VOLANTE SUMMER SCHOOL

PhD COURSE — University of the Aegean
Lesvos, June 12 – 18, 2013

ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΙΓΑΙΟΥ

Transitions in Landscape and Land Use

Visions Of LANd use Transitions in Europe – VOLANTE - FP7-ENV-2010-265104
www.volante-project.eu

VISIONS OF LAND USE TRANSITIONS IN EUROPE

OVERVIEW

Bas Pedroli, Project Leader
Alterra Wageningen UR

VOLANTE

12 June 2013
www.volante-project.eu

COOPERATION

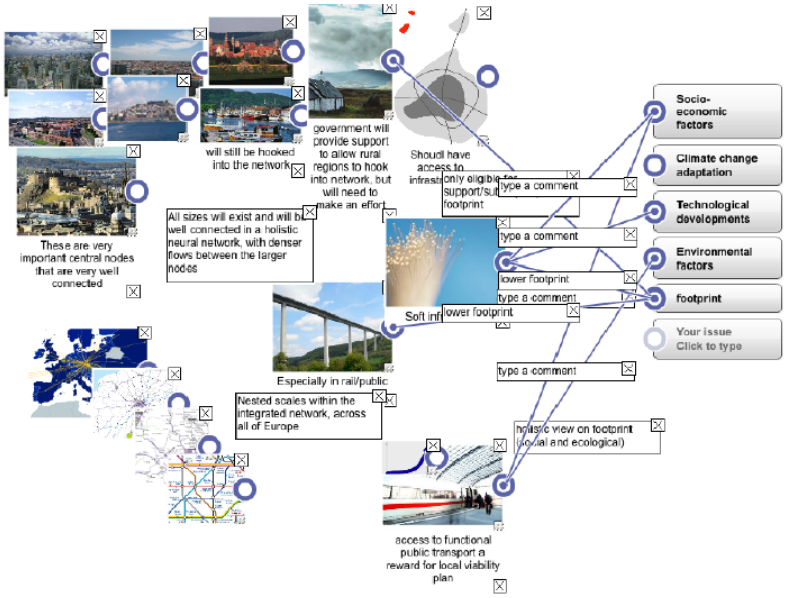
VOLANTE
VISIONS OF LAND USE TRANSITIONS IN EUROPE

Collaborative Project (large scale integrating project) under the 7th Framework Programme of the European Commission's DG Research & Innovation

