

MOBILE PASTORALISM

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MOBILE PASTORALISM IS ONE OF THE EARLIEST CULTURAL PRACTICES OF HUMANITY. AS AN ACTIVITY OF EXTENSIVE LIVESTOCK BREEDING, IT EFFICIENTLY USES RANGELAND SOURCES SUCH AS MOUNTAIN RANGES, DRY PLAINS, SAVANNAHS, STEPPES, TUNDRA.

The core feature of the practice is the mobility of people and their livestock in search of forage and water. No matter the different forms of the practice (e.g. transhumance, nomadic pastoralism), herds typically return to a particular landscape on an annual basis even once in several years when the landscape is not that productive. Thus, mobile pastoralism offers one of the most sustainable ways of maintaining the Mediterranean's different habitats and ecosystems. It is also one of the most sustainable food production systems providing healthy, safe and culturally appropriate food produced through ecologically sustainable methods.



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THREATS TO THE PRACTICE

Despite several benefits of mobile pastoralism, the mobile pastoralists and their way of living have faced various threats: constraints in finding sufficient land to maintain herds and even accessing lands and migration routes due to fragmentation by new land use, such as intensive agriculture and construction of new settlements, highways, huge dam projects, etc.; land degradation due to increasing environmental problems connected to the climate crisis; difficulties related to the economic context mainly triggered by no access to the market and changing patterns in the market demands; increasing pressures by states forcing mobile pastoralists to settle down; exclusory policies disregarding rights, values and identities of the pastoralist communities; social exclusion problems triggered by doctrines of modernisation and globalisation; shrinking families and generational renewal problems occurred in the low motivation of young generations.

1. CULTURAL SUSTAINABLE LAND-USE PRACTICES

Mobile pastoralism encompasses the varying ways that people move through the landscape with their livestock (Yilmaz 2019). It is a highly adaptive and flexible practice, presenting differences from context to context, as it evolved in response to spatial and temporal variabilities. In Turkey, there are two main forms of mobile pastoralism: nomadic pastoralism and transhumance. The differences are mostly based on whether or not the entire family or community moves with the herd. In nomadic pastoralism, the entire family or community moves together with the livestock, while in the case of transhumance only a part of the family or an individual move during the migration period while the rest of the family remains at a home base. In addition, nomadic pastoralism relies on “high levels of mobility and changing dwellings throughout the year, living in a succession of campsites along vertical or horizontal routes”; whereas “transhumance involves seasonal movement of the herd between pastures with some use of campsites” (Zogib 2014).

The main focus of the Yolda Initiative, one of the AMNC partners, is the Sarıkeçili nomadic pastoralist community consisting of a population living in around 150 tents (approximately 5-10 people per tent). They have two periods of migration, each takes around 30-45 days in spring and autumn, and they move along the Taurus Mountains in Southern and Central Anatolia, throughout the migration routes of approximately 350 kilometres. Under their tents, they reside in Akdere, Gülnar, Aydıncık, and Bozyazı coastal towns in winter and highlands of Seydişehir, Beyşehir, Bozkır, Ahırlı and Akören in summer. The main livelihood of the community is goat herding (with some families also herding sheep), and with this, they produce milk, yoghurt, butter and cheese as by-products of the goats.



Nomadic pastoralism in
the Taurus mountains, Turkey
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2. BENEFITS OF THE PRACTICE

2.1. BIODIVERSITY

The migration of mobile pastoralists creates a shifting mosaic of patches in different stages of regrowth or succession in the landscape as mobile herds allow pastures to rest and trees to regenerate. The routes used during migration have many ecological functions. The migration routes, which function as ecological corridors, interconnect valuable habitats and protected areas as well as broader semi-natural and natural landscapes and contribute to habitat diversity by creating openings in forests and natural habitats for wild species around agricultural fields. By grazing, herds maintain the gaps within the forests, which allows maquis and a variety of plants to survive and regenerate.

The mobility of domestic herbivores ensures long seed dispersal distances for plants by the transportation of seeds attached to animal coats, fleeces, hooves and droppings and the dispersal by ingestion and later defecation. Seeds attached to the fleece of livestock can be transported over distances of up to several hundred kilometres in substantial numbers, which

also highlights the ecological corridor function of the migration routes. Mobile pastoralism is also relevant in the maintenance of food webs. Different scavengers along the region benefit from pastoralism as are insects providing valuable ecosystem services associated with nutrient cycling (such as dung beetles or ants).

