

Theories and tools for understanding the landscape

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European Landscapes in Transition

10 public lectures in Copenhagen and in Aarhus

Jorgen Primdahl (DK), Bas Pedroli (NL) Teresa Pinto-Correia (PT)

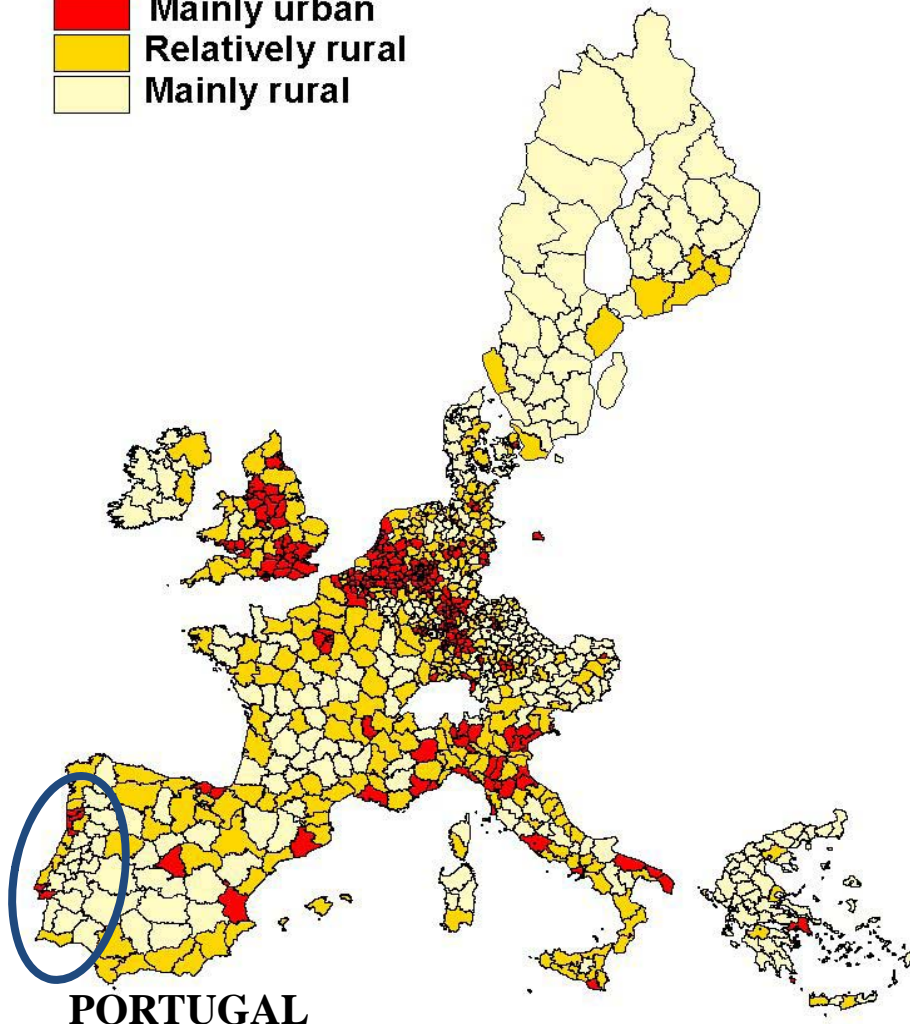
10th and 12th December 2013

the landscape I come from

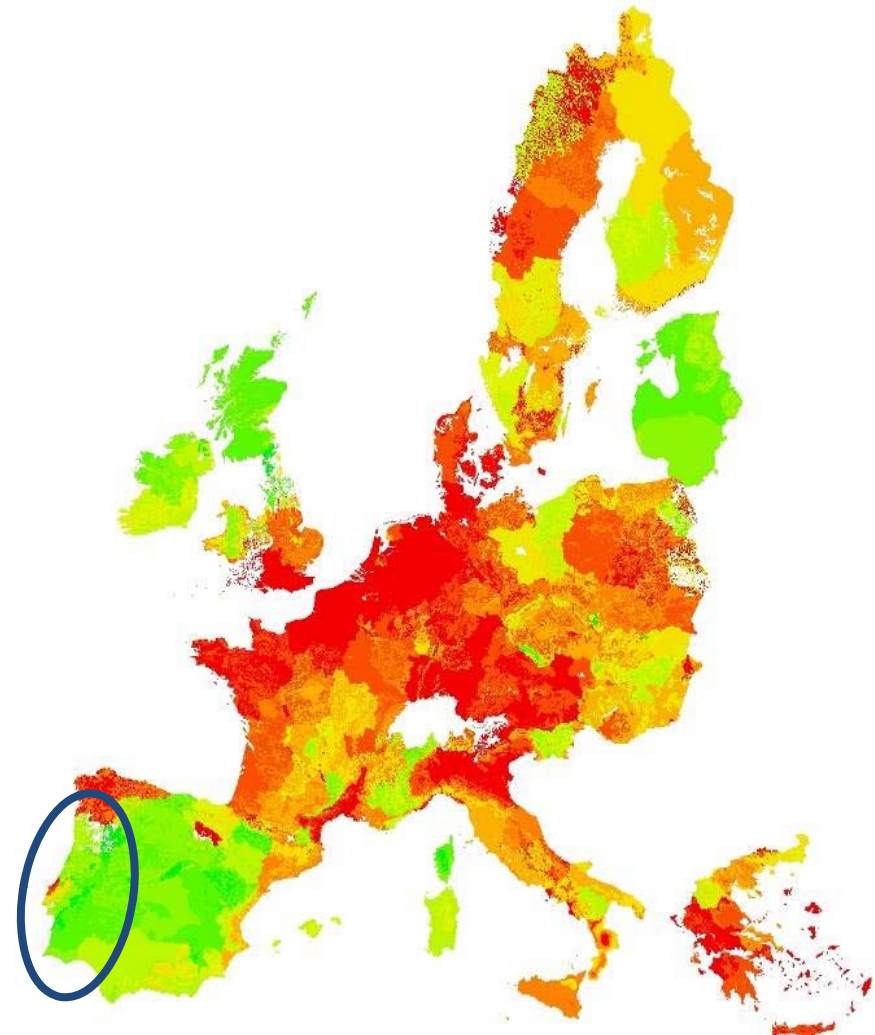


a particular context

Rural / Urban



Farming intensity



and it is changing fast



leading to a different character



a complex mosaic



multiple activities



a multiple society

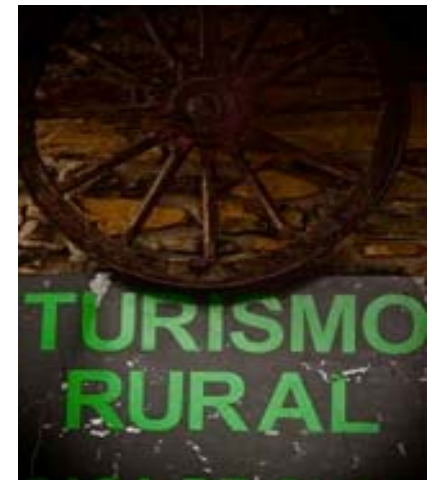


Differentiation of space trajectories

*Domon 2011, Holmes 2006 and 2012;
Marsden 2013; Marsden and Somino 2008; Wilson 2007*

Transition theory suggest that there is a spatial, temporal and structural co-existence of several **processes of transition** from productivism to post-productivism, and further to bio-economic productivism, going on in rural areas in Europe, resulting in an increasing diversification of rural space

 **changing drivers of landscape**



How to understand the landscapes of today ?



**questioning the changes and
the drivers for these changes**

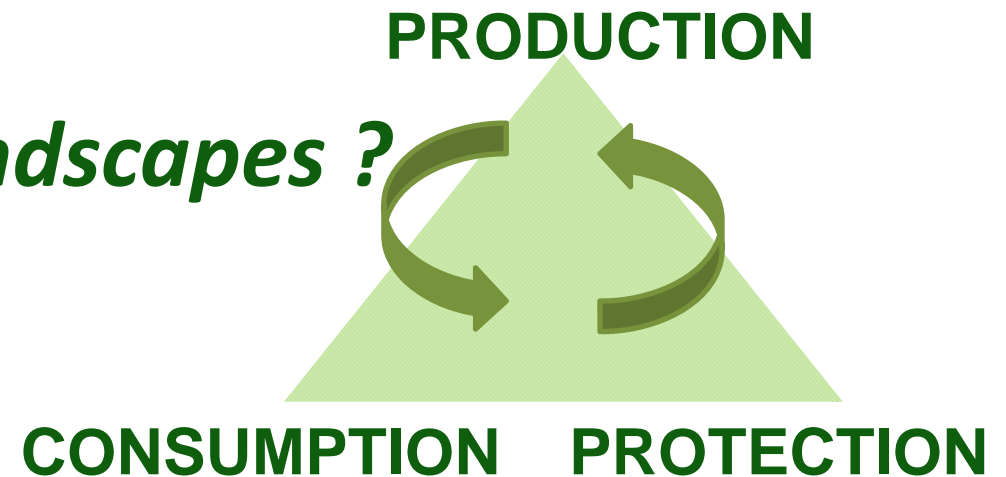
- * re-defining relations space-people-activities**
- * grasping new demands >> new modes of rural occupancy**
- * understanding the role of new actors**
- * assessing multi-scale interactions and decision-making**

