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Mainstreaming Climate-Smart Agriculture in Programs and Policies

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USAID GLEE – CSA, Lusaka, Zambia

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PARTNERSHIPS FOR SCALING CLIMATE SMART AGRICULTURE (P4S - CSA)

PRESENTATION LEARNING OBJECTIVES

- To demonstrate how CSA can be mainstreamed into national programs and policies
- To provide examples of CSA planning tools and approaches being applied to support partners and national institutions
- To highlight lessons learned from application of CSA Country Profiles and the CCAFS CSA Prioritization Framework
- Highlight how tools and approaches can be most effectively integrated into USAID agricultural planning and programs

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African Union – New Partnership for African Development

NEPAD TRANSFORMING AFRICA

CAADP The Comprehensive Africa Agriculture Development Programme

AFRICA CSA Alliance

Regional Economic Communities (RECs)

COMESA

SADC SOUTHERN AFRICAN DEVELOPMENT COMMUNITY TOWARDS A COMMON FUTURE

CEDEAO ECOWAS

National Agricultural Investment Plans (NAIPs)

Other National Level Policies (NAPAs/NAPs/NAMAs, etc.)

Programmatic Investments and Policies

Staple Crops, Cash Crops, Livestock/Dairy, etc.

CSA Adoption by farmers

Through development partner implementation

CSA

Mainstreamed Throughout All Relevant Ministries and Programs

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CSA-Plan:

A multi-step planning and implementation guide to scaling CSA

- Flexible
- Simple
- Stakeholder Driven
- Linkable

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ENGAGEMENT

Situation Analysis

Risks and Enabling Conditions

Vulnerability & Impacts + Readiness

Stocktaking for CSA Action

Targeting & Prioritizing

Practices, Programs and Policies

Trade-offs & Value for Money

CSA Investment Portfolios

Program Support

Guidelines & Implementation

Knowledge into Action

Taking CSA to Scale

Monitoring and Evaluation

Across Scales and Systems

Evidence Based Results Framework

Learning from Experience

CAPACITY DEVELOPMENT

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CSA Country Profiles

Situation Analysis

Objective

Provide a brief yet comprehensive overview of the **status** of **CSA activities** and **enabling environment** in a given country

Contents

- National agricultural context
- Ongoing CSA practices and level of 'climate-smartness'
- Identification of high interest practices for further investigation
- Institutional, policy, and financial entry points for scaling out CSA

Target Audience

- **Government stakeholders**
- Development agencies
- Non-governmental organizations
- Researchers & farmers

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Stakeholder engagement

Information & Data gathering

Databases
(FAOSTAT, WB, CSE, MEDD etc.)

Interviews
(FONGS, ISRA, IED, ANCAR etc.)

Focus groups

Surveys

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Climate-Smart Agriculture in Senegal

Climate-smart agriculture (CSA) considerations

P A M Senegal's economic growth strategy identifies agriculture as the key driver for poverty reduction and enhancement of food security in the country. Development plans for the agriculture sector need to account for the implications on greenhouse gas (GHG) emissions, particularly for the expansion of rice cultivation and livestock production.

M Livestock represents a major source of GHG emissions, and there exist opportunities for enhancing pasture management and integrating vegetation to reduce emissions and improve land management practices.

I A The use of climate information has become integral to farmers' decision-making and farming practices.

$ Access to finance is limited for smallholder farmers and represents a significant barrier to adopting CSA practices.

A $ Climate index insurance is increasingly being adopted by smallholders in the millet, rainfed rice, maize and groundnut sectors, thanks to a 50% subsidy by the government and innovative payment schemes of integrating the cost of the premiums in the credit lent out to farmers for the purchase of inputs.

I $ Mobilizing private sector involvement in smallholder value chains opens the opportunity to generate sources of revenue and contribute to scaling out CSA in the country.

$ International funds have been accessed for climate change adaptation and food security, which can be linked to support the adoption of CSA practices.

