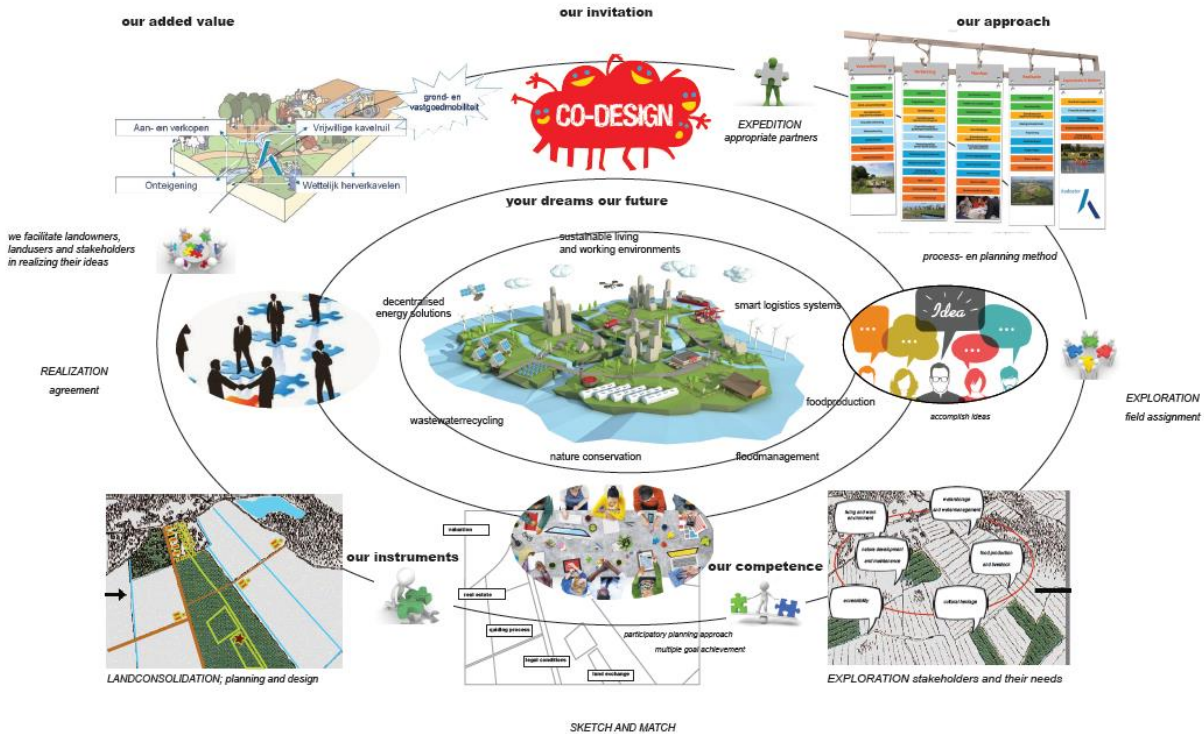


# Widen Your View with SKETCH 'n MATCH Empowering Participatory Planning in Rural and Spatial Development

Mark OBBINK, Kadaster, the Netherlands

**Key words:** Interactive Design, Participatory Decision-making, Environmental Planning, Bottom up Working Method, Rural Development.



## SUMMARY

*Sketch 'n Match* is an interactive spatial planning method, developed by the former Dienst Landelijk Gebied (Dutch Governmental Service for Land and Water Management) and the Dutch Kadaster.

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The best way to realise plans is to mobilize local energy and knowledge. In the Dutch practice, it became clear that the best way to do that is to involve people in an active way at an early stage of the planning process. Not by discussing about an already developed plan or concept, but by helping them to develop their own plan together. Images are the key to these processes. The Sketch 'n Match method has not only proven its value in the Netherlands, but also abroad. It's about real participation. Planning becomes more creative and last but not least more fun!

