



Projekt INSPIRATION - Integrales Boden- und Flächenmanagement

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Umweltbundesamt/INSPIRATION

Umwelt
Bundesamt



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Inhalt

- Konsortium/Projektpartner
- Einführung in das Thema
- Ziele/Methodik
- Stand des Projektes und Ausblick



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INSPIRATION

- **INSPIRATION = INtegrated Spatial Planning, land use and soil management Research ActTION**
- Initiated by the **German Federal Environment Agency**, University of Nottingham, Stadt+, Common Forum, Deltares
- Coordination and Support Action (CSA)
- Funded by EC under Grant Agreement No. 642372
- Duration: 36 months (1 March 2015 - 28 February 2018)
- Budget: 2.598.760,50 €



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21 INSPIRATION Partners



16 countries &
International
Advisory Board



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Projektpartner aus D



Koordination und fachliche Steuerung



National Focal Point



Workpackage Leader



Team Leader



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EU 8. FP „Horizont 2020“ – Teil III Gesellschaftliche Herausforderungen

Societal Challenge 5: "Klima, Umwelt, Ressourceneffizienz und Rohstoffe" (call 10b-2014 11-12-2013)

- 08-2014: Preparing & promoting innovation procurement for soil decontamination
- 09-2014: Consolidating the European Research Area on biodiversity and ecosystem services
- 10a-2014: Enhancing mapping ecosystems and their services
- **10b-2014: Structuring research on soil, land-use and land management in Europe**
- 11a-2014: Mining of small and complex deposits and alternative mining
- 11b-2014: Flexible processing technologies
- 13a-2014: Mineral deposits of public importance
- 13b-2014: Strategic international dialogues and cooperation on raw materials with technologically advanced countries
- 14-2014: Consolidating global knowledge on the green economy in support of sustainable development objectives in Europe and internationally

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Call 10b-2014 - Inhaltlicher Rahmen/Ziele

- Strukturierung des Forschungskomplexes „Boden, Landnutzung, Landmanagement“
- Entwicklung einer europäischen **strategischen Forschungsagenda** (SRA) dafür
- Koordinierungs- und Unterstützungsmaßnahme
- **Themen** → integrativ und sektorenübergreifend: „land-use change impacts and trends; bioenergy/ bioeconomy resources; spatial planning; soil threats; sustainable use of the **soil-sediment-water system**; global impacts; socio-economic research“
- Richtschnur für zukünftige **Forschungskooperation und gemeinsamer Forschungsaufrufe**

Call 10b-2014 – Angestrebte Effekte

- **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.

Forschungslandschaft in Deutschland



Bodenwissenschaftliche Forschung von 2000 – 2005 an 59 Universitäten, 91 involvierte Fachrichtungen

Quelle: acatec 2012

Fakultäten

- Land-/Forstwirtschaft und Gartenbau
- Geowissenschaften
- Umweltwissenschaften
- Planung und Ingenieurwesen
- Sozial- und Wirtschaftswissenschaften

- Bodenressourcen und Flächenmanagement
- Bodensanierung
- Bodenlandschaften, Landnutzung und Klimawandel
- Soil Engineering und Melioration – Inwertsetzung degradierter Flächen
- Boden, Ernährung und Gesundheit
- Standortspezifische Biogeochemie und Stoffdynamik in Böden

- Boden-Wasser-Pflanze-Interaktionen
- Boden-Biodiversität
- Innovative Methoden, Sensortechniken und Geofernerkundung
- Bodendatenmanagement und Versuchsinfrastrukturen
- Boden-Sozioökonomie
- Technologien der Bodenbewirtschaftung

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Politik und Forschung – EU Rahmen

Policy

No net land take by 2050

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

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

H 2020

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

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.

