Go Mechanization!

Promoting access to Sustainable Agricultural Mechanization in West Africa

A pilot financed by the

KOREA GREEN GROWTH TRUST FUND

KAJA WALDMANN, AGRICULTURE ANALYST, WORLD BANK

CHIWIMBO PERSEVERANCE MWIKA, AGRICULTURE SPECIALIST, WORLD BANK

FSRP

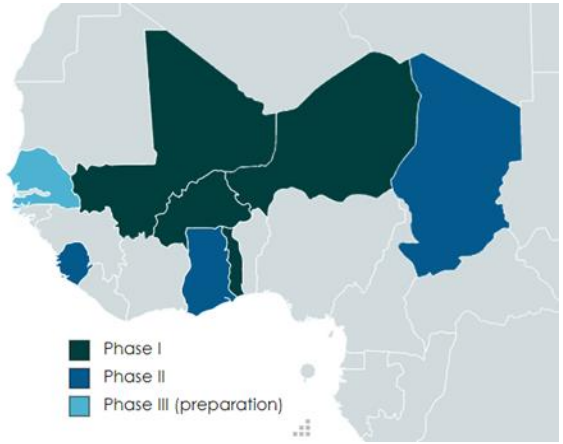
West Africa Food System Resilience Program

Food System Approach

Total envelope:
USD 1.056 billion

WHERE?

The program benefits the entire **West Africa** region through investments made by the three regional organizations and investments in Burkina Faso, Chad, Ghana, Mali, Niger, Togo, Sierra Leone, and Senegal.



WHO?

Three regional organizations…

& 8 countries…

WHAT?

… are **taking the lead on three thematic area:**

Regional Food Market Integration and Trade

Digital Advisory Services for agriculture and food crisis prevention and management

Sustainability and Adaptive Capacity of the Food System's Productive Base

… make **investments** in …

The KGGTF-financed work on SAM in FSRP

KOREA GREEN GROWTH TRUST FUND

Financing of 500 000 USD →

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Attached to

FSRP
West Africa Food System Resilience Program

To support

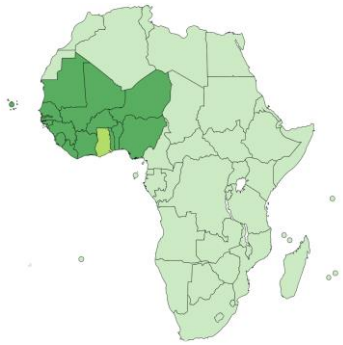
Go Smart Mechanization! Sustainable Agricultural Mechanization

OBJECTIVE

To expand access of smallholder farmers to SAM technologies, services, and information in West Africa and Ghana

… and thereby contribute to the implementation of the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA).

WHERE ?



Aimed to benefit all FSRP countries and spill over to all of **West Africa**

WHO ?

ACT African Conservation Tillage Network
Conservation Agriculture for Improved Livelihoods and a Better Environment

CSIR Council for Scientific and Industrial Research · Ghana ·

THE HOWARD G. BUFFETT FOUNDATION
CENTRE FOR NO-TILL AGRICULTURE

TROTRO TRACTOR LIMITED

CORAF

ECOWAS CEDEAO

Food and Agriculture Organization of the United Nations

FSRP
West Africa Food System Resilience Program

CGIAR | AICCRA
Accelerating Impacts of CGIAR Climate Research for Africa

WHAT ?