behind the pattern, unfolding the processes



Changing modes of rural occupance: an on-going dynamic process

*what is driving
the use of the rural landscapes ?*



➡ relative weigh of production, consumption and protection are being altered, and often re-arranged again >> contradictions and complex dynamics



new management models

driving forces in the revaluation of rural landscapes

PRODUCTION

agricult. hyper
productivity

↓
overcapacity

↓
surplus resources
to alternative
purposes

CONSUMPTION

more access
higher incomes
lifestyle change

↓
urban penetration

↓
farm pluriactivity
off-farm income

PROTECTION

surplus land
return to nature

↓
environmental
concerns

↓
policies and
programmes

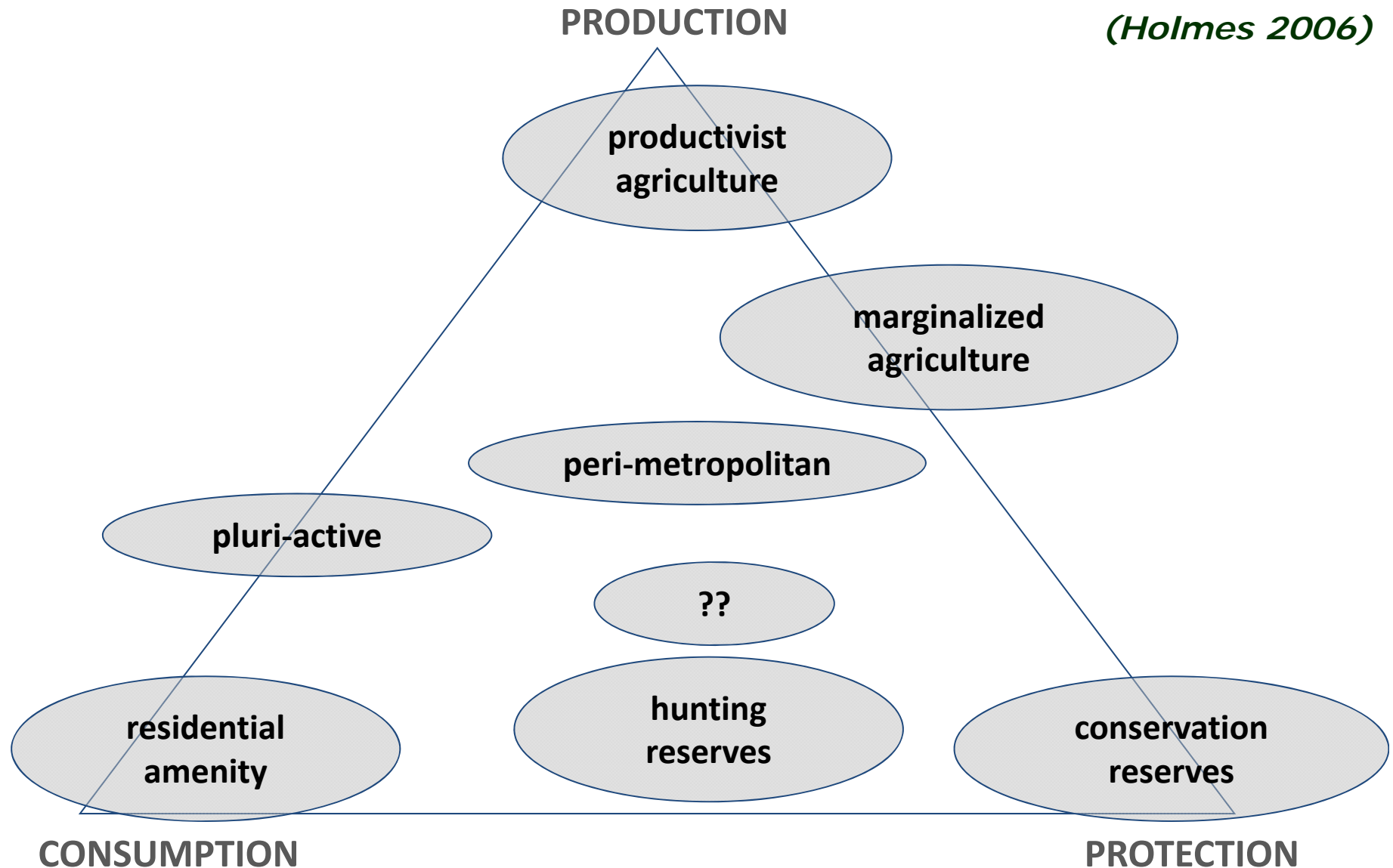
transition towards multifunctionality

in the appraisal, allocation, use and management of rural landscapes

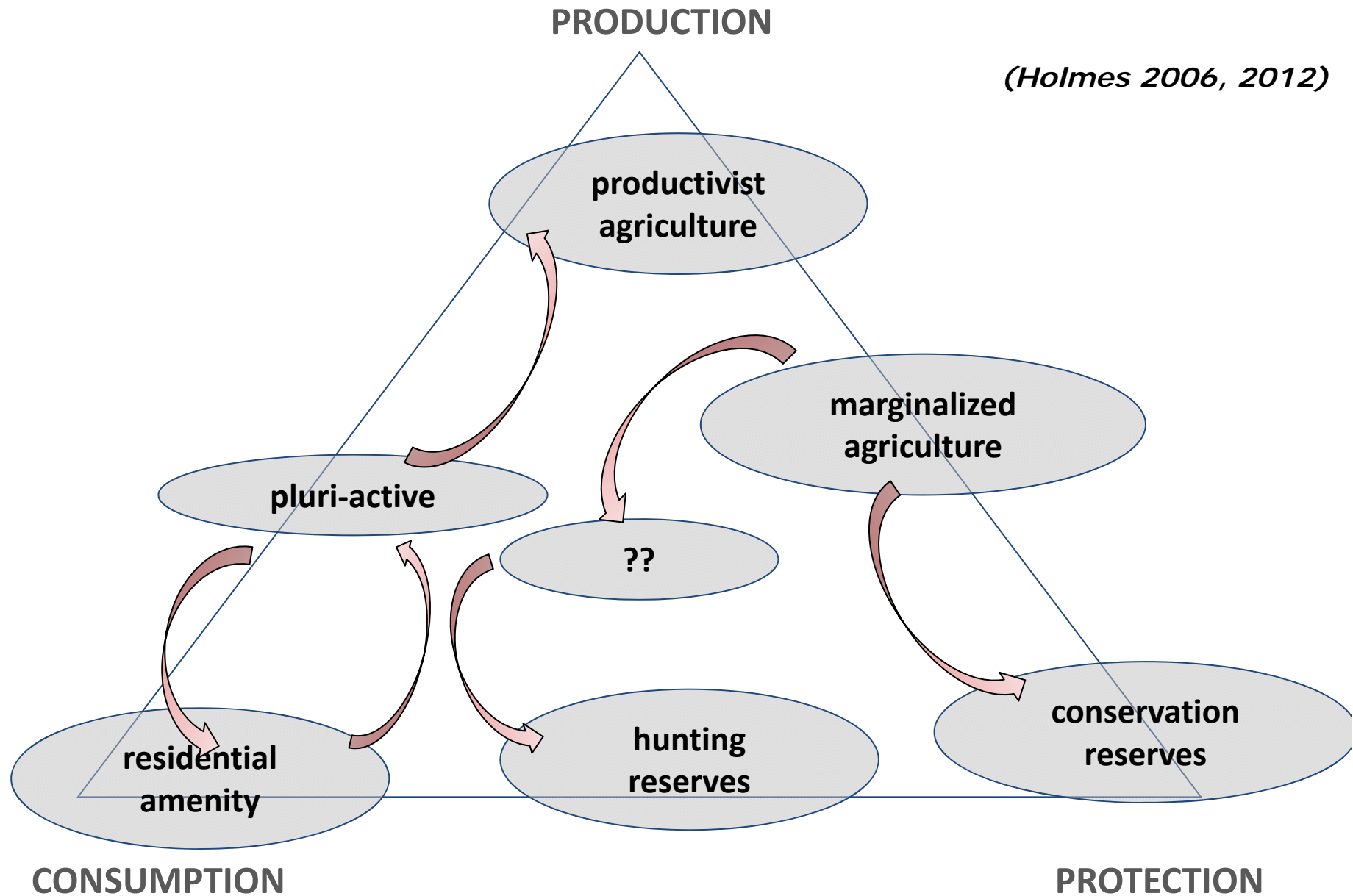
**increasing diversity, complexity and spatial heterogeneity
in modes of rural occupance**

