AI4SoilHealth

AI4SoilHealth Youtube channel, AI4SoilHealth podcasts

D7.5

Action Number: 101086179

Action Acronym: AI4SoilHealth
Action title: Accelerating collection and use of soil health information using AI technology to support the Soil Deal for Europe and the EU Soil Observatory

HISTORY OF CHANGES		
Version	Publication date	Changes
1.0	1st December 2025	• Initial version
2.0	15th December 2025	• Reviewed and signed off

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1. Executive Summary

The AI4SoilHealth project leverages digital media—specifically a dedicated YouTube channel and a podcast series—to disseminate knowledge, engage stakeholders, and build a global community around AI-driven soil health monitoring. These platforms aim to translate complex scientific concepts into accessible content, showcase practical applications, and position AI4SoilHealth as a thought leader in sustainable soil management.

YouTube Strategy:

The channel serves as a visual hub for tutorials, webinars, and expert interviews, targeting researchers, policymakers, NGOs, and progressive farmers. Since January 2023, it has published long-form videos and short educational clips, achieving over 8,200 total views. Content focuses on soil sampling techniques, AI applications in soil health, and policy integration. Legacy plans include curating playlists for academic and policy audiences and maintaining permanent links to project outputs. The same content has also been used on other channels with a substantial reach, amplifying visibility and impact.

Podcast Strategy:

Hosted on the *Investing in Regenerative Agriculture and Food* platform, the podcast amplifies project insights through conversations with leading experts and practitioners. Episodes cover topics from regenerative farming to AI innovations, collectively reaching thousands of listeners. Long-term accessibility will be ensured via stable hosting and integration with YouTube.

Both channels extend the project's impact beyond its funding period, ensuring enduring access to technical resources and fostering informed dialogue on soil health and AI technologies.

2. Strategic approach to digital media

The digital media strategy for AI4SoilHealth is designed not to just broadcast information, but to deepen stakeholder engagement, demonstrating tangible impact, and building a global community of practice around the intersection of Artificial Intelligence and sustainable soil management.

Our two channels—YouTube and the Podcast—are utilised for distinct but complementary purposes to maximize reach and utility across diverse audiences, from policymakers and researchers to advanced agricultural practitioners.

These channels provide us with a direct link to an international soil health community and an opportunity to extend the reach of our project outputs.

Core Strategic Pillars

1. **Translating the science:** Breaking down complex AI models and soil science principles into accessible, actionable insights.

2. **Demonstration:** Providing visual evidence of the technology in action, linking research to real-world outcomes.

3. **Thought Leadership:** Establishing AI4SoilHealth as the authoritative voice in the future of soil health monitoring and data-driven agriculture.

3. YouTube

Objectives:

- To inspire our audience with the potential of soil science, inform people of the latest discussions in the field and equip students with up-to-date techniques.
- To raise awareness of the AI4SoilHealth brand and inspire our target audiences of the potential of AI powered soil health technology and its benefits.
- To convene a scientific and policy discussion about the latest soil health monitoring frameworks, the best new and old indicators to use and novel soil health technologies that make use of Artificial Intelligence.
- To amplify the impact of our in-person events and recorded webinars by sharing the discussion with a wider audience.

Target audience (in order of priority):

1. Targeted future users of novel soil health technologies – researchers, civil servants, environmental managers, NGOs, etc.

