

Effective Governance for Sustainability

- Landscape Character Assessment at Municipality level in Denmark

Introduction

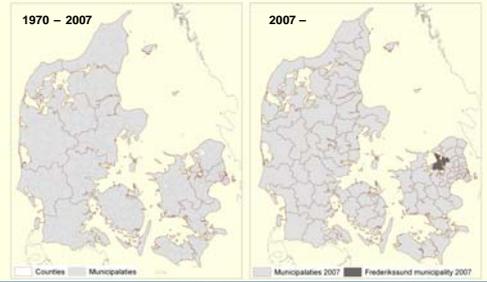
In 2007 a new local government reform will reduce the number of municipalities in Denmark from 271 to 98. The reform also transfers landscape planning and management from county to municipality level. Hence the new municipalities have to adopt new methods and skills in order to comply with the new tasks.

This poster illustrates how the Landscape Character Assessment (LCA) method can support the municipalities in order to conduct effective governance for sustainability according to T3.3 in the GLP figure.

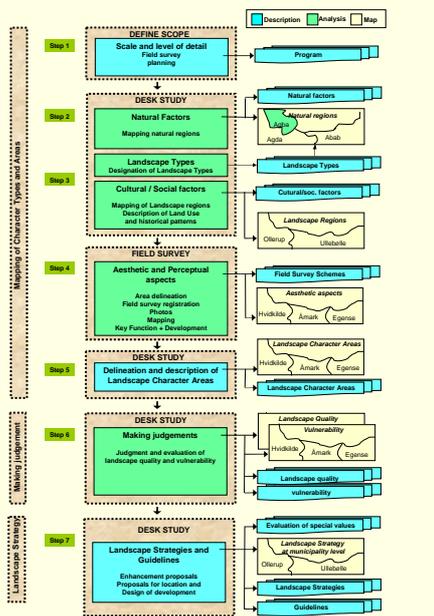
The GLP figure illustrates the research framework and the three thematic areas that relates to the Global Land Project. T3 aims to identify the character and dynamics of vulnerable and sustainable coupled socio-environmental land systems to interacting perturbations. Further T3.3 focuses on decision making and governance of land systems from an institutional point of view. It stresses that better understanding of the roles of institutions causing and confronting land systems changes are needed. Further it emphasizes that effective future governance must be based on performance experiences of institutions in managing land systems.



The Global Land Project analytical structure GLP (2005-8).



Landscape Character Assessment (LCA)



LCA was implemented in the Planning Policy Guidance in UK during 1997 as a tool in planning for sustainable development. LCA is an aid to decision making. The LCA guidance defines it as a tool to help to understand what the landscape is like today and its role is to ensure that change and development does not undermine whatever is characteristic or valued about any particular landscape.

Since 2003 a group of Danish planners and researchers has adapted the method to Danish conditions. In the Danish version the method is divided into seven steps. These steps include both desk and field studies. Description, analysis and mapping are important elements in LCA and shown with different colours.

Step 2, Step 3 Mapping Natural Regions

Mapping of natural regions form the basis of the LCA. The three small maps (A, B and C) are the main input in a GIS analysis of relief, soil type and geomorphology leading to delineation of relative homogeneous natural regions.

The results for Frederikssund Municipality are shown in the largest map (D) together with information about geomorphological main types. Each natural region is given a unique number and a letter code consisting of information about geomorphology, soil type, terrain and complexity.



Step 4 Field Survey

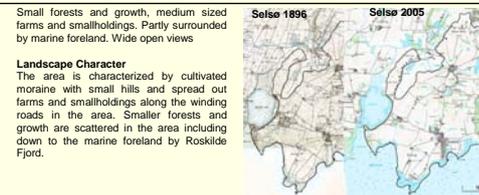
The field survey is needed in order to identify key elements and features that are not apparent from the desk study. Aesthetic and perceptual qualities that are not perceived from the map analysis complement the desk study. The field study uses digital registration by use of GIS combined with digital field survey sheets.



Step 5 Landscape Character Areas

Geographical Location and Delineation
Selse Hummocky is situated east of Skiby in the Hornsherred region and forms a peninsula into Roskilde Fjord. It covers an area of approx. 22 Sq kilometres. The northern and western delimitations are made up by the Selse marine forelands. The delineation is shown in black outline to the right.

Key Character
Cultivated moraine with smaller hills pitted due to dead-ice formation.



Main Findings



Peri-urban growth south of Frederikssund city.

The survey conducted in the Frederikssund case area was carried out at municipality level and confirms that the LCA method enables the new larger municipalities to implement effective governance with regard to sustainable land use and landscape management. By that it complies with T3.3 in the Global Land Project research framework.

One major difference compared to former methods used in Denmark is that LCA addresses the landscape as such, it does not focus on special parts only. On the contrary each part of the municipality is analysed and described by the LCA. It addresses forces for change, define landscape types based on natural regions, designate landscape character areas and determine the vulnerability and sensitivity that relate to any particular part of the landscape.

The dynamics that relate to the fast changes in farm structure, peri-urban growth and expansion of infrastructure are now to be dealt with by the municipalities as a consequence of the local government reform. However the LCA method provides the municipalities with a new tool that enables them to take on this challenge. Hence the method provides important input to the development of new landscape plan policies which are much needed.

The landscape character method approaches all landscapes and points out the character, vulnerability, thus giving an overview of all landscapes in a region.

The landscape character method has been transformed from the original regional version and is now adapted to a planning tool that address the municipality level.



Step 6 Making Judgements

Each landscape character area is subdivided into four classes according to the representation of the outlined key characters, intactness and time depth. This part of the LCA is a matter of judgement and contains some degree of subjectivity. The classes are: Highly Characteristic, Characteristic, Fuzzy Character and Contrasting Area.

As shown in the map to the right the Northern part of Selse Hummocky is classed as highly characteristic whereas the more levelled south-western part is classed as characteristic (due to outlying farms and holiday cottages). The surrounding landscape of Selse Manor is classed as a contrasting area due to a low representation of key character but a clearly defined character.

A fuzzy character is an area without a clear character and a

low representation of key character, no part of Selse Hummocky is classed as such.

As shown on the map the area around Selse Castle is classed as highly sensitivity to overall changes in land use. The area is vulnerable due to a specific cultural historical pattern and because the area represents high quality visual and scenic aspects.

The northern area contains a well preserved star pattern from the enclosure movement in East Denmark and the village of Østby is to some degree preserved according to historical traditions.

The rest of the Selse Hummocky area is classed as medium sensitive based on landscape elements and the number of preserved cultural history patterns, land use diversity and the visual and aesthetic aspects in this part of the area.

