



# African Fertilizer and Soil Health Action Plan (2024-2034)

Dr Manyewu Mutamba

# Content

## African Fertilizer and Soil Health Action Plan (2024-2034)

The challenge

Previous commitments

About the AFSH Action Plan

The AFSH Action Plan results framework

Implementation framework

Leadership and coordination

Stakeholder engagement and partnerships

Monitoring, evaluation, accountability and learning

Phased implementation



# The challenge



# The challenge



- Soil degradation in Africa is threatening the sustainability of agricultural production.
- About 75%-80% of the continent's cultivated area is degraded.
- More than 485 million people (65% of the population) on the continent are affected.
- Projections suggested that >50% of currently arable land may be unusable by 2050.
- Sustainable crop production intensification and soil health management requires innovative, relevant, economically viable, and locally adapted nutrient management technologies and practices.
- Small family farms struggle to access sustainable soil management technologies and fertilizers of good quality.

# The challenge



- Fertilizer financing is a major constraint faced by smallholder farmers.
- Despite increased local manufacturing, Africa is still dependent on imported fertilizer.
- This is due to fractured intra-continental markets, poor distribution infrastructure, and a lack of regional trade policy harmonization.
- High dependency on imports exposes the continent to external global market shocks, for example:
  - The recent global fertilizer crisis caused a 25% decline in fertilizer consumption from 2019 to 2022.
  - This is expected to decrease food production by 30 million metric tons of grains.
  - Which is enough to feed over 60-90 million people for a year.

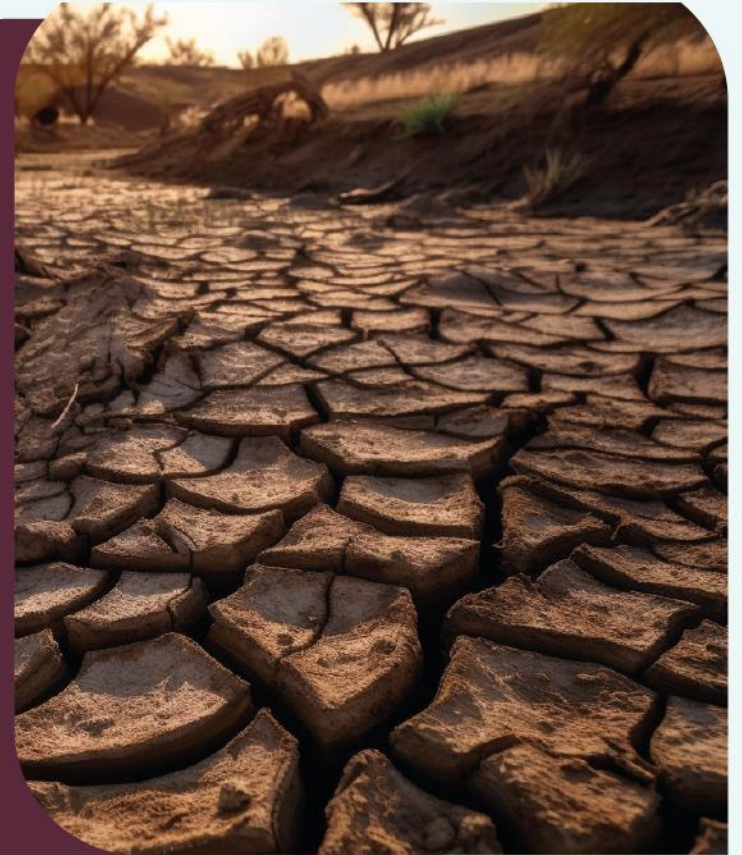




# Previous commitments

# Previous commitments

- The Africa Fertilizer Summit (2006) identified the need to increase fertilizer use to stimulate agricultural productivity growth and reverse soil nutrient depletion.
- The Abuja Declaration positioned fertilizer and complementary inputs as key to increasing crop yields and reducing food insecurity and poverty amongst smallholder farmers.
- Since then, fertilizer use has increased marginally and low agricultural productivity, food insecurity, malnutrition and land degradation remain critical challenges.
- More than 278 million Africans (20% of the population), were classified as undernourished in 2021.





# About the AFSH Action Plan



# About the AFSH Action Plan



- The goals and aspirations of multiple African agendas (e.g. Africa 2063, CAADP, Malabo Declaration) require improved and sustained investment in soil health.
- African Union Commission (AUC) tasked the Forum for Agricultural Research in Africa (FARA), other xPillar4 agencies, and specialized Agencies (especially the United Nations Food and Agriculture Organization (FAO), to develop a **long-term framework** for addressing Africa's Soil health crisis – the **Soil Initiative for Africa (SIA)**.
- The African Fertilizer and Soil Health (AFSH) Action Plan is a **10year Continental Strategy**.