(Holmes 2006)

reshaped balances: new modes of rural occupance

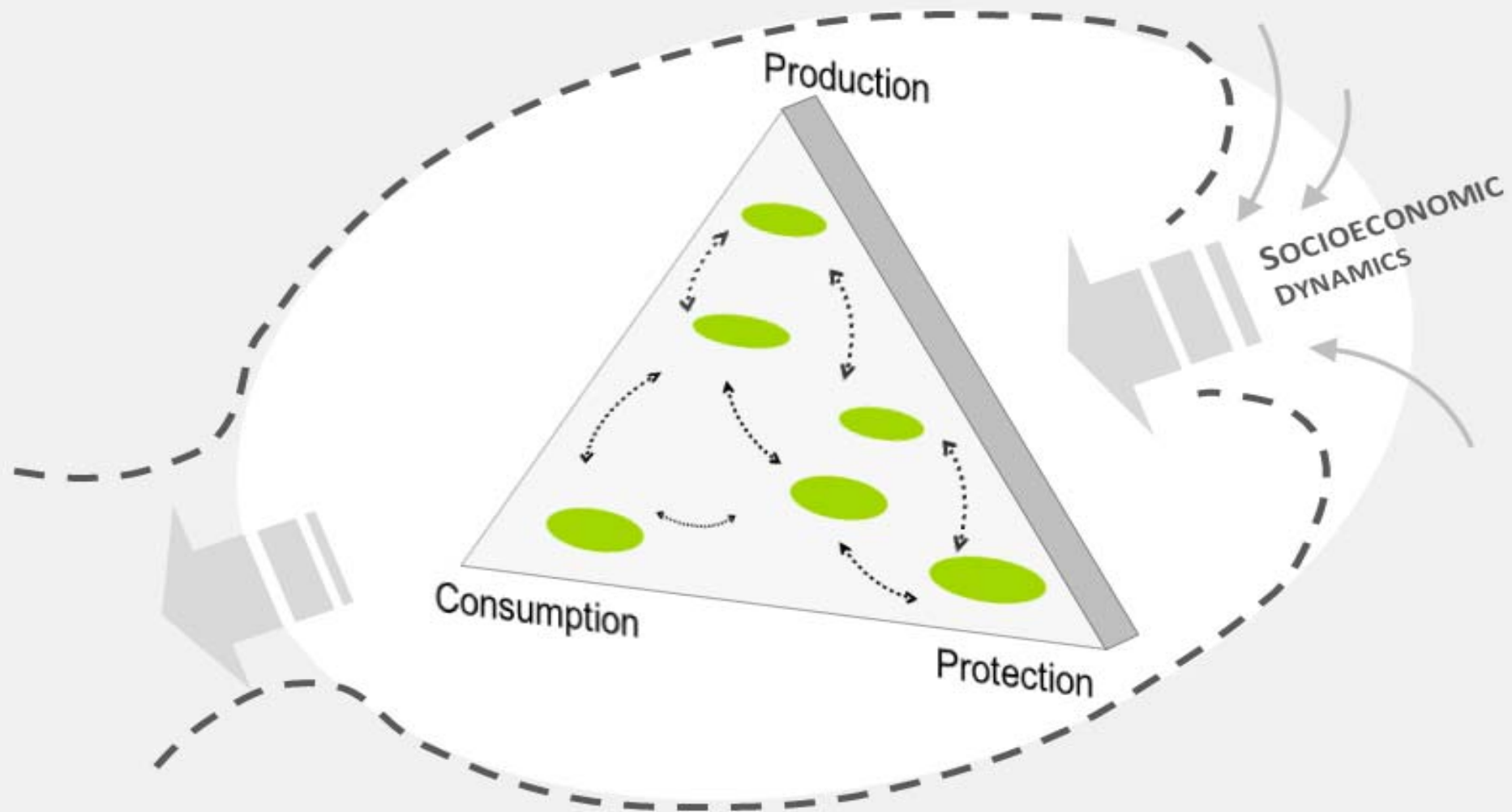


positions may change...

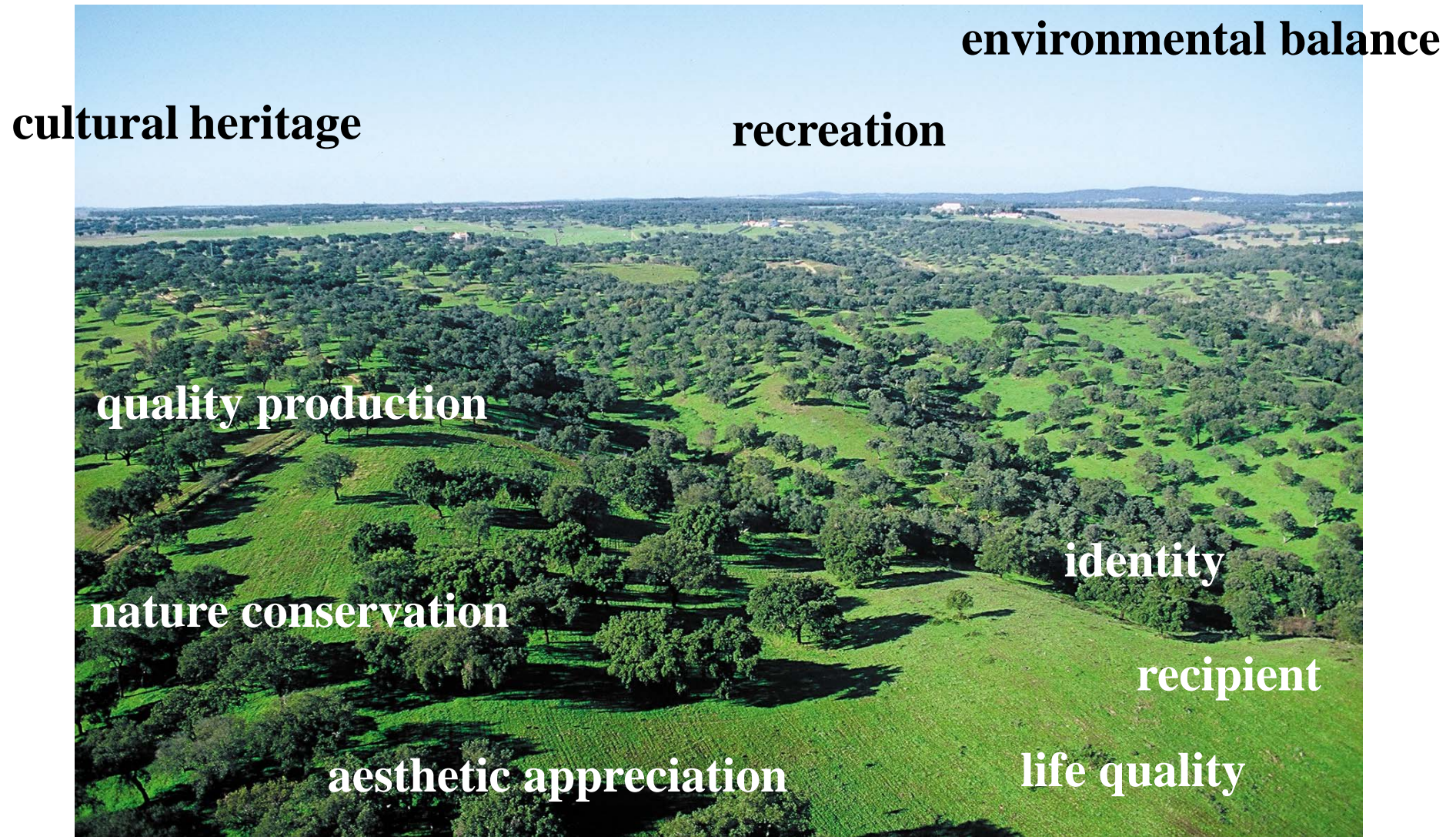


..and each particular socio-economic context has a decisive role

(Ribeiro, Madeira and Pinto-Correia 2013)