2. The science of soil health community.

3. Policy makers that are part of the EU Soil Mission.

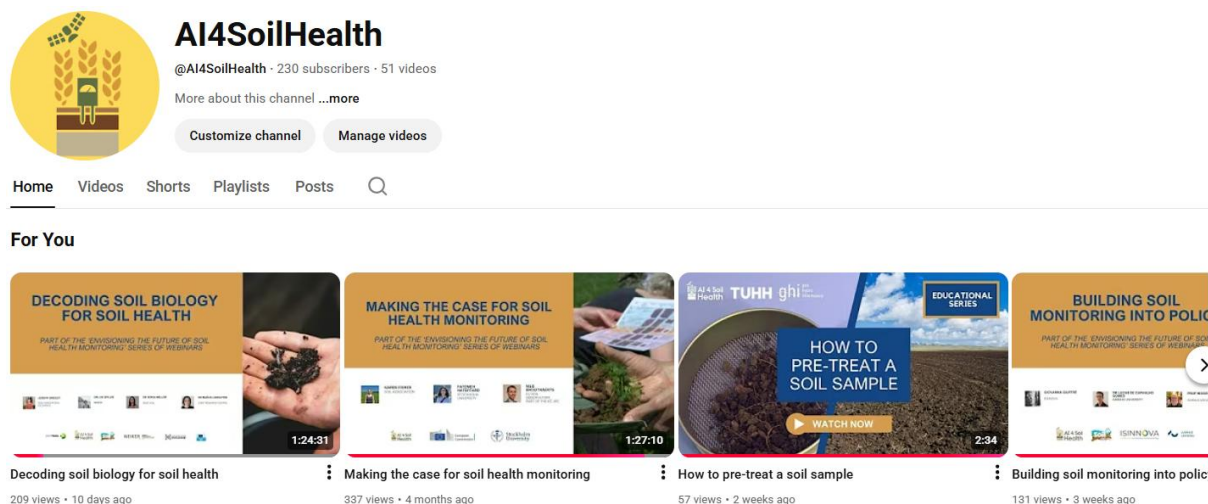4. Progressive farmers interested in using soil health monitoring tools.

Outputs and results:

Figure 1: The AI4SoilHealth YouTube channel

Long form videos – More than 3 minutes – From 1st January 2023 to date (1st December 2025)

Video title	Video publish time	Views	Link
An introduction to soil sampling for students	Feb 14, 2025	436	Link
Building the Soil Health Data Cube	Nov 12, 2024	348	Link
Making the case for soil health monitoring	Jul 29, 2025	337	Link
The sound of soil: monitoring soil health ecoacoustic techniques	Jan 3, 2025	321	Link
Predicting the future of soil health with AI	Oct 14, 2025	261	Link
Unlocking the power of open data for soil health	Jul 8, 2025	251	Link
Soil Health Data Cube tutorial	Aug 21, 2025	156	Link

Alfred Grand: Why an Austrian farmer and researcher trained by earthworms is very excited about AI	Mar 14, 2024	145	Link
Building soil monitoring into policy	Nov 14, 2025	124	Link
Arwyn Jones - Supporting the implementation of the Soil Monitoring Law	Jan 31, 2025	107	Link
Exploring bulk density	Aug 4, 2025	93	Link
Using language models for automated soil health data extraction from ecological research papers	Jan 3, 2025	92	Link
Tomsilav Hengl: The 7-step framework for soil health assessment in an autonomous GIS infrastructure	Jan 7, 2025	75	Link
Decoding soil biology for soil health	Nov 25, 2025	75	Link
Bridget Emmett: A conversation with one of the leading soil scientists in Europe	Jul 2, 2024	74	Link
New methods for in-situ soil health surveillance	Jan 3, 2025	56	Link
How to pre-treat a soil sample	Nov 20, 2025	53	Link
Developing a robust soil health indicator framework for Europe	Jan 3, 2025	49	Link
Paul Clarke: How AI, smart machines, digital twins and modelling can revolutionise food production.	Feb 28, 2025	47	Link
Tom Hengl: Why don't we celebrate the champions of land restoration?	Mar 13, 2025	41	Link
Jason Hayward Jones podcast: The transition to regenerative agriculture and how technology can help	Jul 15, 2024	39	Link

