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Future Agriculture lunch seminar, Alnarp, May 13, 2013

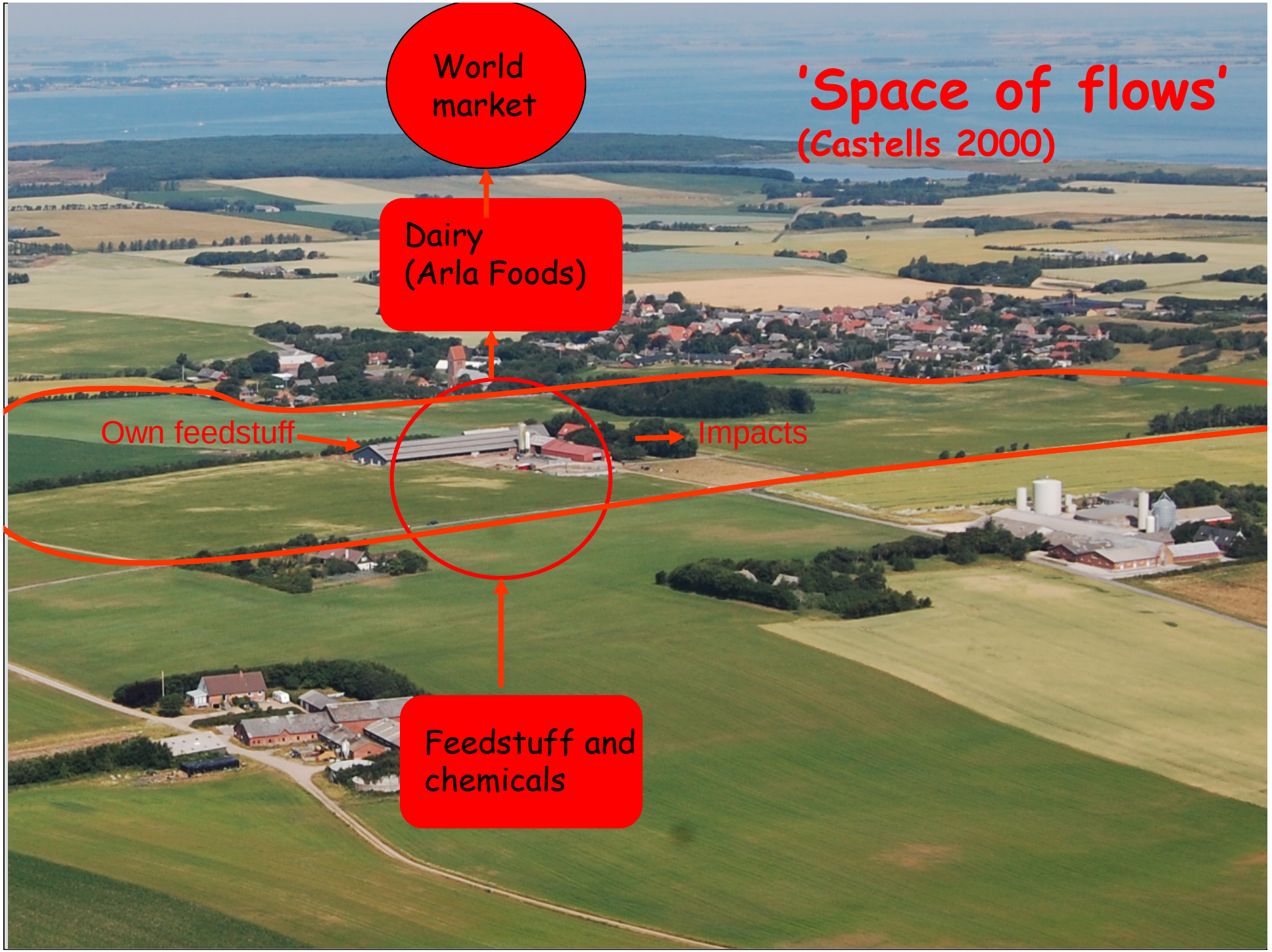
The agricultural landscape.

