The International Committee on Contaminated Land
22 years of world-wide cooperation

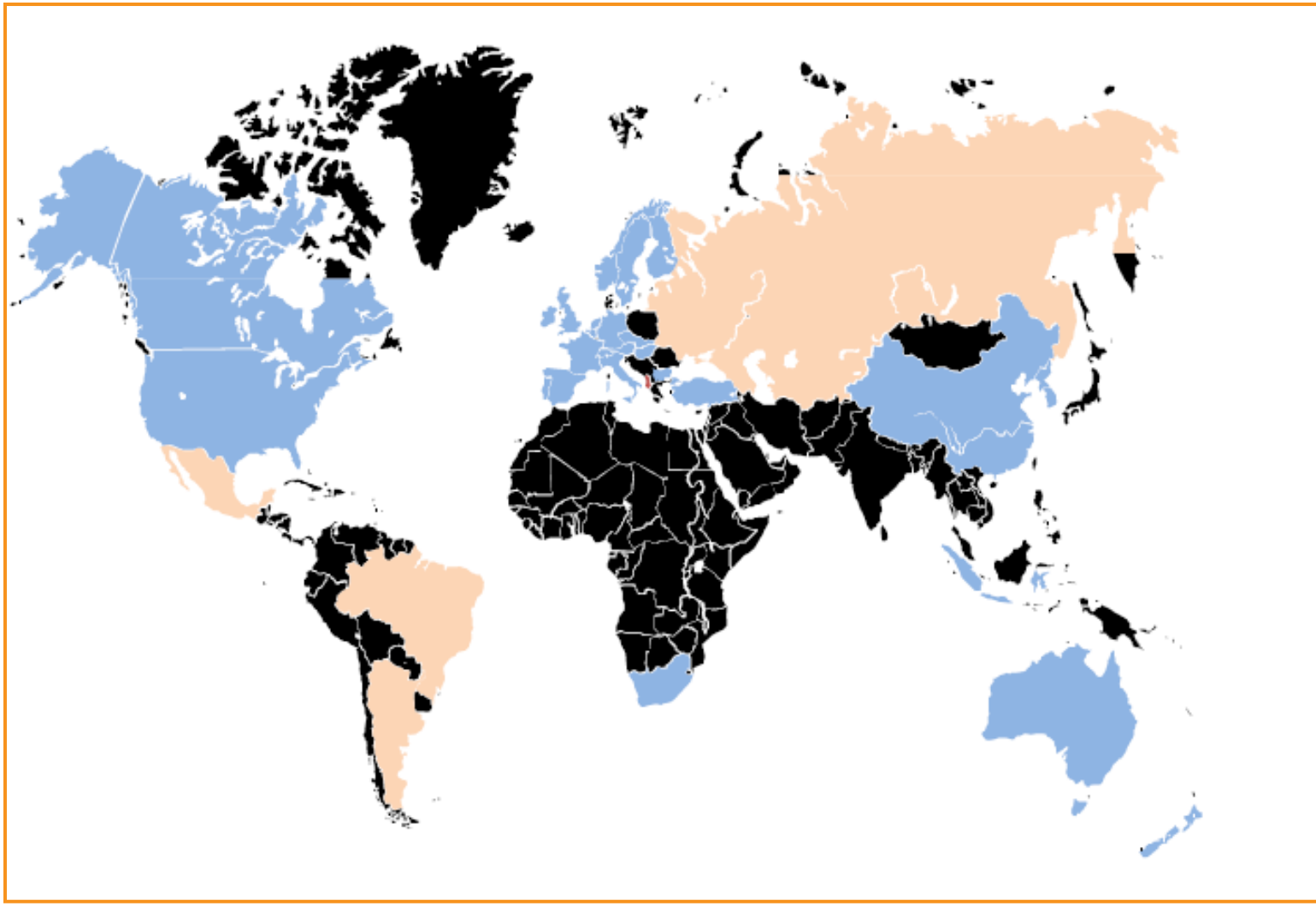
Melbourne, 9th of September, 2015

ICCL Mission

- Provide a platform, open to any country, in which issues and problems of contaminated land and groundwater can be discussed and information freely exchanged to the benefit of all participants

52 countries involved

18 countries
Present in
Melbourne



Topics discussed

- identification, registers,
- Management principles (precautionary, fit for use, …)
- risk assessment, remediation, clean-up targets, reuse of contaminated soils
- funding models vs. PPP, orphan sites, liability chain
- Quality management
- groundwater & soil protection related to CLM,
- CLM in CEE and developing countries,
- Emerging contaminants
- Brownfield regeneration
- diffuse contamination, sediments, mining & military & radioactive sites etc.

INtegrated Spatial PlannIng, land use and soil management Research ActTION

ALGA – INSPIRATION
Joint event

Melbourne (Australia) 9 September 2015

Agenda

- Tour de table
- Meeting Objectives – Paul NATHANAIL
- Short presentation of the INSPIRATION project – Dominique DARMENDRAIL
- Case Study: the Netherlands vision & related needs - Margot de CLEEN (NL)

Tour de Table

- Recalling names and faces

  - Name, institution

Objectives of the Workshop

Paul NATHANAIL, University of Nottingham

Meeting Objectives

- Introduce you to the INSPIRATION project (aims, partners, structure, activities, timescales)
- Identify approaches to help understand how new knowledge can support sustainable land management for fulfilling human and ecosystems needs.
- Learn more about expected useful future forms of new knowledge and policy tools from the perspective of policy makers and implementers.

> Policy formulation and implementation will influence how effectively we manage soil and land to meet societal needs and ensure wise environmental stewardship.

Objectives

- Share past experiences
- Understand better how policy informs research
- Understand better how research drives policy
- Identify currently known knowledge gaps
- Share experiences of and expectations from funding
- Share experiences of dissemination: wide and deep
- Share experiences of intellectual property rights: ownership, exploitation
- Begin a conversation…

INtegrated Spatial PlanniIng, land use and soil management Research ActTION

“INSPIRATION“ project Scope, Methodology and State of Implementation

Dominique DARMENDRAIL

Land and Soil - Sediment - Water Systems / at the political agenda

- Meeting societal needs such as food, drinking water, energy production, shelter, infrastructure and overcoming societal challenges and ambitions (climate change, biodiversity, etc.)
- Multiple scales (from global scale - their role in climate change adaptation and mitigation to more local scales like river basin management or food security)

INSPIRATION Expected Products and Impacts

- **Network** of funding agencies and other key players in Europe
- Joint vision and a **Strategic Research Agenda (SRA)**
- Evidence-based policy and appropriate, cost-effective management, planning and adaptation decisions
- Enhanced impact of research and innovation activities through
  - better identification of R&I priorities,
  - improved coordination of EU and Member State/Associated Country research and innovation programmes and funded activities,
- Synergies with international research and innovation programmes.