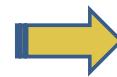
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INSPIRATION - Herausforderungen und Ziele

1. Identifizierung der gesellschaftlichen Herausforderungen in Bezug auf Boden, Landnutzung und Land-/Flächenmanagement
2. Identifizierung und Sortierung von Forschungsthemen nach der Maßgabe von Akteursinteressen
3. Beitrag zu europäischen Politik- und Forschungsinitiativen



- EU-weite Forschungsagenda
- “Bottom up”



Bearbeitungsschritte

- Identifizierung des Forschungsbedarfs im Dialog mit Anwendern und Forschungsförderorganisationen: Welche gesellschaftlichen Anforderungen werden an eine nachhaltige Landnutzung gestellt? Welche Implikationen hat dies für den Boden-, Sedimente-, (Grund-)Wasserschutz?
- Zusammenstellung der thematischen Wissensbedarfe mit Blick auf noch nicht befriedigte gesellschaftliche Herausforderungen und Ermittlung von länderübergreifenden Gemeinsamkeiten
- Ausarbeitung einer strategischen Forschungsagenda (SRA) zur Adressierung der Wissens- und Forschungslücken
- Umsetzungswege (Finanzierung, Partnerschaften) zur Implementierung der SRA

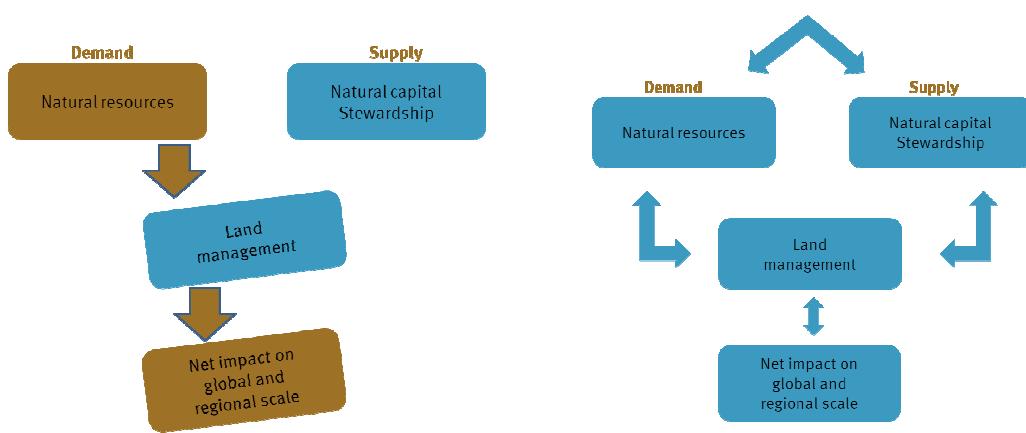
Thematischer Ansatz

Vier übergeordnete Rahmenthemen

- Treiber der Nachfrage nach Boden-, Sediment- und Grundwasserressourcen
Resources demand and efficiency
- Verantwortlicher und fürsorglicher Umgang mit dem Naturkapital
Natural capital stewardship
- Integriertes Boden- und Flächenmanagement
Land management
- Netto Effekte: Verständnis für indirekte Werte und globale Landnutzungsauswirkungen
Net impact on global, EU and local scale

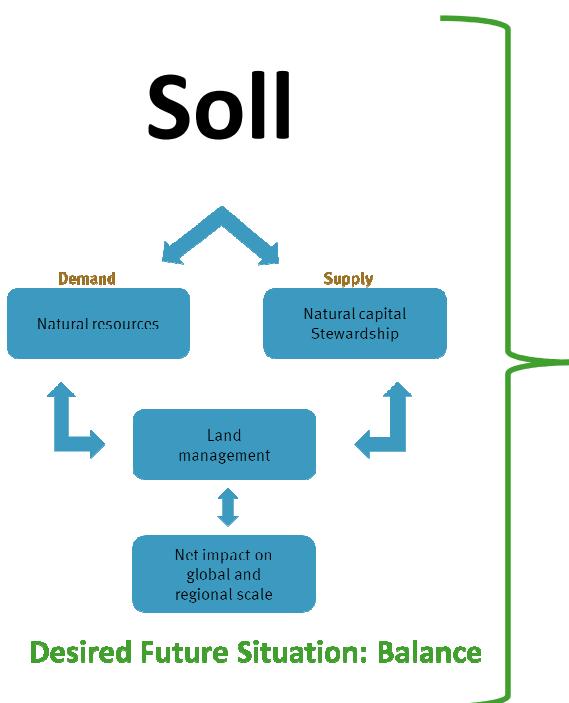
Methodischer Ansatz

IST → Soll





Ableitung von Kernthemen



- Assessment of land resources
- Potential productivity of land and soils
- Demand for soil and land resources, imports and exports
- Competition between land uses (land use conflicts)
- Concepts to identify and quantify relevant impacts
- Instruments to avoid / minimize impacts
- Opportunities of innovative land use technologies
- Resource-oriented land management systems



Bezug zum Grundwasser?