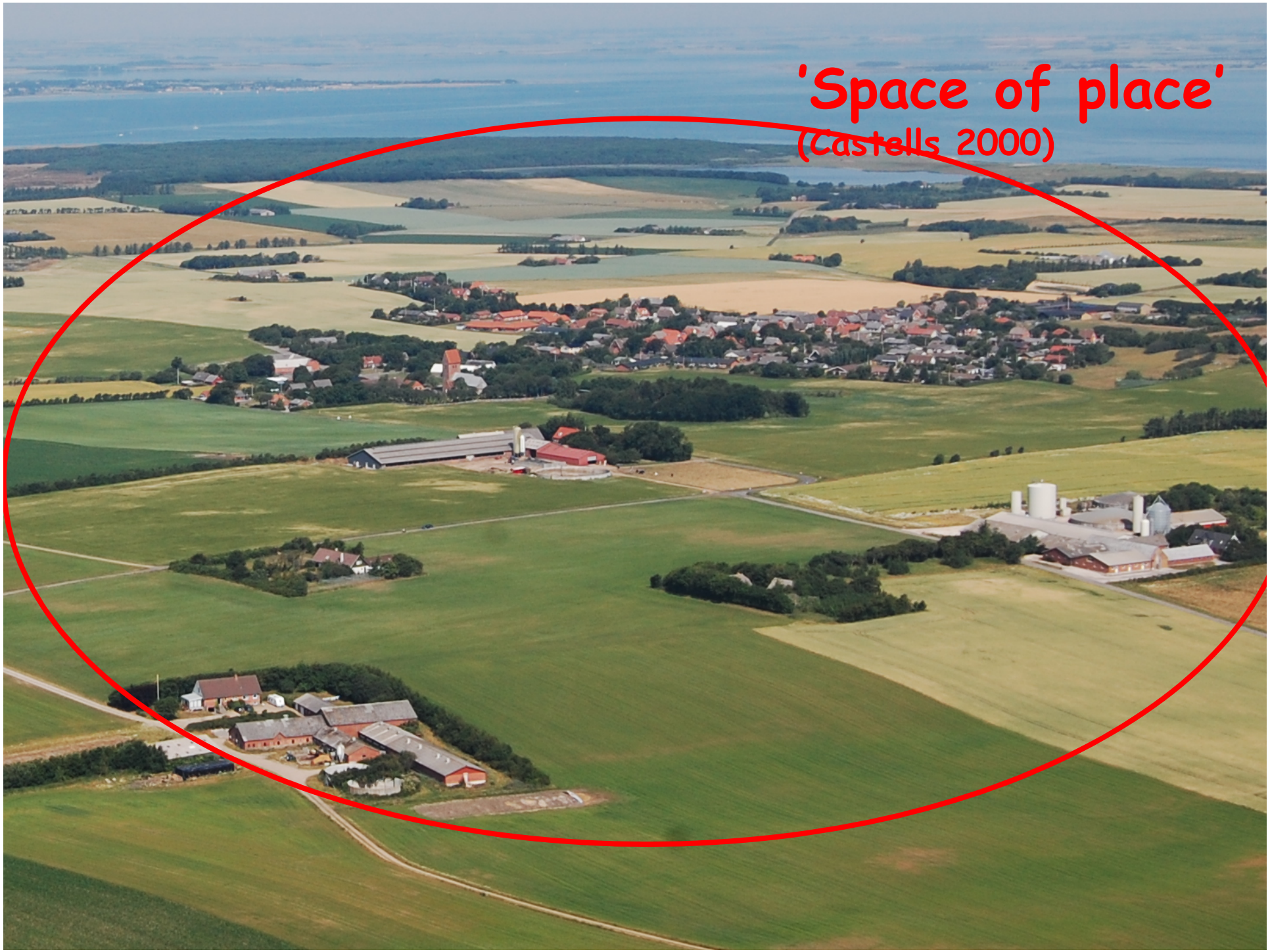
Between global driving forces and local contexts. Change patterns and policy challenges

1. Introduction – the local landscape and global markets
2. Current change patterns - a few case studies and some general change patterns
3. Policy challenges
4. The Danish governmental commission for Nature and Agriculture (*Natur- og Landbrugskommissionen)*

