

ME 06 Spatial decision support for management of Dutch fen meadows

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Context / Social problem

There is a growing awareness that fen meadow areas will face major changes in the near future. Under current conditions agriculture will face increasing difficulties to produce in a cost-effective way. Also as a result from current water management the ground level will continue to drop and the peat layer will slowly oxidize.

What do we know/not know?

Under current conditions the agricultural sector will find it increasingly difficult to keep production costs down to a reasonable level. Continuation of current water management practices will cause ground levels to fall and the peat will gradually oxidise and disappear. Radical changes in land use are inevitable. This project is aimed at everyone involved in the spatial and land use planning of fen meadow areas. Its goal is to structure and present the available information in such a way that it can be used by all concerned when making planning decisions.

What is being studied?

The project intends to design, evaluate and compare future development paths for these areas in the context of the multiple, consistent or conflicting, long term policy objectives that may affect these areas. This approach combines policy objectives dealing with water retention/storage, carbon sinks, nature conservation/development, spatial planning and transition of agriculture. This project will focus on development and use of presentation, visualization and evaluation techniques in participative planning processes of Dutch fen meadow areas. Bodegraven/Zegveld is used as a case study to test the approach. As part of the planning process for this area of the province of South Holland three types of workshops are organized: workshops aimed at design, workshops aimed at analysis and workshops aimed at negotiation. Interaction in these workshops is facilitated by the use of the 'Touch table'. This table includes a large set of digital

maps. The 'Touch table' makes it possible to draw maps using for example a historical map, an aerial picture or a soil type map as background. Different people can draw simultaneously; the table records which stakeholder makes which addition to the map. It is clear that this step involves a process of giving and taking by the various groups. Spatial decision support methods are used to structure, transform and present information in such a way that the trade-offs between objectives linked to the various stakeholders is made explicit and opportunities for improvements are made transparent.

What are the results

Result will be a design for the three types of workshops supported by GIS software implemented in the 'Touch Table' that is tested within an actual land use planning project in a fen meadow area. If the planning process runs smoothly the project could also contribute to a better plan for the area and better communication with the stakeholders.