21 INSPIRATION Partners

- **INSPIRATION** = **IN**tegrated **S**patial **P**lann**I**ng, land use and soil management **R**esearch **A**c**TION**
- Initiated by the **German Federal Environment Agency**, University of Nottingham, Stadt+, Common Forum, Deltares
- Funded by EC under Grant Agreement No. 642372
- Duration: 36 months (1 March 2015 - 28 February 2018)

EU Policy and Research

Policy

No net land take by 2050

- EU Soil Strategy - 2006
- EU 2020 Strategy
- Road Map for a resource efficient Europe

H 2020

Research and innovation (R&I) that will help Europeans achieve meaningful, harmonious and lasting existence in the face of significant driving forces

- *7th Environmental Action Programme*
- EU Communications on green infrastructure strategy
- *EU Biodiversity Strategy's*

Research on soil and land issues

- Contribute to food security and food safety
- Ensure secure supplies of safe drinking water
- Secure energy supply and distribution

- Reduce Raw material and resource consumption
- Ensure efficient use of natural resources
- Contribute to climate change mitigation and societal adaptation.

Our Conceptual Model

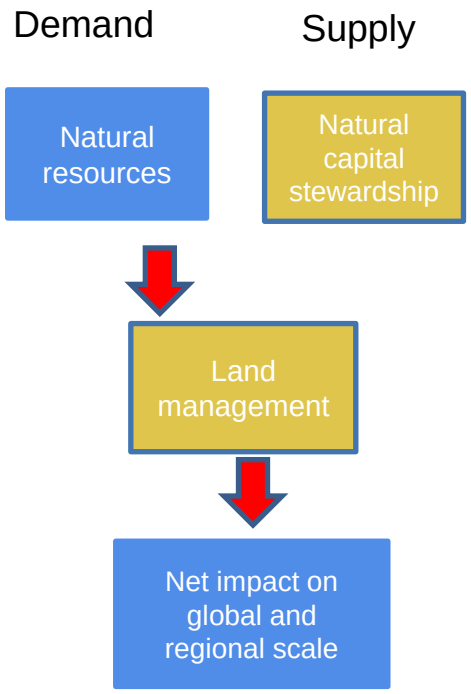
INtegrated Spatial PlannIng, land use and soil management Research ActTION

Our Premises

- Improve efficient use of knowledge by a **demand driven** SRA
- Ensure success in addressing **societal challenges** by a broad **Policy - Science Interaction**
- Establish a **transnational network** of funding bodies and cooperating industries/regions by recognition of **individual demands** in the SRA