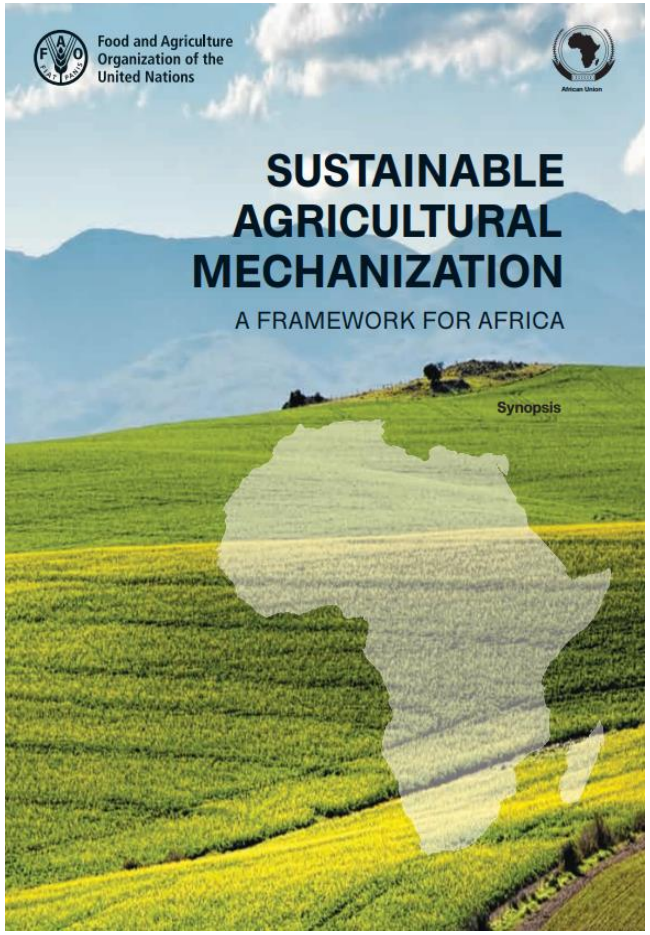
1) Support a digital platform promoting SAM in Africa

2) Pilot SAM bundles in Ghana

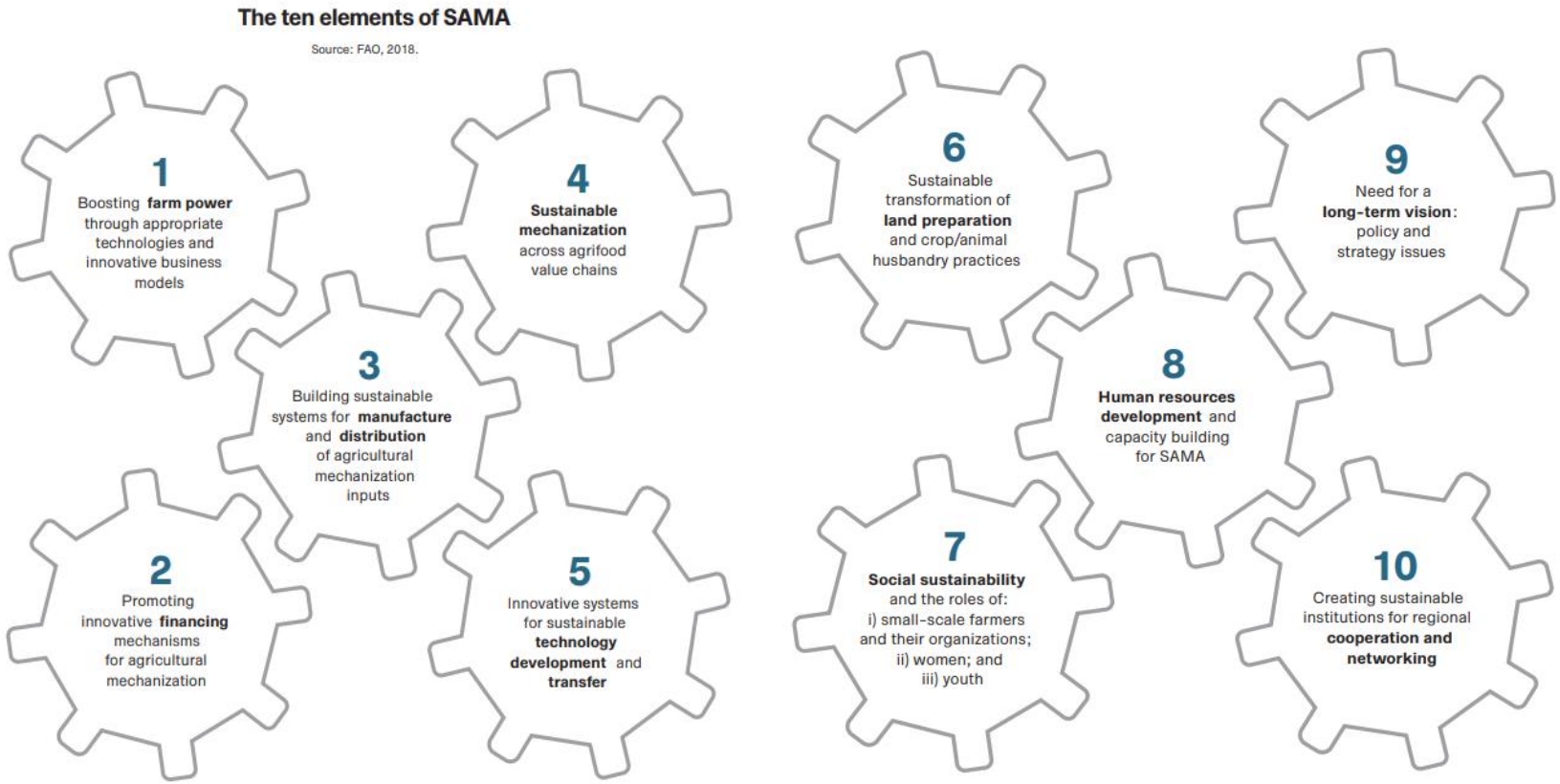
3) Develop country profiles and regional F-SAMA strategy