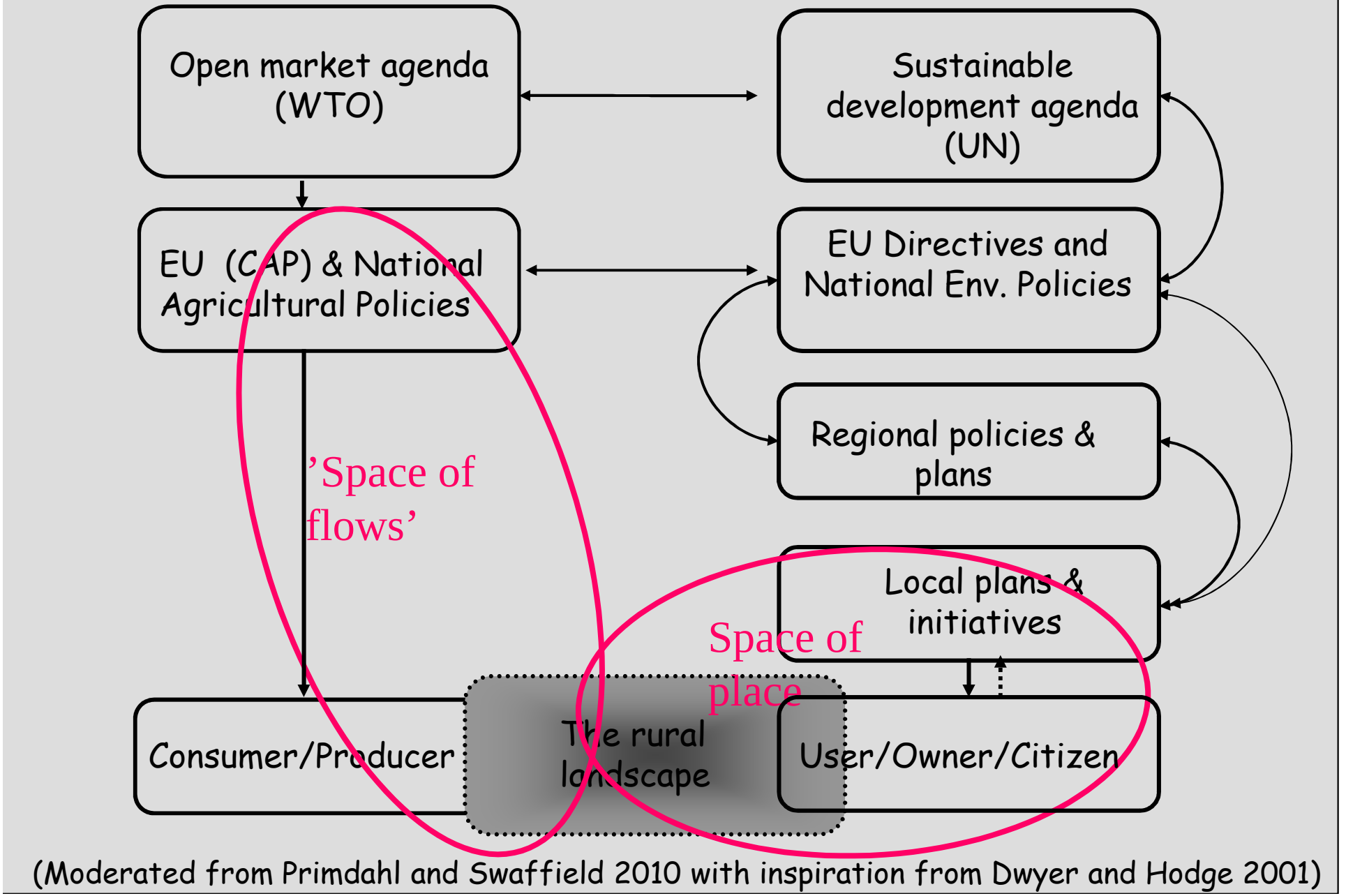

The parish of Lihme, Denmark 1948


The parish of Lihme, Denmark 2009


World market
'Space of flows'
(Castells 2000)
Dairy (Arla Foods)
Own feedstuff
Impacts
Feedstuff and chemicals