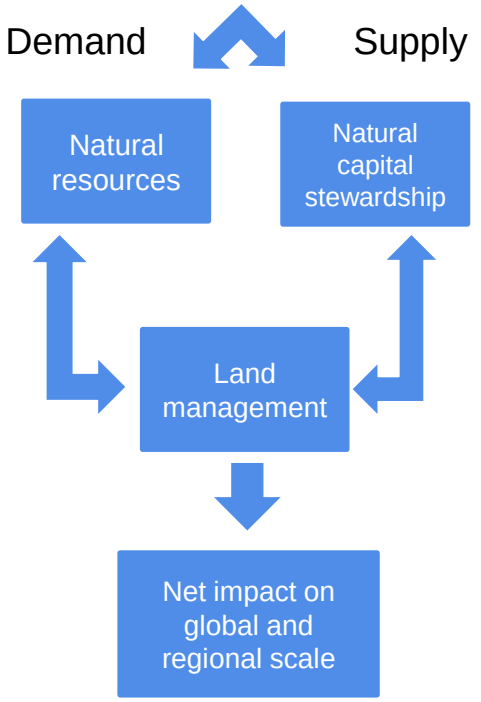
Current situation

Imbalance of Demand and Supply

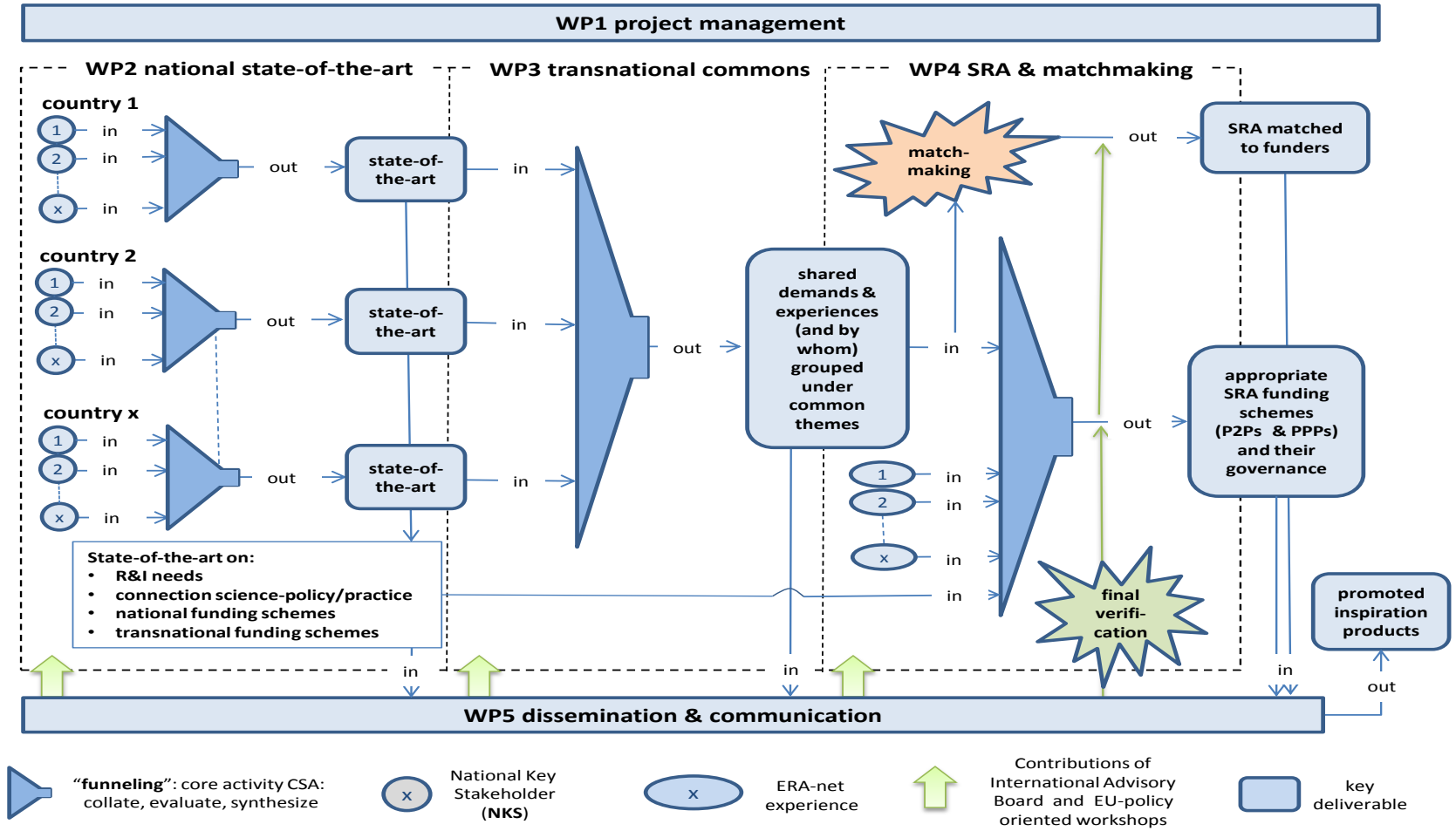


Objective

Balance of Demand and Supply



Our workflow



First actions

- Contact with key networks
- World cafés in different events: Global Soil Week, AquaConsoil 2015
- Policy – Oriented Workshop
- First National Workshop (in the UK) – Others planned in Autumn
- Sweden (SGI) applies for becoming full member
- Website launched
- First e-Newsletter in September

Ministry of Infrastructure and the Environment

Dutch motives and motivation to go for inspiration

Challenging and innovative

Workshop Common Forum –ALGA Melbourne

Margot de Cleen
Co Molenaar

18 September 2015

Outline

The Netherlands are crowded: high pressure on land and soil

The Dutch Ministry is in favour of a joint EU strategic research agenda

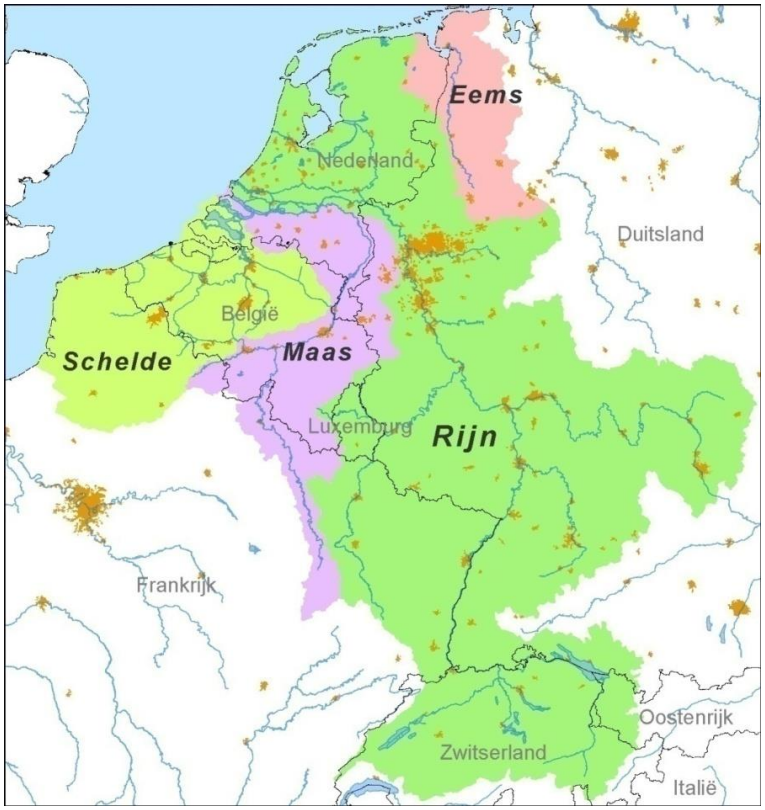
- Transition in soil policy asks for new knowledge
- Decreasing budgets aspire to new coalitions and joint investments
- A joint research agenda together with stakeholders is a means to efficient knowledge development and exchange
- Insight in stake holder interests is important to come to new financial arrangements

The Netherlands, a pinprick on the world map

The Netherlands	**Australia**
41.526 km²	7.692.024 km²
Inhabitants 17 million,	23 million,
400 p/ km²	0,33/ km²
16% water	1% water

Characteristics of The Netherlands

- Delta of 4 internationals rivers
- Soil: fine sediment of clay, sand and peat. Multi layered.
- Shallow groundwaterlevels.
- Groundwater flows.
- Fresh water aquifers up to depth 700 meter, salt water aquifers up to depth of 900 meter.



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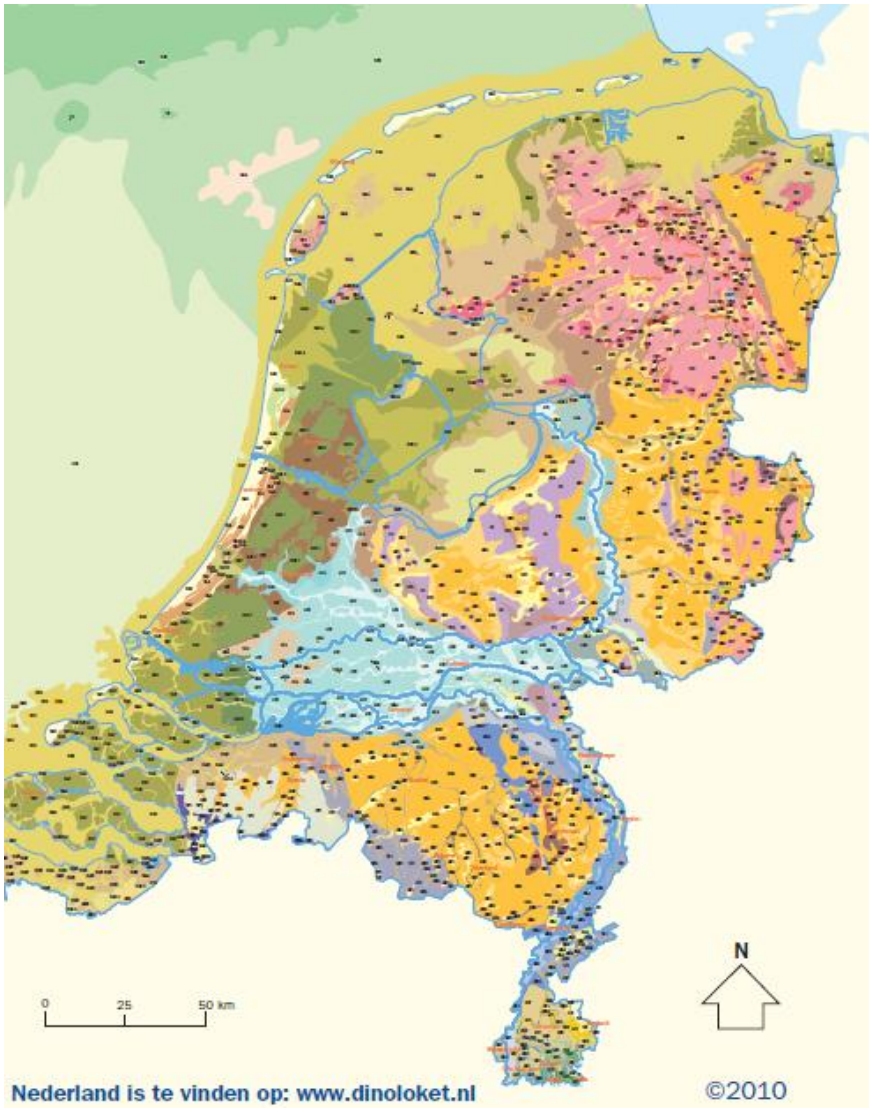