A Sketch 'n Match is a series of intensive interactive sessions lasting up to a maximum of three days, in which participants (citizens, policymakers, farmers, environmental and nature organizations, rural recreation companies and other share- and stakeholders), under supervision of a spatial designer and a process supervisor, analyze and work out the spatial problems in a specific region. With this method, local residents, experts and policy-makers together draft plans for a specific, well-defined area.

The challenge usually involves finding solutions to spatial planning and rural development issues that meet a wide range of objectives relating to agriculture, water, nature, recreation, cultural history and rural housing. These different aspects are well discussed and weighted before the actual process of designing potential land use scenarios for a specific area. Sketch 'n match produces a spatial design created by the participants, in the form of a land-use plan, map, book, visual story, model, 3-D GIS visualization or whatever form that best suits the project.

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# **Widen Your View with SKETCH ‘n MATCH Empowering Participatory Planning in Rural and Spatial Development**

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## **1. EMPOWERING PARTICIPATORY PLANNING IN LAND DEVELOPMENT**

### **1.1. The emergence of Sketch ‘n Match**

Sketch and Match has been developed by the former Dutch Dienst Landelijk Gebied (Governmental Service for Land and Water management) and Dutch Kadaster. It is an innovative and proven bottom-up working method of participative decision making in environmental planning. It is a response to a changing society in which plans are no longer made from top down but rather from behind the desk. People want to influence their own environment and work with stakeholders on site to resolve issues. In addition, experience shows that sector achieving solutions often capsize when an integrated and participatory approach is lacking. The sketch and match approach addresses this need and also helps to speed up the planning process and achieves support from the stakeholders involved.

It is also a reaction of the accumulation of plans from several different policymakers regarding water management, nature, housing, agriculture recreation, industrial developments, infrastructure and more. Very often these plans are aimed at the same area and fight with each other for space, money and attention. The sketch and match method combines all the mentioned ambitions and is trying to find an accepted compromise to fit in all these plans in one spatial design.

### **1.2. Empower your planning by mobilizing local energy**

Despite cultural differences, despite other planning processes, despite the language gap, the Sketch ‘n Match method of Kadaster shows that people can make a difference in every country and in every area.

The best way to realize plans is to mobilize local energy and knowledge. In the Dutch practice, it became clear that the best way to do that is to involve people in an active way at an early stage of the planning process. Not by discussing about an already developed plan or concept, but by helping them to develop their own plan together. Images are the key to these processes.

Images and maps makes that participants focus on the possibilities and opportunities in the area rather than looking backwards and focusing on their own idea’s or reflecting on idea’s and plans of others. Images and maps have also a function to inform the participants so that their knowledge level becomes more equal and therefore makes the discussion easier and more balanced.

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The Sketch 'n Match method has not only proven its value in the Netherlands, but also abroad. It's about real participation. Planning becomes more creative and last but not least more fun!

### **1.3. From public support to local energy**

For a long time, planning practices were about making plans. Studies often had a weak basis regarding common interest. Meetings about results rarely brought participants together. It was just about consulting people before and after the planning, only creating passive support from the public. From the design table and back, there were long discussions, long processes and lots of meetings and paper. And last but not least, resulting in long and dull reports. This led to a gap between plan and realisation.

The Sketch 'n Match method is about making plans with and by the people. Involved parties make the plan together. Experts and landscape architects just have a supporting role. Discussions are creative. Always 'yes' instead of 'no, but'. The meeting table becomes the drawing table. These results have a full use of local knowledge, full scope on local urgencies and are created from a positive synergy from the start. The local energy is mobilised and every participant has the same position.

