

Developing human capital in the context of the Soil Initiative for Africa Framework

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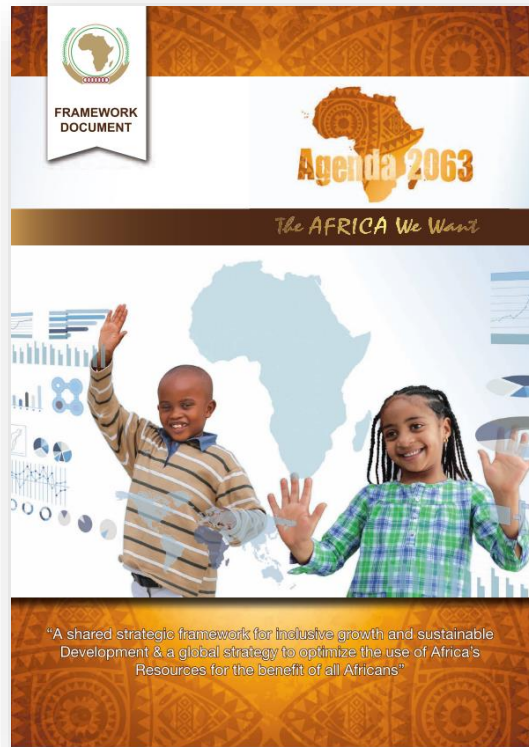
Africa Agricultural Extension Week

8 November 2023

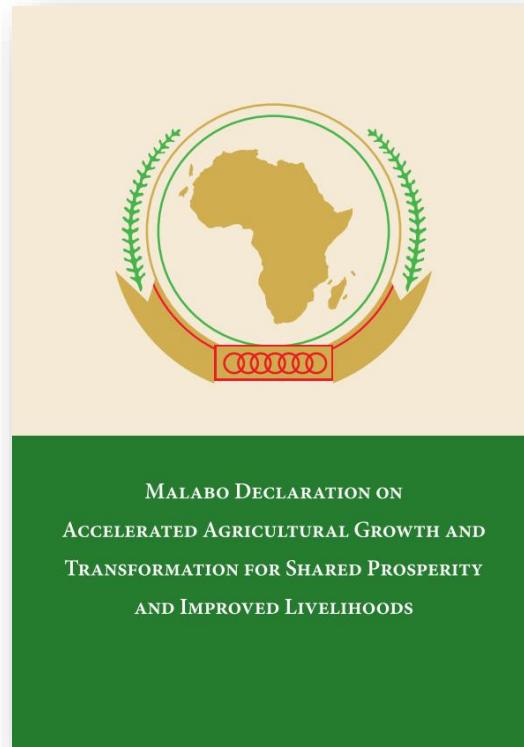
Abuja, Nigeria

Africa: Priority to increase agricultural productivity

AGENDA 2063



MALABO DECLARATION



COMPREHENSIVE AFRICA AGRICULTURE DEVELOPMENT PROGRAMME (CAADP)

