

Soil Information Workflow: 8 steps to develop a Soil Information System (SIS)

Soil Information Workflow turns data into insights, helping professionals make smarter, sustainable decisions.

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.



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

Gender assessment

Climate impact

Problem

- Soil Degradation Crisis:** 65% of Africa's productive land is degraded due to desertification, affecting 45% of the continent.
- Africa's soils are deteriorating:** Due to factors like organic matter loss, declining fertility, nutrient imbalance, pollution, soil biodiversity loss, increasing acidity, and erosion.
- Key drivers:** include overgrazing, deforestation, and unsustainable farming practices, leading to soil degradation that threatens biodiversity, ecosystems, and productivity.

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 program

This technology provides an innovative approach to combat soil degradation in Africa by building integrated soil information systems (SIS) that collect, analyze, and share vital soil data.

- It supports climate resilience (SDG 13) and combats land degradation (SDG 15), enhancing agricultural productivity and environmental sustainability.
- Collaborations with key partners ensure the successful implementation of the SIS roadmap, addressing soil challenges and promoting long-term agricultural and environmental sustainability across the continent.

50,000—100,000 USD
Workshop cost varies based on specific needs

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