The grazing practices of goats depicts a positive impact on limiting and slowing down ground fuels to be transported to the air fuels during potential wildfires as goats consume the dry vegetation and leaf cover in the understory and thus reduce the vertical continuity of the shrub layer. In addition, the migration routes created by mobile pastoralists have proven to be highly beneficial in the formation and maintenance of natural firebreaks that prevent the spread of fires.

Extensive livestock grazing is also an effective tool for soil stability, restoration and resilience as it adds manure to the nutrient cycle and restores vegetation cover as mobile herds allow pastures to rest and trees to regenerate. Manure has the capacity to increase soil macro aggregates, compaction resistance and water content capacity, all of which have a direct positive effect on resistance to erosion. The benefits on soil structure mentioned above also have a direct benefit on the water storage capacity and in the regulating water cycle.



Shepherding in the Shar Mountains, North Macedonia © Jovan Bozinovski

2.2. CULTURAL

The practices, strategies, social institutions and evolving knowledge of mobile pastoralists, all based on constant interaction with the environment and ecological processes culminate in a valuable body of knowledge. Based on an understanding that their and future generations' survival depends on natural resources, the traditional ecological knowledge of mobile pastoralist communities holds such wisdom emerging from their accumulated experiences of thousands of years. This knowledge has much to offer not only in terms of nature conservation but also of the cultural diversity and heritage of the world., exhibiting a complexity of experiences, value systems and techniques as reflections of their sophisticated way of living.

To illustrate, Sarikeçili nomadic pastoralists' deep understanding of the environment and their integration into the ecosystem have constructed various elements of knowledge, some of which are:

- Herding domestic herbivores such as goats and camels
- Handmade dark tents, sacks and carpets produced made with goat hair
- Traditional recipes of meat and dairy products (tulum cheese, smoked condensed yoghurt, butter and fried meat)
- Traditional use of livestock guarding dogs, such as Kangal (AKA Anatolian shepherd dog) and Akbaş breeds
- Traditional harvesting and use of edible and medicinal plants

2.3. CLIMATE CHANGE

Mobile pastoralism facilitates mitigation to climate change by majorly creating carbon sinks in the ground (up to 100 tons of CO₂ per hectare) and contributing substantially to forest management and fire control (Zogib 2014). It is the most climate-friendly livestock production system; having a very relevant role in CO₂ offsets by grazing and low-carbon livestock production. However, mobile pastoralism, along with other livestock practices that vary in their degree of extensification, has been largely attributed to large carbon footprints. These attributions are nevertheless contentious because they do not consider baseline emissions in ecosystems and the very low fossil fuel use footprint by pastoral practices because of less reliance on industrial animal feed (Casas & Manzano 2010; Global Justice Now 2015; Vigan et al. 2017).

Besides climate crisis mitigation, the capacity to adapt to climate crisis challenges is probably the most distinctive feature of pastoralist communities. Indigenous breeds, for instance, are an essential element in order to tackle the climate crisis as they are adapted not only to local environments but also to the practices of the community. The ability of mobile pastoralists in coping with natural seasonal change in climatic conditions and uncertainty while being in search of better sources of forage and water brings them resilience and adaptability to the climate crisis along with others (e.g. social, economic).

Shepherd cloth Korab-Koritnik, Albania © Arta Starova



2.4. SOCIO-ECONOMICAL

The economic value of the practice can be mainly explained by the sustainable land use mechanisms utilising the areas of lower agricultural potential. It also helps a strong and resilient rural economy, by creating sustainable direct and indirect jobs and stimulating “peripheral economies” linked with different types of tourism, handicrafts, wine and gastronomy, etc. (Manzano et al. 2018). Continuation of this cultural practice helps especially women and youth to access jobs or become entrepreneurs. This also prevents the generational renewal problems occur via the out-migration of young people to urban areas due to the lack of job opportunities.

In general, the local products of pastoralists are successful in meeting the need for healthy food for consumers. Mobile animals are more likely to be fit and resistant to disease, especially local breeds, which are usually hardier and more adapted to local conditions. It is known that they are less affected by animal diseases, because of the trouble parasites have in establishing refugia. Such benefits are transmitted to the meat, milk and other derived products resulting in high quality. Therefore, the products of mobile pastoralists not only contribute to cultural and biological diversity and to tackling climate crises; at the same time the practice ensures the production of healthy, safe and equitable food with very high nutritional value.

3. REFERENCE LIST

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