Running from 2010 – 2015; 14 partner institutions

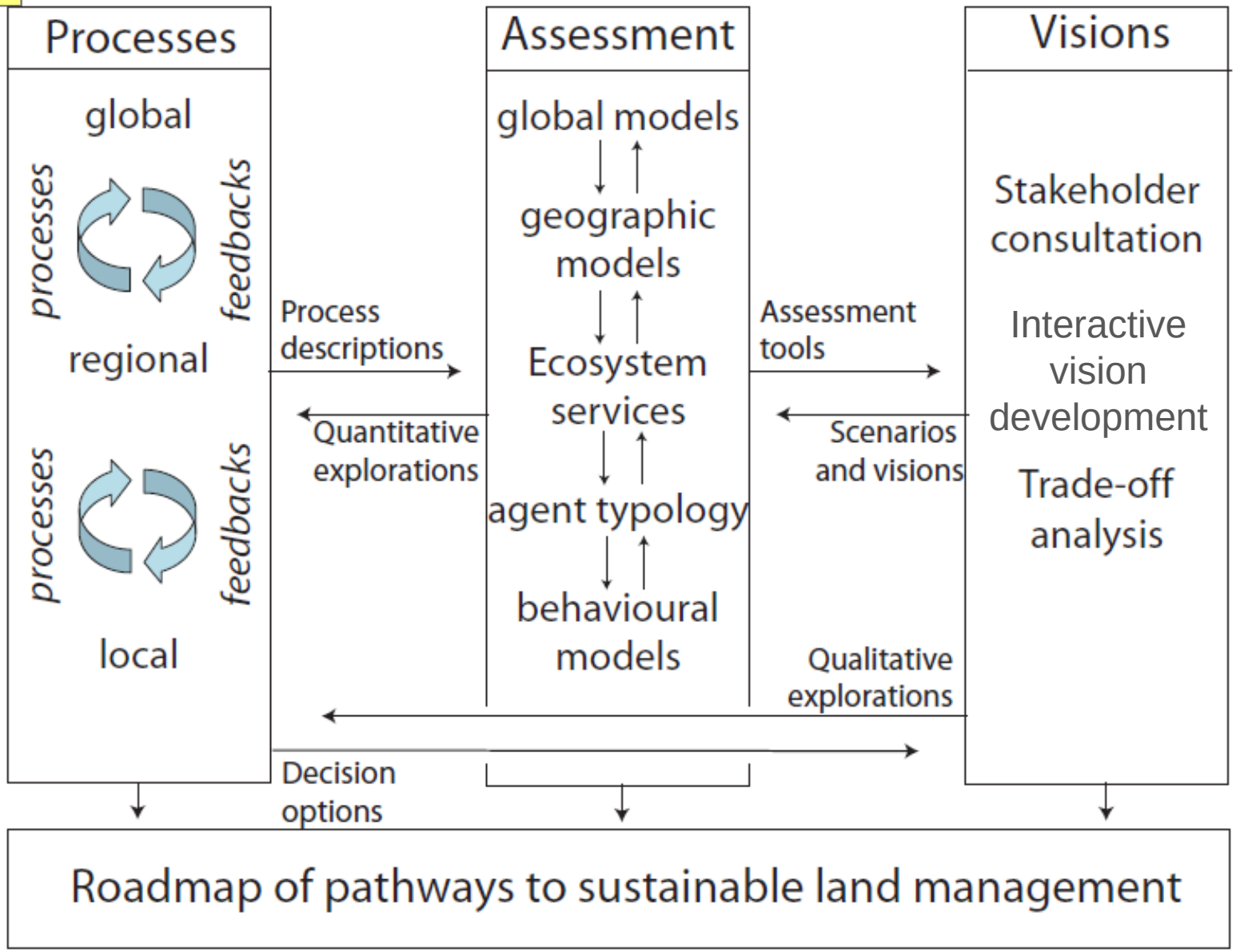
Alterra	**Lead Partner – DLO Wageningen UR**	**The Netherlands**
UEDIN	Edinburgh University	**United Kingdom**
UNIKLU	Institute of Social Ecology	**Austria**
VUA	VU University Amsterdam	**The Netherlands**
PIK	Potsdam Institute for Climate Impact Research	**Germany**
UCPH	Copenhagen University	**Denmark**
EFI	European Forest Institute	**int.**
CNRS	CNRS Grenoble	**France**
Aegean	University of the Aegean	**Greece**
UNIBUC	Bucharest University	**Romania**
JRC	JRC-IES	**int.**
UBER	Humboldt University Berlin	**Germany**
NERI-AU	National Environmental Research Institute	**Denmark**
PROSPEX	PROSPEX bvba (SME)	**Belgium**

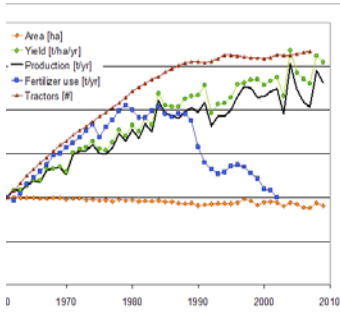
VOLANTE:
about future land use



Aiming to:

- Identify clear visions of European land use policy and land management
- Reduce the large variation in possible land use scenarios for the future to a manageable set
- Identify crucial points of no return both in history and in potential future
- Identify and evaluate policy options for the various landscapes of Europe and for shorter and longer term perspectives, to achieve desired futures
- Focus on a Roadmapping workshop where prominent decision makers and stakeholders interactively discuss the conclusions of this evaluation
- Result: Portfolio of Roadmaps for Future Land Resources Management in Europe


Processes
global
processes
feedbacks
regional
processes
feedbacks
local
Assessment
global models
geographic models
Ecosystem services
agent typology
behavioural models
Visions
Stakeholder consultation
Interactive vision development
Trade-off analysis
Process descriptions
Assessment tools
Quantitative explorations
Scenarios and visions
Qualitative explorations
Decision options
Roadmap of pathways to sustainable land management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1970
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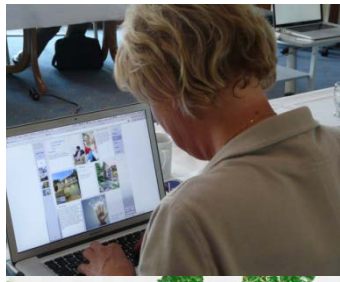

