

IALE EUROPE



2015 Meeting of the Italian IALE chapter *The Ecological Dimension into Land Governance*

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diversity of European landscapes



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and particularly their complexity



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.. changing fast

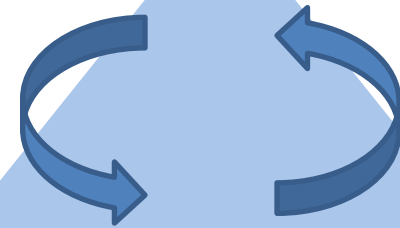
Conflicting and complementary land use paradigms

>> intensification vs extensification

>> scale increase vs expanding small scale elements and farming

Urbanization and new expectations from society

PRODUCTION



CONSUMPTION

PROTECTION

**resulting in specific combinations and mismatches
of landscape pattern and landscape function**

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and a reshaped mix of actors



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landscape research in Europe



Long lasting tradition:

descriptions and representations since the 14th century

explorations and study of nature/culture relationships since the 19th

Establishing the roots of Landscape Ecology:

Carl Troll *Landschaftsökologie* 1939

Integration of disciplines in the emergent Landscape Ecology

Congress in Veldhoven 1981 and foundation of IALE in Slovakia 1982

Constantly evolving:

Broadening of scope to fit complex drivers and patterns

Conceptual innovation facing novel real world questions

From interdisciplinarity to transdisciplinarity

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Strongly linking to practice:

landscape at the centre of a maelstrom of issues surrounding
food safety, environmental balance and climate change
common goods and public rights, societal expectations

- * Identifying policy relevant indicators and related thresholds
- * Developing procedures for public assessment and participation
- * Assessing and informing the targetting of public policies
- * Creating visions and pathways for new management paradigms
in multiple contexts

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Dealing with the multiple landscapes

but also the multiple meanings of the word landscape:

An ecological system

A spatial entity

A scenery

A region with deep historical roots and shared identity

An holistic entity



place based

focusing on uniqueness

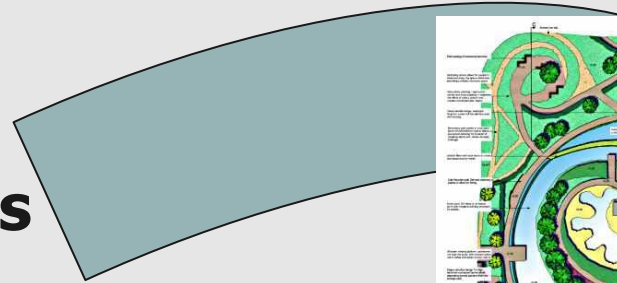
involving people

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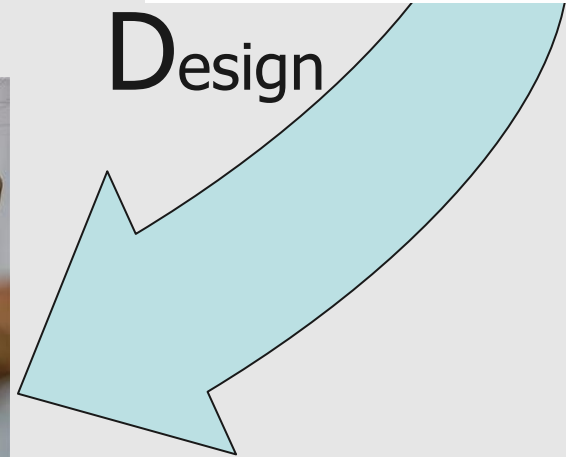
a multiple approach



Space
Patterns
Processes



Design



People
Place
Practice
Participation



IALE Europe, since 2009 a regional chapter of IALE



Aims:

- * strengthen contacts and enriching the dialogue between members of Europe's landscape concerned community**
- * represent the interests of this community within the wider European social and institutional context**
- * secure the all European landscapes and the adapted Landscape Ecology approaches are equally considered in European policy making**
- * make the collective expertise of IALE Europe available, where appropriate for promoting a more balanced interaction between humans and their environment.**

IALE Europe, since 2009 a regional chapter of IALE



If you want to learn more:

>>> www.iale-europe.eu

Next IALE European Congress: Ghent, 12-15 Sept. 2017

>>> and:

Antrop M., Brandt J., Ramos I.L., Padoa-Schioppa E., Porter J., Van Eetvelde V. and Pinto-Correia T., 2013

in *Landscape Ecology*, vol. 28, issue 8

“How Landscape Ecology can Promote the Development of Sustainable Landscapes in Europe – the role of the European Association for Landscape Ecology (IALE Europe)”

Periurban landscapes

URBAN

RURAL

MALLS

LOCAL MARKET

ROADS.

TENESS

EDUCATION

E HOUSING

EVENTS.INDUS

RY

NOISE. MOVE

.CALMNESS

**VORS.PRESTI
M**





What differentiates conceptually PeriUrbanAreas (PUA) from urban and rural?

Composition, complexity and dynamics

Antrop, 2004; Meeus and Gulink, 2008; Simon, 2008; Rauws and de Roo, 2011; Fertner, 2012

scenario development in the Metropolitan Area of Lisbon

Basic assumption



PUA is a “new” space that needs more targeted policies and treated as a “spatial system in its own right”

Rauws and de Roo, 2011



How
differentiate
PUA from
URBAN and
RURAL?

How
differentiate
within PUA?

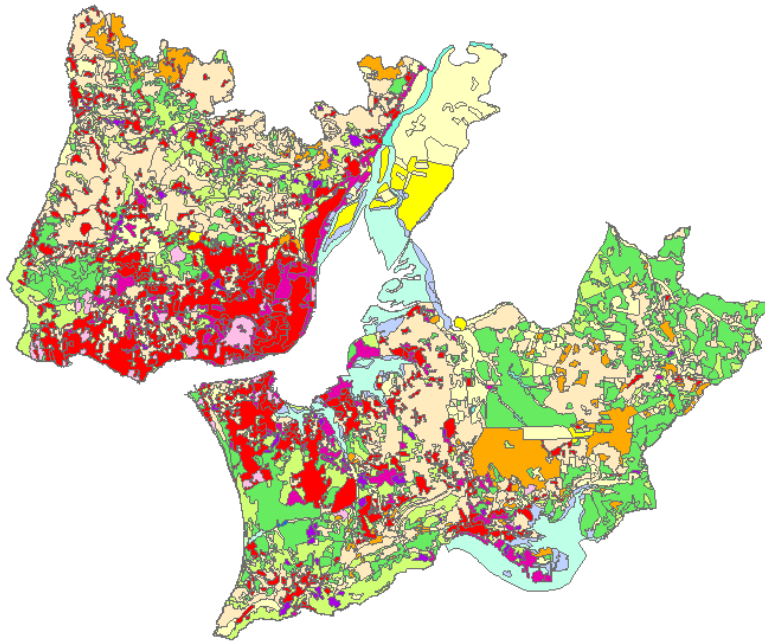


TYPOLOGIES

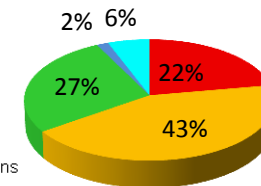
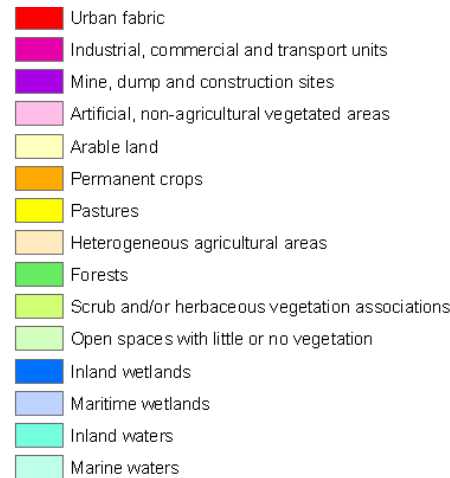
as basis
for scenario development
for targeted policies and planning