### **1.4. Images are the key**

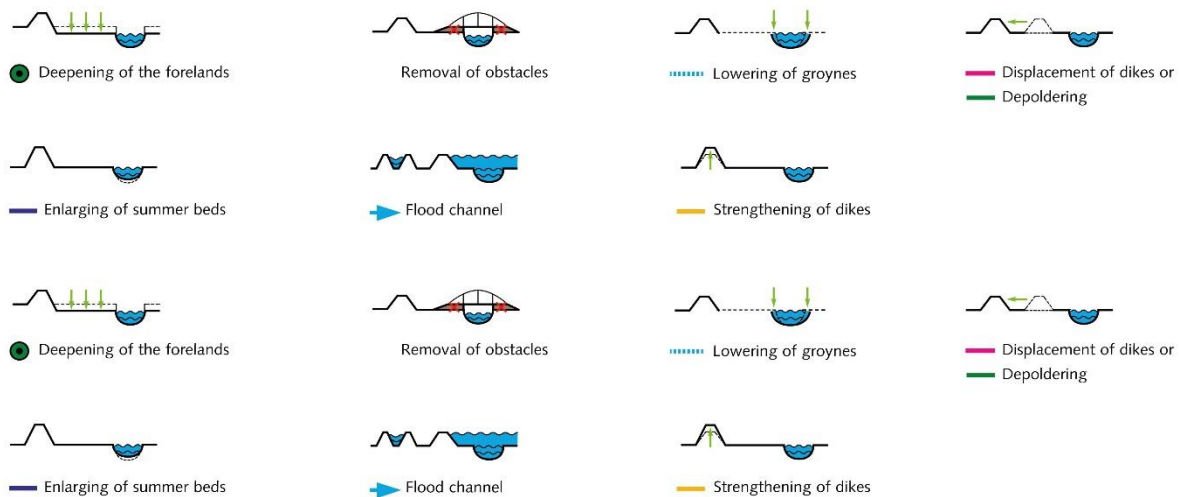
The Sketch 'n Match method is all about images and maps. One image tells more than a thousand words. Images can tell stories and they stimulate the creative process. They *make planning fun and creative*. The Sketch 'n Match method is about *specifically defining what everybody means and wants together by drawing it*.

### **1.5. Sketch 'n Match benefits**

This method creates better commitment and understanding between all parties involved, from different governmental bodies to the smallest local farmer, by working together. It is mobilising energy and is much more faster than any other method. It is therefore very efficient. It gives a broader view on solutions, even new solutions or innovative solutions. Stakeholders are pursued to see the interest of the other parties. Every idea is a good idea.

### **1.6. Sketch 'n Match points of attention**

Before Sketch 'n Match can start it needs a thorough and intensive preparation of the experts. Without a good preparation and a guidance of the process Sketch 'n Match can create the wrong results. Participants also need to be informed in an early stage and ones needs to be sure that all the relevant stake- and shareholders are well represented at the meeting.



## 2. INTERACTIVE WORKING METHOD

Every Sketch ‘n Match consists of three phases:

### Registration and preparation;

- STEP 1 Describe the assignment and define the objectives
- STEP 2 Decide on the format of the sketch ‘n match
- STEP 3 Decide on date and invitations
- STEP 4 Facilitation arrangements
- STEP 5 Send invitations
- STEP 6 Organise a venue
- STEP 7 Collecting information and participants

### Sketch ‘n match Session

The participants are invited to express their expectations regarding the Sketch ‘n Match work session. After summarizing the expectations and the problems all the participants are invited to go on the field trip to see the real situation of the study area in the field. The Sketch ‘n match session consists in forming work groups which analyses: qualities, problems and potentials and design.

### Completion

- Main issues found by the work groups.
- Development of the (design) principles.
- Integration of all the issues and solutions in a land-use plan that every stakeholder agrees with.
- Final presentation

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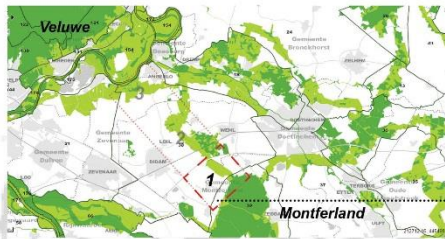
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PLANATELIER KADASTER **Klimaatcorridor Veluwe - Montferland** van wensbeeld naar ruilplan naar inrichtingsplan

