachment of other economic activities in their territories, such as power schemes, wildlife protection, security, and tourism. This is quite surprising, as it might seem that the interests of pastoralists conflict with other policy objectives, while they are often the best allies to pursue such policy intents.

The main shortcoming of such a policy perspective across the region is probably the limited ability to effectively link these different interests within an overall development framework that sees society as a sustainably functioning organism. The abandonment of marginal territories, erosion of local knowledge and skills, intensification of livestock production, loss of landscape biodiversity and the diminishing capacity to cope with climate change are processes that affect society as a whole, with important consequences for everyone's lives. This short-sighted policy perspective reflects and reiterates the bias that traditionally informs our societies, from the educational to the administrative systems, hinging on the in-depth bias that perceives pastoralism as obsolete and ineffective, rather than the most appropriate agricultural practices for certain ecological settings. This misperception translates into low social and economic prestige, and helps explain to a good extent the phenomena of labour shortages, low generational turnover, and rural depopulation characterising pastoral settings throughout the Mediterranean today.

To redress these dynamics, the policy framework across the Mediterranean should once and for all appreciate pastoralism as the most effective, and often the only, system to maintain a productive and sustainable human presence in the mountain areas and drylands of the region. Accordingly, public investments and support systems should better account for the specificities and potentials of extensive livestock production, and operate with a view to adequately redress and compensate for farms and people who decide to invest their life and profession in:

- producing food in harsh areas and difficult conditions,
- providing society with important public goods and positive environmental externalities that are hardly acknowledged and prized by market mechanisms.

At the different national and local levels, policy endeavours should redress existing public support in more effective ways. Pastoral resource management and food production systems

need to become more rentable and attractive practices. This requires, on the one hand, a better tuning of existing financial mechanisms that support environmental-friendly practices while also ensuring the entrepreneurial autonomy and economic viability of pastoral farms. On the other, specific efforts must address the youth and the generational renewal processes, starting by redressing the current educational and training system whereby modernity is always associated with livestock intensification. Mechanisms to attract and integrate local youth as well as immigrants and newcomers also deserve adequate attention and financing.

Climate dynamics and range ecosystems functioning suggest reinvigorating native breeds, animal mobility, and seasonal rotation patterns, which in turn require more effective mechanisms to regulate access to and control of pastures. Interactions between crops and livestock should evolve in more sustainable ways, as agricultural resources clearly provide an essential complement to animal grazing, but without altering feeding and livestock management patterns in ways that degrade the local natural resource base. Better synergies will also need to be developed with the forestry sector, moving away from the rigid dualism that currently informs the perspective of foresters on grazing land. As evidence attests, particularly in the Mediterranean, grazing by animals, including goats, plays an important role in the management of forest resources and the prevention of major environmental hazards, including fires.

Existing experiences across the region show that the societal appreciation of the pastoral profession could receive an important boost from locally-nested pastoral schools that invest in reproducing and innovating local pastoral systems and the related human capital. With the aim of supporting more effective generational renewal processes, these experiences allow, on the one hand, for a better recognition of the public goods that pastoralists provide to the wider society, while, on the other, contribute to enhancing entrepreneurial skills through innovative management and institutional processes and patterns. Accordingly, technical assistance as well as training and research in pastoral settings should evolve from principles and practices that are tuned and tailored to recognising the specificities of pastoral resource management and the embedding agro-ecological conditions, rather than trying to translate and adapt those conceived for conventional, intensive production systems.

Moreover, it is recognised that the poor involvement of pastoralists in fair social dialogue and policy debates has represented a main shortcoming in most Mediterranean countries. Experiences throughout the region indicate that investing in pastoralists' social and political capital could go a long way in consolidating civil society around a sustained collective action. Better organised agro-pastoralists are a strategic asset to effectively deliver public services and technical assistance to support innovation and networking. These initiatives are critical in enhancing the social recognition and economic viability of pastoral farms, while also providing the mechanisms and arrangements to monitor and ensure that appropriate policy principles are adequately translated into legislative and administrative measures in the field.

Throughout the Mediterranean, environmental changes, consumption patterns, market dynamics, labour regimes, and generational renewal generate significant uncertainties that challenge the sustainability of pastoral systems. It increasingly makes sense that MENA drylands host a growing number of animals, while the consistency of pastoral flocks is dramatically shrinking on greener European pastures. Similarly, it seems incongruous that most MENA countries continue focusing on their 'cereal and cattle' totems in a rapidly changing environment characterised by climate change dynamics that affect rangeland conditions and freshwater availability, while European policies seem ineffective in countering rural depopulation, which implies biodiversity loss and growing exposure to natural hazards. Current patterns of farmland abandonment across Europe and the intense degradation of rangelands in MENA countries

provide dramatic scenarios and need to be rapidly corrected through a more coherent and integrated policy framework that better takes into account changing trade patterns, natural resource management, labour markets, trade, and migration regimes in a regional perspective.

Options for redressing ongoing trends

Pactores stands amongst the many scientific developments and civil society efforts that demonstrate and support the strategic links between sustainable livestock systems, healthy rangeland territories and overall societal wellbeing. Pactores actions aim at showing the consistency and sustainability of pastoralism as effective resource management, specifically in agro-ecological settings where other forms of production prove unfeasible.

According to our analysis, in order to contribute to translating good intentions into effective practices, a more appropriate policy setting shall consider:

- a specific, tailored vision and approach, which does not emanate from replicating and adapting strategies conceived for other areas/systems, and that put pastoralists' capacities, needs and interests as a main reference objective;
- an integrated and comprehensive vision, that engages policies related to agriculture, animal production and food within the broader picture that includes international trade, environmental concerns, labour market, including migratory dynamics;
- accordingly, this new perspective should revise current policies through a pastoral perspective, setting the sustainable reproduction of its natural and social assets as its strategic compass.

Such a policy shift should provide an opportunity to capitalise on the evolving social demand for the products, services and public goods provided through pastoral resource management - and the associated externalities reflected in landscape and biodiversity, animal welfare, organic production and the feeding of other relevant economic dimensions, from food marketing to rural tourism and environmental protection. Market and trade-related domains should also be addressed, and mechanisms should be put in place for better governance of existing value chains, with the aim of recognising and valuing the positive characteristics associated with extensive livestock production when competing with products issued for systems that externalise these costs to the environment and society, and recognise extensive producers rather than market agents.

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Annexes

Annex 1 – Evolutions of the policy framework in MENA region

	LAND	LIVESTOCK	PEOPLE
	Inverse mobility	Pastoralists as livestock producers	Sedentarize and control
	Detaching livestock from lands	External inputs supply infrastructure Market integration and State dependence	Incorporation and co-opting Support farmers' income – subsidies, loans
	Territorial polarization	Cereal and cattle totems + chicken & import	Coops Ethno-lignageres
	Range degradation	From public to private financial support	Emigration

Annex 2 – Evolutions of the EU CAP framework

	LAND	LIVESTOCK	PEOPLE
	Productivism approach with market and environmental distortions		
	Less Favoured Areas High Nature Value	Sustainable production, concerns for food safety, animal welfare and health and environment	Income support in a multifunctional perspective Cross-compliance and compensations environment/market
	Environmental policy engagements	WTO engagements and quota systems	Decreasing viability
	CAP land rights Territorial polarization Land abandonment	Intensification process PGI, PDO schemes Flock reconfiguration	Depopulation and GR Immigrant workforce
	Socio-ecosystem services		Farm to fork