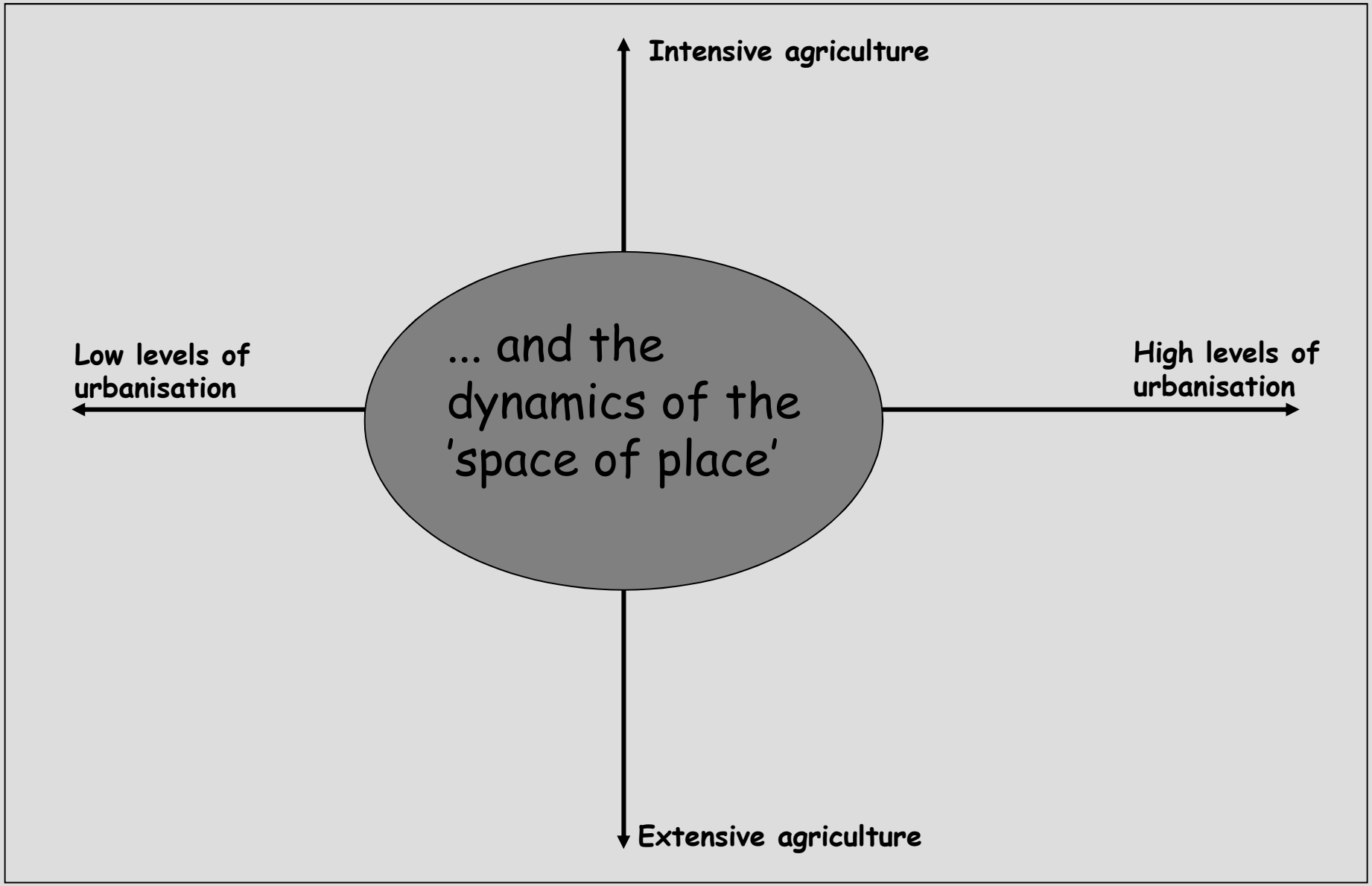

'Space of place'
(Castells 2000)

On two international policy agendas and rural landscapes



(Moderated from Primdahl and Swaffield 2010 with inspiration from Dwyer and Hodge 2001)