Case study Metropolitan Area of Lisbon

~ 3000 km²; ~ 3 million inhabitants; ~ 1000 inhab/km²; 18 municipalities (LAU1); 211 parishes (LAU2)

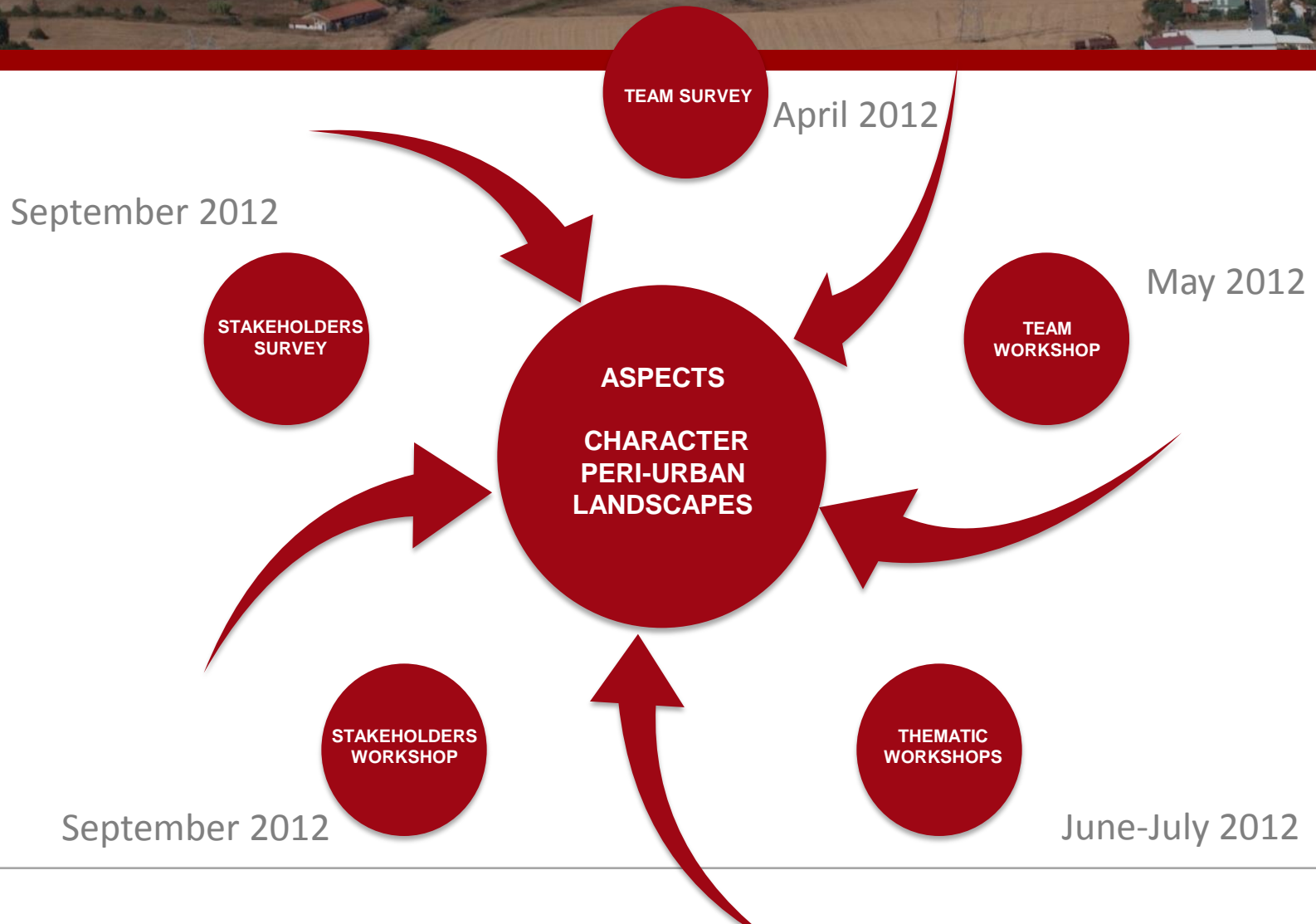


Corine Land Cover 2006 Level 2

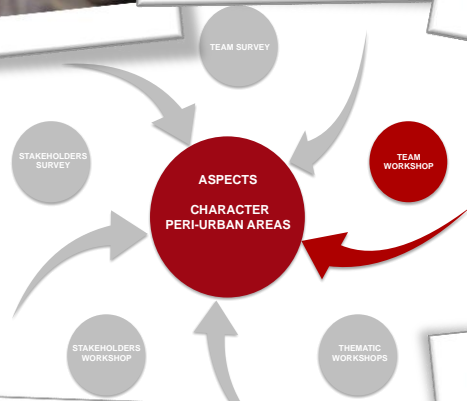
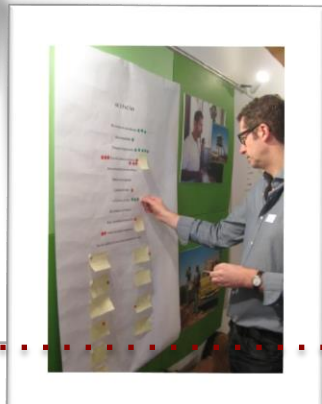