# About the AFSH Action Plan



The AFSH Action Plan focuses on Integrated Soil Fertility Management (ISFM).

## What is ISFM?

It addresses the concept of production systems in which efficient fertilizers, both mineral and organic; other inputs, such as improved seeds; water use efficiency for irrigation; and other aspects of soil health and sustainable management are crucial to food security and agricultural sustainability.

# About the AFSH Action Plan



## Which countries?

All 55 African Union (AU) Member States

## Who implements?

AUC, AUDA-NEPAD, Regional Economic Communities, governments, business and industry, farmers and farmer organizations, financial institutions, civil society and development partners.

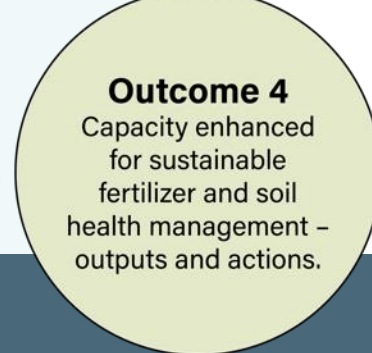
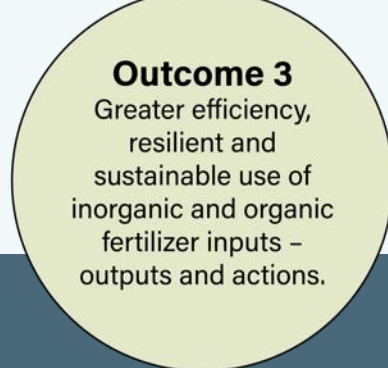
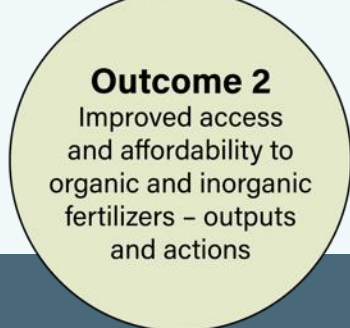
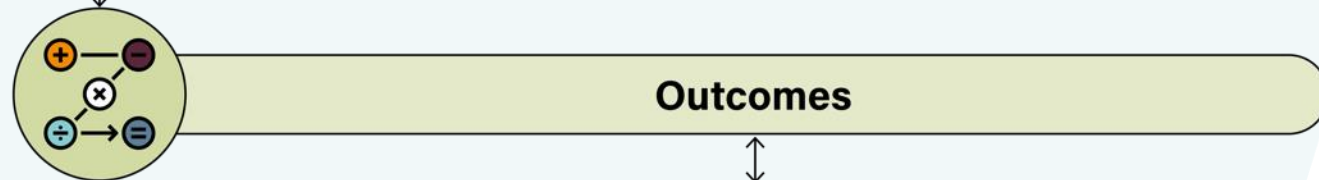
## When?

- **Preparatory phase** - July 2023 to December 2024
- **Implementation phase** – January 2025 to December 2035






# The AFSH Action Plan results framework



# The AFSH Action Plan results framework


Outcomes	Outputs	Actions
<p><b>1. Improved policies, investment, finance and markets for sustainable soil health and fertilizer management</b></p> 	<p>1.1 Improved policy environment</p>	<p>Action 1.1.1 Develop context-specific, continent-wide guidelines for the formulation and implementation of relevant national policies that enable sustainable soil health and efficient fertilizer management.</p> <p>Action 1.1.2 Harmonize national policies and regulatory frameworks on fertilizer efficiency and soil health solutions to ensure cross - sectoral coherence and promote regional and continental trade.</p> <p>Action 1.1.3 Support smallholder farmers to access viable commodity markets and support improved security of land tenure and use rights to enable individual investments in efficient fertilizer use and soil health.</p> <p>Action 1.1.4 Enact policies and regulation to support/promote the use of local food products.</p> <p>Action 1.1.5 Identify areas of high agricultural or ecological importance for protection, restoration, and sustainable management to improve soil health.</p>



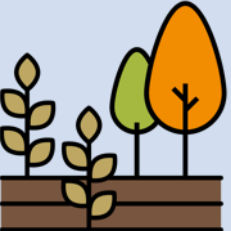
# The AFSH Action Plan results framework