IN: NFPs do collate info related to:	OUT: NFPs do NOT collate info related to:
<ul style="list-style-type: none"> Knowledge demand, i.e. demand driven research questions Main issue: we aim for a strategic research agenda, i.e. for careful development of something new, creation of new knowledge! Science-Policy-Interface (SPI): what works, what not? R&D funding national/international 	<ul style="list-style-type: none"> Solutions / answers! Financing, taxation, etc. for pure budgetary reasons Impact assessment of status quo Inventories about the current state of land-use and of the soil-sediment-water system²
Land use and management in rural and urban areas, including natural, nature-sanctuary, coastal areas, deltas, estuaries and river basins.	Marine areas.
The complete soil and subsurface (= ground), including groundwater. We go as deep as the bedrock, till where human activities reach. Focus is on activities where it generates land-use conflicts or whether it can be used to solve societal challenges.	So deep that there is no more influence of human activities and/or no more concerns about land-use conflicts resulting from these activities.
Land management and use of land and its (impacted) compartments, i.e. the Soil-Sediment-Water (SSW) system. And the capacity of the SSW system to deliver ecosystem services.	Policy making, such as regulation and taxation issues, that do affect land-management and land use, but do not contribute to more effective addressing of societal challenges.
Questions how land management and use of land and related compartments (SSW-system) can help overcoming societal challenges, meeting societal needs. (mitigation of driving forces, e.g. lower eco footprint and sustainable use of ecosystem services provided by the SSW system)	Status quo description of how resources and SSW ecosystem services are used and managed now on national level.
Governance questions and funding possibilities related to the topic mentioned above. Hence specifically governance directed towards more effective land management and use of land and related compartments so that it provides a better contribution to overcome societal challenges	Note: still have to define boundaries here, i.e. where it overlaps with WP 4/5. Later on in the project, WP4 will develop implementation plan on the basis of the declaration of all funders. And later on WP5 will work on top priorities (IAB) and reports to funders (communication at different levels)
State-of-the-art on research questions, i.e. gaps in our current knowledge (agendas), i.e. what to do to advance the state-of-the-art	State-of-the-art in research. We do not need to describe that, as it is already known, at least to the experts (i.e. our NKS), or anyone who takes the effort to collate that state-of-

Soil, Land Use, land management - What's in what's out?

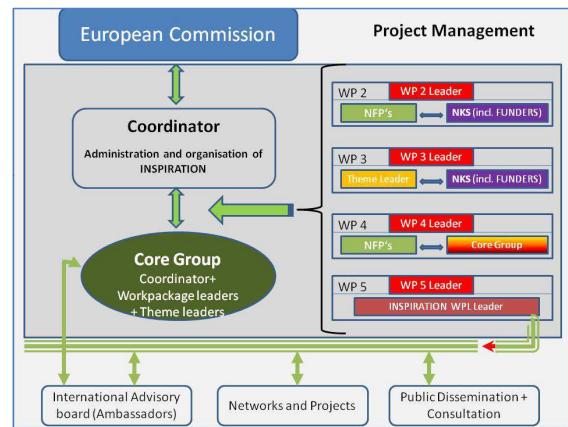
Grundwasser (Definition WRL):

Alles unterirdische Wasser in der Sättigungszone, das in unmittelbarer Berührung mit dem Boden oder dem Untergrund steht

- **In:** The complete soil and subsurface (= ground), including groundwater. We go as deep as the bedrock, till where human activities reach. Focus is on activities where it generates land-use conflicts or whether it can be used to solve societal challenges
- **Out:** So deep that there is no more influence of human activities and/or no more concerns about land-use conflicts resulting from these activities.