Two major drivers: agriculture and urbanisation



Six agricultural landscapes

Good conditions for agricultural production

New Zealand

Marginal conditions for agricultural production

Portugal

Denmark

Main characteristics of the six landscapes

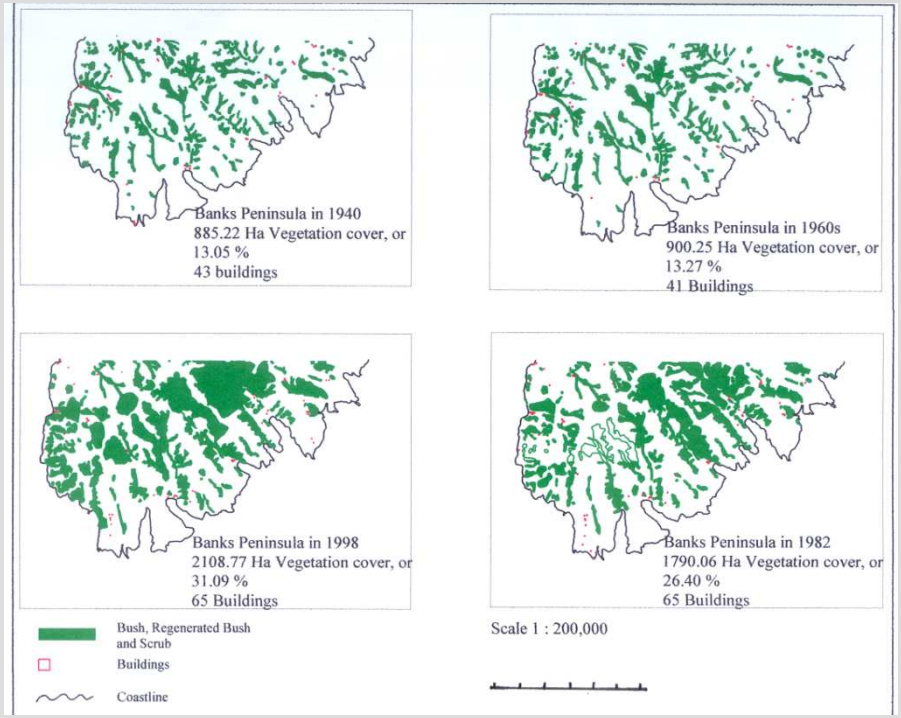
	Te Pirita	Banks Peninsula	Sao Mancos	Amen-doeira	Hvorslev	Nees
No of farm	8	10	9	13	14	15
Av. Farm size, ha	670	590	520	180	35	63
Rainfall, mm	400	670	660	450	630	690
Conditions for Agriculture	Good (with irrigation)	Marginal	Good	Marginal	Good	Marg.
Agricultural land use, % of total farm property						
Arable	20	7	48	16	80	74
P. grassland	76	58	45	19	3	6
P. crops	0	0	6	1	0	0
Woodland	(2)	17	1	0	8	7
Other l.u.	2	18	1	0	8	7
Livestock						
Main type	Dairy	Sheep	Mixed	Cattle	Pigs	Pigs
L. units/ha uaa	1.81	0,40	0,18	0,45	1,00	0,44

1. Te Pirita, New Zealand

- Dry land sheep farming in transition to dairy
- Irrigation and intensification
- Population increase
- Intense competition for water and evidence of degrading resource
- Declining biodiversity and landscape heterogenity
- *Institutional failure*

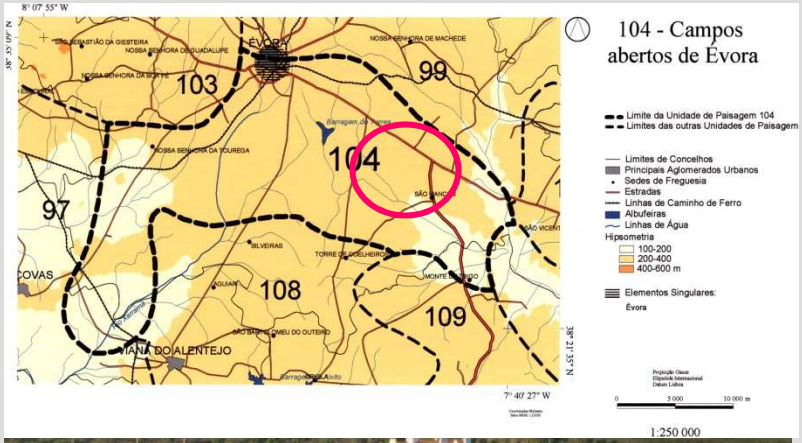
2 Banks Peninsula, New Zealand

- Counter urbanisation and growth of tourism
- Population increase
- Extensification of agriculture, rural subdivision
- *De-regulations of public policy, designation of 'landscape zones'. Voluntarism and biodiversity conservation*