A Adaptation M Mitigation P Productivity I Institutions $ Finance

The climate-smart agriculture (CSA) concept reflects an ambition to improve the integration of agriculture development and climate responsiveness. It aims to achieve food security and broader development goals under a changing climate and increasing food demand. CSA initiatives sustainably increase productivity, enhance resilience, and reduce/remove GHGs, and require planning to address tradeoffs and synergies between these three pillars: productivity, adaptation, and mitigation [1]. The priorities of different countries and stakeholders are reflected to achieve more efficient, effective and equitable food systems that address challenges in environmental, social and economic dimensions across productive landscapes. While the concept is new, and still evolving, many of the practices that make up CSA already exist worldwide and are used by farmers to cope with various production risks [2]. Mainstreaming CSA requires critical stocktaking of ongoing and promising practices for the future, and of institutional and financial enablers for CSA adoption. This country profile provides a snapshot of a developing baseline created to initiate discussion, both within countries and globally, about entry points for investing in CSA at scale.

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PARTNERSHIPS FOR SCALING
CLIMATE SMART AGRICULTURE (P4S - CSA)

CSA Considerations

A Adaptation M Mitigation P Productivity

Institutions $ Finance

- Overview of the key messages…

A P The use of climate information has become integral to farmers decision-making and farming practices.

$ Access to finance is limited for smallholder farmers and represents a significant barrier to adopting CSA practices.

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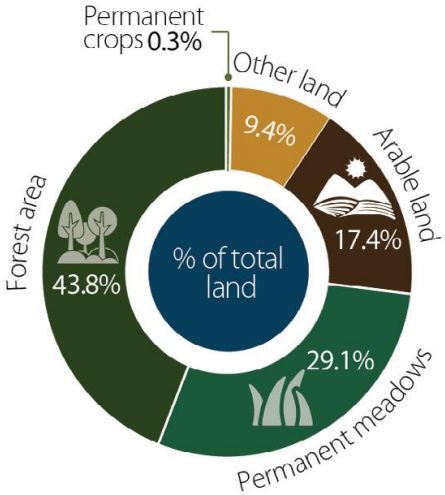
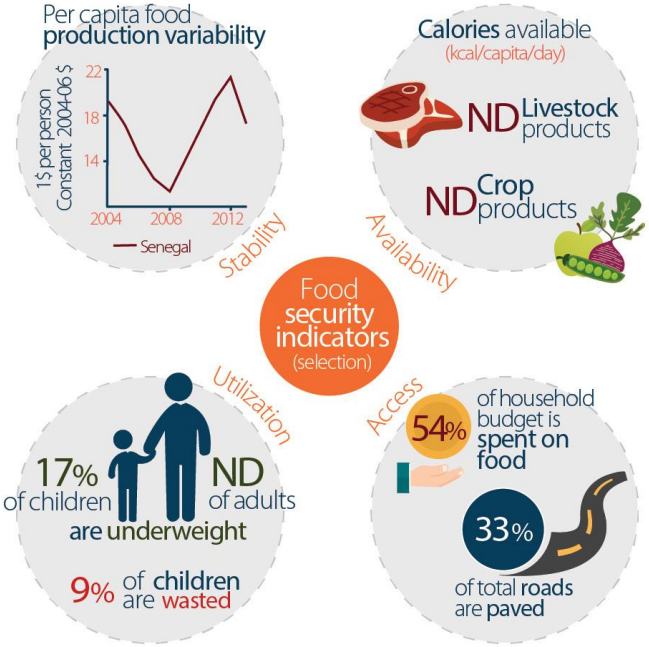
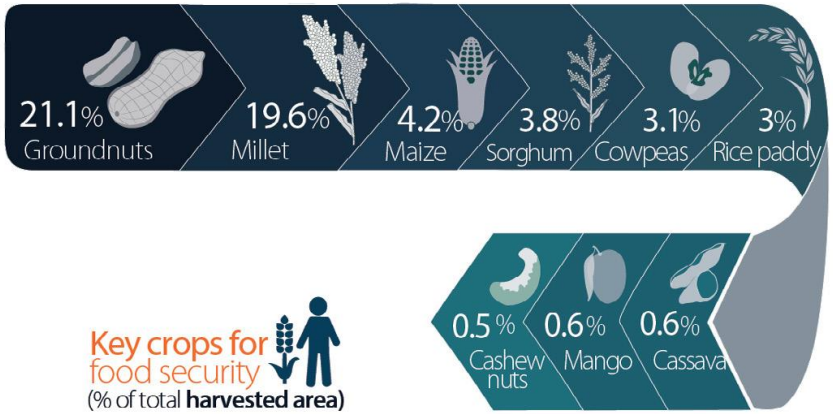
Food security and Nutrition

