

Soil Information Workflow: Roadmap to develop or upgrade a Soil Information System (SIS)



ISRIC - World Soil Information
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Turn soil data into clear insights with our soil information workflow!

ISRIC-World Soil Information provides a structured approach to collect, organize, and serve soil data, helping users establish efficient soil information systems. It supports better soil management and informed decision-making through a series of eight essential steps, from needs assessment to data serving.

This technology is **pre-validated**. 9·7 Scaling readiness: idea maturity 9/9; level of use 7/9

Gender assessment 👍 4

Climate impact 👍 6

Problem

- **Soil Degradation Crisis:** 65% of Africa's productive land is degraded due to desertification, affecting 45% of the continent.
- **Lack of Integrated Systems:** No unified approach for collecting, monitoring, and sharing soil data, which hampers effective soil health management.
- **Unsustainable Land Use and Management:** Practices like overgrazing, deforestation, and unsustainable farming are major causes of soil degradation, leading to reduced soil productivity and increased vulnerability to climate change.

Solution

- **Building a Soil Information System (SIS):** Develop an integrated system to store, analyze, manage, and disseminate soil data to improve soil health and monitor deterioration.
- **SIS Profile Development:** Create a SIS profile that aligns with use cases and includes a viable business model for long-term sustainability.
- **Step-by-Step Design Process:** Follow a structured workflow for designing and building the system to ensure effective implementation and functionality.

Key points to design your project


This technology provides a comprehensive approach to building or enhancing a Soil Information System (SIS), enabling effective soil data collection, analysis, and dissemination.

To develop or improve a SIS in your country, follow these key steps:

- Define the vision and objectives of the SIS.
- Collaborate with ISRIC and CABI to create a SIS roadmap.
- Collect, store, and organize soil data efficiently.
- Use modeling for soil mapping and decision-making.
- Share data through accessible online platforms.
- Provide training for effective system use and interpretation.

By adopting this approach, you can address soil challenges, enhance agricultural practices, and promote sustainable land management.

50,000—100,000 USD
Workshop on user needs assessment

 **IP**

Open source / open access

Commodities

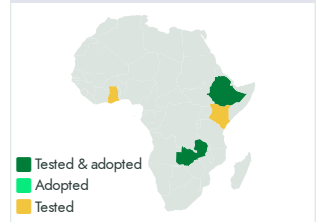
Sustainable Development Goals



Categories

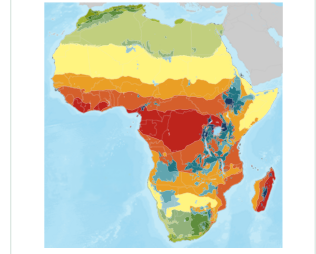
Policies

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Development institutions, Governments, Researcher center, Soil scientists



<https://e-catalogs.taat-africa.org/gov/technologies/soil-information-workflow-roadmap-to-develop-or-upgrade-a-soil-information-system-sis>

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