CLC2006

Transdisciplinary process



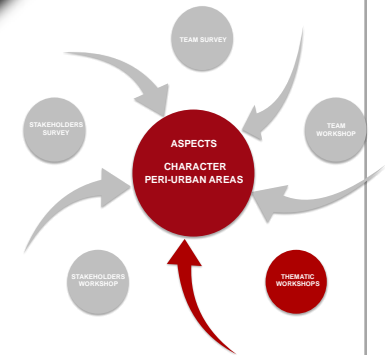
Transdisciplinary process



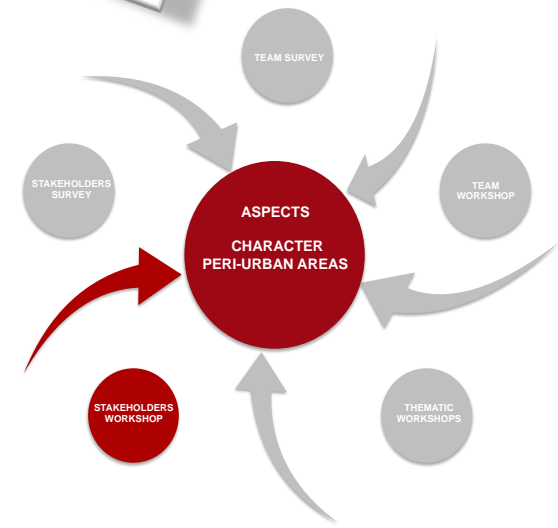
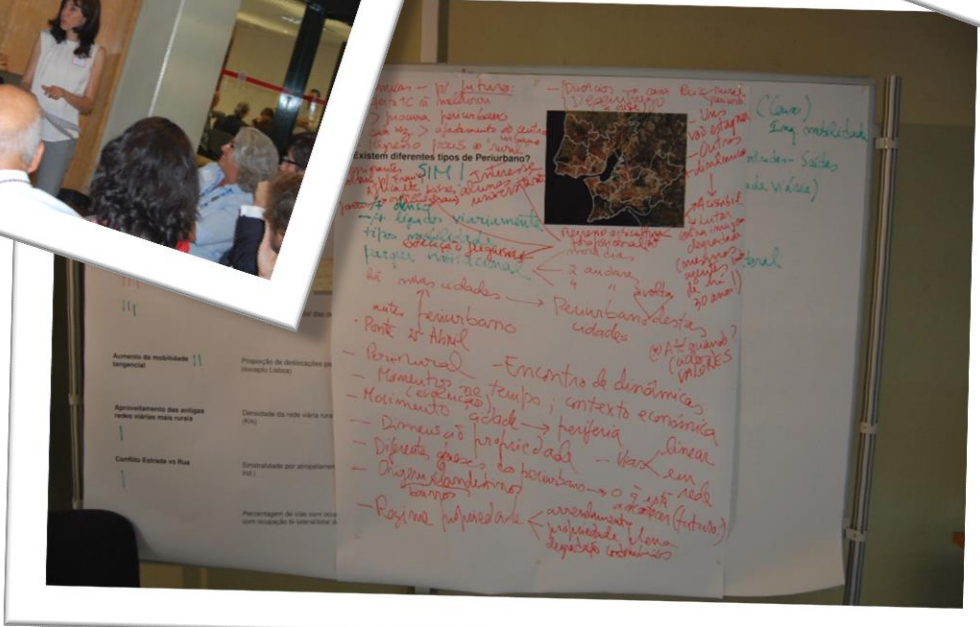
Transdisciplinary process



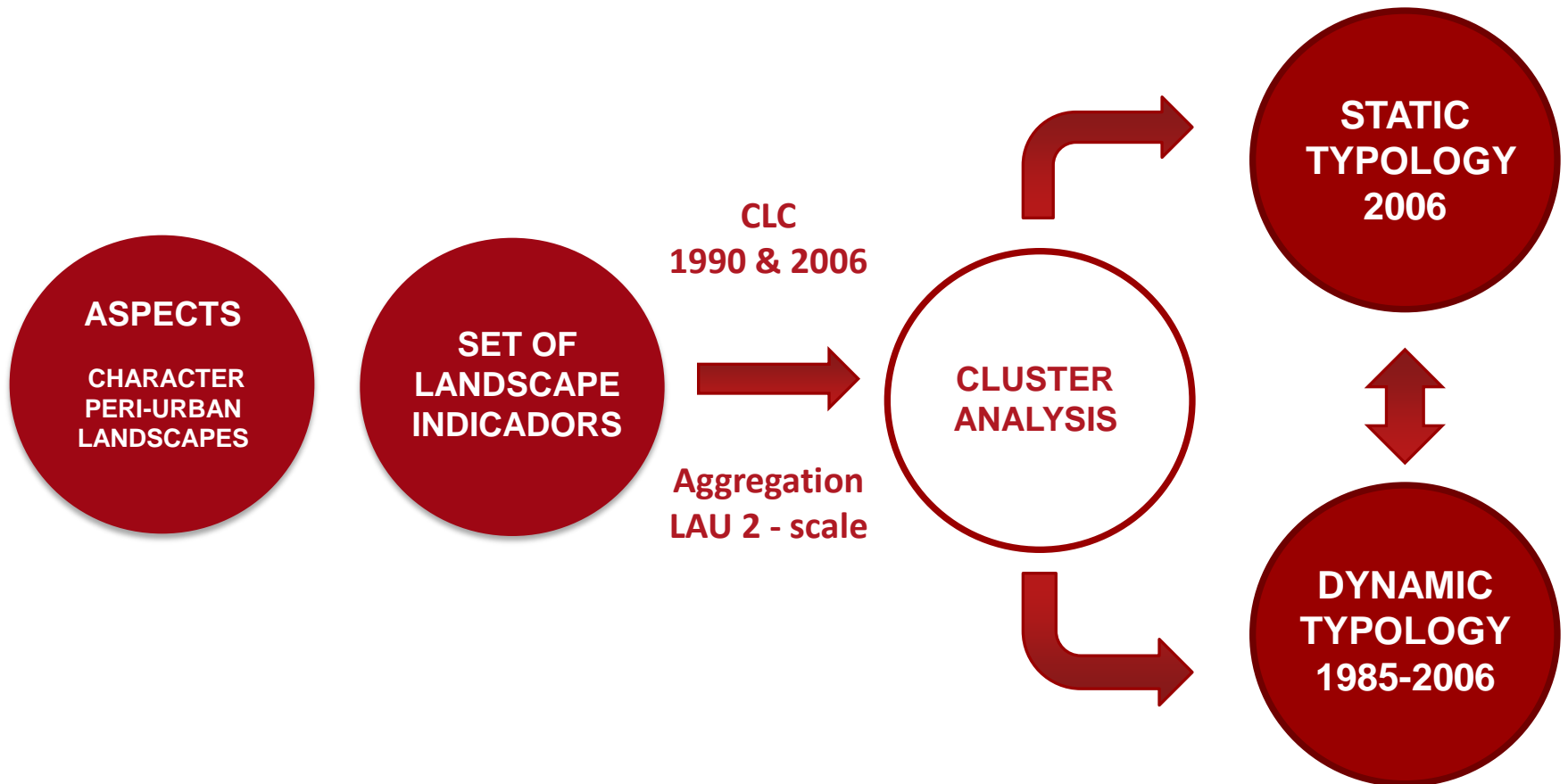
Development of a common object oriented language – insights into disciplinary jargons



Transdisciplinary process



Methodology: *building on Landscape Ecology*





Indicators and scale

■ *Land cover diversity*

- Percentage of agroforestry (%)
- Percentage of annual crops (%)
- Percentage of permanent crops (%)
- Percentage of forests (%)
- Percentage of Scrublands (%)
- Percentage of Farmland mosaic (%)
- Percentage of other artificial surfaces (%)
- Percentage of Urban (%)
- Land cover richness
- Number of patches in the landscape
- Edge density in the landscape (km/km^2)

■ *Urban-non-urban interface*

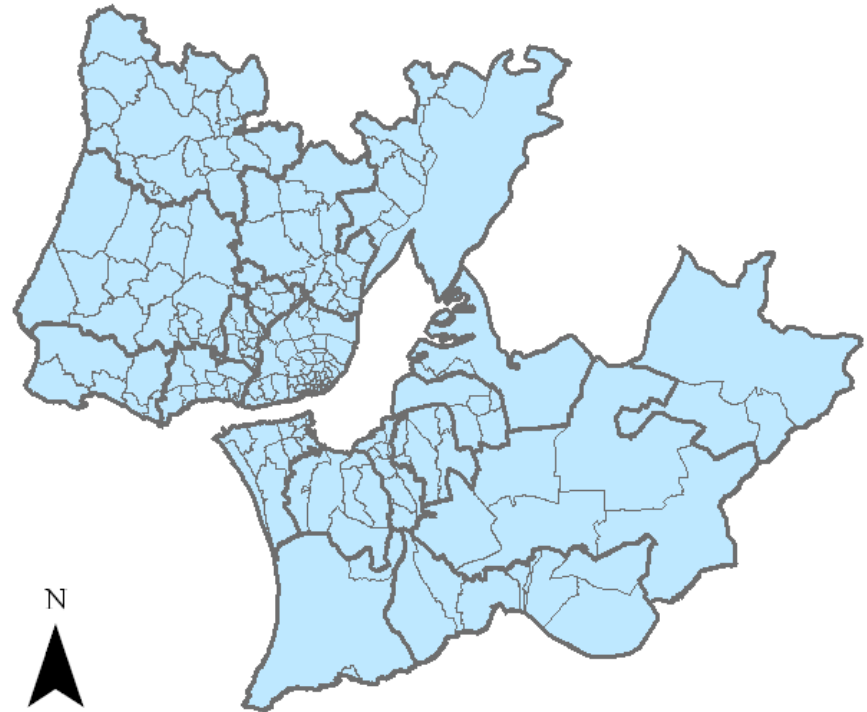
- Total edge between urban-non-urban classes (km)
- Edge density between urban-non-urban classes per urban area unit (km/km^2)

