POLICY – ORIENTED WORKSHOP

Brussels, 30 June – 1 July 2015

EuroGeoSurveys, Rue Joseph II; 36 – 38

Result summary

Detlef Grimski / UBA, coordinator of the INSPIRATION Project, and Dominique Darmendrail / BRGM, Communication Work Package leader, opened the meeting and welcomed the participants (see appendix).

After a short presentation of the Horizon 2020 funded project by the coordination team, two stakeholders were invited to present their vision of the land use and soil challenges and its related RTD needs:

- Margot de Cleen, from the Dutch Ministry for Infrastructures and Environment
- Aracely Castro Zuinga, from the FAO.

The stakeholders were then invited to contribute on several issues of concern for the development of a new Strategic Research Agenda (SRA) (and its implementation plan). The main outcomes of these discussions are summarised below.

The discussions will be analysed in-depth in the INSPIRATION project in the upcoming phase. They will feed into the respective Work Packages (WPs) which collate the SRA research topics in themes and that draft the SRA and develop a plan for its implementation.

World Café 1 on "The research needs and knowledge gaps"

Moderator: Franz Makeschin / DIU
Reporter: Paul Nathanail / UNOTT & Franz Makeschin / DIU
Work was made by two groups
- Group P: Policy makers & Researchers
- Group S: Stakeholders & Researchers

<u>Results</u>

The aim of the discussion was to identify research needs and knowledge gaps and to connect them to the themes and cross-sectorial issues suggested for INSPIRATION (by WP3).
These themes and cross-sectorial issues will be used as a background for the interviews of the NKS (National Key Stakeholders) to describe the main targets of INSPIRATION.
As a summary of the discussion, the following main questions and recommendations for the themes are given for 3 of them. See the scan of the two sessions are attached in pdf (Scan of the 2 sessions).

Natural resources demand and efficiency:

- Demand for key indicators and soil functions within ecosystem services concept,
- Identify and agree on key indicators to maintain soil functions,
- Need for integration of soil & water & sediment indicators within heterogeneity and scales of landscapes,
- Target specific soil types / soil landscapes for ecosystems (soil functional diversity),
- Integration of soil productivity & added value of ecosystem services,
- Land use type & provision of ecosystem services,
- Integrate ecosystem services concepts with simple models (implementable) !
- How to trade-off functions / weight the models,
- Need to ``connect`` soils and ecosystems with society & economy,
- Soil erosion and soil sealing losses : dimension, consequences and potential for reclamation,
- Urban areas contributing to agriculture through different policy areas (waste, nutrients),
- Shrink swell soils are a major economic natural hazard, how do we mitigate the impact on the economy?

Land management:

- Challenge: producing biomass and maintaining soil functions for carbon sequestration (climate gases and humus for ecosystem functions), and hydrological function
- Gaps for policy tools to choose use of soil,
- Awareness of society beliefs and values with regard to soil management,
- Implementable and practicable instruments for steering land management,
- Urbanisation and land take challenge,
- Management of urban areas.

Natural capital stewardship:

- Critical factors for soil sustainability (soil "resilience"),
- Applicability of SEEA (System of Integrated Environmental-Economic Accounting), development of the soil reporting component,
- Sustainability of soil / land uses systems after reduced input of fertilizers and irrigation? Develop simple models that contain soil dynamics and impacts of feedbacks on soil functions and the delivery of ecosystem services,
- Understand how soils are changing in response to soil threats on anthropogenic time scales (5-30 years),
- Better connect our understanding of soils and their functionality in the context of critical zone science from tree top to bedrock.

World Café 2 on "How to implement the strategic research agenda: funding, dissemination & intellectual property rights": What do we know? What do we need?

Moderator: Jos Brils / Deltares
Reporter: Dominique Darmendrail / BRGM & Jos Brils / Deltares
Work was made by two groups
- Group P: Policy makers & Researchers
- Group S: Stakeholders & Researchers

Results

The outcomes are summarized below for each question and on the scanned documents.