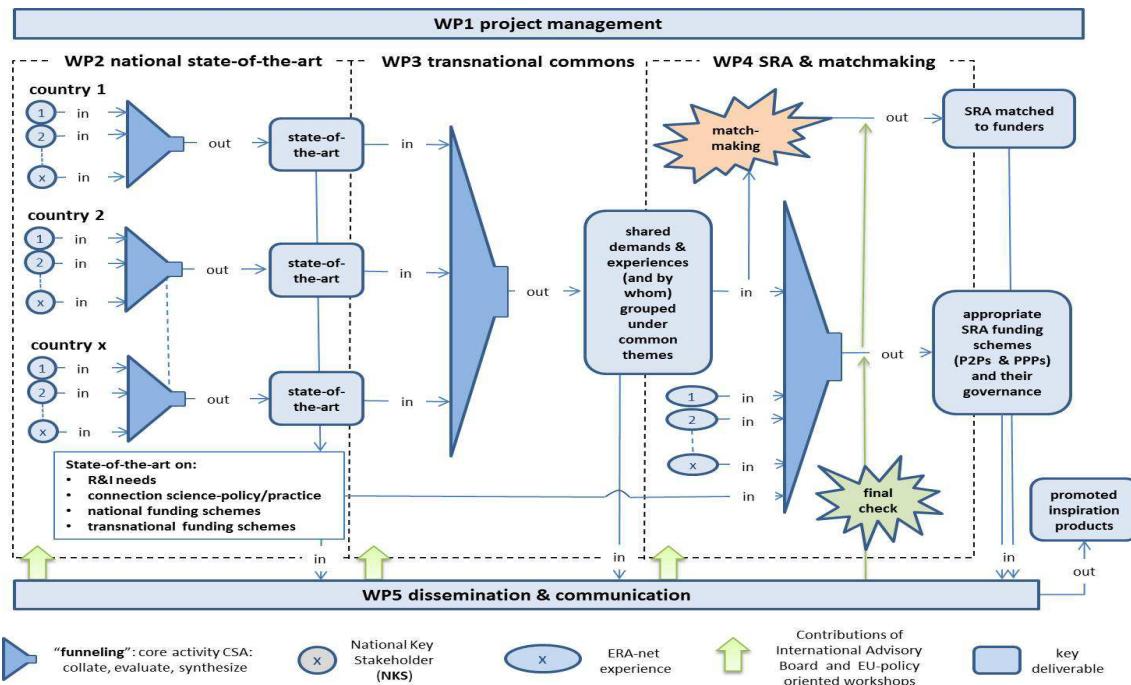
Projektorganisation und - durchführung

- WP1: Project management
- WP2: Demands of research from industry, end-users and funders
 - **National Focal Points for 16 countries**
 - approx. 20 external key stakeholders per country in national WS
- WP 3: Transnational commons aggregated under 4 integrated themes / 8 thematic issues
 - **4 Theme leaders**, one per integrated theme
 - **4 key stakeholders**, 1 per theme
- WP 4: Developing, Delivering and **Match-Making of a Strategic Research Agenda**
- WP 5: International Dissemination and Communication