■ *Non-urban continuity*

- Largest non-urban patch index (%)

■ *Urban morphology*

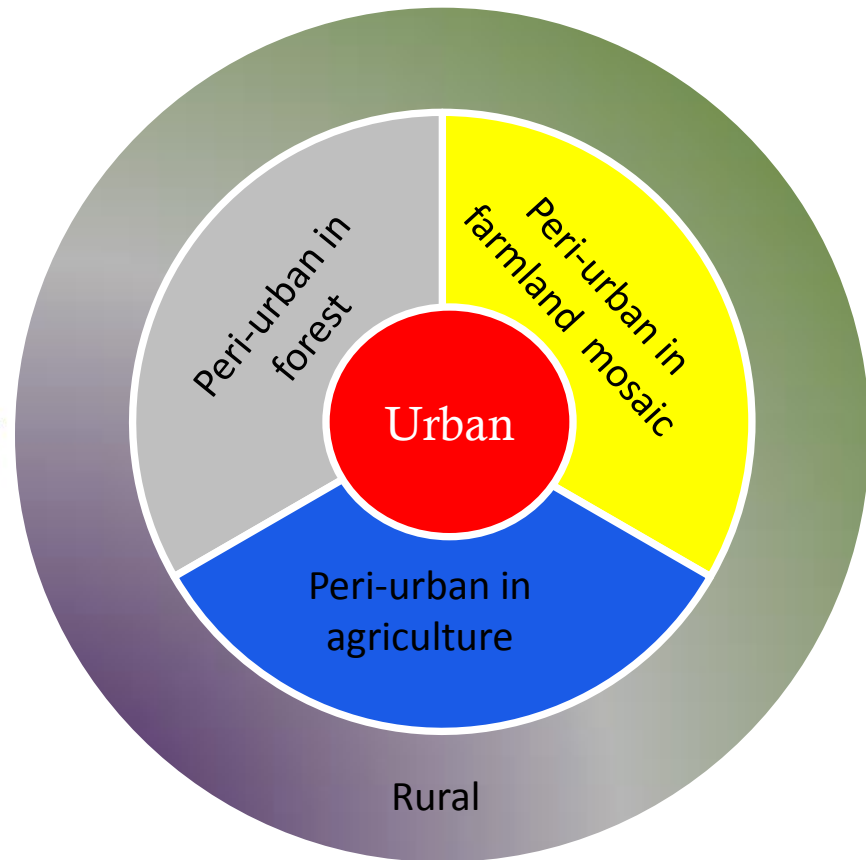
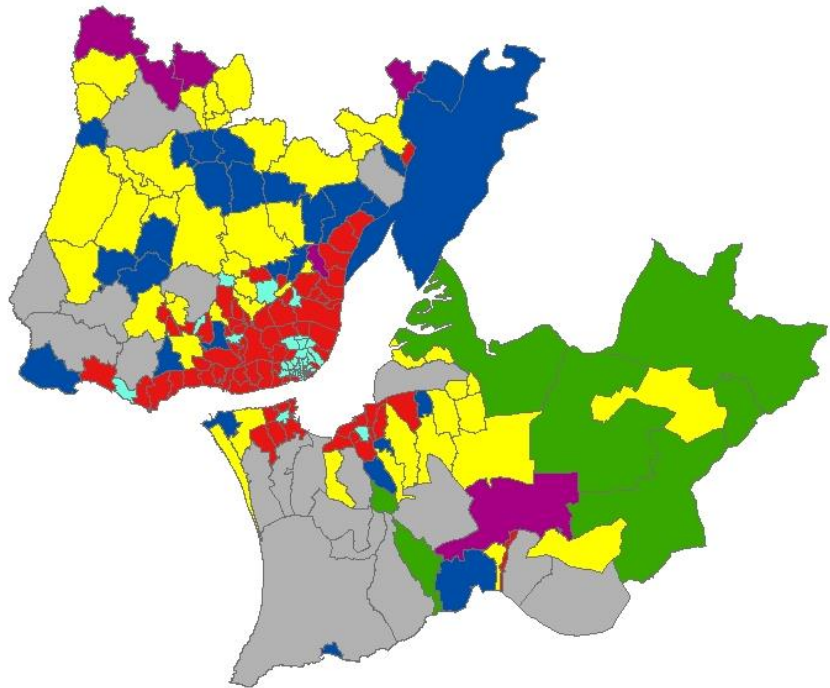
- Number of urban patches
- Standard deviation of the urban patches area



