Land-use dynamics in the dehesas of the Sierra Morena (Spain): Drivers, actors and management strategies

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Why the dehesas?
The overall objective of the study was to disentangle the complex nature of land-use dynamics in the dehesas. This agrosilvopastoral system is based on a wise combination of development and conservation strategies, with the result of constituting one of the hotspots of global biodiversity. It has evolved over centuries due to adaptive management practices (complementary and integral resource use and a sophisticated spatio-temporal organization of resource appropriation) concerned with extensive livestock breeding and wood fire control. These practices are based on a diversity of local environmental knowledge that has developed over generations.

Over the last 50 years, the dehesa has experienced profound structural and functional changes, leading to symptoms of degradation, overexploitation and abandonment. National and European policies have tried both to develop and to protect the dehesa with different results.

What have we learned so far ...

✓ Political measures and corporate activities are profoundly sectoral. The dehesa is reduced to a silvopastoral system.
✓ Different paths of land-use change correspond to the high spatial and temporal diversity concerning the strategic responses with the different types of management practices to socio-economic changes and politics.
✓ The economic viability, strategic orientation and personal attitudes of the land manager determine adequate land-use decisions and adaptive management practices.
✓ New players and institutions have begun to create new networks within local communities and beyond, to diversify agrarian activities and to promote economic benefits as well as adaptive and collective resource management.

... and what does this mean for future policy and research?
X The conservation and development of an agrosilvopastoral system like the dehesa has to come along with an active and innovative use of the existing natural resources.
X European policy for agriculture and local development must support the endogenous entrepreneurial dynamic and be sensible to regional idiosyncrasy as they are the key factors in the development of the dehesa.
X “La dehesa hay que vivirla”.
X Who is “living” the dehesa?

Selected references

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Methods
Transliteration of:
* GIS-based land-use analysis,
* Semi-structured, in-depth interviews with 10 land managers,
* Analysis of EU agro-environmental measures and policies

Research questions
- What are the main land-use changes in the last 50 years in the development of the dehesa system?
- Which are the underlying land-use decisions and management practices at the farm level?
- Which main driving forces and actors contribute to these decision-making processes and its impacts on land-use dynamics?


draft and cartography: Christoph Schröder

The political-ecological analysis of different settings of the observed land-use dynamics, identifies actors, drivers and power relations over spatial scales as well as its impact on local decision making