



Structural Drivers Reshaping Transhumance Systems in Mediterranean Turkey

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BACKGROUND & STUDY CONTEXT

What is Transhumance?

- Seasonal livestock mobility
- 400–450 km on foot each migration
- Mersin coast → Konya uplands (1,500–2,200 m)
- Sarıkeçililer community: ~150 families, ~90,000 goats
- Hair & Honamlı goat breeds – highly resilient
- Low-input, ecologically embedded system



Why It Matters

- Biodiversity conservation & habitat connectivity
- Wildfire risk reduction through grazing
- Soil fertility via manure deposition
- UNESCO Intangible Cultural Heritage (2019)
- Living example of circular & green economy
- Food security in marginal landscapes

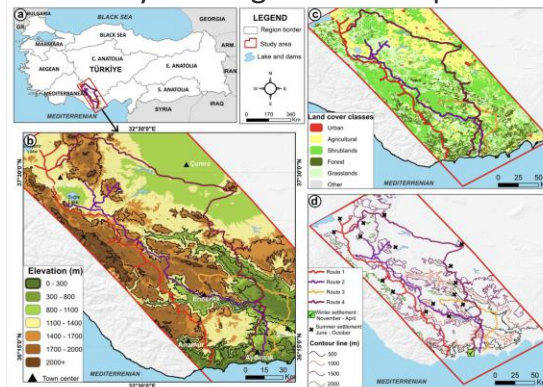


FIGURE 1
Study area (a) location, (b) elevation map, (c) land cover classes adapted from CORINE 2018 maps, and (d) the temporal and spatial dynamics of migration routes.

METHODOLOGY

Walk-and-Talk Interviews

1

15 transhumant
households
Snowball sampling



Participant Observation

2

140 observations
2019–2023
Full migration cycles



Ecological Surveys

3

Pasture condition
Grazing pressure
Water availability



Archival & Photo Analysis

4

868 photos
120 archival records
2014–2023



Triangulation: interviews × ecological data × photographic evidence → socio-ecological analysis across household, route & landscape scales

SIX STRUCTURAL DRIVERS OF TRANSFORMATION

01

Demographic Transition & Rural Urbanisation

Youth out-migration · labour shortages · erosion of intergenerational knowledge

02

Market Marginalisation & Economic Pressures

Price volatility · no cold-chain access · excluded from subsidy schemes

03

Governance Failures & Institutional Gaps

Bureaucratic permit barriers · protected area restrictions · no legal mobility rights

04

Climate Variability & Environmental Stress

Early droughts · erratic precipitation · declining forage · livestock mortality

05

COVID-19 Pandemic Disruption

Movement bans · market closures · pasture concentration · spatial competition

06

Green & Circular Economy — Missed Link

Manure recycling, low-carbon mobility unrecognised; no market or policy incentives

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REGULAR ARTICLES



From grazing to green: unraveling the ecological consequences of transhumance decline in Turkey's Mediterranean mountains

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Article

Farmers' Risk Perception on Climate Change: Transhumance vs. Semi-Intensive Sheep Production Systems in Türkiye

Sezen Ocak Yetişgin¹, Hasan Önder^{1,*}, Uğur Şen², Dariusz Piwczynski³, Magdalena Kolenda³, Beata Sitkowska³ and Ceyhan Yücel⁴

KEY FINDINGS

Route Fragmentation

Migration corridors are compressed; stopover sites lost to agriculture, tourism & conservation designations → uneven grazing pressure

Shift to Reactive Mobility

Anticipatory, seasonally embedded decisions replaced by short-term adjustments — weakening adaptive capacity under climate variability

Household Labour Concentration

Reduced collective organisation; women & elderly bear disproportionate burden; informal conflict-mediation institutions eroding

Ecosystem Services at Risk

Fuel-load reduction, habitat connectivity & climate buffering in marginal landscapes threatened by declining mobility

Adaptive Resilience Persists

Rotational grazing, breed diversification, manure valorisation — pastoralists as retro-innovators operating within green/circular logic

POLICY IMPLICATIONS & CONCLUSION

Policy Framework Needs

- Legal recognition of seasonal mobility rights
- Integration of pastoral corridors into spatial planning
- Equitable access to veterinary, financial & market services
- Subsidies explicitly designed for mobile systems
- Organic / climate-certified market schemes for pastoralists

Core Conclusion

Transhumance in Mediterranean Turkey is not disappearing; it is being reshaped into more fragmented and less resilient configurations.

The system's ecological, cultural, and productive value remains real, but will be lost without deliberate institutional intervention.

Recognising mobility, seasonal land use, and collective organisation as functional components of livestock systems not residual practices is the essential first step.

Thank You

Questions & Discussion



Watch the video: <https://www.youtube.com/watch?v=ZEsvGFChW10>

Contact & Publication

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ARTICLES

**Transhumance in Central Anatolia: A Resilient
Interdependence Between Biological and Cultural
Diversity**

Sezen Ocak¹

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