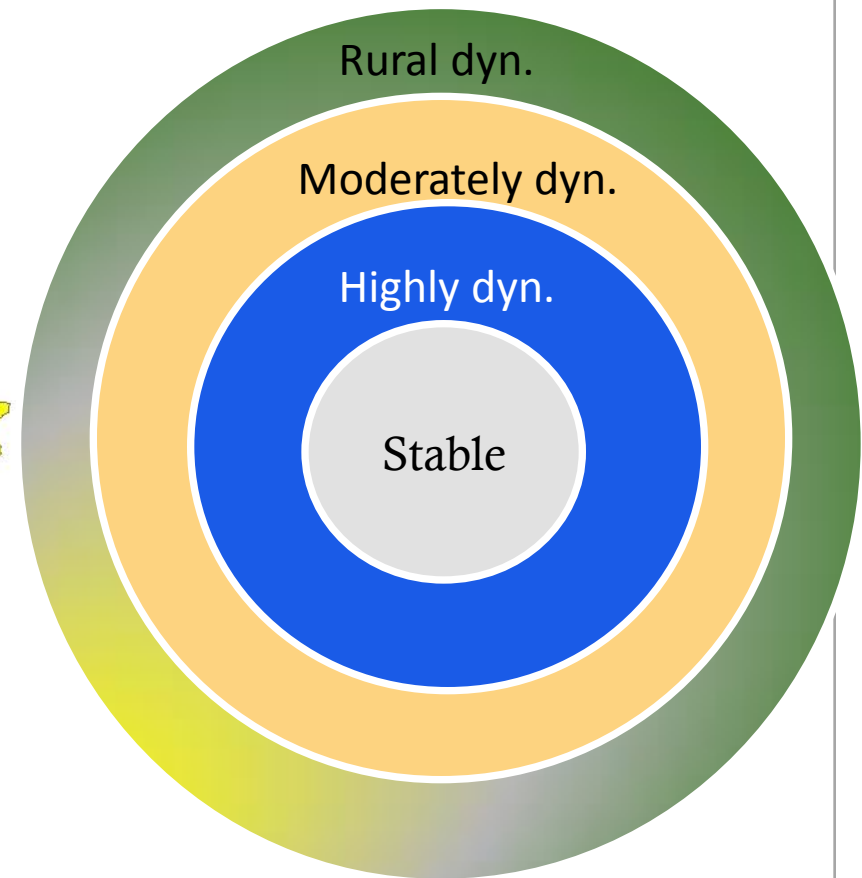
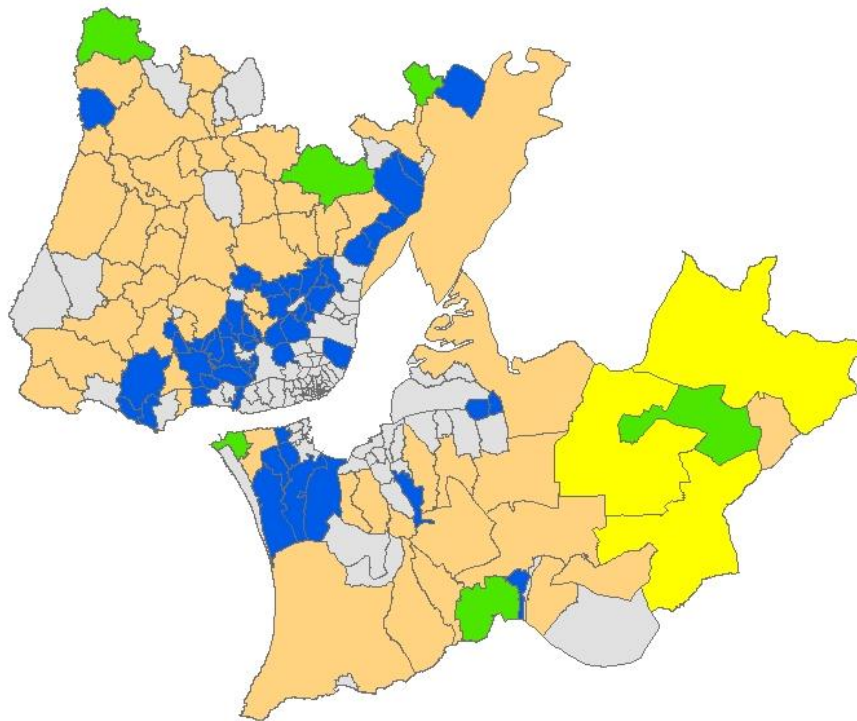
Aggregated to LAU 2 scale (211)



Summing up: A static model of the LMA

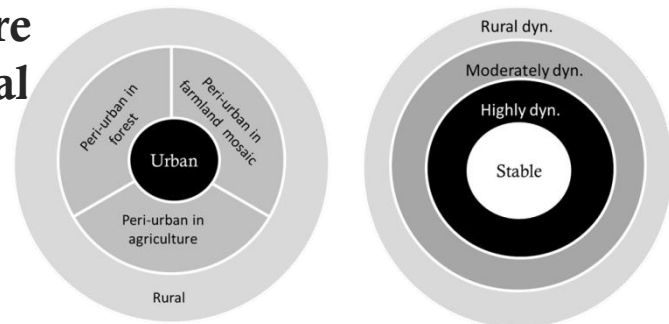


Summing up: A dynamic model of the LMA



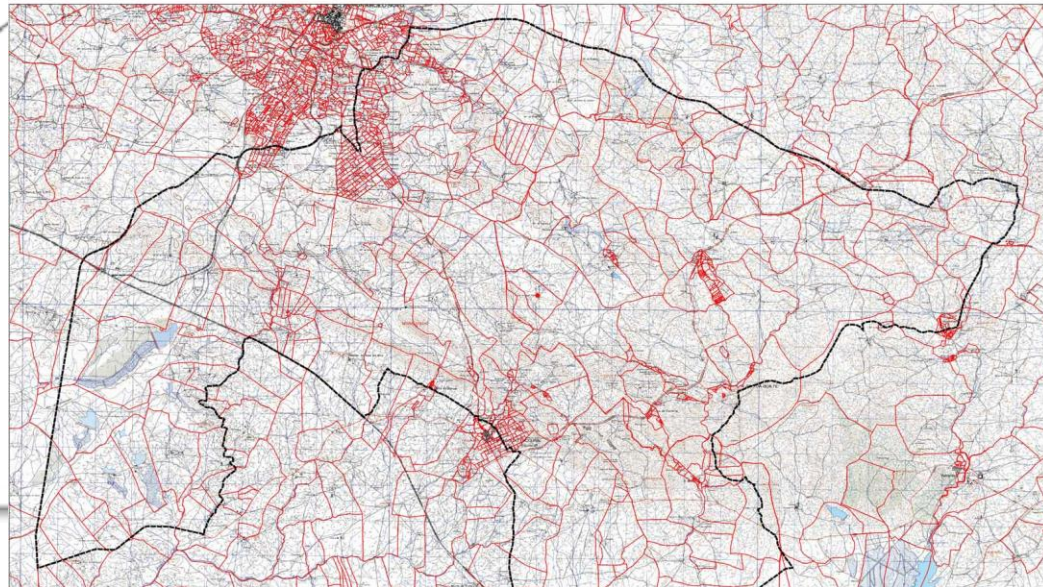
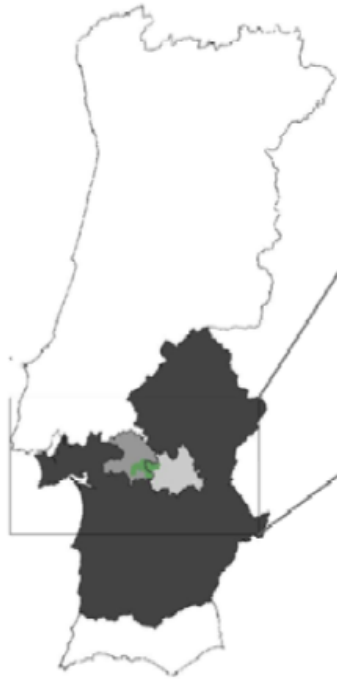
Summing up: all stakeholders recognize these types and dynamics

- Identification of 7 types of LAU in the LMA, of which 2 urban, 3 peri-urban and 2 rural.
- Peri-urban typologies are distinguished by the type of landscape matrix where urban fabric and other artificial areas are embedded.
- In each type of area, the type and mix of inhabitants is different, and each registers particular changing trends.
- This complementary analysis of static and dynamic typology is needed to recognize differentiation and inform targeted planning options
 - * where you are and how did you get there
 - * what are assets and human capital
 - * what is the strategic pathway