Agricultural area
9,015,000 ha
= 46% of total land area







Key crops for food security
(% of total **harvested area**)

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ND= No data
* Takes into account aspects of affordability, availability, and quality
** Refers to the 109 countries included in the Index

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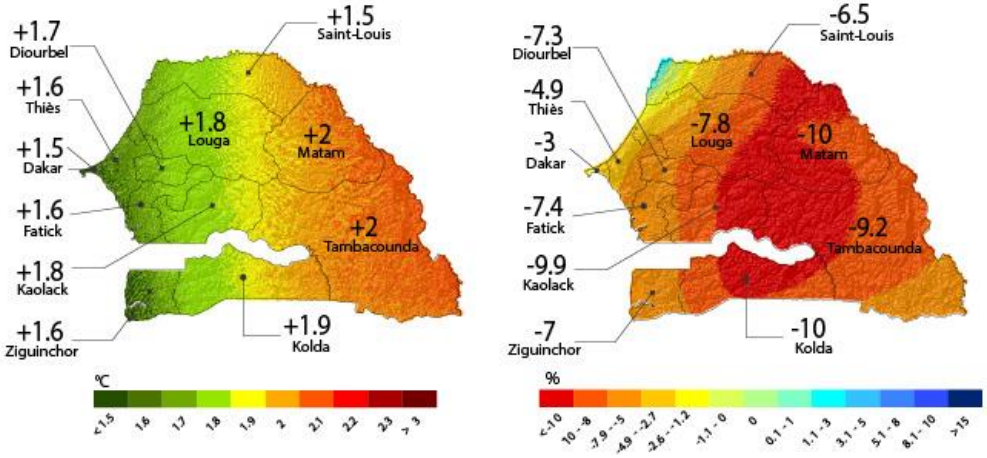
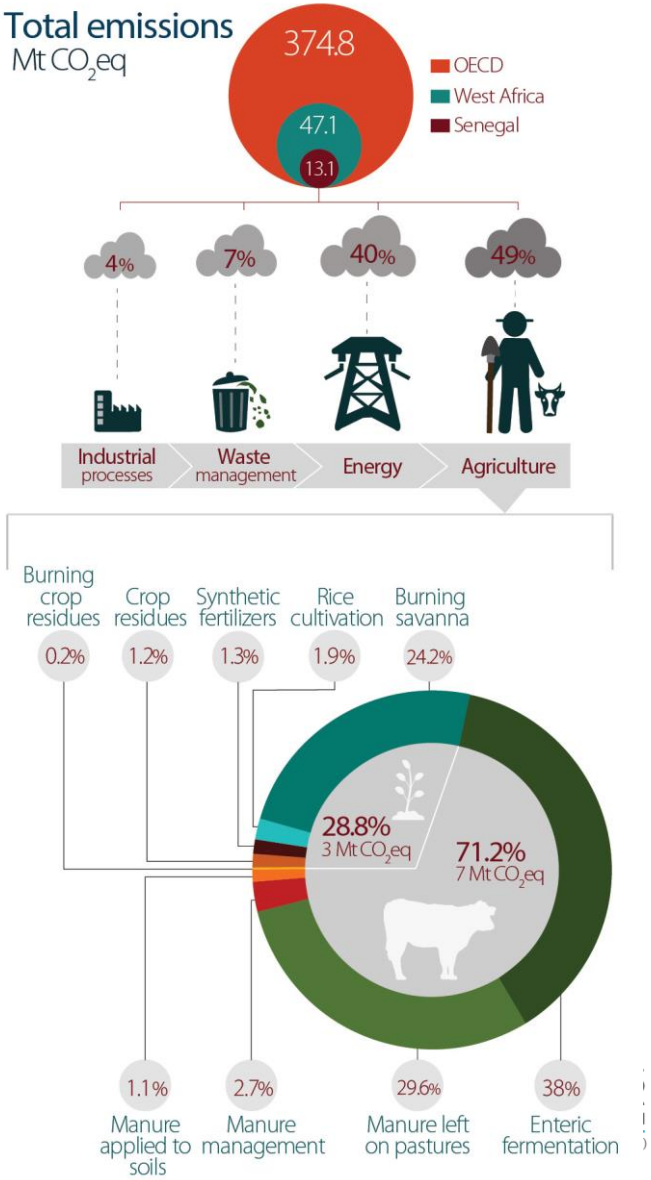
GHG Emissions