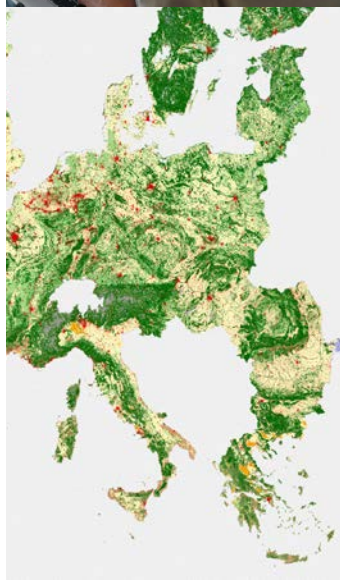

aims of the Roadmapping Process

- Produce outcomes that are
  a) relevant for decision-makers' needs and use (*salient*);
  b) *credible* as being the result of the application of adequate scientific methodological and empirical work; and, finally,
  c) *legitimate,* since they are incorporating divergent values in a non-biased context.
- Provide optimal synthesis and integration of project results and provide the basis for knowledge transfer from VOLANTE to the identified stakeholder groups
- Decide on recommended pathways for land use development
- Create Roadmaps for Future Land Resource Management, as a meaningful set of recommendations, supported by relevant high level representatives of policy, NGO and private sector stakeholder groups
- Identify obstacles, critical factors and implementation recommendations for the Roadmaps
- Produce and publish a high-impact Science-Policy Briefing on the outcomes of the Roadmapping process, including a post-VOLANTE implementation plan

Month			mei-12	jun-12	jul-12	aug-12	sep-12	okt-12	nov-12	dec-12	jan-13	feb-13	mrt-13	apr-13	mei-13	jun-13	jul-13	aug-13	sep-13	okt-13
			19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Deliverable		First responsible																		
D1.4	Synthesis report: Upscaling results and cross-region comparisons	Søren Kristensen									Comments to draft					report ready		34		
D2.2	Report on land system policies, trends and the importance of institutional agreements	Pia Frederiksen	Edinburgh	country reports				A'dam meeting	cross-country Report							32				
D2.3	High impact publication on effects of EU-policies on land use change	Theo van der Sluis	spatial and temporal analysis of landscape						Scientific paper											36
D2.4	Recommendations for relevant policies being developed for EU-27	Theo van der Sluis										Scientific paper								36
D3.2	Paper on recent land use transition hotspots in Europe	Tobias Kummerle	design hotspots criteria													32				
D3.3	Paper on drivers of recent land use transitions in Europe	Tobias Kummerle																		36
D3.4	Maps of syndromes of land system change in Europe	Tobias Kummerle																		
D4.2	Databases based on standardised, comparable data formats	Karlheinz Erb										28								
D4.3	Report on technological institutional and economic changes	Søren Kristensen												30						
D4.4	Report on country-level analyses	Tobias Kummerle							availability of empirical results											36
D4.5	Report on comparative analysis	Karlheinz Erb							availability of empirical results											
D5.3	A scientific paper providing an illustration and evaluation of the complementarities and integration	Peter Verburg	monitor results to fit in framework;												outline paper					
D6.2	Report describing the ABM, the data meta-analysis and the definition of model inputs	Mark Rounsevell									27									
D6.3	Report describing the application of the ABM	Mark Rounsevell	UEDIN to undertake applications													32				
D7.3	Description of the translation of sector specific land cover and land management information	Hermann Lotze Campen																		36
D7.4	Paper indicating the new insights using the integrated modelling system	Hermann Lotze Campen																		
D8.2	Spatially explicit assessment of current ecosystme service supply for Europe	Peter Verburg						maps new service models		assessment report 27										
D8.3	identification of current hot spots and a typology relating to potential causes	Sandra Lavorel					methods hot spot analysis			maps of current ES supply				Discussion				analyse hot spots		36
D9.2	A report on future land use visions and the stakeholders'visions onto the scenario framework	Marc Metzger	report in Edinburgh	Format final visions								28								
D10.3	Synthesis report on trade-offs & sustainability limits workshops	Marta Perez Soba												work-shop		workshop				36
D11.1	Report documenting the assessment results for the scenarios stored in the database	Peter Verburg						First results processed										34		
D11.2	Interpretation of scenario results in terms of described and mapped 'syndromes' of land change	UBER?												Agreement on work plan for Task V11.2						draft report
D11.3	Report describing critical pathways to (un)desired outcomes targeted at discussion support in WP13	Marcus Lindner												Agreement on work plan for Task V11.3						
D12.2	Science-based trade-off and synergy evaluation of hot spots and problem spots in future ESS supply	Sandra Lavorel							work plan for Task V12.2											
D12.3	Value-based trade-off evaluation of future ecosystem service supply under selected land use scenario	Bernard Wolfslehner													work plan for Task V12.3					
D12.4	Value-based trade-off evaluation of future ecosystem service supply under selected land use scenario	Bernard Wolfslehner																		work pla
D13.1	Report describing roadmapping methods including plans for workshops	Bas Pedroli	First brainstorm					2nd meeting												
D13.3	VOLANTE Roadmap	Bas Pedroli																		
D16.2	Media engagement plan to support launch of Roadmap	Georgia Cosor																		start up
	Final training modules: Training on	Georgia Cosor																		