Montemor-o-Novo

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



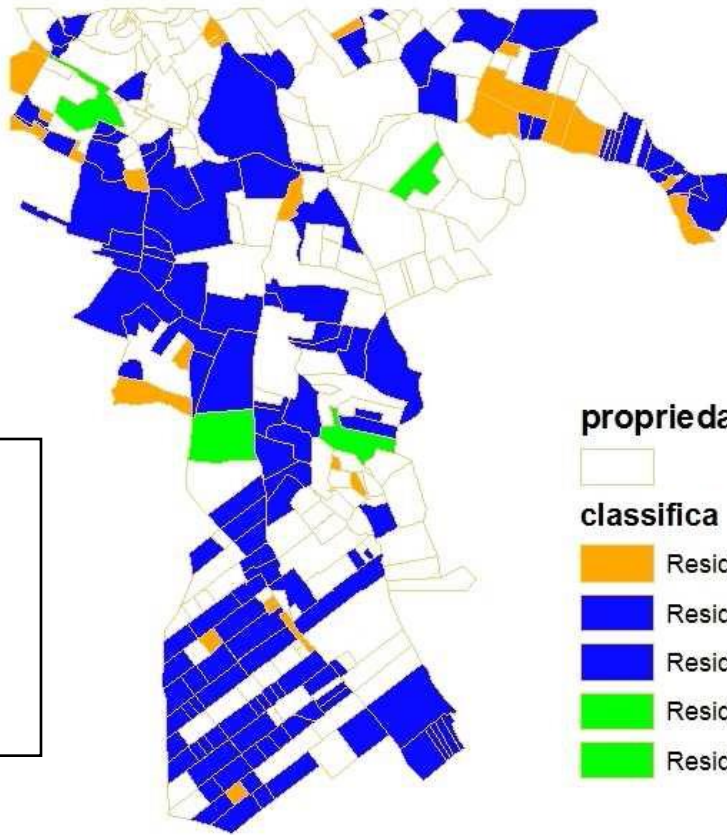
An attractive town,

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%**



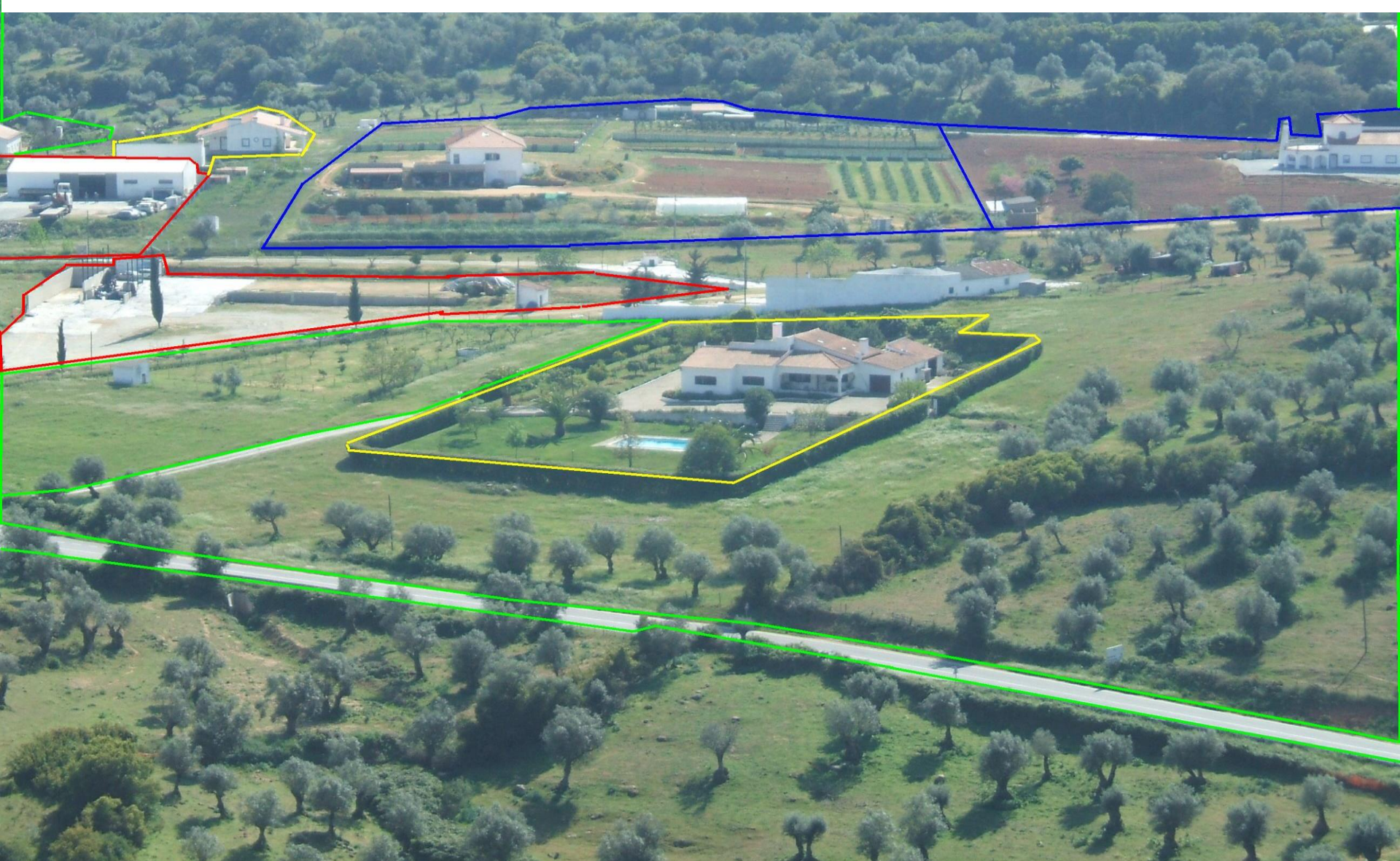
Residência do proprietário mais produção mista por outro **1,8%**



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

0 1 2
Kilometros

new functions in old patterns
.... or changing patterns ? >> a mismatch



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

*opportunities for innovation
in landscape care*

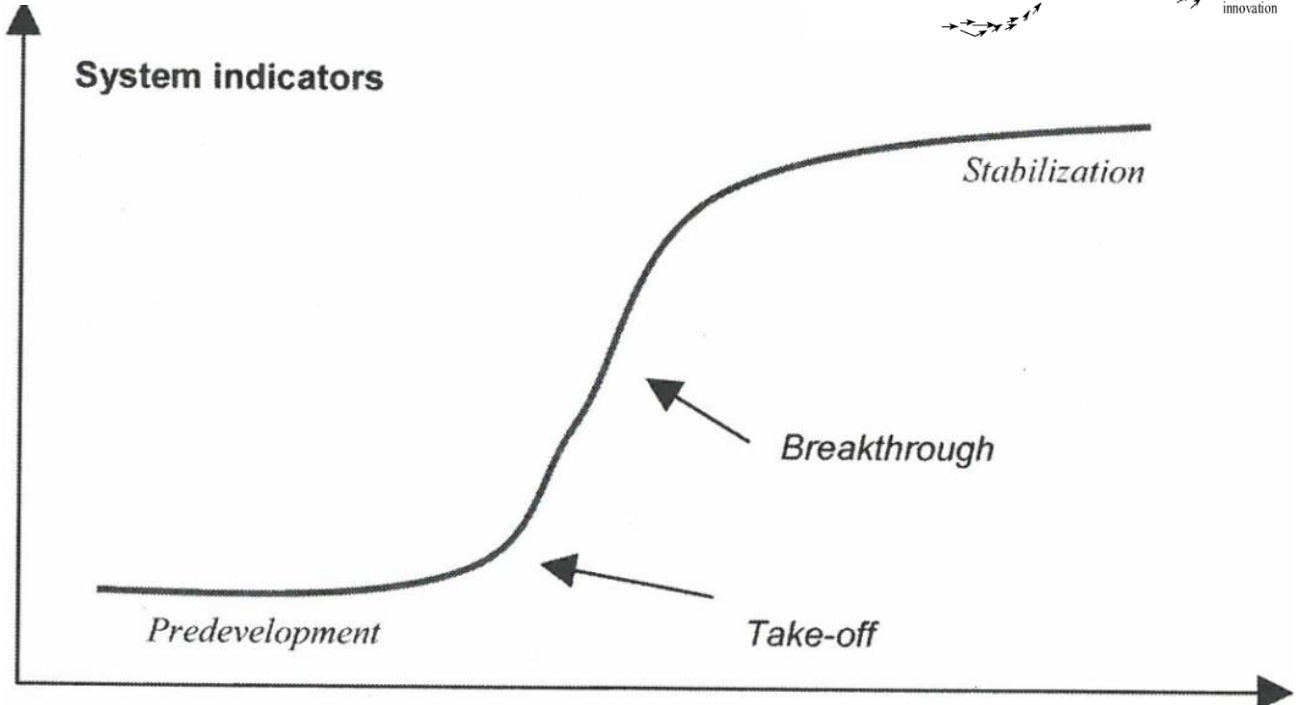
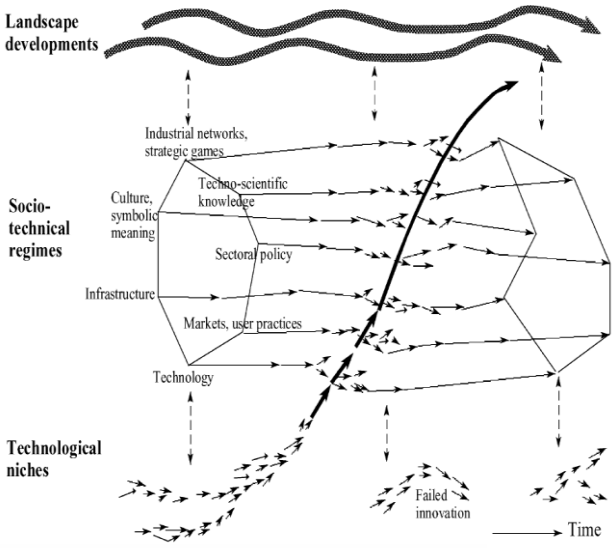
Lifestyle farming seems to be a niche