Climate Change and variability

Project Change in Temperature and Precipitation by 2030





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* Maps prepared for Kenya (WB, CIAT. 2015)

CSA Practices smartness

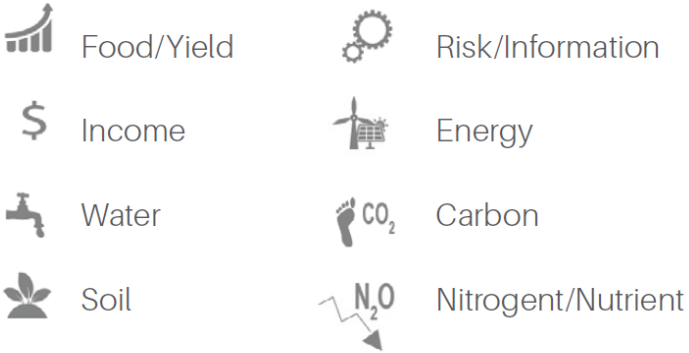
Smartness categories & levels

- Food , income -
- Water, Soil, Risk, Energy –
- Carbon, Nitrogen -

Adaptation	Mitigation	Productivity
Contributes to reductions in on-farm organic waste and odors. Facilitates the elimination of pathogens. Can provide alternative on-farm heating sources	Contributes to reduced methane emissions upon aerobic composting	Increases productivity (on medium and long term) as a result of enhanced soil health and fertility

Maure Composting for Fertilization (Livestock Silvo-pastoral)

-10 to 10 scale



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ENGAGEMENT

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CSA Prioritization Framework

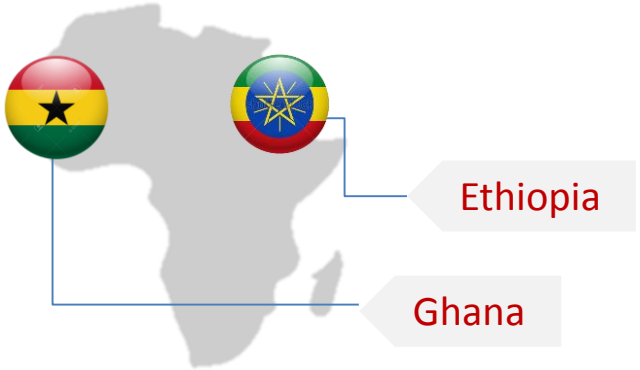
Targeting & Prioritizing

Objective

Provide a participatory process for targeting investment portfolios towards best-bet CSA options contributing to optimized national and sub-national planning

Target Audience

- **Government stakeholders**
- **Development agencies**
- Non-governmental organizations
- Researchers & Farmers