4) Scale up SAM adoption in FSRP

What is the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA)?



- The African Union Commission (**AUC**) and the Food and Agriculture Organization (**FAO**), through an Africa-wide consultative process, developed the F-SAMA in 2018.
- The F-SAMA has **ten priority elements** geared towards **mainstreaming SAM into national and regional agricultural development programs**.



Why do we need Sustainable Agricultural Mechanization?

Opportunity
The potential of the West African Food System is underutilized

What is SAM:
Sustainable Agricultural mechanization embraces […] of all types of tools, implements, machines and equipment for agricultural production, harvesting and primary processing of agricultural produce used in ways that are environmentally friendly, economically viable, and socially responsible.

Impact:

Sustainably increased production:
- Sustainable mechanization can boost productivity and crop yields, addressing food security needs, while simultaneously reducing soil degradation and improving environmental sustainability

Improved livelihoods through better on and off farm jobs in the food system :
- Mechanization reduces labor-intensive tasks, improving labor efficiency and farmer wellbeing and enables the creation of more and better jobs along value chains

Green agricultural growth

The KGGTF financed work on SAM in FSRP – 4 Activities

Through 4 activities, the KGGTF support **advocacy**, **data and knowledge generation**, **capacity building** and the i**dentification of concrete policy strategies and investments on & in SAM.**

1) Support a digital platform promoting SAM in Africa

Support the Africa Mechanize Platform promoting SAM in Africa

- Needs assessment
- Strategy for platform
- Development of element(s) of the platform for advocacy and capacity building

2) Piloting of bundles of SAM, CSA and CIS

Generate evidence environmental and economic sustainability of SAM and provide capacity building to local community

3) Data collection and development of implem. strategies

Development of

- 8-10 SAM Country Profiles
- Regional F-SAMA Implementation Strategy
- 2 F-SAMA Country Implementation Strategies and Roadmap

4) Development of strategy to scale up SAM through FSRP

Scale-up SAM in the context of the FSRP including through

- Identification of SAM technologies for dissemination in the FSRP
- Collaboration with national (and international) research institutions

Activity 1: Support AfricaMechanize Platform promoting SAM in Africa

1) Support a digital platform promoting SAM in Africa

Background

- As part of the implementation of the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA), the African Conservation Tillage Network (ACT) was mandated by AUC and FAO to host a digital information platform to promote SAM through advocacy and capacity building
- A preliminary website exists which will be upgraded:

Objective

Support the gradual development of the Africa Mechanize Platform promoting SAM in Africa through advocacy and capacity building

Results achieved

- Needs assessment conducted
- Strategy document for the development of the platform developed

Next steps and expected outcomes

- Implementation of elements of the strategy document including
  - Communication strategy
  - Partnership strategy
  - Communication, including newsletters, webinars etc.
  - Digitalized trainings for policy makers, service providers and farmers

Activity 2: Pilot SAM + CSA + CIS bundles

2) Piloting of bundles of SAM, CSA and CIS

Background

- The grant finances a pilot in Offuman, Ghana, providing bundles to farmers consisting of SAM services for land preparation, climate smart agriculture technologies (including seeds), climate information services and capacity building
- Benefits:
  - data and evidence on crop productivity, soil health and other indicators will be generated comparing the pilot and a control group (using conventional farming techniques)
  - capacity building on SAM are provided in the community, including demonstrating various smaller and cheaper SAM technologies (e.g., jab planters) to farmers.