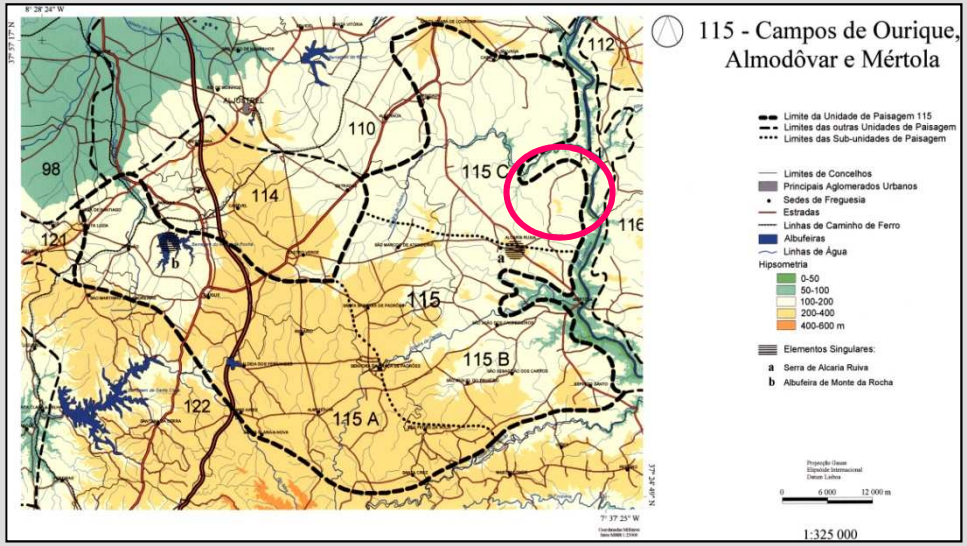
3. Sao Mancos, Portugal

- Intensification and mechanisation
- Increase of irrigated area
- Counter urbanisation
- Population increase
- *Introduction of agri-environmental schemes, restrictive building regulation*



4 Amendoeira, Portugal

- Marginalisation/extensification
- Aforestation
- De-population
- Emerging tourism and increased hunting
- *Significant support for aforestation and montado management*



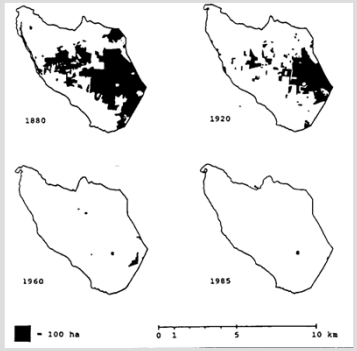
5. Hvorslev, Denmark

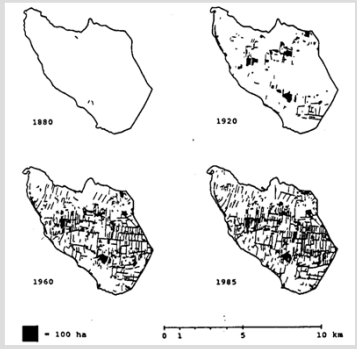
- Intensification (and marginalisation)
- Counter-urbanisation (increase in hobby farmers)
- Increased envIronmental impacts
- Increase in small habitats
- *Restrictive env. Regulations – no coherent institutional 'support'*

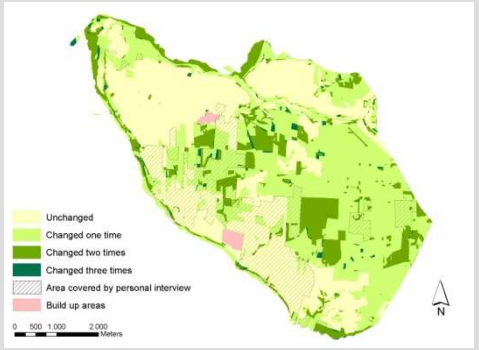
How the farm is seen ▸	The farm owner main motivations for possessing the farm[1]:			
Occupational status[2] ▾	A (good) place to live	A (good) place to	Both	Sum (= 100 %)
Landscape practice[3] ▾				All
Hedgerows planted, meter/100 ha	681	225	303	469
Hedgerows removed, meter/100ha	98	30	82	84
From land in rotation, ha converted/100 ha[4]	7.3	0	1.4	5.2
To land in rotation, ha intensified/100 ha	2.7	1.0	1.2	1.7
				All
Share of farms with new buildings	38	38	35	37 (n=119)
Share of farms with empty buildings	31	23	37	33 (n=103)

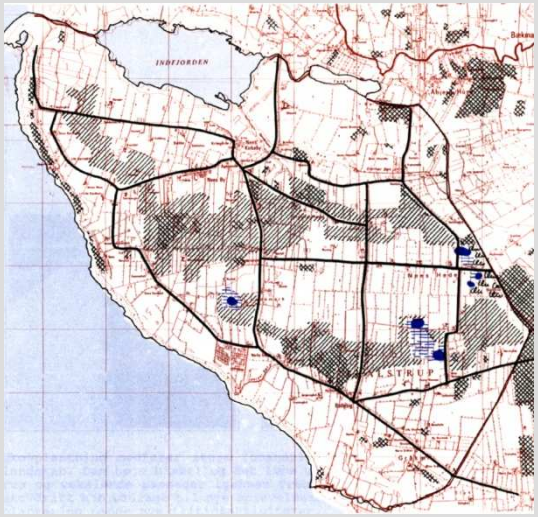
6. Nees, Denmark

- Long history of land use instability
- Declining farm viability
- Afforestation
- Stabilisation of population
- Improved biodiversity
- *New schemes for afforestation, local community actions*