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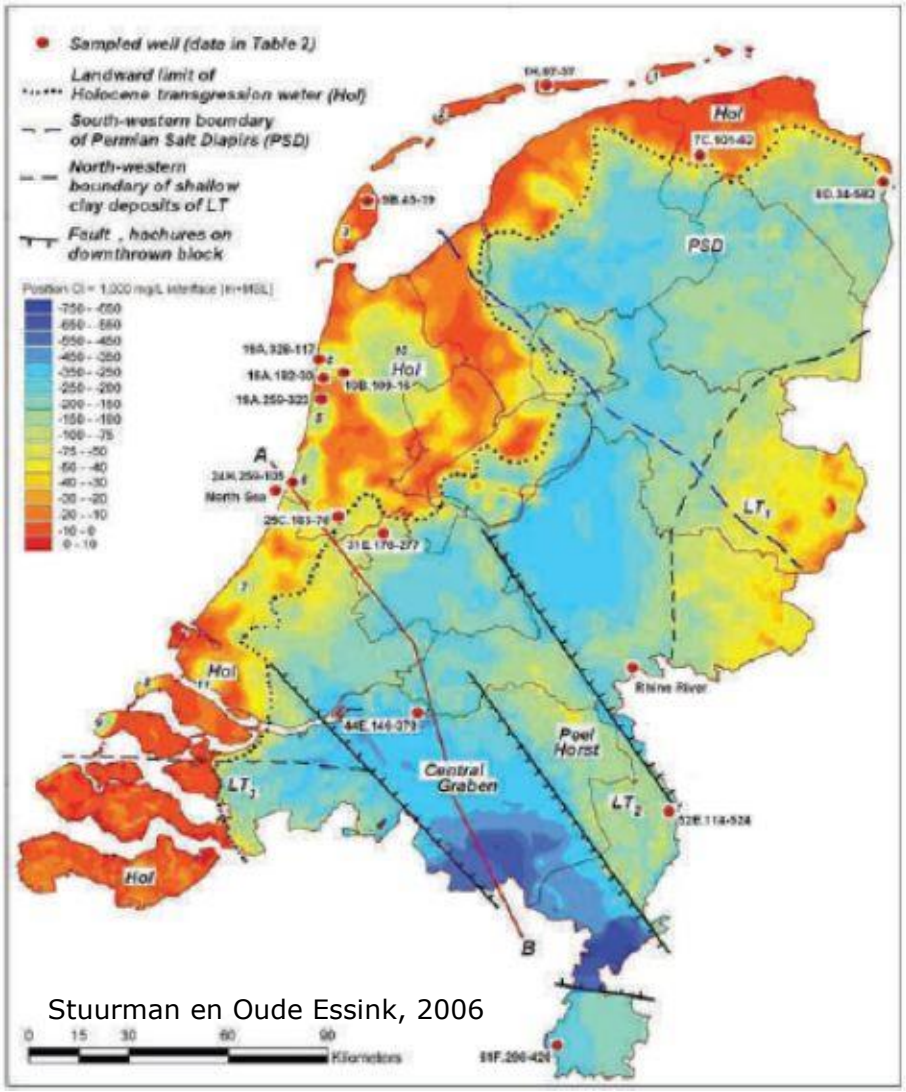


Stuurman en Oude Essink, 2006

Dutch governance

National level

Council of Ministers
- Ministry of Infrastructure and Environment
- Ministry of Economic Affairs

