

Soil Sentinel



Short Name

Soil Sentinel

Formal Name

Soil Sentinel: Circular community for sustainable soil amendment strategies

Contact Person

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Institution/Organisation

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Website

<https://www.pmf.uns.ac.rs/en/>

<https://smartwatertwin.pmf.uns.ac.rs/>

Social Media

 [@pmf_dhbhzs](#)

 [@smartwatertwin_project](#)

 [@smartwatertwinproject](#)



Soil Sentinel empowers farmers to monitor soil health and enable safe, sustainable sewage sludge use through citizen science and collaboration.



Summary

We are Soil Sentinel, a citizen science initiative that empowers farmers to take an active role in monitoring soil health and supporting the sustainable use of sewage sludge in agriculture. In response to Serbia's growing need for environmentally responsible sludge management, we train farmers to collect reliable soil samples and understand the conditions required for safe sludge application.

Working alongside researchers and laboratories, farmers contribute real-world data that informs both agricultural practices and national policy. By comparing farmer-collected and expert-collected samples, the project ensures data quality while building local capacity. We focus on promoting circular economy principles, reducing waste, and improving soil fertility, especially for smallholder farms.

Through open-access tools, training materials, and inclusive workshops, Soil Sentinel bridges the gap between science, policy, and rural communities. Together, we are creating a transparent, cost-effective, and community-driven approach to environmental monitoring and sustainable land management. Healthy soil, informed farmers, and safer food systems start here.