1. What is not working properly to date?

Group		Input
P		Policies fragmented and not integrated
	S	Too much and too complex EU directives
	S	Policies do not connect to reality
P		Connection local > global scales, and vice versa: behavioral change v.s. awareness raising
P		Diverse and competing interests from land-users, hampering integration
P		Being able to demonstrate added value
P		Enforcement, dialogue and cooperation
P	S	Science-Policy Interfacing
P	S	Research stops where it should continue: lack of implementation: huge gap between science and practical applicability: in business as well as for policy making/implementation
	S	Acceptation of innovative solutions for policy making (e.g. MNA, reuse of waste)
	S	Disconnect between natural and socio/economic scientists (Science-Science Interfacing)
P	S	Existing knowledge not fully exploited: policy makers do not look for state-of-the-art
P		It is not a political attractive topic
P	S	Stakeholders (including end-users) engagement
P		Loss of experienced scientist/experts due to budget cut-backs
P		The soil/land-use agenda too much driven by soil scientists
	S	Static and non-multidisciplinary research (Chines Wall, too sectorial and too technocratic)
	S	No natural capital accounting
	S	We are not looking 'deep enough': 3D-scale of soil and ground
	S	Lacking RTD budgets

2. What is the risk of inaction?

Group		Input
P		Non-use of RTD results leads to a loss of resources/experts
P	S	Soil degradation continues > resulting in social impacts and more conflicts
P		Loss of competitiveness: EU v.s. USA/Canada
P		Loss of available solutions
P	S	Loss of land (grass, forest etc.) for basic needs: food, drinking water etc.
	S	Putting our well-being &health at risk
	S	We are losing things that we don't know that we are losing, I,e, where we might benefit from in future (ecosystem services, business opportunities industry/enterprises, jobs)
	S	"From an economic perspective we come to a point where natural capital cannot be substituted by man-made services/products"
P		Less resilience to change increases risk/vulnerability
	S	Risk is good for GDP
P	S	Increase of inequity: outer-urban – agricultural– marginal areas: W/E and N/S
	S	Losing the support of end-users/stakeholders
	S	Appropriation of the general public / Change of policies: Story telling!

3. What to improve?

Group		Input
P	S	Setting more realistic policy targets / policies do not connect to reality
P		Better use of existing policies vs. development of new policies
P		Bridging RTD communities and policy makers / other stakeholders
P		Researchers should be more concerned about implementation (paradigm shift)
P		And should be more concerned about using elsewhere available
P	S	Transition from a sectorial to a holistic approach
P		Consideration of the developing country's needs (land, export/import)
P	S	Show the value of what has been done so far, i.e. demonstrate the results
P		Communication between sectors and different geographical scales
P		Creation of a critical mass of communities/projects
P		Identify the key levels of actions v.s. ambitions & time scales
	S	Shorten the research time frame (from questions identification to creation of value on the market
	S	More transdisciplinary and multidisciplinary, more holistic, to systemic approach (for doing a better job in policy implementation, better designing of policies)
	S	Have a broader perspective: integration and translations for different communities -> more translators
	S	Provide evidence to support policy goals achievements
	S	Connect soil and subsurface
	S	Linking monitoring and modelling (both multidisciplinary) for capturing changes
	S	From academic, to applied science, to innovation, including innovative management approach

4. Where to start? Q: who should prioritize? Communities of Practices? Stakeholders jointly?

Group		Input
P		Demonstration projects
P	S	Telling Stories for different communities: best cases, show added value of RDI
P		Clustering
P		Involve policy makers in research development
	S	Understanding motivation of individual end-users and value their systems
P		Identification o x-cutting priorities between JPIs
P		Start by easy, shot-term actions for showing the importance of research
P	S	Definition of clear goals/objectives i.e. what to achieve and by whom Define smart goals and success factors while identifying the RTD needs
	S	Develop projects from the demand side / Appropriate funding
P	S	Identify the problem owners and other stakeholders if possible since the beginning
P		Identify science-policy translators/ambassadors: we need (ad-hoc) CIS-SPI
	S	Funding needed for all phases (from "free", academic research to innovation transfer & uptake)
	S	Reduce the current "Research development" time frame (several years from the identification of the RTD questions to the research contract)
	S	Improve reward mechanisms for scientists

World café 3 "Future and Innovative funding"

Moderator: Dominique DARMENDRAIL
Reporter: Dominique DARMENDRAIL
Work was made by two groups
- Group A: **MdC, BdB, JB, PN, DG, ED, FM, VG**
- Group B: **PN, AS, PR, EK, EDC, FN, DD, MCD, DtB**

Results

Solutions - explore leverage effect.