Provincial

12 Provinces
- Regional spatial planning
- Ground water protection (quality)

Regional

24 Water authorities
- Regional water management
- Ground water: quantity
- Urban waste water treatment

Municipalities

408 municipalities
- Spatial planning at local level
- Sewerage system

EU Strategy 2020

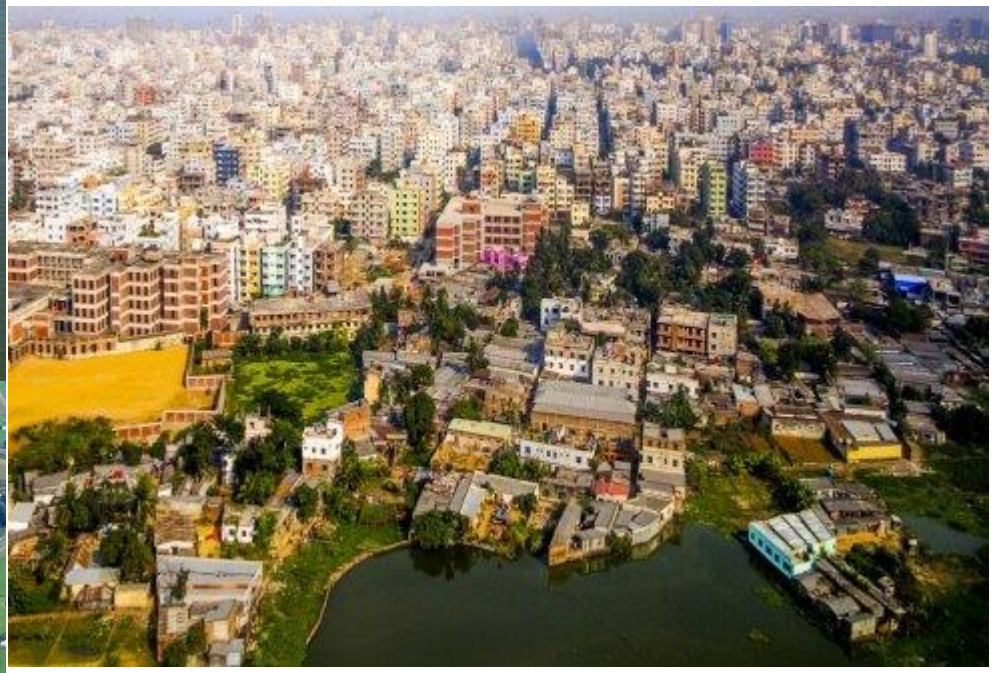



Greener, smarter, more jobs



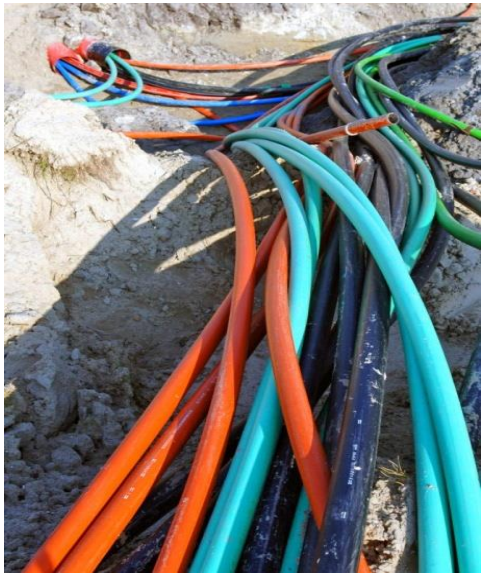

Better regulation

Challenges in Delta area's



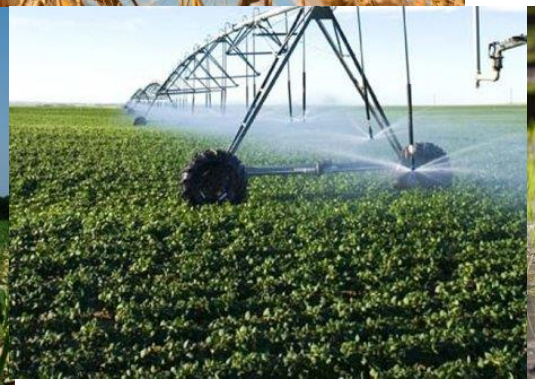
Bron foto: Wageningen UR

Intensive use of land and subsurface



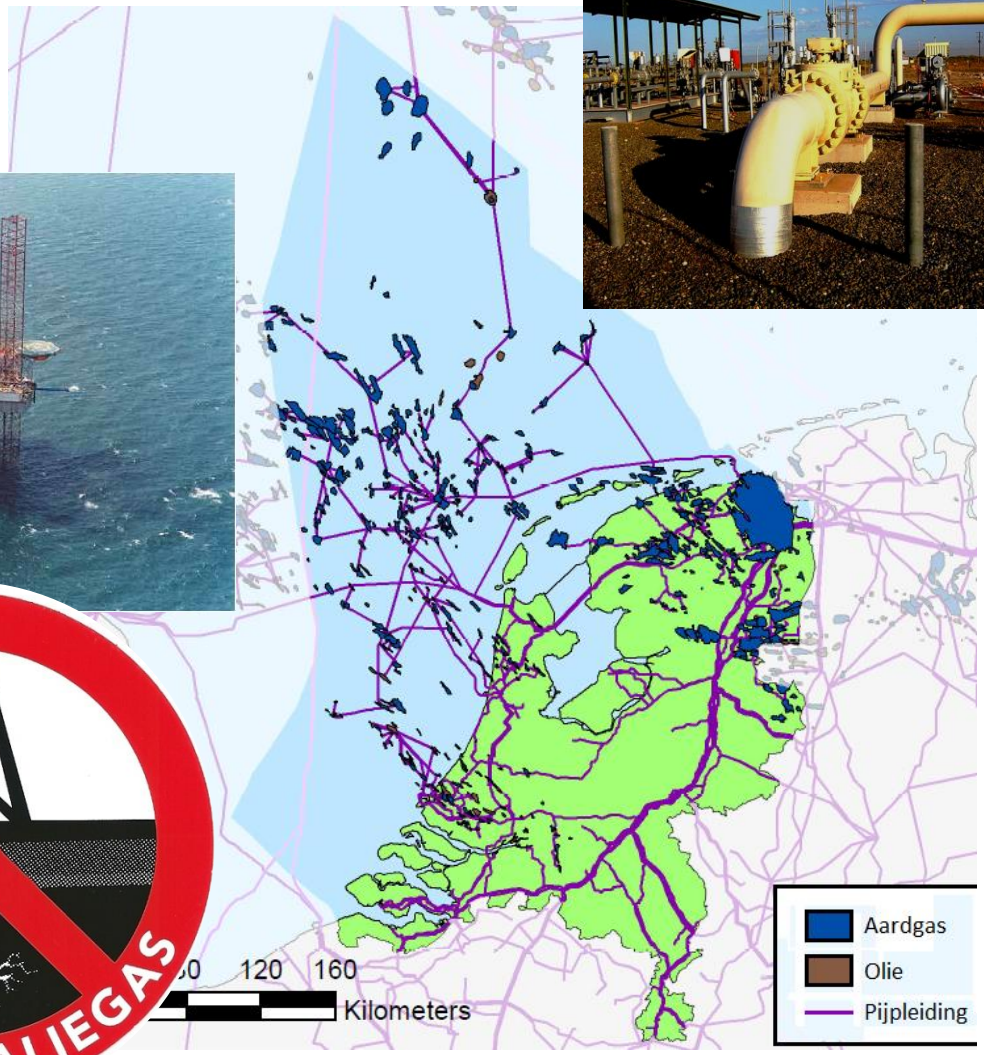
Feed the world

GLOBAL SOIL PARTNERSHIP



Bron foto's: Wageningen UR

Energy policy



World wide competition for resources

Changes in soil policy

Policy is in transition

- From soil protection to sustainable use of the soil-sediment-water-system in solving societal challenges
- From subsurface care to deep and broad use of ecosystem services (3/4D)
- From general regulations and prohibitions to tailor made solutions on regional and local level: **spatial planning and land management**
- From taking the lead to involving the energetic society (demand driven)

New approaches

- From local to area approach
- From sectorial to integral approach
- From general to tailor made solutions