the extensive silvo-pastoral systems:increasingly multifunctional



from production



to (also) consumption and protection



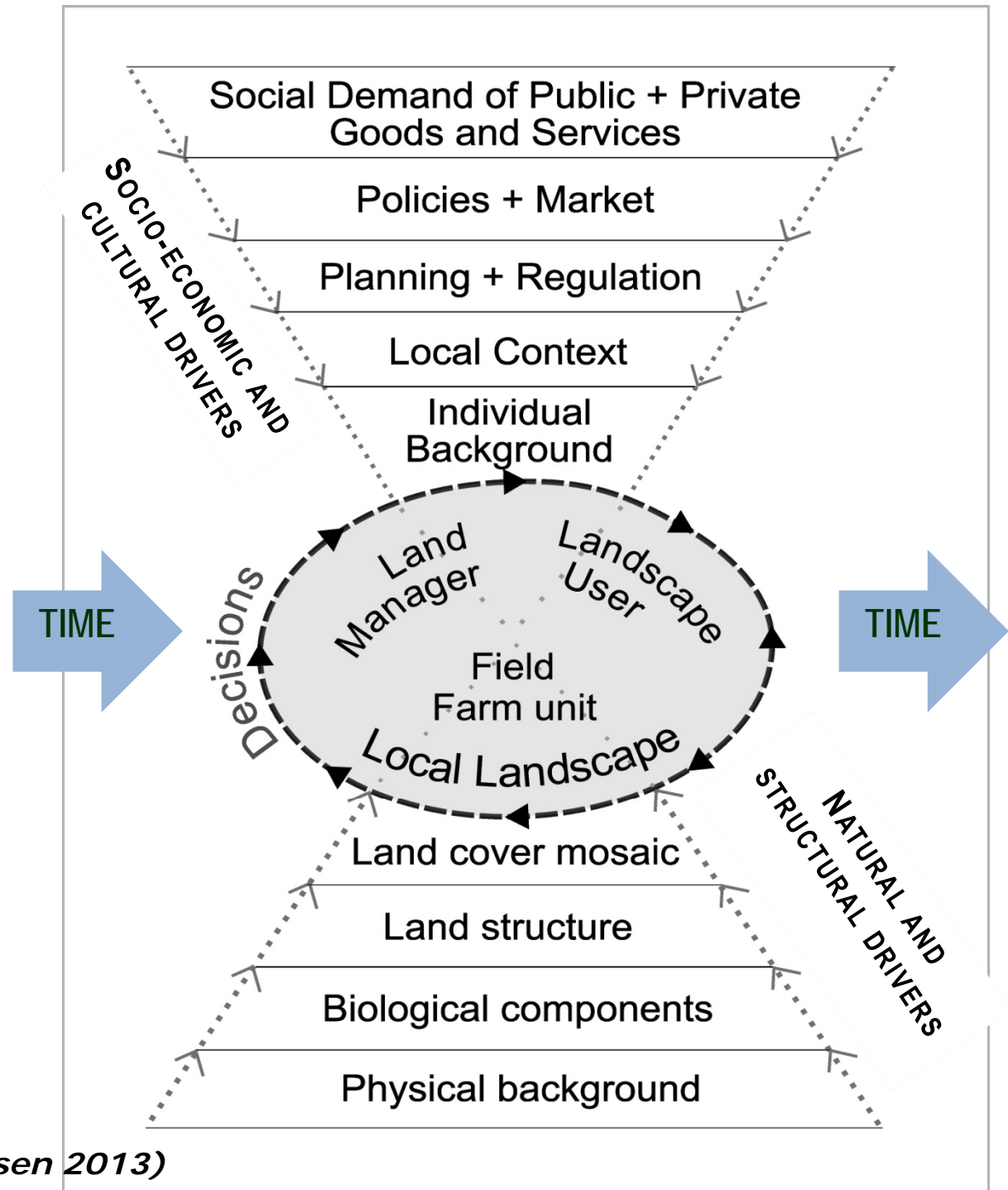
landowners are landscape decision-makers



between global and local drivers,
between constraints and opportunities
they may not be aware of this paradigm shift
but in their farm and fields, **they interact with other users**

**In the interplay
between
different drivers,
need to
acknowledge
new set of
actors**

**the landscape
as the
meeting arena**

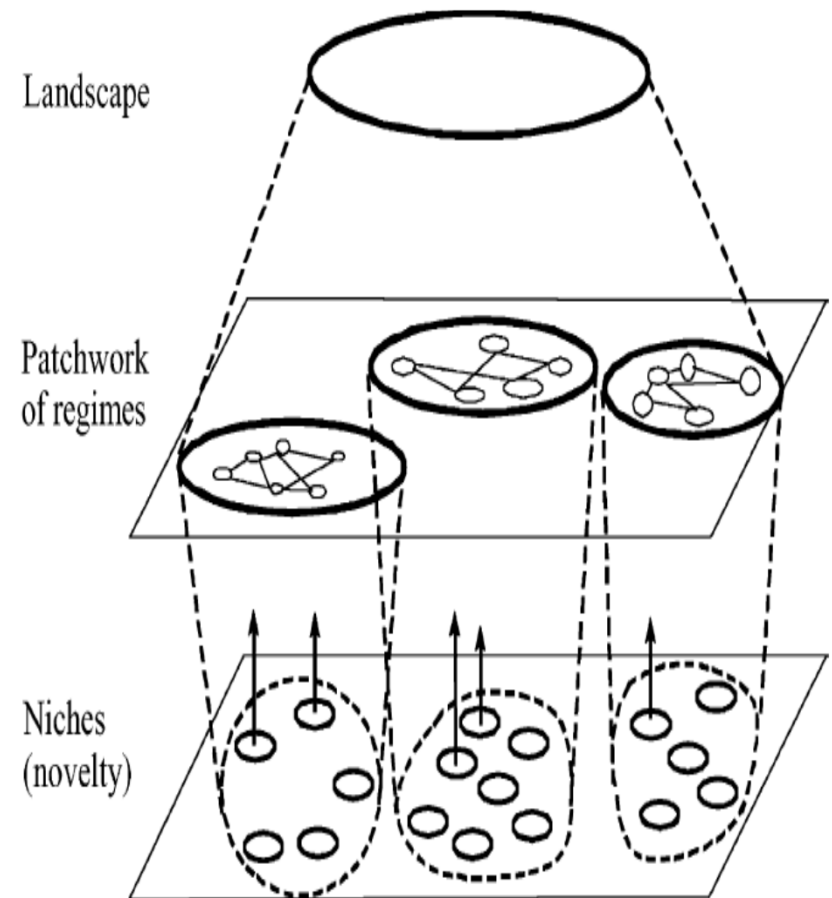


Transition theory: the multi-level perspective

(Elzen et al 2004; Geels 2004; Geels and Shot 2007; Grin, Rotmans and Schot 2010)

- **Landscape**
 - Broad background structures, external context, society
- **Regime**
 - Regulations, markets, sector infrastructures with stable configurations
- **Niche**
 - Entrepreneurs and innovators
 - Actively construct niche

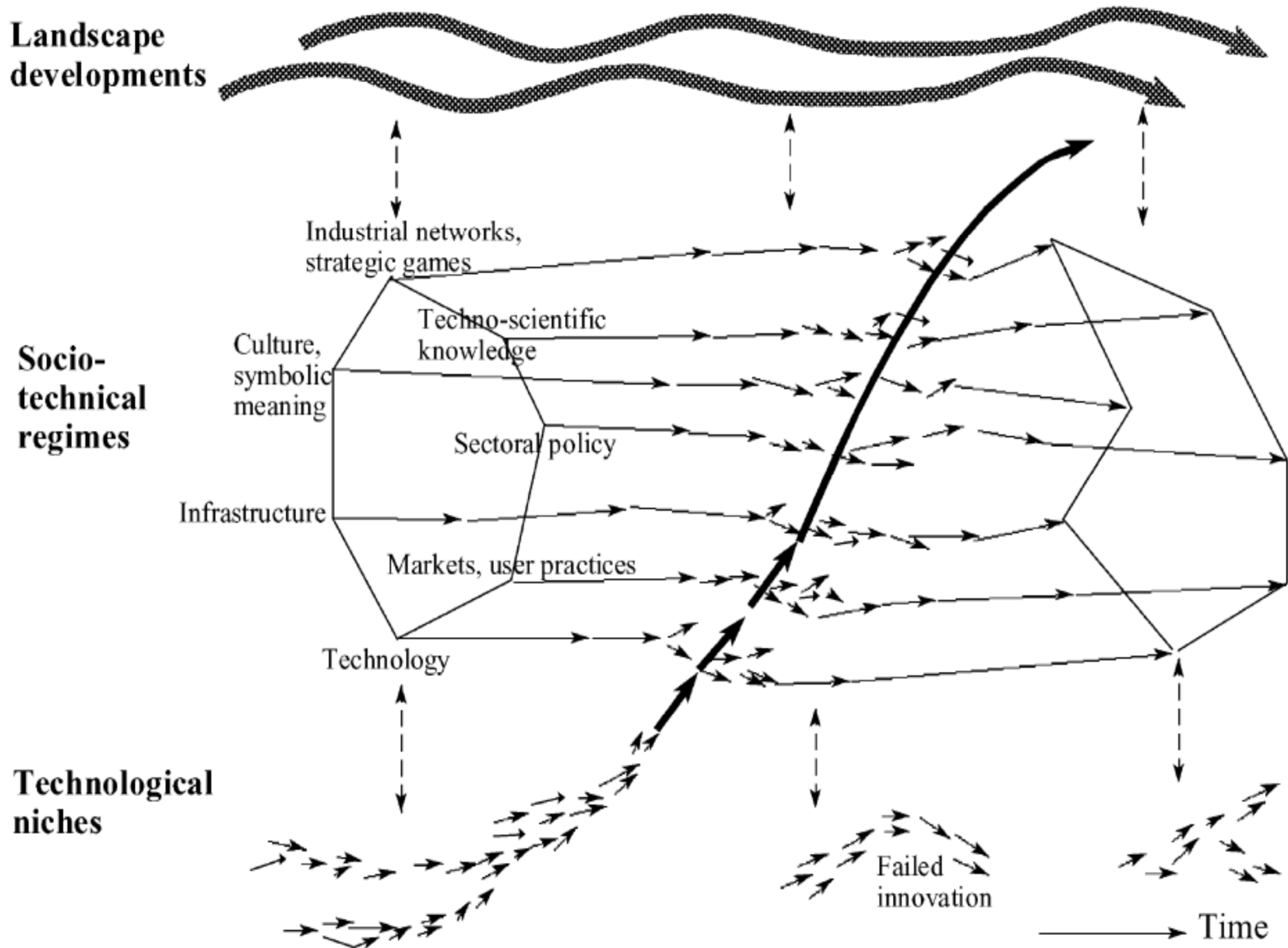
Mutual reinforcement necessary for transition: alignment of trends developments and events on the 3 scales



Transition studies, grounded in transition theory

(Elzen et al 2004; Geels 2004; Geels and Shot 2007; Grin, Rotmans and Schot 2010)

- **Multi-actor**
- **Multi-level:** niche, regime, landscape
- **Multi-phase:** pre-development, take-off, acceleration, stabilization
- **Long time frame:** 25-50 years, breakthrough: 10 years
- **Radical shifts:** change in functioning of a sub-system: in terms of structure, culture and practices
- **Focus on socio-technical transitions**
 - Change in technology affecting society at large



Transition theory: how radical changes occur?

