SOIL HOUR WEBINAR SERIES
2nd Edition – 26.10.26
NATURE BASED SOLUTIONS

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Intro

The second edition of the SOIL HOUR for Living Labs webinar series, held on 26 October 2026 within the framework of SOILL STEP-UP, explored how Nature-Based Solutions (NbS) can move from innovative concepts to practical implementation and wider adoption. Drawing on experiences from LANDSHIFT, SOILCRATES-Ireland and URSOILL, the session highlighted the importance of combining scientific knowledge and decision-support tools with local evidence, involving landowners, farmers and other stakeholders in co-creation, and monitoring soil health to assess results and guide improvements. The discussions also demonstrated how Living Labs can help bridge the gap between local experimentation and broader application through continuous learning, collaboration and links to regional strategies and policy. The following three key takeaways from each speaker capture the main lessons and practical insights shared during the webinar.

LANDSHIFT, Marzia Gabriele,

Assistant Professor Politecnico di Milano

1. DECISION-SUPPORT TOOLS FACILITATE THE PROCESS AND GAIN FURTHER VALUE WHEN COMBINED WITH LOCAL EVIDENCE. The NbS library has been a valuable source of inspiration and an actionable guiding tool for designing roadmaps and regional strategies for sustainable land use, and it effectively opened the dialogue with stakeholders. Building on it, solutions are adapted to site-specific constraints (budget, land characteristics, soil structure, the actual land-use problem) and enriched with locally generated evidence, which further strengthens the case for adoption and scalability. Library: https://www.naturebasedsolutionslibrary.org/

2. INNOVATION MUST BE CO-DEFINED WITH END USERS, AND PARTICIPATION RESTS ON A CLEAR VALUE PROPOSITION. The operational meaning of "innovation" differs between researchers, landowners and farmers, so the first step is to elicit what stakeholders consider innovative or feasible in their context. This phase is mostly carried out between landowners, farmers and land managers on one side, and researchers and academia (national research centres, universities) on the other. It is facilitated by intermediaries (agricultural advisors, consultants, farmers' associations that protect growers' interests)

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and by regional authorities that align the process with territorial priorities. Landowners hosting a trial will ask what the return is for them, so participation hinges on aligned interests, a feedback loop on results, the role of public administration and access to funding that makes upscaling viable.

3. SCALING IS AN ITERATIVE LOOP FROM PLOT TO LANDSCAPE, CLOSED BY POLICY LINKAGE AND FEEDBACK. Trials under real farm conditions are adaptive: protocols are reviewed regularly and adjusted as new techniques and practices emerge. Trials also generate new management practices and modes of collaboration (peer-to-peer exchange, shared decision-making), which often shape adoption as much as technical results. Monitoring with harmonised soil health descriptors, including biological functions (microbial biomass carbon, soil respiration, enzyme activities, eDNA, nematodes and earthworms, QBS-ar), demonstrates the benefit of each intervention. Cross-site pattern detection enables upscaling from plots to landscape. Linkage to incentives and regional strategies makes the practice self-sustaining beyond the project, and lessons learned, failures included, refine practices and priorities for the next cycle.

SOILCRATES - The Irish LL, Lena Madden,

Senior Researcher/Lead PI Technological University of the Shannon (TUS)

1. A BOTTOM-UP APPROACH IN SELECTION AND IMPLEMENTATION OF A NATURE-BASED SOLUTION IS INCREDIBLY IMPORTANT FOR FUTURE UPTAKE AND SCALING UP OF SUCCESSFUL PRACTICES.

   Here you can find our catalogue of practices that we offer to farmers to choose from, if of interest: https://soilcratesireland.ie/wp-content/uploads/2026/09/Preliminary-draft-catalogue-of-soil-improvement-practices_09052025.1-6.pdf

2. CO-CREATION SESSIONS AS A PART OF LL ENGAGEMENTS ARE NOT ONLY EXCELLENT TOOL FOR GENERATING SOLUTIONS TO SOIL PROBLEMS AND DISSEMINATION OF THE RESULTS BUT ALSO FOR TROUBLESHOOTING OF ENCOUNTERED IMPLEMENTATION PROBLEMS AND ENCOURAGEMENT TO CONTINUE WITH SUSTAINABLE SOIL MANAGEMENt.

3. SELECTION OF SOIL HEALTH INDICATORS SHOULD BE BASED ON THE PURPOSE OF THE MONITORING BUT ALSO INCLUDE ALL CHEMICAL, PHYSICAL AND BIOLOGICAL INDICATORS TO ASSESS THE FULL COMPLEXITY OF THE SOIL CONDITIONS AND CHANGES POST IMPLEMENTATION.

URSOILL - The Luxembourg LL, Anna Espinoza,

Senior Researcher Luxembourg Institute of Science and Technology (LIST)

1. AT FORMER BROWNFIELDS, THE RESTORATION CHALLENGE MAY BE MORE COMPLEX THAN EXPECTED. Soil pollution and contamination need to be considered alongside the site's future use and stakeholder requirements. In the Luxembourg Living Lab, the proposed response combines soil reconstruction with compost or biochar amendments and phytoremediation, highlighting the need to adapt interventions to what site assessments reveal.

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2. CO-CREATION HELPS CONNECT RESEARCH WITH LOCAL NEEDS. Bringing stakeholders into the Living Lab process can help shape practical solutions, strengthen collaboration between researchers and practitioners, and support local participation in improving urban soil health.
3. LOCAL SOLUTIONS CAN CONTRIBUTE TO WIDER CHANGE. Testing and refining approaches across Luxembourg's 10 sites can generate experience that supports the replication of urban soil restoration practices in other European contexts. The normal paragraph should use the format "Normal".

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