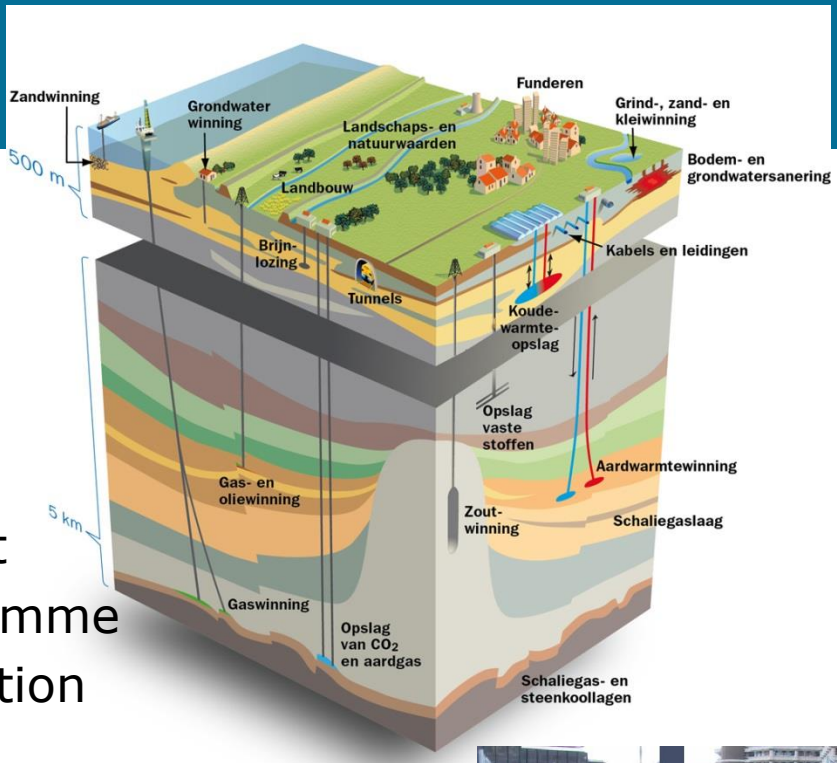
New partners and stakeholders

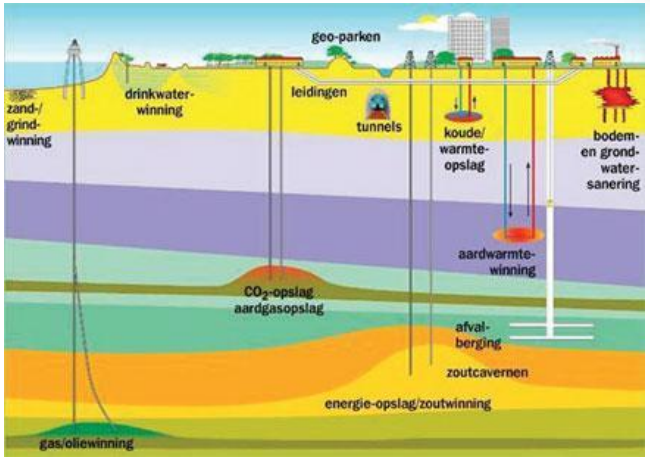
New knowledge is required

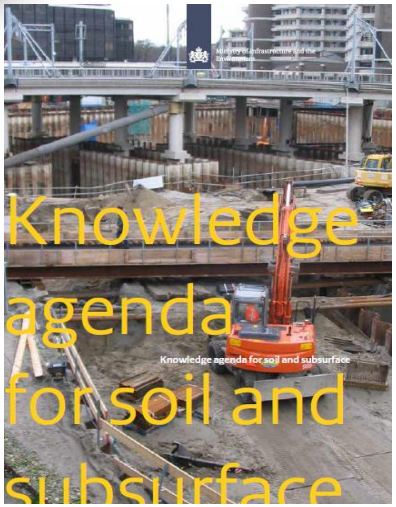
Opportunities for new financial arrangements

Towards innovation

- National Spatial plan
- Decision Framework
- Knowledge structure
  - agenda on knowledge requirement
  - Research and development programme
  - knowledge transfer and dissemination programme







Knowledge requirement

A knowledge agenda on soil, sustainable land use and management

- Societal drivers
- Societal challenges
- Sustainable use of the soil-sediment-water system
- Knowledge gaps and requirements

Climate change **urbanisation** **presure on resources**

Living in a Delta **Economic crisis**

Growing middle class **food security**

Climate robust cities **energy crisis** **drinking water**

energy safety and security

Challenges and chances

It is necessary to find new ways for knowledge development

- Show the values of soil and its services (natural capital)
- Connect to societal challenges
- Connect with the stake holders
- Join forces and investments national and international

Hints for scientists and policy makers

Understanding the drivers behind developments is crucial

Focus on opportunities, don't forget protection

Show and tell: have success stories ready

Thank you for your attention

Questions or more information?

Co.molenaar@rws.nl
Margot.de.cleen@rws.nl

2015 International Year of Soils

World Café


World Café Guidelines
HAVE FUN!!
PLAY... DRAW DOODLE
Facilitate yourself & others
CONTRIBUTE YOUR THINKING
Listen together for patterns, insights, & deeper connections
LISTEN TO UNDERSTAND
FOCUS on what matters
LINK and connect IDEAS
Speak with your MIND... and HEART
SLOW DOWN.... so you have TIME to think & reflect

Questions for this World Café

- Q1 How is Australia soil and land use most similar to and most different from other parts of the world?
  - LORNA 1a, ANNE 1b
- 2 What works/ does not work in transferring new knowledge into daily practice? For practitioners? FOr regulators? Belville
- 3 What key research questions do you think Australia needs to focus on over the next 15 years to adapt to climage change [INCLUDE THE KEY SOCIETAL QUESTIONS} Erwin
- 4 What capacity does Australia have to deliver research over the next 15 years and what does it need to develop or access by international collaboration? Arminda
- 5 Is the CRC funding model sustainable into the future? Can CRC make the transition to standalone long term viable research organisations like Battelle, CIRIA and CLAIRE? Jo

World Café tables

plenary summary of results by each table chair

Wrap-up

Q1 How is Australia soil similar / different from RoW? LORNA 1a,

- Soilss not unique but exposed to si,ilqr pressures
- Differences age poor in nutrients nore intensely used

Q1 How is Australia land use similar / different from RoW? ANNE 1b

- Low reliance on groundwater
- Bushfire risk
- Climate change perception

- Same coastal setting
- Need for affordable housing

2 What does/ doesn't work in transferring new knowledge into practice? Belville

- Why not? Policy timeframe is too slow
- Ipr cannot share info
- Risk averse regulators; dont want to be first

- If it works we will adopt it
- Harmonisation; NEPM process
- Forums for sharing are effective

3 key research questions Australia needs to focus on to adapt to climate change Erwin

- Aka sustainability in CLM
- Risks need to be balanced
- Knock on effects need to be understood ans trade offs are important; but may not be doable; cost/ benefit as done in medicine may not work for CLM
- It is difficult!!!