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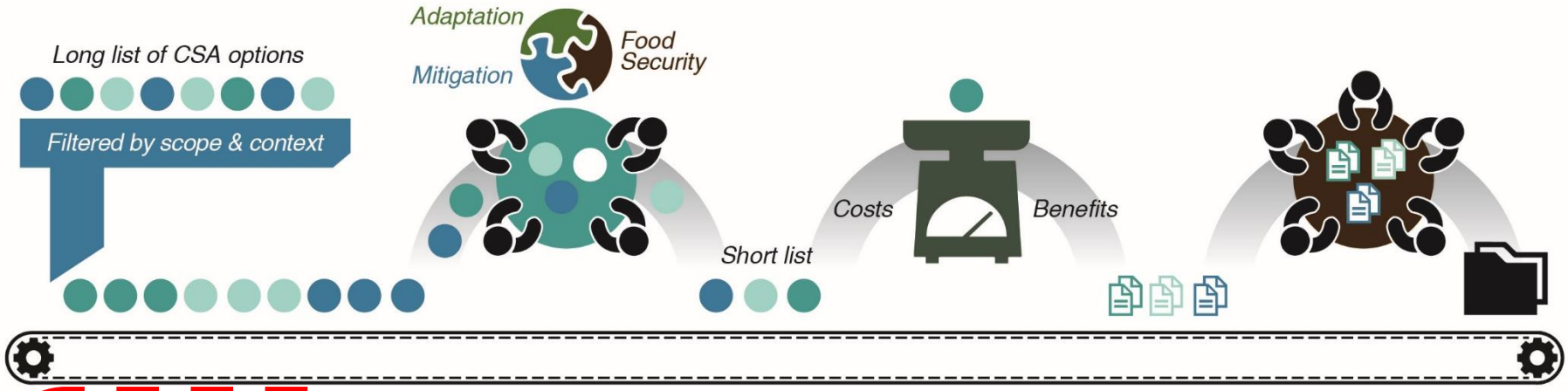
Filters for selecting CSA investment portfolios



Results

- **Scope** – region, commodity
- **CSA indicator** selection
- **long list** of CSA practices

Results

- **Short list** of priority practices and programs
- Stakeholder selection via **workshops**

Results

Ranked short list based on **economic analysis**

Results

- **CSA investment portfolios**
- Identified opportunities and constraints

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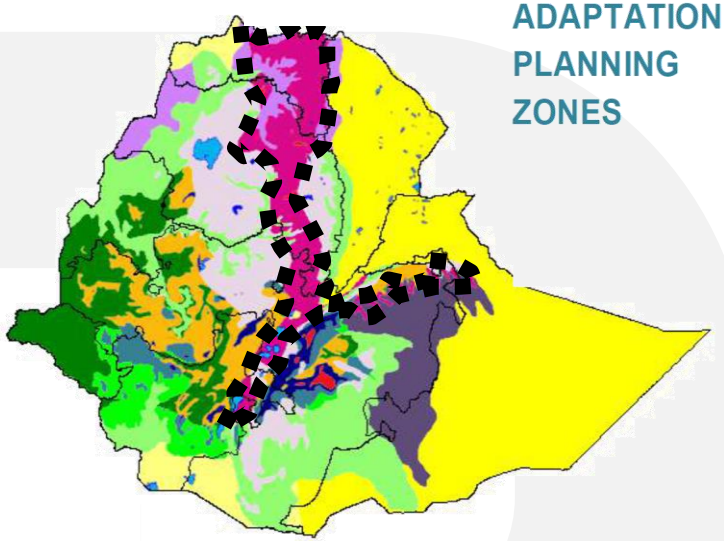
Selecting attributes to assess CSA interventions in Ethiopia

Phase 1

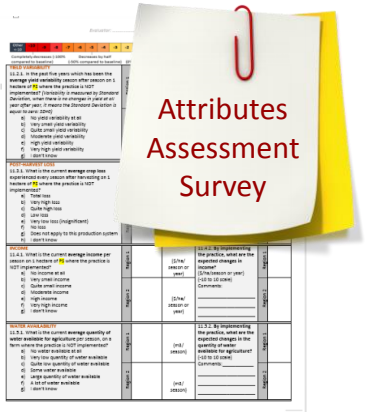


- Establish Expert Group
- Geographic and Cropping System Scope
- CSA Attributes for Assessment
- Long list of applicable CSA interventions
- Identify stakeholders
- Assessment of interventions based on CSA attributes