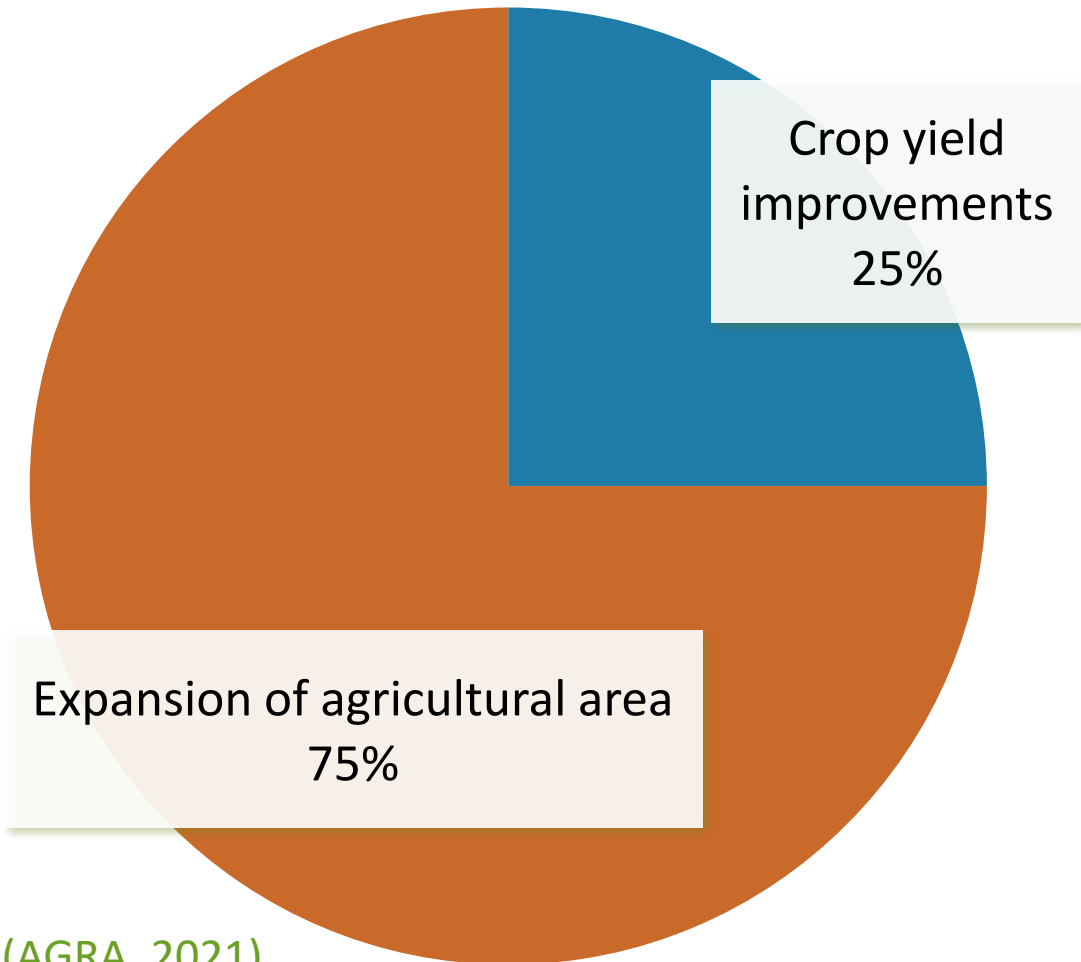


Agenda 2063: First 10-year implementation plan (2013-2023)

- **Double agricultural (total factor) productivity (PA 1.5.1)**
- **At least 30% agricultural land under sustainable land management practice (PA 1.7.2)**

But... since 2000 in Sub-Saharan Africa

Agricultural production growth due to:



