

Technical meeting on soil health monitoring

Presentation of results from soil monitoring networks and real examples of successful practices that enhance soil health across different land-use systems.

Our event will focus on soil health monitoring and its practical application for improving soil management under different land uses. The event will present results from soil monitoring initiatives in the Basque Country and showcase how scientific knowledge can support farmers, land managers and public authorities in making informed decisions that protect and enhance soil health. The event will take the form of a half-day technical meeting combining short presentations, discussion and a practical field demonstration.

The programme will combine presentations of monitoring results at the regional scale with local case studies illustrating successful practices that contribute to soil health improvement in cropland, grassland, vineyard and forest systems. Another objective is to stimulate discussion about future approaches to soil monitoring, including the potential development of soil health indices and digital tools that can support decision-making. The meeting will conclude with a practical demonstration of simple soil measurements that can be carried out directly in the field without laboratory equipment, allowing participants to observe and discuss rapid methods for assessing soil condition.

The target audience will primarily include farmers, agricultural advisors and land managers, as well as representatives from regional and local administrations involved in environmental and agricultural policy. Researchers, technical staff and other stakeholders interested in soil health monitoring and sustainable land management are also expected to participate. Most speakers will be researchers from NEIKER, a Basque research institute specialised in agricultural and environmental research.

Agenda:

Welcome and context

9:30–9:35 — Welcome and institutional message — (Basque Government)

9:35–9:45 — Importance of soil health and the European directive — (NEIKER)

Regional scale

9:45–10:15 — Results from the pilot sampling of the Basque soil health monitoring network — (NEIKER)

10:15–10:30 — BASONET forest soil monitoring network — (HAZI)

Local scale

10:30–10:45 — Forest case study — (NEIKER)

10:45–11:00 — Vineyard case study — (NEIKER)

11:00–11:30 — *Coffee break*

11:30–11:45 — Cropping system case study — (NEIKER)

11:45–12:00 — Grassland case study — (NEIKER)

Participatory session and discussion

12:00–12:20 — What should a soil health digital twin look like?

Is a global soil health index useful? — (NEIKER)

Field measurement demonstration

12:20–13:00 — Simple measurements that can be carried out without a laboratory — (NEIKER)

Date: 10th of June 2026 from 09:30 to 13:30

Location: NEIKER Arkaute, Vitoria-Gasteiz (SPAIN)