	CSA Pillar		
Attributes	**Productivity**	**Resilience/Adaptation**	**Mitigation**
	Yield	Food Access	Emission intensity
	Income	Ecosystem services	
	Variability	soil erosion	
	Nutrition	Soil quality	
		Efficient use of water	

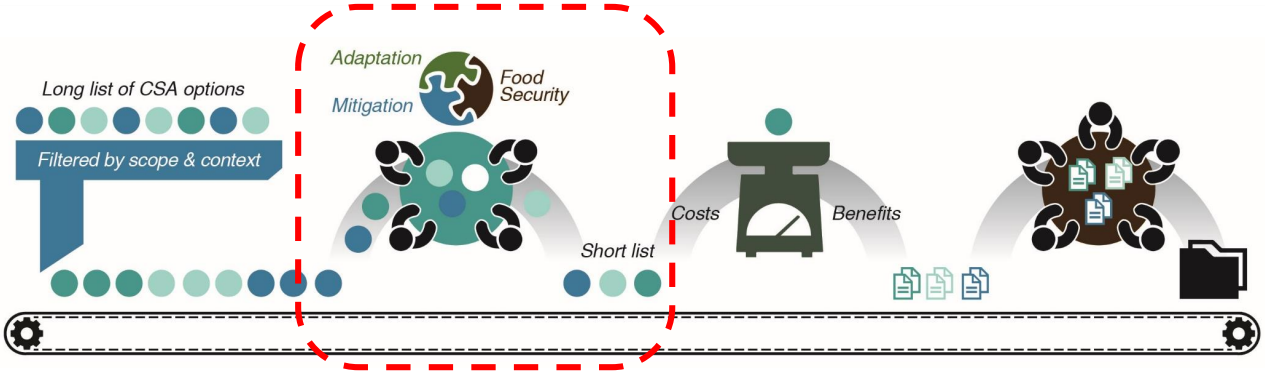
Selecting attributes to assess CSA interventions in Ethiopia

Category of practices	CROPS	LIVESTOCK
Genetic resources	Drought resistant and adapted varieties	Artificial insemination,
Agroforestry	Intercropped, Fruit trees, FMNR	Fodder shrubs, silvopastoral
Nutrient Management	ISFM, efficient use of Fertilizers	Improved feeding
Water Management	Drip-irrigation	Boreholes, pits
Soil and System Management	Conservation agriculture	Pasture management, Rotational grazing
Pests and diseases	IPM	Vaccines
Postharvest	Harvest timing, improved technology, simple technologies (small scale storage)	Cold storage value chains
Energy	Biofuels	Biofuels, biogas