From EU Soil Mission to Pope Francis, how to change local and state agriculture and food policies	Apr 25, 2024	38	Link
AI-driven monitoring of earthworm behaviour in ecotoxicological soil health assessments	Jan 3, 2025	37	Link
Assessing the impact of climate and land cover changes on land degradation	Jan 6, 2025	37	Link
A compositional for soil organic carbon VISNIR measurement method preventing moisture interference	Jan 3, 2025	35	Link
Paving the way towards digitalisation enabling agroecology for European farming systems	Jan 6, 2025	33	Link
Zsombor Diriczi 'A risk free regenerative transition supporting farmers and consultants with soil'	Jan 6, 2025	31	Link
Monitoring soil at a Pan-European scale. Systems for soil health assessment across space and time	Jan 3, 2025	31	Link
New tools to measure extracellular enzymatic activity in soils without a laboratory	Jan 3, 2025	27	Link
Using AI to monitor and manage urban gardens	Jan 6, 2025	23	Link
Networks for soil degradation risk assessment using multivariate data	Jan 6, 2025	20	Link
Showing the vulnerability of viticulture to climate change by using remote sensing in Spain	Jan 6, 2025	15	Link
Total views		**3523**	

YouTube Shorts – Less than 3 minutes From 1st January 2023 to date (1st December 2025)

Video title	Video publish date	Views	Link
Measuring soil infiltration capacity using the Wooding infiltrometer	Mar 21, 2025	1228	Link
How to nail a soil bulk density measurement	Feb 28, 2025	767	Link
Measuring soil infiltration with the Beerkan Method	Feb 28, 2025	653	Link
Analysing soil aggregate stability using the SLAKES app	Feb 28, 2025	324	Link
Measuring soil respiration using an infrared gas analyser	Feb 19, 2025	222	Link
An introduction to soil salinisation in deltaic regions	Jun 30, 2025	216	Link
How to read a soil horizon	Feb 7, 2025	215	Link
How to take a soil sample in salt affected areas	Jun 30, 2025	203	Link
How our Croatian pilot site processes saline soil samples in the laboratory	Jun 30, 2025	161	Link
How can we help soil managers use the latest soil science?	Jan 30, 2025	157	Link
Join soil scientists in the field in Sweden	Feb 28, 2025	123	Link
How to plan soil sampling in salt affected areas	Jun 30, 2025	81	Link
What can soil microbes teach us about rotational grazing?	Feb 28, 2025	76	Link
Chemical vs biological indicators for soil health	Jun 2, 2025	73	Link
How farmers can use biological soil sensors	Feb 24, 2025	60	Link
Join soil scientists in Wales at the Plynlimon Research Catchments	Feb 7, 2025	55	Link
Why its important to measure soil biology	Feb 24, 2025	53	Link
Why understanding biology is critical for monitoring soil health	Feb 24, 2025	53	Link
New tools advance understanding of soil health	Jun 2, 2025	36	Link

	Total	4760	

Legacy plans

The long-term value of the AI4SoilHealth YouTube channel will be sustained by converting it from an active project dissemination tool into a permanent, self-service technical and educational resource. To achieve this, all training and demonstration content, including tutorials, webinars, campaign videos and educational videos, will be consolidated into a range of comprehensive playlists.

Crucially, the channel will be preserved to direct users to the enduring technical components of the project: all video descriptions and the channel's 'About' section will feature direct, unchanging links to key public deliverables and publications.

This ensures the channel acts as the public, visual pathway to the project's key outputs long after the project website ceases to operate.

Furthermore, to maximize institutional reach, dedicated "Policy Explainer" and "Academic Use" playlists will be curated and actively promoted to partner universities and EU policy bodies, thus encouraging the incorporation of AI4SoilHealth videos into curricula and official policymaker information sources.

4. Podcast

Objectives:

- To utilise pre-existing channels to showcase key voices and the latest science from the project to a wider audience.
- To break complex issues down into accessible formats that a wider audience can understand.
- To amplify the AI4SoilHealth brand in the wider regenerative farming community.