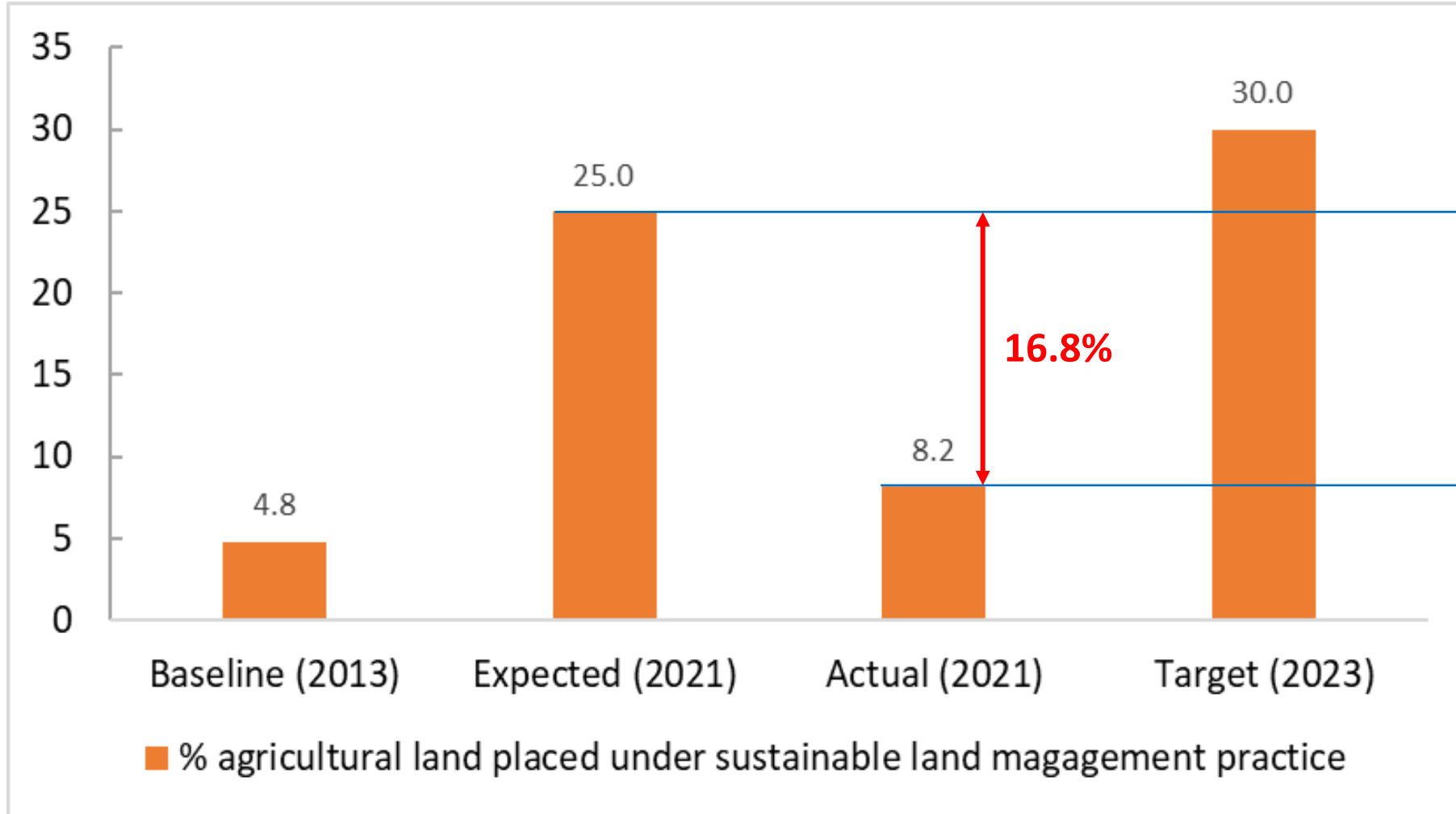
(AGRA, 2021)

Key reasons:

- Long term decline in **soil health**
- Up to 65% cropland in Africa is degraded (exacerbated by deforestation, overgrazing)
- Inherent soil limitations

Reduces fertilizer efficiency

Agenda 2063 Second Continental Report



Agriculture area under sustainable land management in Africa [\(AUC & AUDA-NEPAD, 2022\)](#)

Nairobi, 2024

**Africa
Fertilizer &
Soil Health
Summit**

Developing Africa's 10-Year Action Plan



(Draft documents)



**Soil Initiative
for Africa**

(Long term)

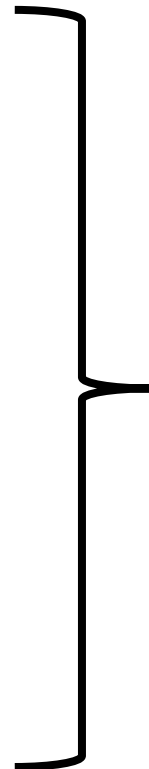
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**Africa Fertilizer
and
Soil Health
Action Plan**

(10 years)