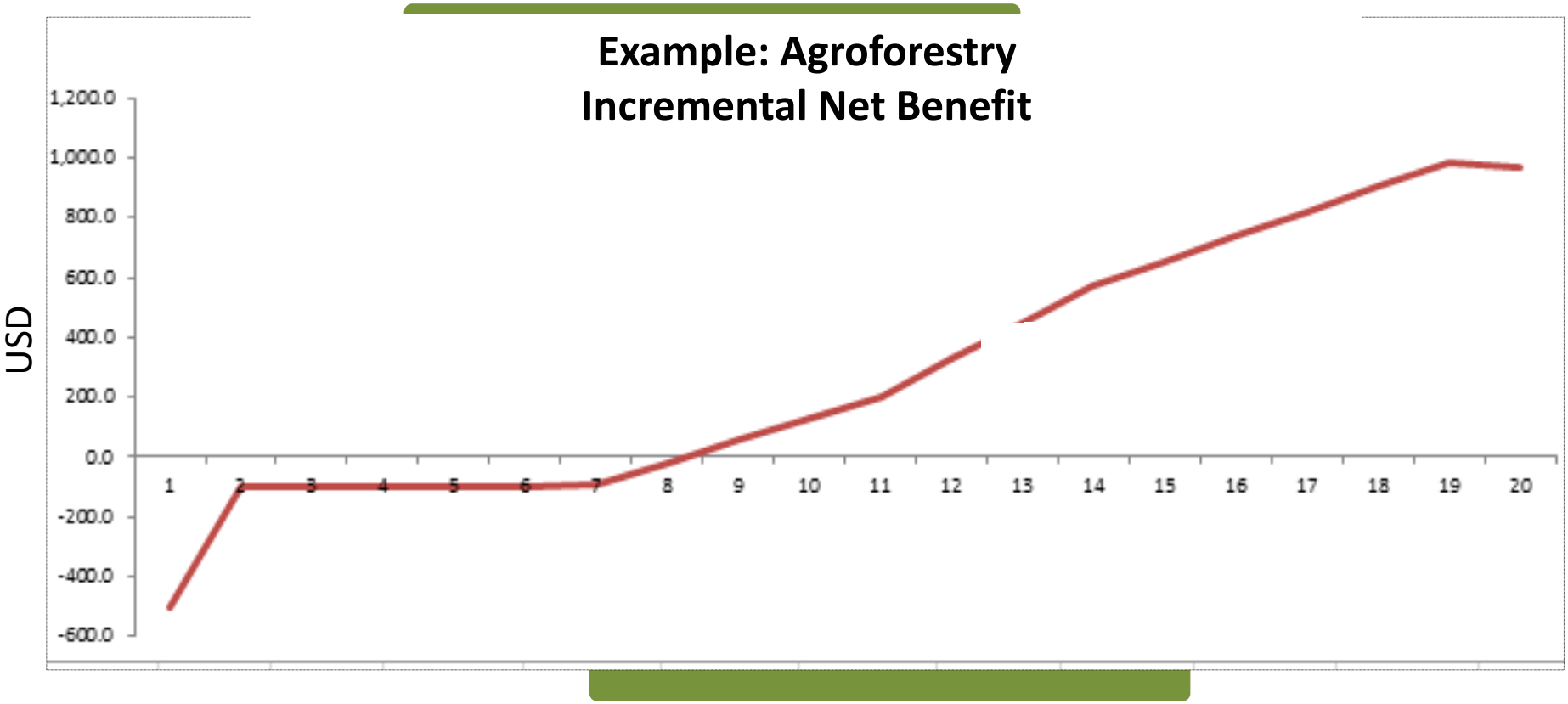


Next step

Phase 2



Cost-Benefit Analysis of CSA practices



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AMEDD

CSA INVESTMENT PORTFOLIO

Sudanese Region - Mali

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No.	Portfolio objectives	Included practices
1	Increase income, food security and capacity to adapt to climate change	Compost production (on-farm)
		Contour bunds (for management of cultivated fields)
		Improved varieties
		Intercropping (sorghum/cowpea)
2	Improve agricultural productivity and farmers' incomes including rural women, to be able to address climate change challenges	Contour bunds (for management of cultivated fields)
		Development of rice valleys
		Development and stocking of ponds
		Improved varieties

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CSA PLAN ENGAGEMENT

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TAKE AWAY MESSAGES

- CSA Country Profiles provide an easy to digest assessment of opportunities to mainstream CSA within the national context. Also can be developed at the subnational level and across value chains.
- CCAFS CSA Prioritization Framework facilitates stakeholders in identifying investment portfolios aligned with stakeholder priorities. Opportunities to expand the approach to prioritize CSA interventions across the value chain.
- CSA Plan can support mainstreaming of CSA into policies and programs across decision-making levels for government, NGO/CSO, private sector and USAID (e.g. CDCS, PAD, portfolio review, etc.)