Summing up

- Changes in agricultural landscape systems express two main drivers;- agricultural structural change, and urbanisation processes
- The combined effects of these dynamics vary widely
- The influence of the sustainability agenda also varies and depends of the nature and strenght of local institutions
- Commercial agriculture in areas characterised by good conditions (environment and infrastructure) for agriculture seems to be intensifying
- Agriculture in areas with marginal conditions is generally extensifying
- Systems with similar agricultural conditions seem to be converging in function and character
- Systems with different conditions seem to be diverging
- Livestyle farming (hobby farming) and other expressions of 'urbanisation' is increasingly affecting agricultural landscape systems, and causes both practical conflict and problems in analysis…

The six agricultural landscapes

Good conditions for agricultural production

Marginal conditions for agricultural production

Diverging?

Converging?

Diverging?

Converging?

Diverging?

Research and policy challenges

- What can be done to integrate the two agendas at the international and the national level?

  (WTO reforms?, cross compliance measures?, land market 're-nationalisations'? Other options?)

- How do the local community (re-) gain control over its landscape?

  (And what role can local landscape actions play in community formation?)

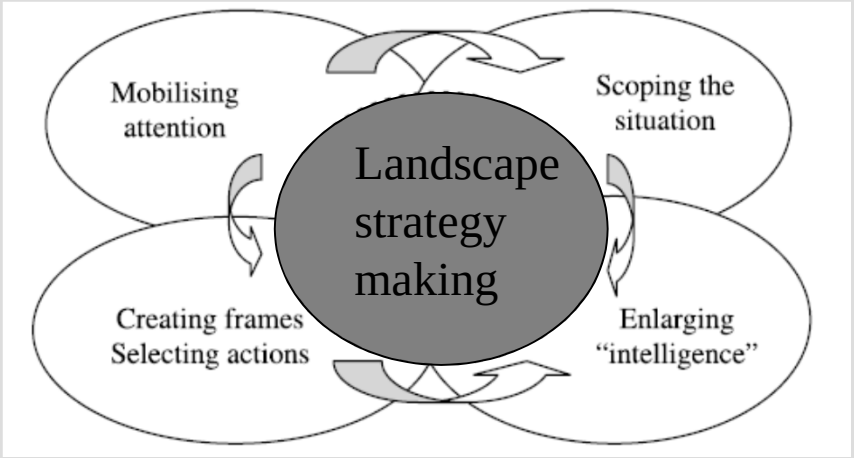
- What do well functioning and attractive rural landscapes look like?

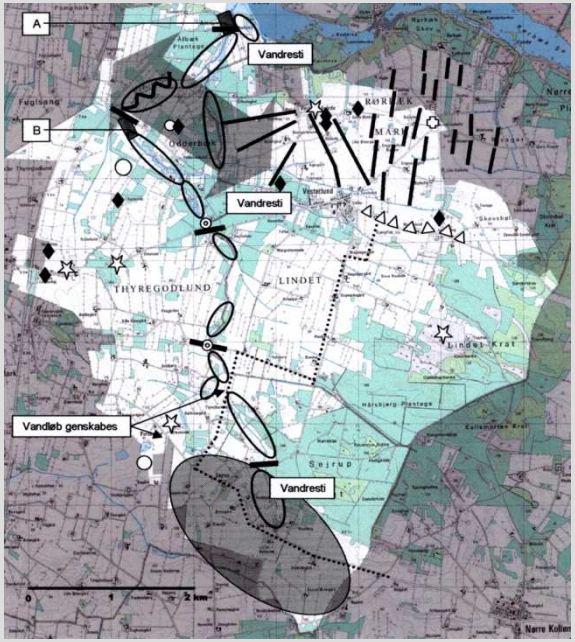
  (We need models and strategies for *future* landscapes – for discussions, for inspirations)