Target audience:

- Regenerative and transitioning farmers curious about soil health, data, and innovation
- Agri-food professionals like agronomists, soil scientists, advisors and sustainability leads in food companies
- Regenerative business ecosystem such as AgTech entrepreneurs and startups, impact investors and fund managers interested in food & ag, NGOs and practitioners working on regenerative transitions
- Policy and institutional stakeholders like EU and national policymakers, research institutions and public agencies
- Educated general audience interested in climate, nature, food systems, and solutions as well as journalists and communicators covering agriculture and sustainability

Outputs and results:

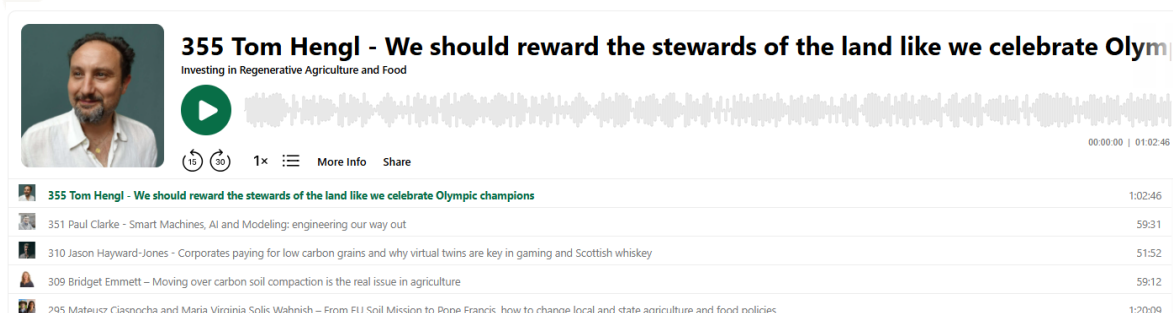Investing in Regenerative Agriculture and Food platform (produced by RegenEarth, previously known as Sustinn)

Figure 2 – The podcast series presented on Investing in Regenerative Agriculture and Food website.

Full podcast series available on https://investinginregenerativeagriculture.com/ai-soil-health-and-technology/

Title of podcast	Release date	Downloads/ Listens	Link
Alfred Grand – Why an Austrian farmer and researcher trained by earthworms is very excited about AI	Mar 12, 2024	2670	link
Mateusz Ciasnocha and Maria Virginia Solis Wahnish – From EU Soil Mission to Pope Francis, how to change local and state agriculture and food policies	Apr 16, 2024	1750	link
Bridget Emmett – Moving over carbon soil compaction is the real issue in agriculture	Jun 21, 2024	1970	link
Jason Hayward-Jones – Corporates paying for low carbon grains and why virtual twins are key in gaming and Scottish whiskey	Jun 25, 2024	1720	link
Paul Clarke – Smart Machines, AI and Modeling: engineering our way out	Feb 4, 2025	2030	link
Tom Hengl – We should reward the stewards of the land like we celebrate Olympic champions	Mar 4, 2025	1730	link
	Total	**11870**	

<u>Legacy plans:</u>

As the AI4SoilHealth project website will likely dissolve after the funding period, the legacy of the podcast will be secured by establishing the content through the long-term distribution channels: the Investing in Regenerative Agriculture and Food podcast platform and website and the AI4SoilHealth YouTube channel.

The show notes on both the external host and YouTube will be updated to feature stable links to the core project outputs. This strategy guarantees that the project's intellectual discourse remains accessible and citable through commercially or institutionally secured hosting, eliminating reliance on the temporary project domain.

5. Conclusion

The use of digital media has proven highly effective in translating complex scientific concepts into accessible, engaging content for diverse audiences. By leveraging videos, podcasts, blogs, and interactive webinars, AI4SoilHealth has bridged the gap between technical research and practical understanding.

These formats simplify language without compromising scientific integrity, enabling policymakers, land managers, educators, and citizens to grasp the importance of soil health and its role in climate resilience and sustainable agriculture. Digital platforms also amplify reach and foster dialogue, creating a dynamic ecosystem where science informs action and societal appreciation of soils grows significantly.