Assessing the anchoring >> the niche:

It is changing radically the former paradigm

Is it acknowledged ?

Does it anchor in the regime?



New management arrangements?

Innovation and retro-innovation in land management

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

Creation of new 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 community

- * 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, but does not consider farming
- * Agricultural regime: pressures from the landscape are deviated
- * Agricultural policies remain strongly focused on commercial production >> *supported by equally focused analytical models*
- * **Planning prevents buildings, but has not changed its vision**
- * **No normative institutional anchoring:**
 - no formal or informal rules about what is desirable, which could be embedded in laws, regulations or policies**

How to find the needed pathways ?

a new challenge for governance

a new challenge for research



a participatory process starting locally

involving the identified actors at the different levels

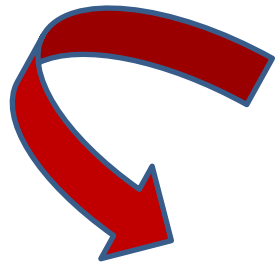
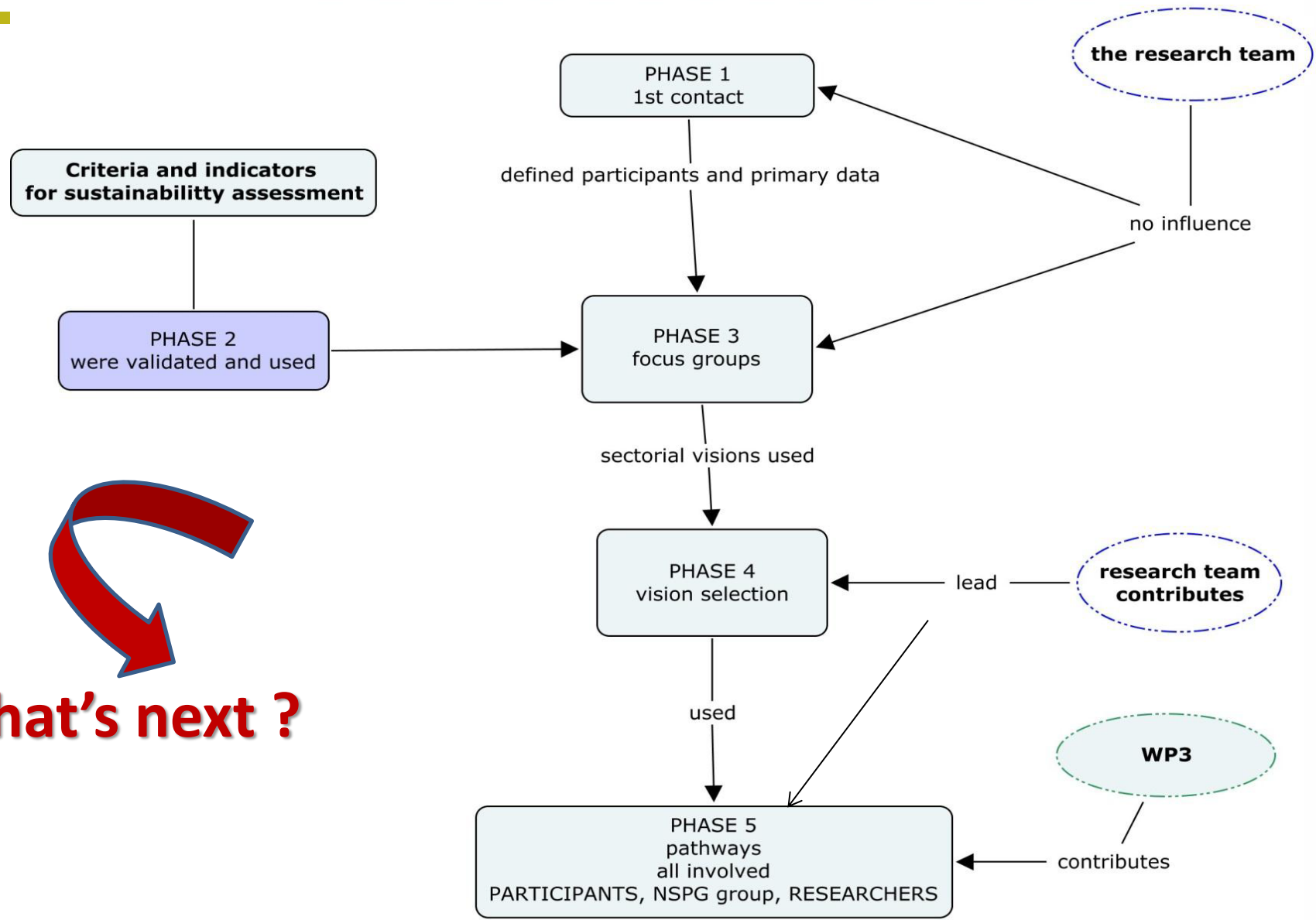
creating visions and defining the needs



FP7 EU Project Farm-Path: participatory work

how would you like your local area to look like in 20 years ?

PARTICIPANTS



what's next ?