PROGRESS after 32 months

- Project well on schedule, deliverables largely on time
- Dedicated consortium with large interest in cross-cutting collaboration, many young researchers involved
- Five inspired consortium meetings (Wageningen, Potsdam, Bukarest, Edinburgh, Amsterdam) and many ad hoc meetings
- No weak partners
- Scientific publications underway from the very start
- Work on land use processes well advanced, cross-cutting issues identified and addressed
- Modelling tools producing results, ready for assessments
- Strong emphasis on stakeholder involvement, stakeholders keen to participate in scenario and vision development
- Large interest from outside world
- Still 2 years to go: high expectations

VOLANTE

Well underway
towards a new
European landscape
management paradigm
for the future !

Landscape Science: Inherent Paradoxes

How does landscape function?

- European landscape: cultural landscape (monks, land lords, bishops, farmers communities)
- European spatial developments more and more defined by global market: *global flow* instead of *local space*

Primdahl & Swaffield 2010

- Urban fringe: economic interests first instead of functional land use relationships based on self-evidence
- Landscape is a social space that can not be owned, but who is then the owner?

So, what does the EU mean for landscape?

- the EU (27 member states) defines boundary conditions for landscape development through its agricultural, environmental, infrastructural, urban, energy and other policies (based on the global market)
- CAP, Habitat Directive, Birds Directive (NATURA2000), Water Framework Directive
- the EU does not take the consequences of the resulting landscape changes
- no EU landscape policy (competency of member states)
- result: paradox today, degraded landscapes tomorrow

Inherent paradoxes of the landscape perspective

1. many policies have large impact on landscape but landscape is not a clearly addressed competence
2. landscape is a notion that is inherently complex and integrated of character, but science and policy prefer clear-cut cause-effect relationships
3. European landscape diversity is an asset, but this makes it difficult to develop EU wide strategies for it
4. landscape is a common good and everybody acknowledges its values, but its societal importance is hardly debated

+ the *Cultural Landscape and Heritage Paradox*

Bloemers et al. 2011

European Landscape Convention

COUNCIL OF EUROPE CONSEIL DE L'EUROPE

EUROPEAN LANDSCAPE CONVENTION
CONVENTION EUROPEENNE DU PAYSAGE

- Council of Europe (47 member states), Straatsburg: no money, no power, but strong ethical appeal
- European Landscape Convention (initiative *Congress of local and regional authorities* CoE):
  - everyone has the right to enjoy landscape
  - every landscape is worth being taken care of
  - intrinsic values of landscape to be made explicit
  - landscape is a public good: public authorities to take responsibility
- in force since 1 March 2004 for those countries that have ratified (currently 37 of which 24 EU, not: DE, AT, EE)

Emerging Research Themes:

Bloemers et al. 2010

1. Universal commons: securing landscape as a common good

2. Roots and routes: coming to terms with mobility and evolving lifestyles

3. Reactions and resilience: long-term landscape transformations

4. Road maps: landscape as baseline and context for future change

Landscape paradoxes revisited

1.	large landscape impact, but no competence	*high level think tank to suggest smart solutions for relevant policy fields: European Landscape Forum* www.agora-landscape.eu
2.	landscape complex notion, but science and policy prefer clear-cut cause-effect relationships	*innovation to focus on landscape functional approach and on landscape as a narrative*
3.	landscape diversity as an asset, but making EU wide policies difficult	*regional development and territorial cohesion to enhance sustainable landscape values*
4.	landscape as a common good, but societal importance underestimated	*fundamental challenge in public participation to enhance cultural landscape identity and living landscapes*
5.	landscape heritage?	*protection through development!*

Landscape Science:
How can new commons for
the future be designed?