Objective

Generate evidence environmental and economic sustainability of SAM and provide capacity building to local community

Results achieved

- Selection of community
- Collaboration with private sector set up (TroTro)
- Set up of demonstration plot
- Support to 30 farmers participating in pilot
- Organization of workshops with policy makers, extension workers and scientists
- Capacity building for policy makers and community (workshops, demonstrations of SAM technologies, farmer field days, etc.)

Next steps and expected outcomes

- Continuous support for pilot
- Continuous capacity buildings
- Publication of scientific paper

Activity 3: Develop SAM Profiles and operationalization strategies of the F-SAMA

3) Collect data and develop implementation strategies

Background

This activity will support development of a strategic policy document showcasing scientific evidence, case studies, and success stories on the sustainability and profitability of SAM - both for farmers and SAM service providers. The activity will be led by ACT, CORAF, and FAO in consultation with ECOWAS.

Objective

Development of a strategic policy document on SAM in West Africa for awareness raising and advocacy

Activities

- **Development of Agricultural Mechanization Profiles for 8-10 Countries in West Africa**
  - Key information and data on the status of agricultural mechanization
  - Prioritized recommendations on how to promote SAM
- **Regional Implementation Strategy and Roadmap**
  - Overview of status of (sustainable) agricultural mechanization in West Africa
  - Assessment of regional and national agricultural mechanization policies, frameworks, strategies, projects and identification of limitations and gaps
  - Documentation of SAM case studies and best practices (including the Offuman demo site) that improve productivity, improve soil fertility, reduce labor and drudgery.
  - Development of a recommendation on SAM promotion for West Africa
- **Development of F-SAMA Country Implementation Strategy for 2 country**

Activity 4: Scale up SAM adoption in FSRP

4) Scale up SAM adoption in FSRP

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FSRP West Africa Food System Resilience Program

Objective

Development of a strategy for the Scale-up in the context of the FSRP

Background

Sustainable mechanization has the potential to be scaled up within FSRP contributing to the FSRP PDO *to increase preparedness against food insecurity and improve the resilience of food systems in participating countries.*

Entry Points :

C1: Digital Advisory Services for agriculture and food crisis prevention and management, including through:

- Upgrading regional food crisis prevention and monitoring systems;
- Strengthening digital Hydromet and agro-advisory services for farmers

C2: Sustainability and Adaptive Capacity of the Food System's Productive Base including through:

- Consolidating regional agricultural innovation systems; and
- Strengthening regional food security through integrated landscape management and investment in climate smart agriculture technology

C3: Regional Food Market Integration and Trade including through:

- Facilitating trade across key corridors and consolidate food reserve systems;
- Supporting the development of strategic and regional value chains, including through investments in key infrastructure.

C4: Contingent Emergency Response Component (CERC)

- Flexible financing mechanism to help countries respond to their most urgent needs.

C5: Program Management

Thank you !

We sincerely **thank** the KOREA GREEN GROWTH TRUST FUND for the support !!!

We are looking forward to

- learn from experiences on digital tools for advocacy, knowledge sharing and capacity building &
- exploring possibilities for collaboration with (Korean) partners on the promotion of SAM.

Thank you for your attention!

Implementation Timeline

GANTT CHART FOR IMPLEMENTATION OF THE KGGTF									
		2024			2025				
Tasks & Activities	DONE	OCT	NOV	DEC	JAN	FEB	MAR	APRIL	MAY
Activity 1: Support a digital platform promoting SAM in Africa									
Development of needs assessment	x								
Development of strategy document	x								
Development of elements of the AfricaMechanize Platform, including digitalization of outcomes of Activity 3		x	x	x	x	x	x	x	
Activity 2: Pilot SAM bundles									
Pilot bundles of SAM services with CSA and capacity building - Season 1	x								
Pilot bundles of SAM services with CSA and capacity building - Season 2	x								
Pilot bundles of SAM services with CSA and capacity building - Season 3									
Data analysis and publication of a paper									
Activity 3: Develop SAM Profiles and Implementation Strategies									
Partner engagemennt (FAO, CORAF, ECOWAS, Country Director's of Ag. Mechanization)	x								
Developing the National Agricultural Mechanization Profiles		x	x	x	x				
Development of Regional F-SAMA Implementation Strategy and Roadmap			x	x	x	x			
Development of 1 F-SAMA Country Implementation Strategy and Roadmap				x	x	x	x		
Validation and publication							x	x	x
4) Scale up SAM adoption in FSRP									
Definition of activities to be implemented under the FSRP	x	x	x	x	x	x	x	x	x