Landscape press the regime

Opens a window of opportunity
Influence mediated by actors' perceptions, agendas, negotiation

Regime fails to offer solution

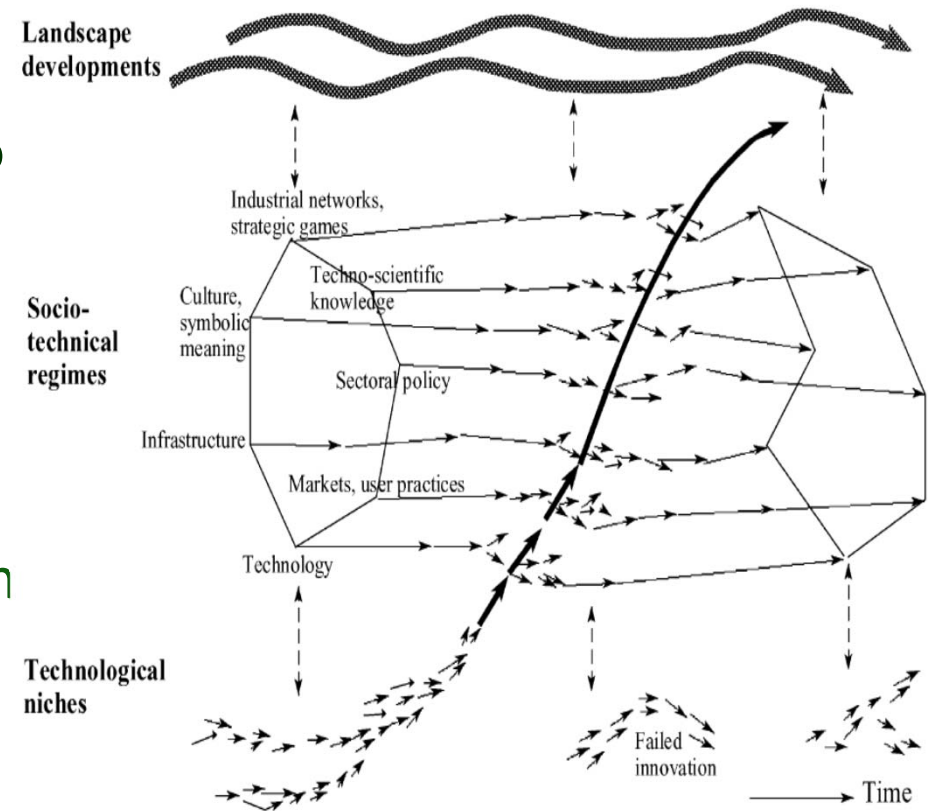
Niches emerge

Initially: mismatch with existing regime, e.g. policies, infrastructure requirements, user practices

Competition between niches, and then Co-evolution

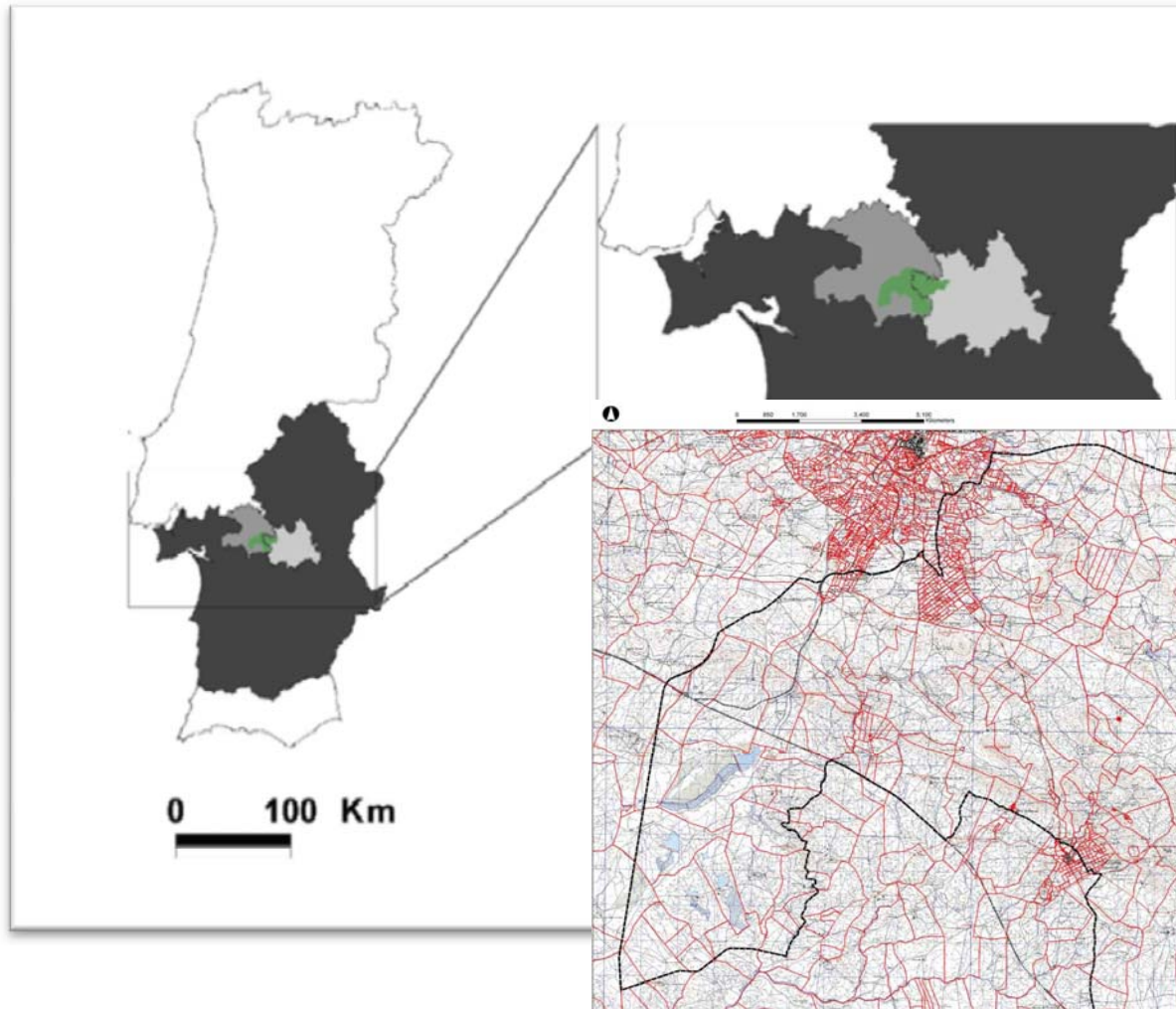
Pressure the regime(s) , meeting landscape pressures

**Anchoring of niche in regime > adaptative management
> change in regime > mainstreaming**



Montemor-o-Novo

100 km east of Lisbon
and 25 km from Évora
Natura 2000 site



An attractive town,

where people look for the surrounding landscape...



and as such the use of the land is changing...