4 What capacity does Australia have to deliver research and what does it need to develop or access by collaboration? Arminda

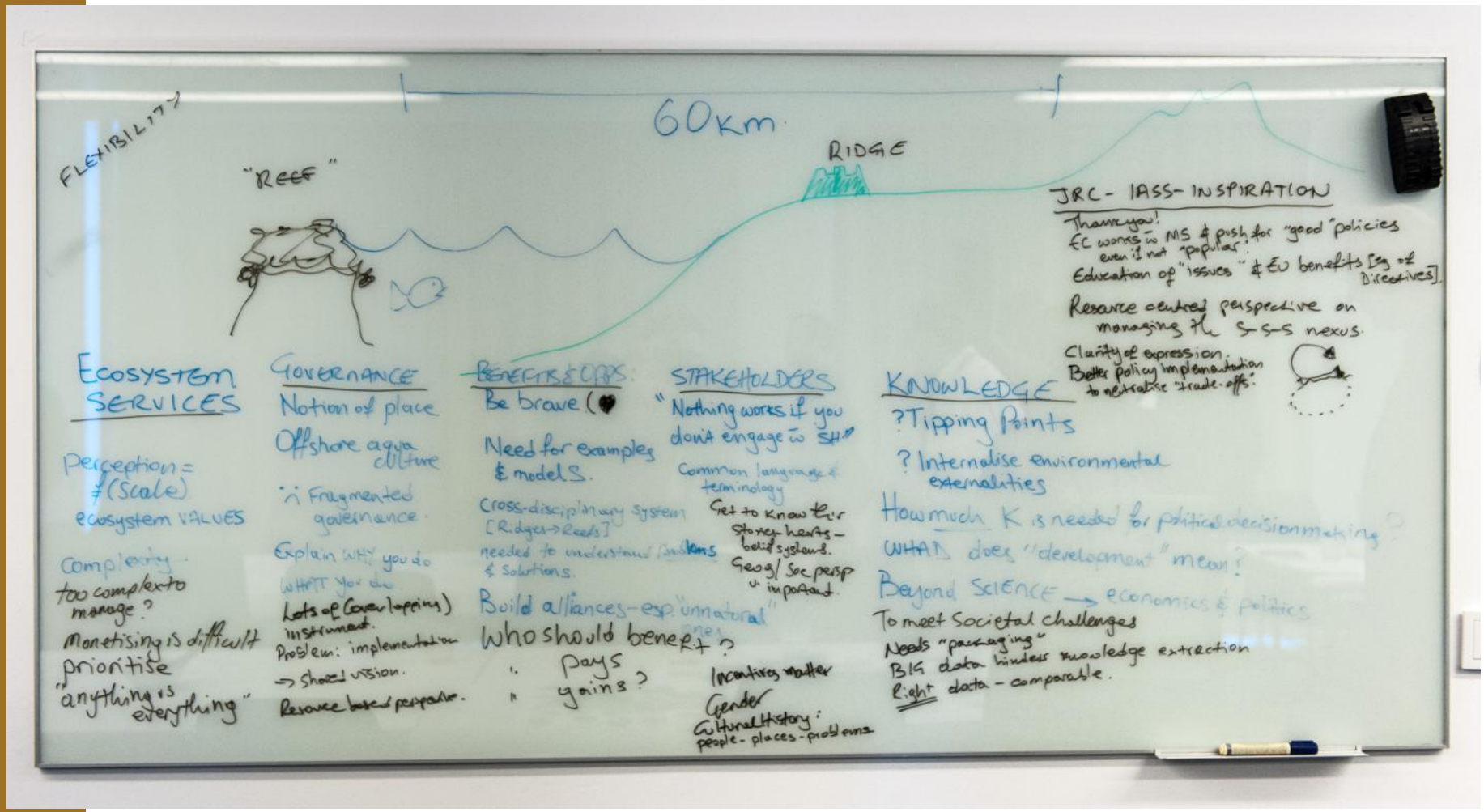
- Capacity is good but risk from political cycles
- Collaboration within Australia
- Clone « Mitzi »
- Fund face to face meetings to save money in long run

5 Is the CRC funding model sustainable into the future? Can CRC make the transition to standalone?Jo

- Possibly not!
- Need greater balance in collaboration; more transparency
- Network internationally

Other events outcomes

Global Soil Week 2015



GSW 2015: some outcomes Ecosystem services

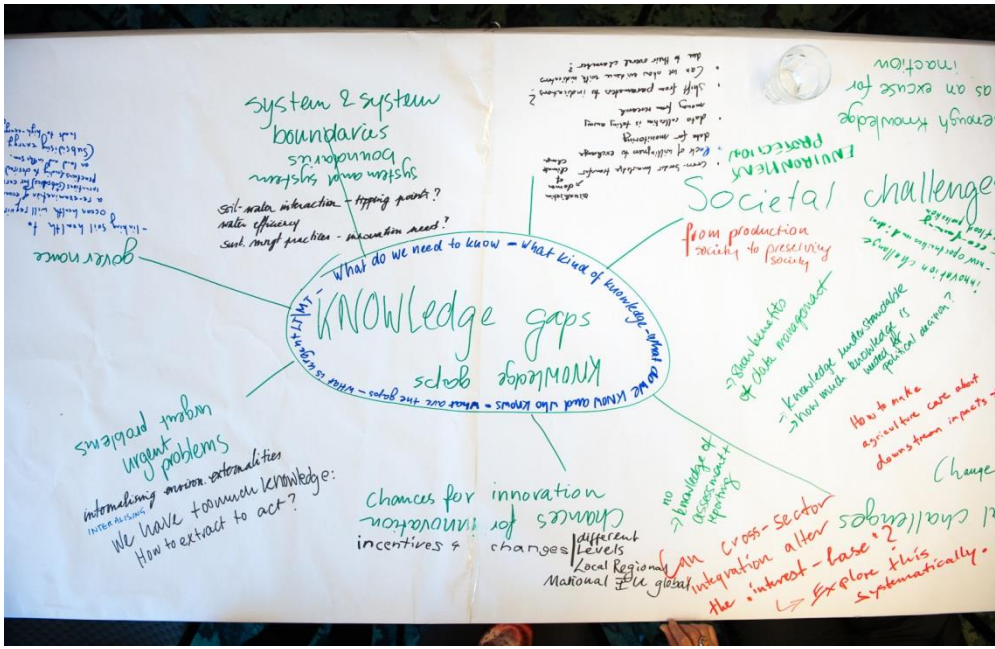
- Ecosystem services should be seen as an economic instrument: the pricing is depending on the balance of demand and supply which again may depend on the scale of the area. Question: how are prices being defined and by whom?

- A competent authority is needed to decide upon who will benefit and who will bear the costs. This should be an open and transparent system under the responsability of the government. Questions: How to deal with difficulties in managing the system? What is the perception of using ecosystem services? What are the trade-offs?