Outcomes	Outputs	Actions
<p><b>1. Improved policies, investment, finance and markets for sustainable soil health and fertilizer management</b></p> 	<p>1.2 Improved financing and investment</p>	<p>1.2.1 Widen the scope of the Africa Fertilizer Financing Mechanism (AFFM) to improve the low - carbon production, procurement, distribution, and efficient use of organic and mineral fertilizers, and soil health interventions.</p>
		<p>1.2.2 Incentivize enhanced private sector investments in low - carbon fertilizer production, research and development, trade and farmer advisory services, towards “smart farming” that better matches various fertilizer types/ formulas with local soil types.</p>
		<p>Action 1.2.3 De-risk farmer investments in yields and soil health of current and targeted food security crops.</p>
		<p>Action 1.2.4 Support financing of infrastructure and logistics assets to improve availability of organic and mineral fertilizers, biofertilizers and biostimulants, and reused and recycled nutrient sources, and access to food markets for farmers.</p>
		<p>Action 1.2.5 Strengthen the soil health fund for research, innovation, and start - ups on efficient fertilizer use and soil health actions, including private sector investments, under the AFFM.</p>
		<p>Action 1.2.6 Deploy innovative incentive support mechanisms for Member States’ greater use of technology to improve the efficiency of existing subsidy programs, with the end goal of encouraging soil health investments by smallholder farmers.</p>
		<p>Action 1.2.7 Establish the minimum threshold for the optimal functioning of AFFM and convene a partner’s roundtable by the end of 2024, to mobilize the required resources.</p>

# The AFSH Action Plan results framework

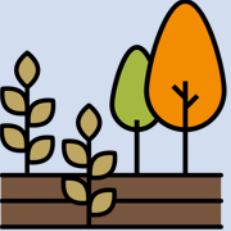
Outcomes	Outputs	Actions
<b>2. Improved access and affordability of organic and mineral fertilizers</b>  	2.1 Increased low-carbon domestic production and distribution	<p>2.1.1 Boost local production and blending of mineral fertilizers and lime using locally available raw materials.</p> <p>2.1.2 Enable small and medium-sized enterprises (SMEs), especially by youth and women, oriented to the production, distribution, and efficient use of mineral fertilizers.</p> <p>2.1.3 Support Research and Development to produce organic fertilizers, biofertilizers and biostimulants, and reused and recycled nutrient sources and novel fertilizers with low carbon, including green ammonia.</p> <p>2.1.4 Strengthen access, especially to women and youth, through market linkages and promote agro dealerships.</p>
	2.2 Enhanced intra-regional fertilizer trade	2.2.1 Leverage the African Continental Free Trade Agreement (AfCFTA) increase intra-Africa fertilizer trade and enact sovereign guarantees agreements between importers and manufacturers.

# The AFSH Action Plan results framework


Outcomes	Outputs	Actions
<b>3. Greater efficiency, resilience and sustainable use of mineral and organic fertilizer inputs and enhancement of soil health interventions</b> 	3.1 Recommendations developed targeted to specific crops, soils and climatic conditions	3.1.1 Develop digitally-enabled context-specific efficient fertilizer and soil health advisory recommendations.
		3.1.2 Develop and deploy standardized and appropriate tools for assessing soil fertility, soil health, and context-specific sustainable soil management and nutrient requirements.
	3.2 Agronomic fertilizer use efficiency increased to optimal levels	3.2.1 Promote integrated soil fertility management practices to enhance crop response.
		3.2.2 Promote context-specific solutions for the use of the right sources of nutrients at the right rates, time, and place.
		3.2.3 Promote access and affordability of liming for ameliorating acidic soils to enhance crop productivity and fertilizer use efficiency.
	3.3 A digital information platform and database established	3.3.1 Establish and operationalize continental, regional, and national soil health monitoring and soil information systems.
		3.3.2 Establish and operationalize a soil health, fertilizer, crop, and climate dashboard for decision support on sustainable soil management.
		3.3.3. Establish and operationalize analytical and decision support tools to guide investments at farm, national, regional, and continental level.