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Projektstruktur


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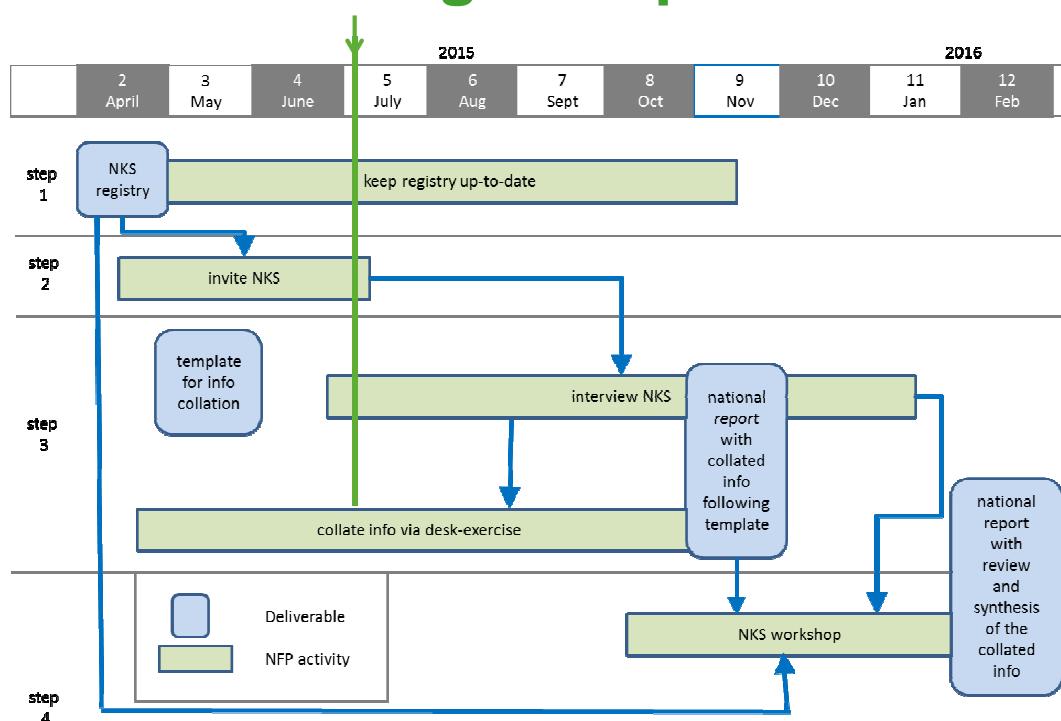
INSPIRATION Zeitplan

Brief description	D#	Primary responsible partner	Month since start of the project (x indicates the delivery date)																																										
			Year 1				Year 2												Year 3																										
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38					
WP1 Project management																																													
D 1/2 year activity reports	1.1a_c	UBA	x																																										
D yearly management reports	1.2a_b	UBA		x																																									
M Conference & final verification event	-	UBA																																											
D Conference report	1.3	UBA																																											
D final report	1.4	UBA																																											
WP2 national state-of-the-art																																													
D MoU on NFPs task execution	2.1	Detares	x																																										
D National Key Stakeholders registry	2.2	Detares		x																																									
D Template national info collation	2.3	Detares			x																																								
D Collated national info in line with template	2.4	Detares				x																																							
D&M Synthesis of collated national info	2.5	Detares					x																																						
WP3 transnational commons																																													
D Evaluation approach WP2 reports	3.1	DIU																																											
D 1st transnational shared state-of-art overview	3.2	DIU																																											
D&M enriched & prioritized overview	3.3	DIU																																											
D&M selected topics for matchmaking	3.4	DIU																																											
WP4 SRA & matchmaking																																													
D Scope of SRA	4.1	UON																																											
D Identified matches & willingness to fund	4.2	UON																																											
D&M SRA to be verified (a), and verified (b)	4.3a_b	UON																																											
D&M SRA delivery models to be (a), and verified (b)	4.4a_b	UON																																											
D Outcome stakeholders workshop	4.5	UON																																											
WP5 dissemination & communication																																													
M First IAB meeting	-	BRGM	x																																										
D&M Website & intranet operational	5.1	BRGM		x																																									
M Policy oriented workshops	-	BRGM			x																																								
D Results policy workshops & IAB recommendation	5.2	BRGM				x																																							
D&M Communication plan & updates	5.3a_c	BRGM					x																																						
D Annual IAB reports	5.4a_c	BRGM						x																																					
D&M Recommendations for SRA implementation	5.5	BRGM							x																																				

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Datenerhebung - Zeitplan



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Stakeholder in Deutschland

Funktion/Stakeholder/Expertise

- 13 Fördereinrichtungen
 - 14 Ergebnisnutzer
 - 13 Wissenschaft
 - 15 Behörden (national, regional, lokal)
 - 8 Universitäten/Forschungsinstitute
 - 7 Industrie
 - 3 NGO
 - 5 Netzwerke
 - 23 Boden
 - 4 Sedimente
 - 7 Wasser
 - 30 Flächen-Landmanagement

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Ausblick

- Stakeholderinterviews mit den nationalen Akteuren (laufend)
- Nationale Workshops im Herbst 2015
 - D: 13./14.Oktober 2015 in Berlin
- Nationale Berichte im Frühjahr 2016

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