Figure 1: Map of Soils and Seas Related Ecosystem Services

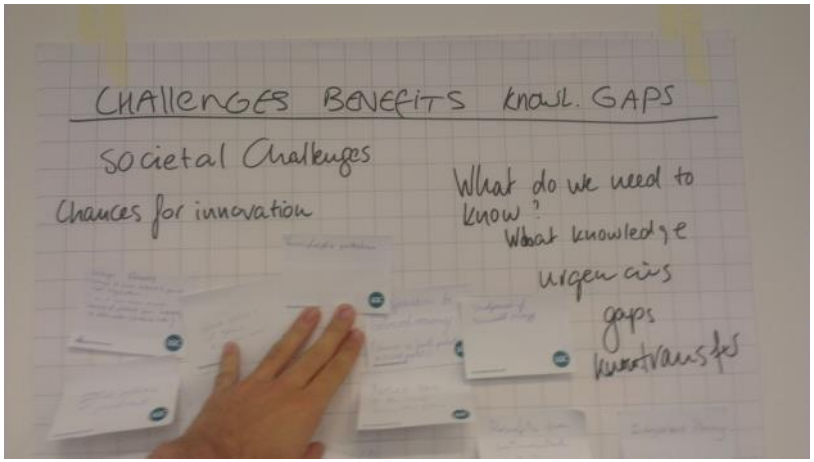
GSW 2015: some outcomes
Knowledge gaps

- There is less need for more information on problems: instead more information is needed on solutions and alliances between stakeholders.
- Focus should be on monitoring of ecosystem services instead of monitoring media. However raising fund for monitoring is even more difficult than for innovation



- Research questions should include social and economic sciences: how to make people conscious of the importance of the land system; finding alternatives to economic valorisation for decision-making, considering non-monetary services and reflecting existing complexities.

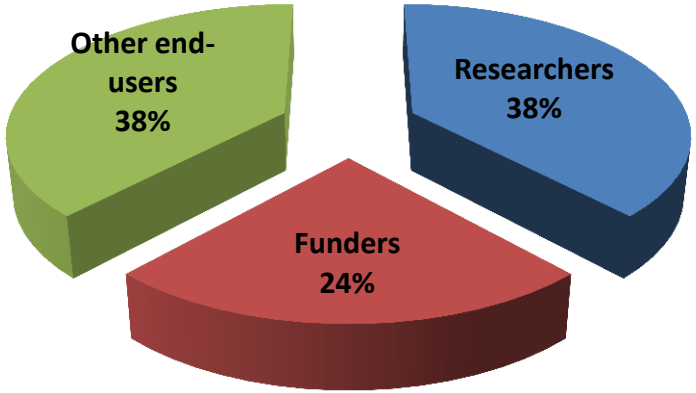
AquaConSoil 2015



AquaConsoil 2015 / Inspiration session

- Ecosystem services
- Challenges (SDGs), benefits, knowledge gaps (governance, financing)
- Instruments:
  - 1. economic/funding instruments/
  - 2. Policies
  - 3. spatial planning
  - 4. risk management
  - 5. awareness raising
- Stakeholders and options for engagement (holistic approach) stakeholder analyses

AquaConsoil 2015 attendees



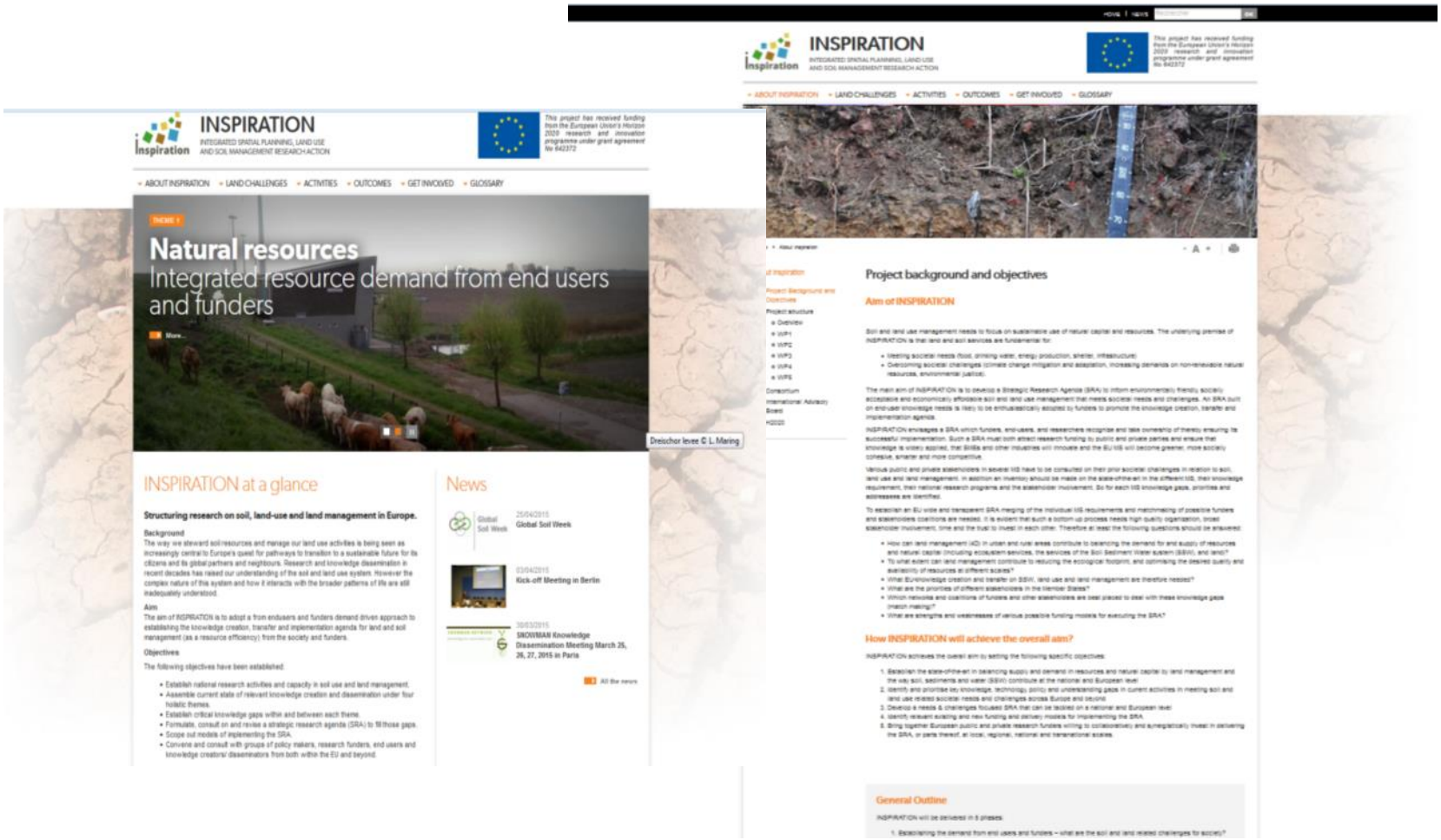
12 Countries: BE, CY, DE, DK, ES, FI, FR, NL, NO, SE, TK, UK

Final Summary

Paul NATHANAIL, University of Nottingham

Final Comments?

Website launched: www.inspiration-h2020.eu



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