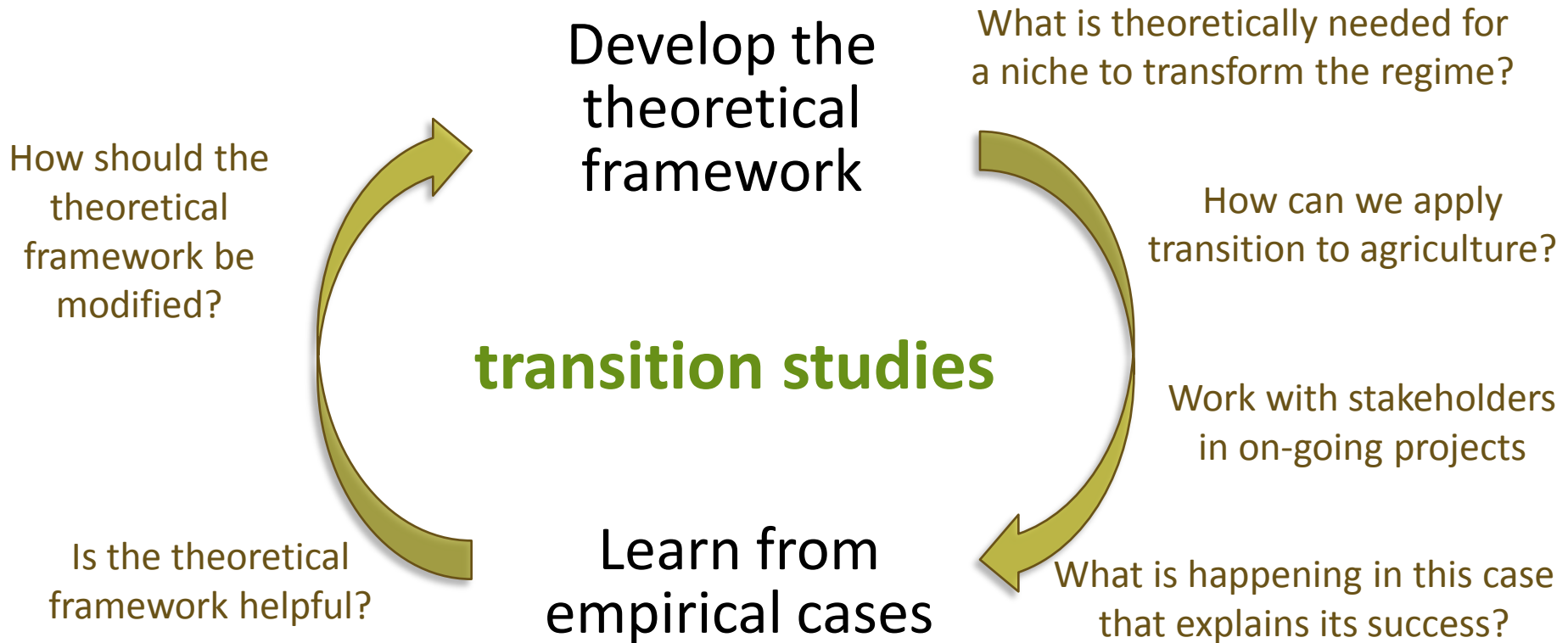
Transdisciplinary

- **Origin:** demand for relevance, societal legitimacy and applicability of research to societal challenges
- **Goal:** transcend boundaries
 - Between scientific disciplines
 - Between science and society
- **Researchers to act as mobilizers, mappers of transition-change dynamics**
 - Engagement in the open-ended process
- **Societal co-production of knowledge**
 - Identify obstacles and potentials with practitioners
 - Co-produce visions of sustainable futures

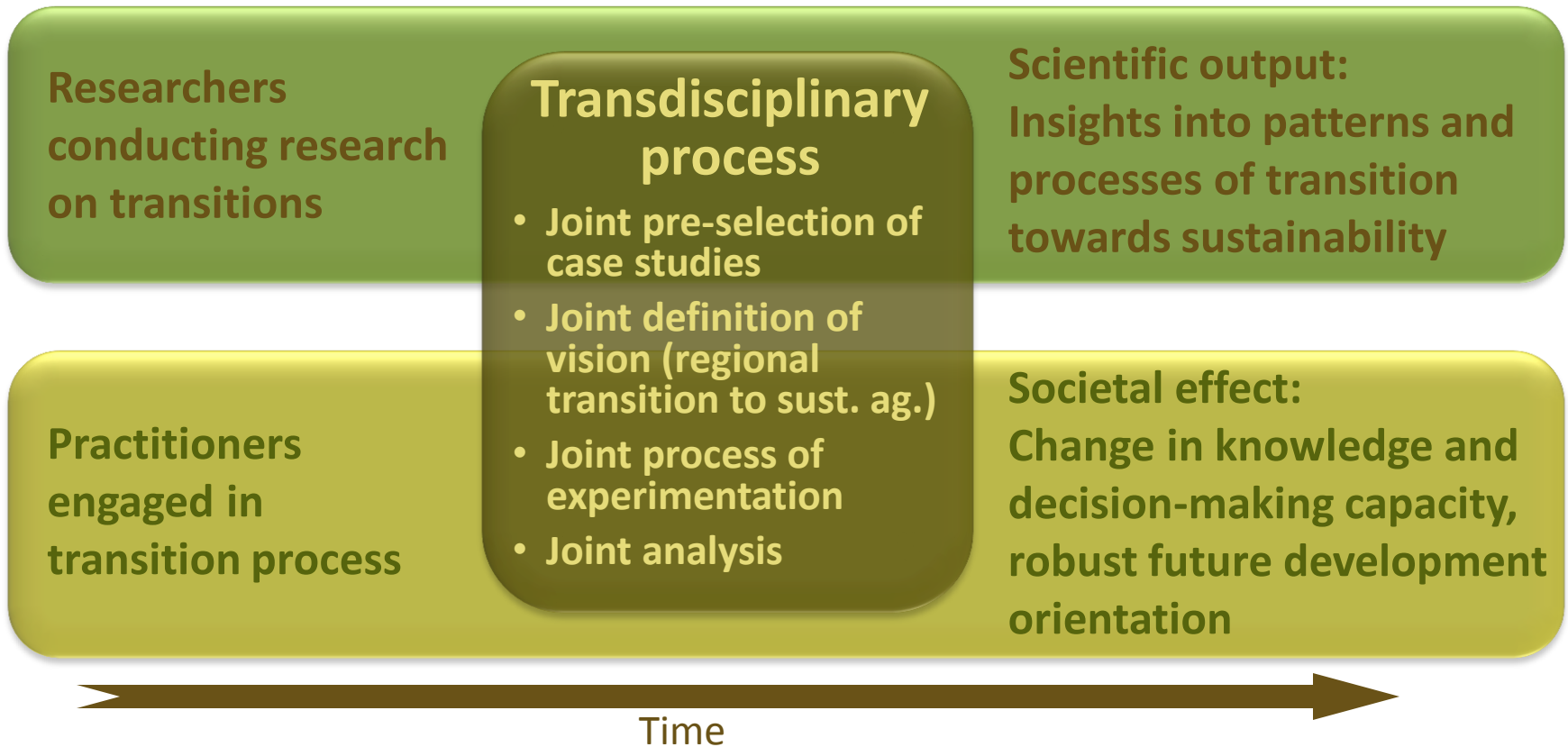
Research modes

- **Mode 1:**
 - Pure: not context-dependent
 - Disciplinary: theory-driven, experimental
 - Primacy of scientists: expert-led, hierarchical
 - Sciences develops, results are transferred
- **Mode 2:**
 - Applied, problem-centered, context-dependent
 - Socially-distributed knowledge, dialogic process
 - Network-embedded, entrepreneurial
 - Build a learning partnerships

Two interrelated aspects



TransDis: Types of outputs



TransDis: 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

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MANY THANKS !



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