+

Nairobi Declaration

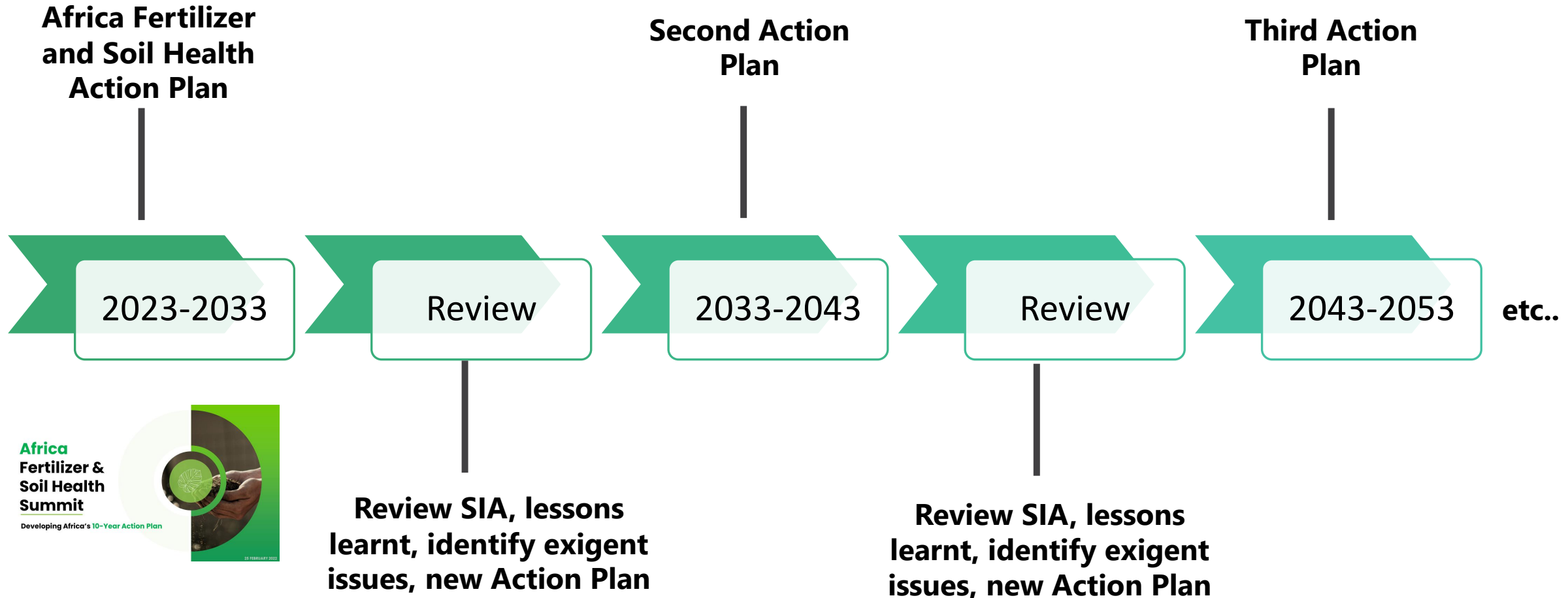




**Soil Initiative
for Africa**

Long-term framework to systematically improve the health and productivity of Africa's soils to be implemented through:

Consecutive 10-year Action Plans



Vision

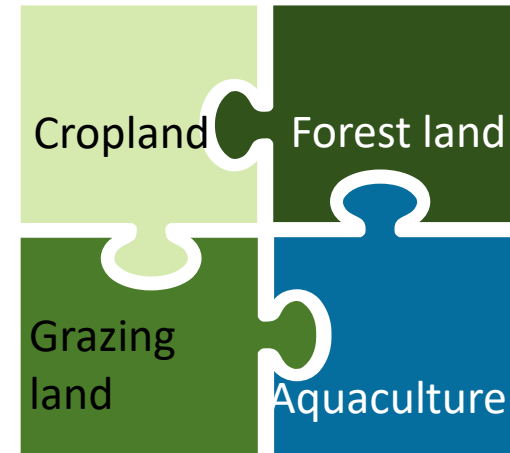
Africa's soils are **healthy and resilient**, supported by a robust **African-led soil management system** with sound institutions, policies, programs, investments, partnerships, and **services** that **supports and empowers land users across Africa** to use practices that **restore and sustain soil health**, significantly increase agricultural productivity, income and prosperity, resilience to climate change, and **reflect national priorities**.