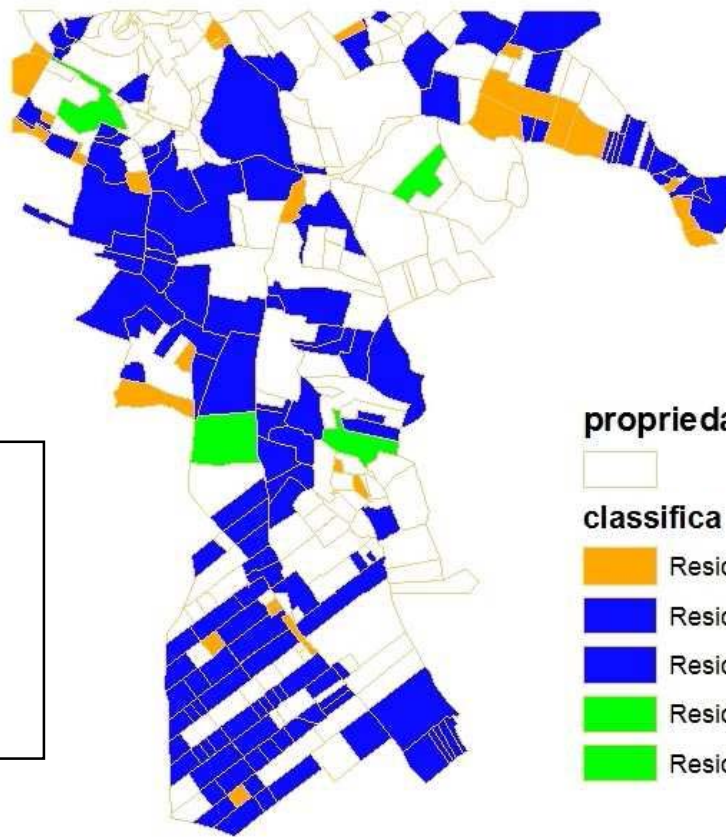
main management driver



166
parcelas

440 ha

52,6%



Legenda

propriedades



classifica



Residência 5,2%



Residência do produtor mais produção mista 27,4%



Residência do produtor mais produção para autoconsumo 17,4%



Residência do proprietário mais produção mista por outro 1,8%

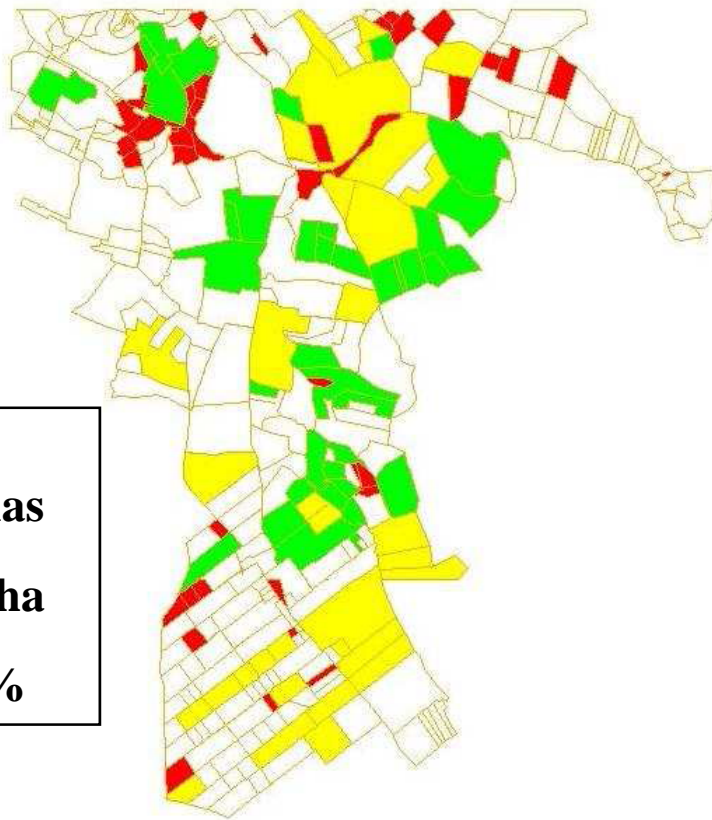


Residência do proprietário mais produção para autoconsumo por outro 0,8%



and the specific farm systems decaying

main management driver



113
parcelas
338,8 ha
40,5%

Legenda

propriedades



classifica



Produção para autoconsumo **5,4%**



Produção para mercado **19,6%**

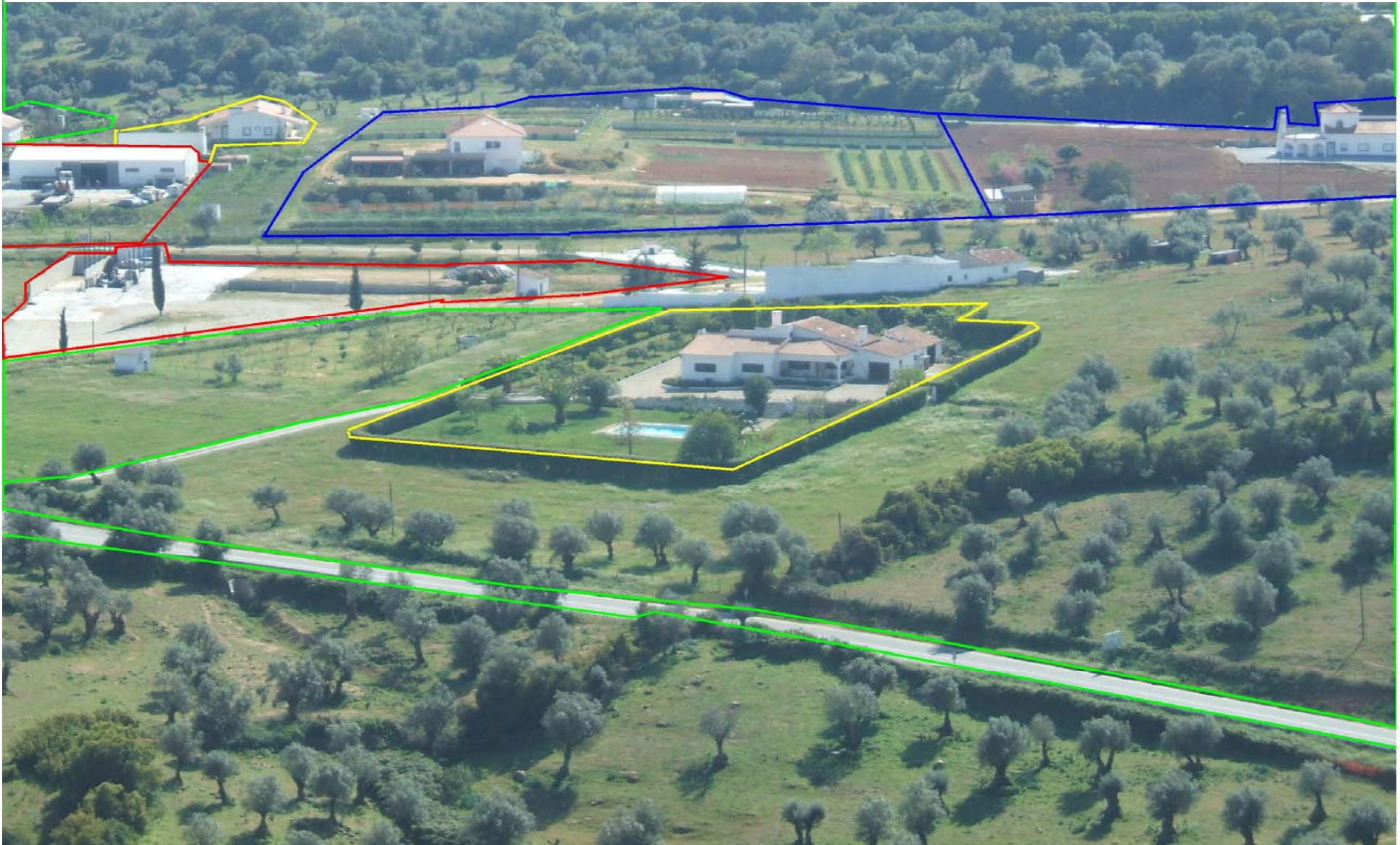


Produção para mercado e autoconsumo **15,5%**

0 1 2
Kilometros

new functions in old patterns

.... or changing patterns ? >> a mismatch



the tragedy of the landscape ??

The tragedy of the commons (Hardin 1968)

Multiple individuals, acting independently, and solely and rationally consulting their own self interest, will ultimately deplete a shared resource even if it is clear that it is not in anyone's long term interest that this happens.



➡ Is this landscape disappearing ? under risk ?

