



PASTINNOVA



PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA



The White Paper on Pastoralism in the Mediterranean Area

EXECUTIVE SUMMARY

Pastoralism and family farming are not a problem in the Mediterranean area but can offer a solution to many of the challenges faced by public authorities to achieve food autonomy in animal products, to preserve biodiversity and revitalise rural territories. Public policies for livestock farming, environmental preservation and rural development must encourage innovations in favour of pastoralism through coherent support mechanisms.

The White Paper on Pastoralism in the Mediterranean Area (WPPM) aims to inform and increase awareness of policy-makers and stakeholders on the potential of pastoral activities to overcome the challenges of food security, agro-ecological transition and socio-economic development of rural areas.

Based on the analysis by the Prima PASTINNOVA project of more than 100 social and technological innovations observed in 12 Mediterranean countries, the WPPM highlights how pastoral business and organisational models can realise their full potential as drivers of the agro-ecological transition in livestock production in the Mediterranean area if they are supported by strong and relevant public policies at transnational, national and regional levels.



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For millennia, pastoralism has provided local Mediterranean populations with quality animal products, thanks to its resilience to water scarcity, climatic hazards, and seasonal variations. Yet today, pastoralism is under pressure as the Mediterranean faces dramatic global challenges marked by several common trends:

- climate change with frequent droughts, heat waves and desertification processes;
- growing demography, migration patterns with generalised urbanisation, globalisation of standards of living, and marginalisation of the hinterlands;
- a strong decline in mobility, collective land use, land fragmentation, overused and rapidly decreasing water and fodder resources;
- changes in land use, overgrazing, soil degradation, loss of biodiversity, encroachment, and big forest fires;
- lack of economic profitability of many pastoral systems linked to the lack of training and professional skills of the pastoralists;
- limited relevant public subsidies for supporting productive extensive pastoral farms;
- land, natural resource and livestock policies and regulations that may be restrictive or conflicting to pastoralists' and their communities' uses and needs;
- risk of zoonotic diseases spread by livestock;
- loss of traditional local breeds and genetic diversity;
- ageing of the agricultural population, decreasing interest of young people in the pastoralist profession, limited job opportunities in rural areas, and insufficient application of innovative methods.

This WPPM calls on public authorities to explore the evolving situation of livestock systems in the Mediterranean, highlighting the potential of pastoralism to overcome future challenges in rural areas.

PASTINNOVA has shown that pastoralism can be an innovative sector and that it address all the priorities and objectives that public policies must consider and integrate concerning livestock production, rural development and environmental sustainability in the Mediterranean:



**TO PRODUCE MORE, INCREASE COMPETITIVENESS
AND PRESERVE FOOD SECURITY, HEALTHY HUMAN
NUTRITION, AUTONOMY AND SOVEREIGNTY**

Strengthening pastoral activities in the Mediterranean basin could largely contribute to developing operational solutions for redesigning livestock production systems. Strong public support in research and innovation, management, market access and logistics can limit reliance on external inputs and feedstuffs and improve farmers' skills in line with agro-ecological principles. Public policies should encourage the use of technological innovations (e.g. virtual fences, GIS tools, hydroponic fodders, use of by products as feeds, new forage plant materials, etc.) and effective management of pastoral fodder resources. They should create a more favourable environment for short value chains for pastoral products, direct sales and digital marketing, and connect pastoral farmers with potential customers.



**TO PRESERVE BIODIVERSITY, NATURAL LANDSCAPES,
ENVIRONMENT AND CULTURAL HERITAGE**

The priority for environmental public services is to preserve biodiversity and landscapes specifically in areas that once had a strong pastoral presence and culture but that to a large extent have now been abandoned by pastoralists. Where a few shepherds do remain, public authorities should improve their working conditions, by building infrastructures and roads to access summer grazing areas, shelters, summer houses and facilities, water supply in rangelands, by promoting local architecture and by supporting them with relevant extension services, training and product labelling schemes. Not to forget the importance of dialogue and participation of pastoralists in the search for practical options for their coexistence with wild animals and the conflicts with nature conservation policies and regulations. Given the increasing risks posed by climate change, public policies should prioritise climate resilience and adaptation to climate change through pastoral systems.

This can be achieved by supporting the adoption of climate-smart practices such as drought-resistant forage crops, improved water management techniques, the development of adaptive grazing systems and other risk management tools as drought insurance schemes. Public authorities should also promote research into the impact of climate change on livestock health and productivity in order to develop region-specific strategies for mitigating these impacts; and pursue frameworks and assessments to better account for the carbon emissions and environmental benefits of pastoral systems.



TO DEVELOP DIVERSIFIED ACTIVITIES AND EMPLOYMENT IN RURAL TERRITORIES

Innovative new pastoral activities and livestock production could support economic activity and job creation in rural areas. Pastoralism plays a crucial role in the social and economic fabric of rural communities. Public policies should seek to strengthen social and economic cohesion by ensuring that pastoralists are integrated into decision-making processes and benefit from regional and national development initiatives. Programmes aimed at improving access to markets, digital tools, and infrastructures will help to address social inequalities and ensure that rural areas can thrive and be economically sustainable.

Alternative pastoral projects could be associated to other activities such as service provision, craftsmanship, gardening and agro-tourism. In these models, much attention should be paid to inclusiveness and involvement of vulnerable actors (women, young people, migrants, smallholders and those at risk of poverty). Pastoral activities should attract new dynamic entrepreneurs. Support of business incubators could boost agricultural innovations through personalised coaching, thematic workshops...



TO PREVENT ENCROACHMENT, FOREST FIRES AND LAND DEGRADATION

In the Mediterranean area, public authorities are increasingly aware that land degradation, encroachment and closure of many rangelands contribute to hazards such as forest fires, landslides and floods. To strengthen civil protection and prevent potential disasters, public policies can support the (re)adaptation and implementation of silvopastoral practices through training courses, technical dissemination, and incentives...

This priority includes land tenure security and sustainable land use. Land tenure insecurity is a critical issue for pastoralists, as it often leads to conflict and to the fragmentation of grazing lands. Public authorities should ensure that pastoralists have secure land rights and access to common grazing areas. Land reform policies should address land tenure issues, prevent land grabbing, and support community land management practices that guarantee the sustainable use of land resources for future generations.

→ The PASTINNOVA project has identified more than 100 innovations developed by pastoralists around the Mediterranean, addressing one or more of these priorities. This shows that pastoral systems are highly innovative, and potentially competitive, contrary to the stereotype of being a regressive activity. The challenge for public policies lies in supporting those innovations whilst responding to several of the priorities of the agricultural and rural areas. The WPPM annex shows examples of innovations for sustainable pastoralism as well as national policies affecting pastoral and extensive livestock farming in 12 Mediterranean countries.



THE COMPLETE WHITE PAPER DOCUMENT IS AVAILABLE AT:

<https://pastinnova.eu/white-paper-on-pastoralism-mediterranean/>