# The AFSH Action Plan results framework

Outcomes	Outputs	Actions
<p><b>3. Greater efficiency, resilience and sustainable use of mineral and organic fertilizer inputs and enhancement of soil health interventions</b></p> 	<p>3.4 Soil health and water management optimized across agricultural sub-sectors and landscapes</p>	<p>3.4.1 Promote integrated soil and water conservation, planning, and management across agricultural sub-sectors and landscapes/ watersheds.</p>
		<p>3.4.2 Promote investments in smart irrigation as part of integrated water resource management for enhancing nutrient use efficiency and soil health conditions for climate change resilience.</p>
		<p>3.4.3 Promote context-specific sustainable agricultural practices to support increased biomass, crop, and animal production in croplands, rangelands, forestlands and inland fisheries.</p>

# The AFSH Action Plan results framework

Outcomes	Outputs	Actions
<p><b>4. Institutional and human capacity enhanced for sustainable soil health and fertilizer management</b></p> 	<p>4.1 Locally relevant soil health and fertilizer management technologies developed and promoted</p>	<p>4.1.1 Strengthen regional and national research and education institutions and capacity in soil health and sustainable soil management.</p>
		<p>4.1.2 Strengthen national extension systems and public-private partnerships for soil health and efficient fertilizer advisory integrated with other farmer services (input and output markets, finance) to improve the quality of support to smallholder farmers.</p>
		<p>4.1.3 Building the capacity of national Research and Development and Extension systems that will need to support and enable the implementation of the activities specified in the Action Plan.</p>
		<p>4.1.4 Review and upgrade tertiary training programs for soil science and agronomy to include subjects relevant to sustainable soil management and efficient fertilizer use.</p>
		<p>4.1.5 Develop a database coupled with a decision support system to promote locally, nationally and regionally relevant fertilizer and soil health management technologies.</p>
		<p>4.1.6 Strengthen informal and in-service training modalities to strengthen research, extension, and implementation expertise on sustainable soil management.</p>

# The AFSH Action Plan results framework

Outcomes	Outputs	Actions
<b>4. Institutional and human capacity enhanced for sustainable soil health and fertilizer management</b> 	4.2 Scale appropriate advisory services on soils and crops available and affordable to smallholder farmers	4.2.1 Build, strengthen, and standardize soil analysis capacity of laboratories to rapidly and accurately analyze large sample volumes. 4.2.2 Establish public-private partnerships to foster innovation towards scalable, affordable, and localized soil and crop-specific advisory.
	4.3 Regional networks for knowledge exchange established	4.3.1 Establish regional research and development networks for the exchange of knowledge and technologies within the continent and with the North-South-South (global) regions. 4.3.2 Establish and convene a biennial Continental Fertilizer and Soil Health Summit.
	4.4 Fertilizer analytical services available for fertilizer quality assurance	4.4.1 Build, strengthen, and standardize the fertilizer analysis capacity of national and regional laboratories in accordance with fertilizer quality standards.





# Implementation framework



- AFSH Action Plan - priority actions for the next 10 years to be implemented in the context of the SIA Framework.
- SIA Framework - long-term actions to improve, maintain, and scale soil health and productivity in all agricultural sub-sectors.



# Leadership and coordination



# Leadership and coordination



- AUC and AUDA-NEPAD will coordinate multi-stakeholders to ensure effective implementation of the AFSH Action Plan.



# Stakeholder engagement and partnerships



# Monitoring, evaluation, accountability and learning

# Monitoring, evaluation, accountability and learning



- Implementation of the AFSH Action Plan will be incorporated into the CAADP M&E system, including into the digital CAADP biennial review dashboard.
- Indicators will be defined with an emphasis on leveraging existing information and indicators.
- The monitoring plan will include tracking of the contributions of the private sector.





# Phased implementation

# Phased implementation

## Phase 1

### Preparatory 18-month post-summit phase for:

- Defining and establishing the coordination mechanism;
- Aligning implementation with future developments under Agenda 2063 and CAADP;
- Cultivating necessary partnerships and alliances;
- Building capacity;
- Piloting and proofing some interventions; and
- Final planning, budgeting, and resource mobilization.
- Country-specific action plans will be developed with the engagement of public-private partners and development stakeholders.

## Phase 2

### The main implementation phase



# CALL FOR ACTION

# CALL FOR ACTION

## AUDA-NEPAD and AUC to:

- Support Member States in domesticating mechanisms for rewarding smallholder farmers for improved soil health practices.
- Develop a systematic soil health monitoring system aligned with existing CAADP M&E systems.
- Develop a post-summit implementation strategy and roadmap for the Fertilizer and Soil Health Action Plan and in line with the Soil Initiative for Africa.
- Develop the partnerships and institutional arrangements for implementation of the Declaration.





# CALL FOR ACTION



**Private sector** to increase investments in Africa's fertilizer industry and promote sustainable soil management practices.



**Continental and international financial institutions** to support private sector investments in Africa's fertilizer industry.



**Development partners** to support governments and regional economic communities to adopt best practices in fertilizer use and soil management.