Consumption as a driver of farm and farmland management

..grounded in a quest for rural lifestyle, healthy food,leisure,

 which may or may not be closely linked to production

Lifestyle farming: the income generated from
agriculture is not the main motivations for the choices taken

> multiple new types of actors

and new community compositions

> changed approach to farming

and therefore to land management

oportunities for innovation

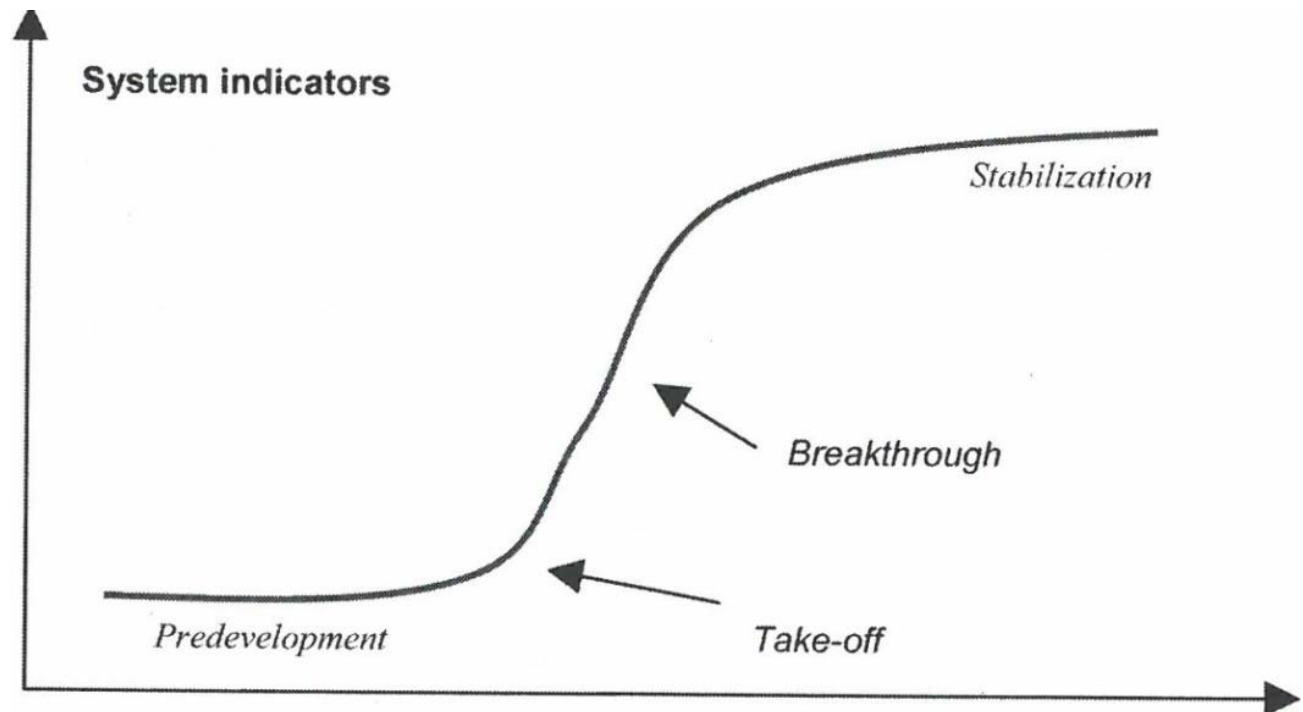
in landscape care

Lifestyle farming seems to be a niche

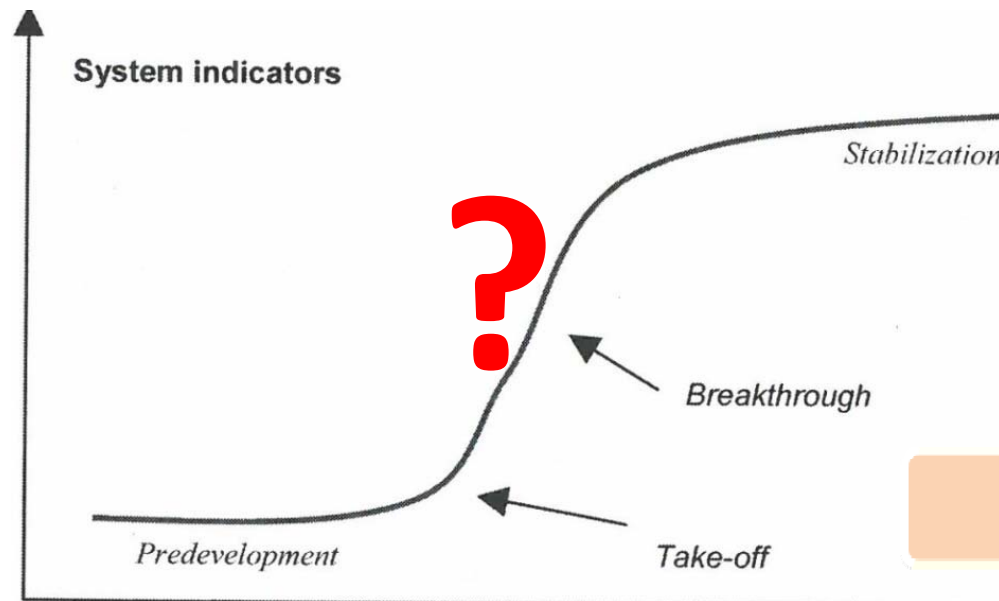
Assessing the anchoring >> the niche:

- is in the take-off stage ?
- is actively engaging with the regime ?
- becomes mainstream ?

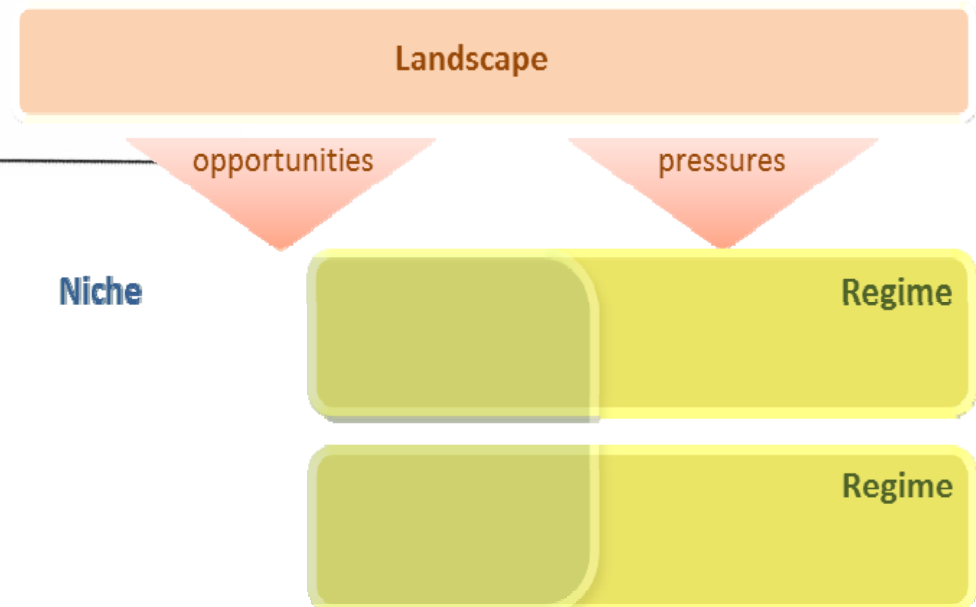
Is it acknowledged as a new paradigm in land and landscape management ?

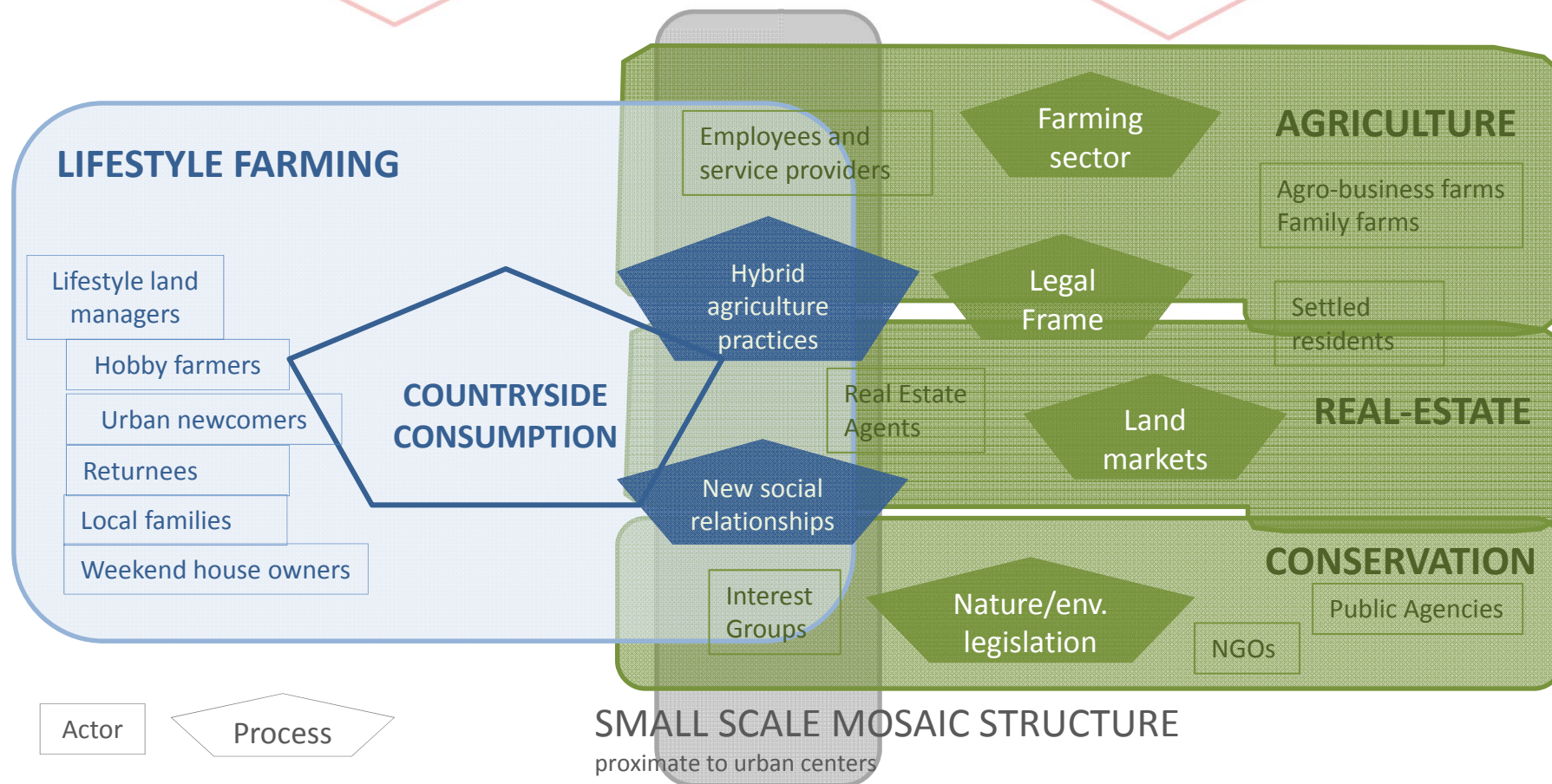
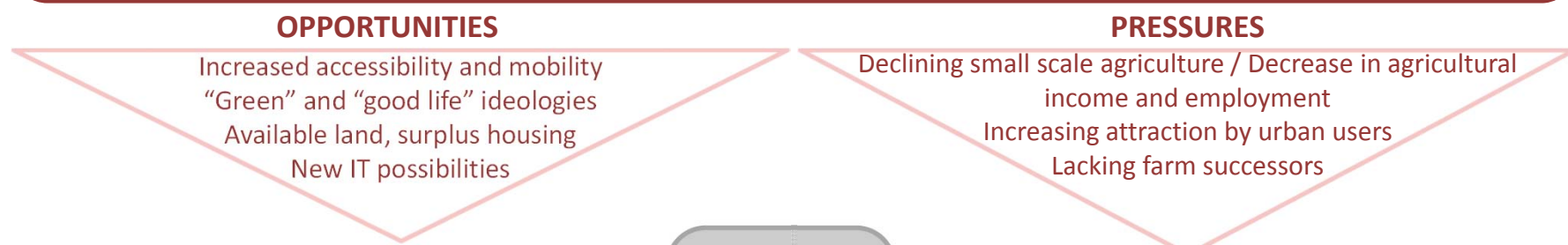