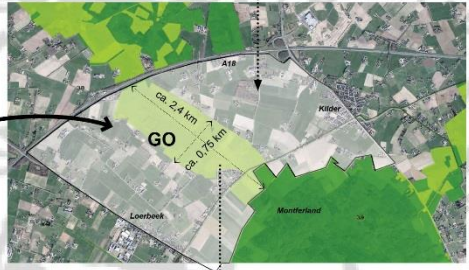
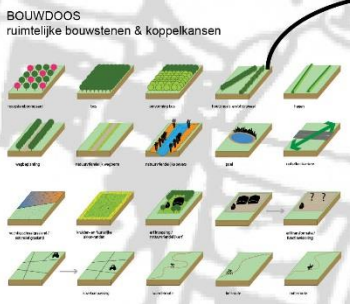


**WERKWIJZE**  
 Samen in co-creatie verkennen van de mogelijkheden op gebieds- en erfniveau.  
 Verkennen:  
 - ligging van de corridor  
 - generieke inrichting  
 - koppelmans gebiedsinitiatieven  
 - inbreng van gronden en (zelf)realisatie

**WENSEN KLIMAATCORRIDOR**  
**Natuur & Landschap**  
 ca. 500 m brede groene ontwikkelingszone bestaande uit:  
 ca 10 - 15 km hofstingels en struweel  
 ca 2 - 5 km natuurvriendelijke oever/perceelsranden,  
 ca 10 - 15 natuurvriendelijke enven  
 ca 10 ha kruidentijke akker  
 ca 15 ha extensief grasland.  
**aantal ha natuur inrichting in het projectgebied:**  
 - 11 ha inrichting op gronden van Natuurmonumenten  
 - 10 ha inrichting op gronden van private eigenaren.  
**Landbouwstructuurverbetering**  
 x ha structuur  
**Recreatief medegebruik, cultureel erfgoed,**

**UITWERKING MET HET GEBIED MONTFERLAND**

**CONTEXT / OPGAVE**  
 realiseren van een klimaatcorridor tussen Veluwe - Montferland in combinatie met landbouwstructuurverbetering in co-creatie met grondeigenaren en bewoners in het gebied



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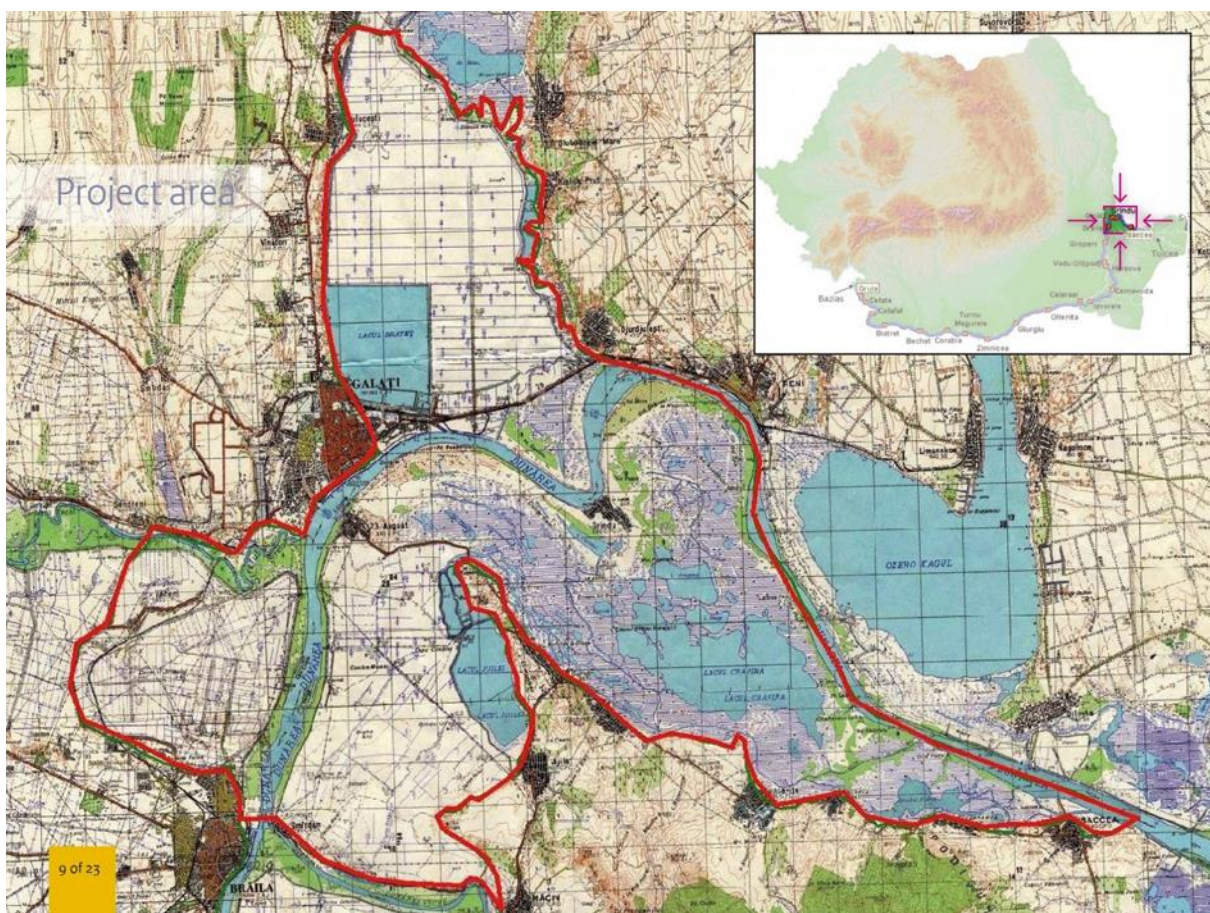
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### 3. EXAMPLE