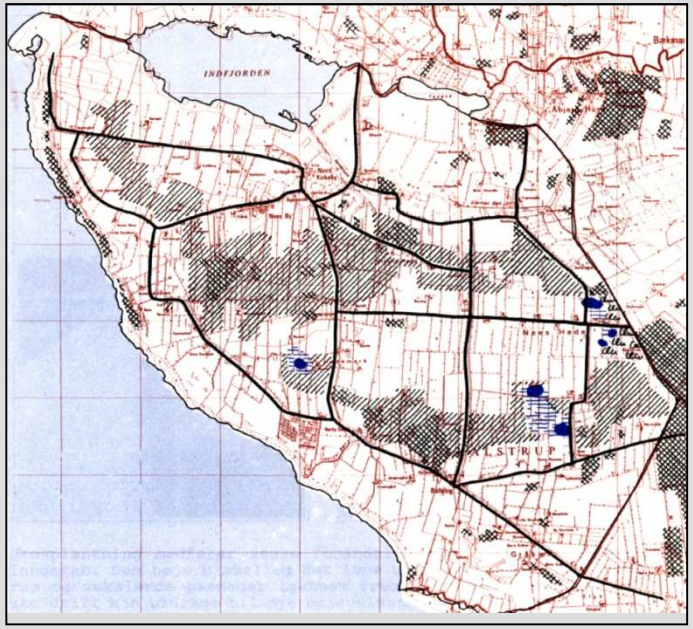
On landscape strategy making

Four dimensions of place making[1]:

- Mobilising attention to the "whole"
- Capturing the situation – where are we/what is the issue?
- Mobilising and enriching the knowlegde resources available
- Generating strategic ideas on framing concepts and key projects for action







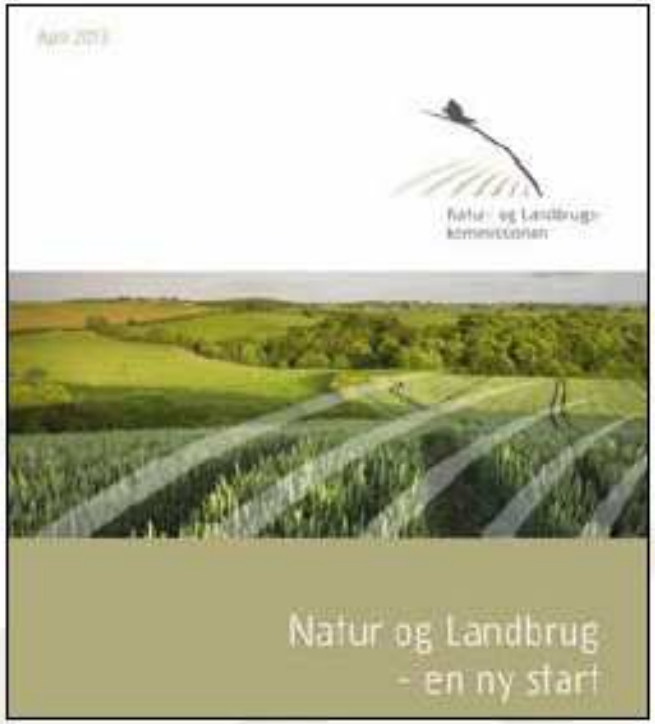
[1] According to Healy (2009) on how to organize spatial strategy making processes

Natur- og Landbrugskommissionen

- Appointed by the government, March 2012
- Status report and visions published September 2012
- The Commission's task:
  - Growth and development opportunities
  - More valuable nature
  - Better Environmental Condition

1 year
No consequences for the public budget

iggjort d. 26. september



Challenges

- Poor conditions for the aquatic environment and biodiversity
- Climate change
- The economic condition in agriculture
- Lack of investment

Natur- og Landbrugs-kommissionen

Opportunities

- International food demand
- Great interest for high quality products
- Danish positions of strength
- Growing demand of biomass
- New Technology

Overall the conditions for Danish agriculture looks good

Natur- og Landbrugs-kommissionen

e forudsætninger

Natur- og Landbrugskommissionens

Natur- og Landbrugs-
kommissionen

Recommendations

- More valuable nature
- Targeted environmental regulation
- Pesticides and drinking water
- Climate action
- Countryside planning
- Food Innovation and marketing
- Acquisition and financing
- Production and exploitation of biomass
- New technology
- EU Common Agricultural Policy
- Research – innovation – competences
- Effective regulation and control

Development and growth in agriculture

Recommendations

- National export strategy
- Certification schemes
- Development of high value products
- Strengthening of technological innoivations
- Support schemes
- Organic farming
- Sustainable biomass production

Effects

- Positive effects for the agricultural sector

Mere og bedre natur

Natur- og Landbrugs-kommissionen

More valuable natural areas

Recommendations

- Clear targets for Danish nature and a national habitat network
- A new national nature foundation
- Improved habitat protection
- Better use of EU support measures

Effects

- More nature
- Coherent network of habitat
- Ensuring quality of existing habitats

What about the landscape?

- ‘Landscape’ is not mentioned with one word in the mandate for the Commission
- There will be a lot of local landscape consequences (actions and re-reactions) of the Commission’s work
- New ways of organising local landscape planning and management is highly needed

See: www.diaplan.dk, multiland.dk