How to analyse what is going on ?



- Identifying actors at all levels + hybrid actors
- Structured interviews + indicators
- Assessing opportunities and constraints registered by niche
- Measuring changes in regime





New management arrangements?

Innovation and retro-innovation in farming

Association with older farmers

and transmission of traditional knowledge and practices

Reshaped production goals and systems:

organic, permaculture, specialised niches,...

Land bank and share of resources

Local food / short supply chains and autonomy

Valorisation of local seeds: focused associations, exchange website

Creation of new land related jobs

New interplay of actors+new roles in a reshaped community

>> a place based process

landscape + food + community *are at the centre*



...but still an unseen process

and unseen farmers

- * **No interaction** between the concerned regimes
- * Conservation regime has opened up for the relevance of lifestyle farming << *but it is the weakest player*
- * Real-estate regime: adapts, has a **determinant role**, but does not consider farming
- * Agricultural regime: pressures from the landscape are deviated
 - ** policies remain strongly focused on commercial production >> *supported by equally focused analytical models*
 - ** Difficult access to support measures (ex. short supply chains)
 - ** Same legal requirements (ex. livestock reporting)
- * No normative institutional anchoring:
no formal or informal rules about what is desirable, which could be embedded in laws, regulations or policies

an opportunity which is being lost

- Re-linking farming with the local landscape
 - Re-shaping the role of farming in the rural community
 - Creating jobs in farming and land care
 - Valuing and producing quality food
 - Attracting external investment and entrepreneurship
-
- **PLACE BASED AND CENTERED IN THE LOCAL LANDSCAPE**
 - **NEW PLACEMENT OF RESPONSABILITIES IN RELATION TO THE LANDSCAPE**

(Sutherland et al, forthcoming; Pinto-Correia et al forthcoming)

Why is this opportunity being lost ?

The established mindset is not only the one of farmers,
but also the one of many other regime actors

>> change in
management paradigms require a transition pathway
where multiple factors need to play together



a new challenge for multi scale governance
a new challenge for transdisciplinary research

How to find the needed pathways ?

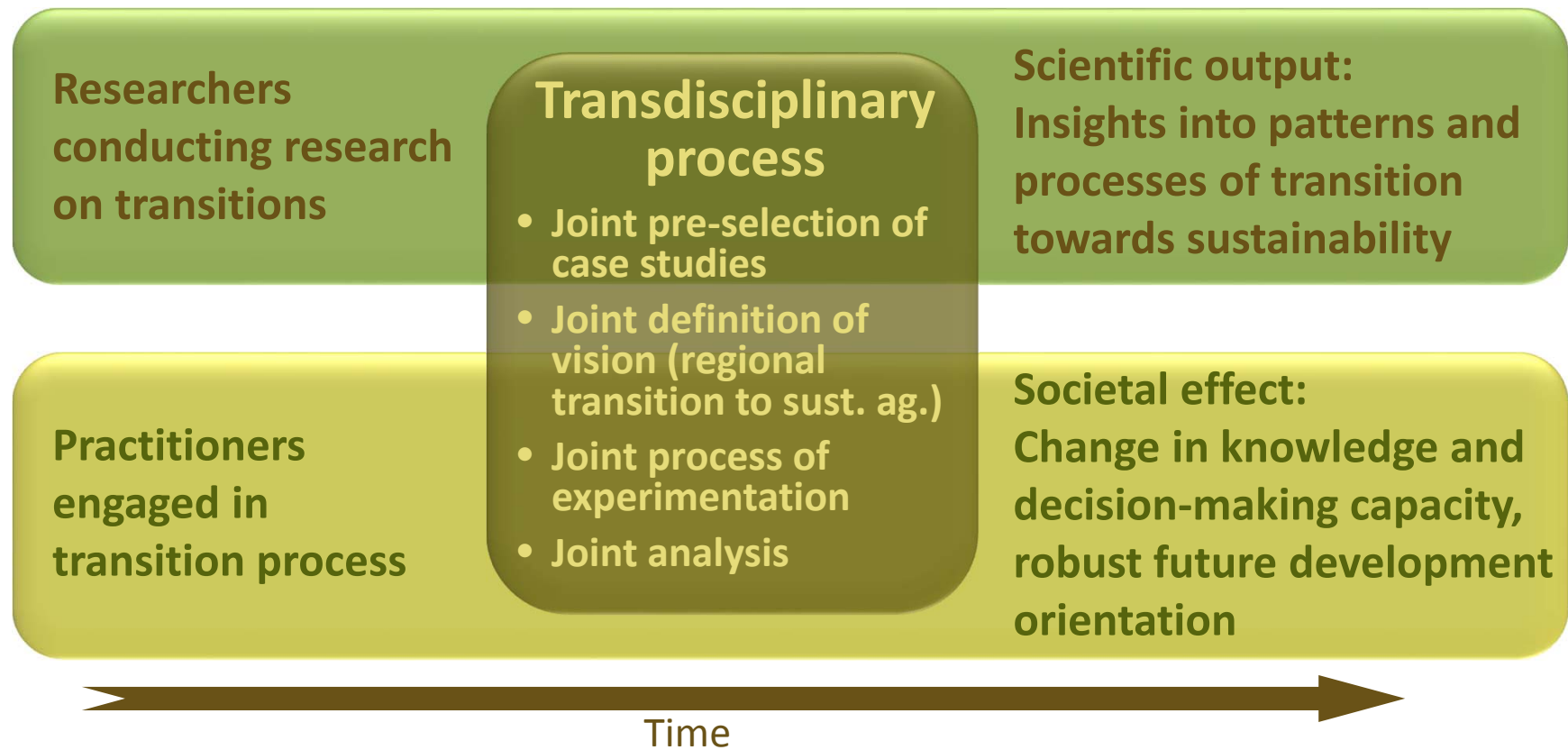
a participatory process starting locally
involving the identified actors at the different levels
creating visions and defining the needs



PARTICIPATORY TRANSDISCIPLINARITY



Transdisciplinarity: Types of outputs



Walter et al. (2007)

Transdisciplinarity: Challenges

- **Very time-intensive**
 - Engagement, knowledge brokering, unfolding process
- **New skills demanded from scientists**
 - Facilitation (get a professional!), knowledge integration
 - Integrating Science and Life-worlds
- **Results/output not easily visible/measurable**
 - Embodied knowledge, learning processes engendered
 - Makes it difficult to show 'success' e.g. to funders
- **Need to press for academic recognition**
 - Results may not be publishable in top journals
 - New scientific fields start being acknowledged

THANKS !



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