#### CAT'S BEND PROJECT, ROMANIA, PLANNING AND DESIGNING IN STAKEHOLDER WORKSHOP

The project *"Room for the River in Cat's Bend, Romania"* aims to develop a number of spatial draft plans for integrated flood management in the Galați–Tulcea region in Romania. The project is initiated by the Dutch Government Service for Land- and Water management (Dienst Landelijk Gebied, DLG). Together with the Dutch HKV-Consultants, DLG has formed an international consortium with 4 Romanian partners: Danube Delta National Institute, World Wildlife Fund Romania (WWF), Eco-Counselling Galați and ALMA-RO, Bucharest.



Location project area: Galați–Tulcea region in Romania

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From 22-24 June 2009, 45 participants gathered at Internatul Liceului Teoretic Gheorghe Murgoci in Măcin for a three-day workshop focussed on water management issues in the Cat's Bend area (in Galati and Tulcea prefects, East-Romania). Participants were representatives of a wide range of Romanian organisations varying from local farmers to representatives of the County Councils and the Romanian Ministry of Environment. The goal was to work out solutions for spatial problems in the Cat's Bend region including the design of new and balanced rural-urban landscapes, the redesign of rural areas to accommodate future-oriented, high-tech agriculture, and also the redesign of the Cat's Bend water system in connection with other spatial functions.

During the Cat's Bend workshop, participants developed a wide range of potential solutions for the project area. Among these was the concept of Canalul Ciulinet; a new water course to be developed in connection to the Danube River. To test these concepts, the HKV/ DDNI hydraulic model was used to calculate the probable effects of the developed concepts on the Danube water level. Contrary to the scepticism and 'distancy' that was met at the start, the Sketch 'n match workshop proved to be a successful and useful method. Participants were enthusiastic about its results. It opened up new directions for solutions to the area, which can be explored further in the future.

Initial aims of the Sketch 'n match in Cat's Bend were, in short:

- start up a bottom-up process to make participants comfortable with this new method of interactive design.
- explore suitable solutions to water management problems in Cat's Bend area.

Suitable solutions are:

- in keeping with existing policy.
- locally supported .
- fit to the usage and characteristics of the local landscape.