Priority investment areas:

- 1**  **Optimize integrated soil health and water management planning and implementation**
- 2**  **Build human, institutional, and social capital for research, development, education, extension, and support for sustainable soil management**
- 3**  **Optimize data and information for effective planning and monitoring**
- 4**  **Ensure enabling policy, legal and regulatory frameworks**



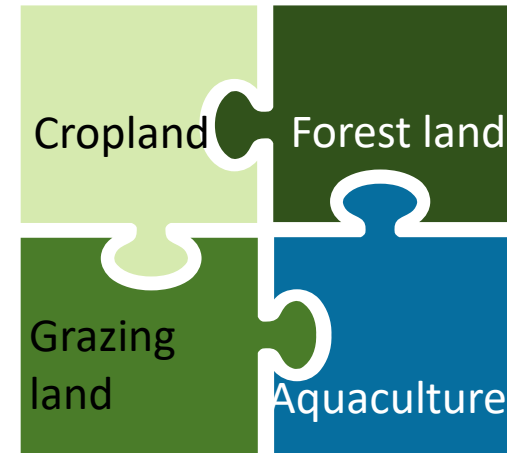


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Build human, institutional, and social capital for research, development, education, extension, and support for sustainable soil management

- a. **Farmers and communities as drivers of change** in soil management
- b. **Smallholder farmers** to be supported as **investors in their own farming businesses**
- c. Need to strengthen **soil-science-related** human capital
Farmers, extension agents, soil-related researchers, etc.
- d. Expanding and upgrading the **quality of training in formal, informal, in-service, and extension training**
- e. **Strong institutional capacity** needed to implement the SIA system





Africa Fertilizer and Soil Health Action Plan

2023 -2033

The AFSH Action Plan, 2023-2033

Outcome 1: Improved policies, investment, finance and markets for sustainable soil health and fertilizer management

Outcome 2: Improved access and affordability of organic and mineral fertilizers

Outcome 3: Greater efficiency, resilience and sustainable use of mineral and organic fertilizer inputs and enhancement of soil health interventions

Outcome 4: Institutional and human capacity enhanced for sustainable soil health and fertilizer management

The AFSH Action Plan, 2023-2033

Outcome 4: Institutional and human capacity enhanced for sustainable soil health and fertilizer management

Output 4.1

Locally relevant soil health and fertilizer management technologies developed and promoted

Output 4.2

Scale appropriate advisory services on soils and crops available and affordable to smallholder farmers

Output 4.3

Regional networks for knowledge exchange established

Output 4.4

Fertilizer analytical services available for fertilizer quality assurance

Challenges in developing human capital in soil science in Africa

- Insufficient awareness/ knowledge among **smallholder farmers** about the **consequences of soil degradation** and **ways to improve soil health**, along with limited access to knowledge, information, and tools to improve soil management
- **Extension services** often lack **updated information** on soil health and sustainable soil management
- Insufficient **soil scientists with updated skills** in the latest technologies, including digital tools in soil science, principles and practices for sustainable soil management, providing evidence-based policy advice to decision-makers, and more

Opportunities to deepen Africa's human capital in soil science

- Support **farmers'** involvement and innovation to **co-create best local soil management practices** – combine local/indigenous knowledge with science-based evidence
- Develop processes to enable **feedback from farmers/communities and extension agents** to inform development of training programs, research priorities, supports services
- Ensure **farmers' access to tailored advice** on optimal use of agricultural inputs and technologies, and access to updated input and output markets and related information
- Leverage **digitally enabled** products and services

Opportunities to deepen Africa's human capital in soil science

- Identify **successful examples** of sustainable soil management implementation for learning, sharing, and scaling
- Establish or **strengthen agricultural research and extension services** to generate and deliver up-to-date and tailored information, data, and services
- Ensure **extension staff** are fully equipped with **knowledge, approaches, resources**, etc. to support farmers to use scientifically sound and locally adapted soil health practices
- Ensure **adequate soil science degree programs** at tertiary education level and ensure soil science is embedded into multi-disciplinary programs related to soil and water management across land use sectors

Summary

- **AFAAS involved** in the development of the Soil Initiative for Africa from the beginning and is a key organization in further elaborating the details to improve human capital in soil science
- The Soil Initiative for Africa Framework and AFSH Action Plan will be **endorsed** at the upcoming **AFSH Summit 2024**
- **Regional and national domestication** of the continental framework will be needed, which will involve consideration of appropriate contexts and specificities

Invitation:

Agenda 2063 (Aspiration 6) aspires to:

“An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children”