Group		Input
	2	Urgency funding procedure? (eg. Ebola, Volcano dust emissions modelling, …) – Reserve fund?
1	2	How to finance co-designed projects? Should they compete in a bid?
1		Explore NL green deals model
	2	Private – Private financing: need transparency in what is already funded by this mechanism – explore with them what is feasible
	2	Use part of the "monitoring of environmental performance of CAP actions" for some research on monitoring….
1		Finance "energy of activation" of some research needs – securing this resource for acting at the right time frame – link to impact assessment, critical mass for convincing funders
	2	Tax rebate for research funding (like for charities)
1		FPA – no additional administrative burdens
1		Article 185 project: connecting regional needs with research funding – too long for the moment
1	2	Crowd sourcing for research : for funding small / individual organisations
1	2	Innov Fund (EIB) newly proposed – to be investigated
1	2	Natural Capital financing capacity (EIB) – Newly proposed – to be investigated

World café 4 on "Barriers and challenges for funding research in soil and land"

Moderator: Stephan BARKTE
Reporter: Stephan BARKTE
Work was made by two groups
- Group 1:   AS, PR, EK, EDC, FN, MCD, DtB
- Group 2:   MdC, BdB, JB, DG, ED, FM, VG, DR

The two sessions are attached in pdf (Scan of the 2 sessions)

Results

The sessions were based on a brain-storming format. The summary below presents the issues that were highlighted as the most important by the participants:

- Research should "**not reinvent the wheel**" – available research results should be used and funding instruments should allow for a sufficient screening phase in new projects.
- **Diversification of the funding system is a problem**. There are competing contexts and priorities reflecting competing interests (inside the topic of land/soil and related to other topics), differences in time lines (formulation and availability of solutions), missing pooling options. A key challenge is the design of integrated funding schemes that enable integrated research.
- Too less integration of different university/institutions/policy makers – trans- and interdisciplinarity does not fit into a "silo thinking". Therefore, more **integrative and holistic research is needed which is solution oriented**. So far, such approaches have not been valued high by evaluators, which often have disciplinary expertise and are not the problem owners. The structure of **funding evaluation has to be revised** so that next to disciplinary excellence more strongly a consideration and judgment of the potential of research to create integrated solutions is assessed. There is clearly a trade-off between applied and fundamental research which should be addressed pro-actively.
- Research has to care about presenting the outputs and relevance of their research outcomes in order to showcase where/how research contributes to the solution of societal challenges. There is a **need for mechanisms/institutions to encourage the transfer of research to practice**.
- **Soil and land management research topics** are competing with other topics. Experts stated that there is not enough awareness about their meaning and hence that priority for the topic is not as high as it needs to be. Some said, there is an **insufficient lobbying** for the crucial topic. There is also a need to show the relevance of the research more clearly. Additionally, there is a need for clear products.

List of existing SRA

Participants were invited to inform INSPIRATION of existing SRA.

Water JPI	Has a Strategic Research Agenda, which is currently under revision. Version 2.0 to be finalized by end of this year
JPI URBAN Europe	publish their own research agenda; set up new platforms
JPI FACCE	Launch a SRA on food security and agriculture. Launch a workshop for join programs
Ministry of Environment NL	Already drew up a strategic agenda which is under re-writing
DG Environment	Many project have been conducted on soil, soil contamination, they are working on a new soil initiative.

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List of relevant reports / initiatives

Participants were also invited to inform of existing reports / actions linked to INSPIRATION.

- DG Env study on legal framework for soil threat vs. protection policies (due in 2015)
- Soil Science Society (25 priorities areas)
- Common cause handbook (values frames) from established by 14 UK NGOs in global issues
- SEEA (UN system of economic & environmental accounting): soil research needs
- Recommendations from road testing "triggers values" for assessing site specific soil quality
- Knowledge agenda for soil subsurface – NL
- CIRIA C733 asbestos in soil recommendations – UK
- ES-KTN soil meeting (Anne Miller, 2011) - UK
- ACATECH transnational issues (?)
- Frontiers in soil science reports – UK
- Kirkham's Legacy and contemporary challenges in soil physics research - UK

Participants

Research Policy		
DG Research and innovation		
DG Research and innovation		
FAO		
JPI Urban Europe		
JPI Facce		
Thematic Policy		
DG Environment		
DG HOME		
Stakeholders		
COPECA COGECA		
NICOLE		
Dutch Ministry for Infrastructures and Environment		
Researchers		
SoilTrEC / NERC Centre for Ecology and Hydrology		
Water JPI / IRSTEA		
SEDNET / DELTARES		
UFZ		
INSPIRATION team		
BRGM	Dominique DARMENDRAIL	WP5 leader
BRGM	Marie-Christine DICTOR	NFP - France
BRGM	Valérie GUERIN	WP5
UBA	Stephan BARKTE	Coordinator
UBA	Detlef GRIMSKI	Coordinator
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