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### Initial objectives of Sketch & Match in Cat's Bend

- introduce participants to this method of interactive design
- explore suitable flood protection scenarios:
  - supported by local, regional and national stakeholders
  - suited for the land use and characteristics of the local landscape
  - preferably in accordance with existing policies
- **focus shift** during Sketch & Match Cat's Bend:  
stakeholders perceived drought / water scarcity - *leading to socio-economic problems* -  
as equally urgent problems

#### redefined design assignment:

→ water management AND sustainable economic development

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### Program of Sketch & Match Cat's Bend

#### DAY 1

- exploration of design assignment and project area:
- field excursion, analysis by maps
- **problems, qualities and opportunities (potential)**

#### DAY 2

- exploration of **solutions**
- calculate probable **effects** with hydraulic modelling

#### DAY 3

- **synthesis**: integration of concepts into integrated sketch
- final **presentation** for team members and decision makers

### Lessons learned: succes (and fail...) factors

- thorough preparation
  - problem (pre)definition
  - selection of participants
  - program
  - facilities and materials (location, catering, tracing paper, etc)
  - input (maps, presentations, field excursion, etc)
- enthusiastic and motivated participants (at least some...)
- well qualified, cooperative team
- combination of sketching and hydraulic modelling
- flexibility (concepts and process)

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### Recommendations: how to ensure local sustainability

1. think **top-down, act bottom**-up in a cyclic way:
  - use the Sketch & Match or similar method in policy planning and equip staff
  - coherent set of objectives at national level, pliable on local level (finetuning)

① ← → ② ← → ③
2. **triple layer approach**: prevention | sustainable planning | disaster management
3. combine **vision with facts** (eg. hydraulic modelling or other calculations)
4. include **socio-economic aspects** in a broad approach for solutions ('added value')
5. focus on **common ground** (win-win) instead of (apparent) contradictions
6. think about an effective **follow up** before starting a Sketch & Match session!

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## REFERENCES

MARK OBBINK, Dienst Landelijk Gebied, (2009): Room for the River and people in Cat's bend, Romania: Applying interactive spatial design for land- and water management solutions.

IULIAN NICHERSU, Danube Delta National Institute for Research and Development, June 2010: Room for the river in Cat's Bend: Application of the SketchMatch method in Romania

JOANNE VINKE-DE KRUIJF, MSc, University of Twente, 2011, The role of dutch expertise in Romanian water projects, Case study 'Room for the River in Cat's bend, Romania'

## SKETCH 'N MATCH PUBLICATIONS

*Cradle tot Cradle (C2C);*

- ideas in the the province of Limburg; 4 Leaf Clover, Venlo; A2 Motorway, Maastricht and the Community of Peel en Maas

*Floodrisk;*

- Room for the River and People in Cat's Bend, Romania, 2009

- Munnikenland ruimte voor de rivier, 2009

*Redevelopment Military bases;*

Veldhuizen, Alverna, Stegerveld, KKN-ZZP, 2006-2008

*Urban Fringes (in the Metropolitan)*

- Scheggen Amsterdam, 2009

- Parkbos de Haar, 2010

*Climate adaptation;*

- Klimaatcorridor Montferland, 2015

- Munnikenland, 2009

*Recreation;*

- Haarzuilens, 2007

- Emmen, 2007

- Idinkbos, 2009

*Nature conservation;*

- Butenfjild, 2005

- Alde Feanen, 2006

*Energy transition;*

- Wind op Zee, 2010

- Duurzame Transport Corridor Betuwe, 2014

*Agricultural transition;*

-Reconstructie zandgebieden; 2006 - 2007

-Binnenveld, 2007

*Rural development Projects*

- Landgoed Nieuwe Steeg, 2008

- HeMa (Hezinger-Mander), 2005

- Maasduinen, 2006

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- De Ruimte, 2006
- Varsen, 2006
- Wijboschbroek, 2006
- Binnenveld, 2006
- Oud Ootmarsum-Notter, 2006
- Nationaal Landschap, Graafschap, Vorden, 2009

## BIOGRAPHICAL NOTES

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