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ADDITIONAL RESOURCES

- Climate-Smart Agriculture Investment Prioritization Framework
- Climate-Smart Agriculture Prioritization Framework (Concept Note)
- New Latin America country profiles open pathways for reaching climate-smart agriculture

Climate Smart Agriculture: Global Learning and Evidence Exchange

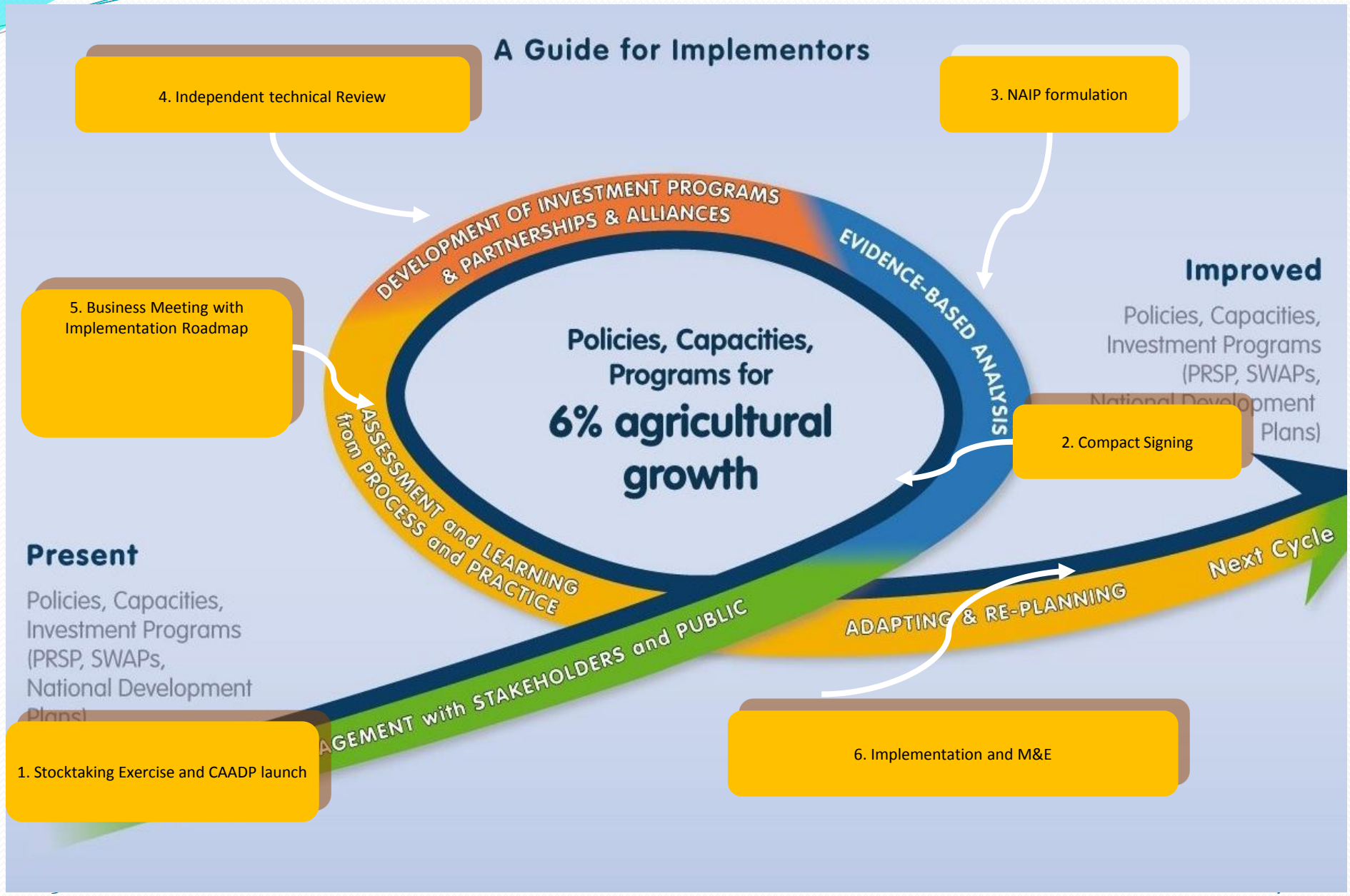
Session: Profiling Climate Smart Agriculture - Pathways, Prioritization, and Plans

Focus: Putting profile in to plan and implementation

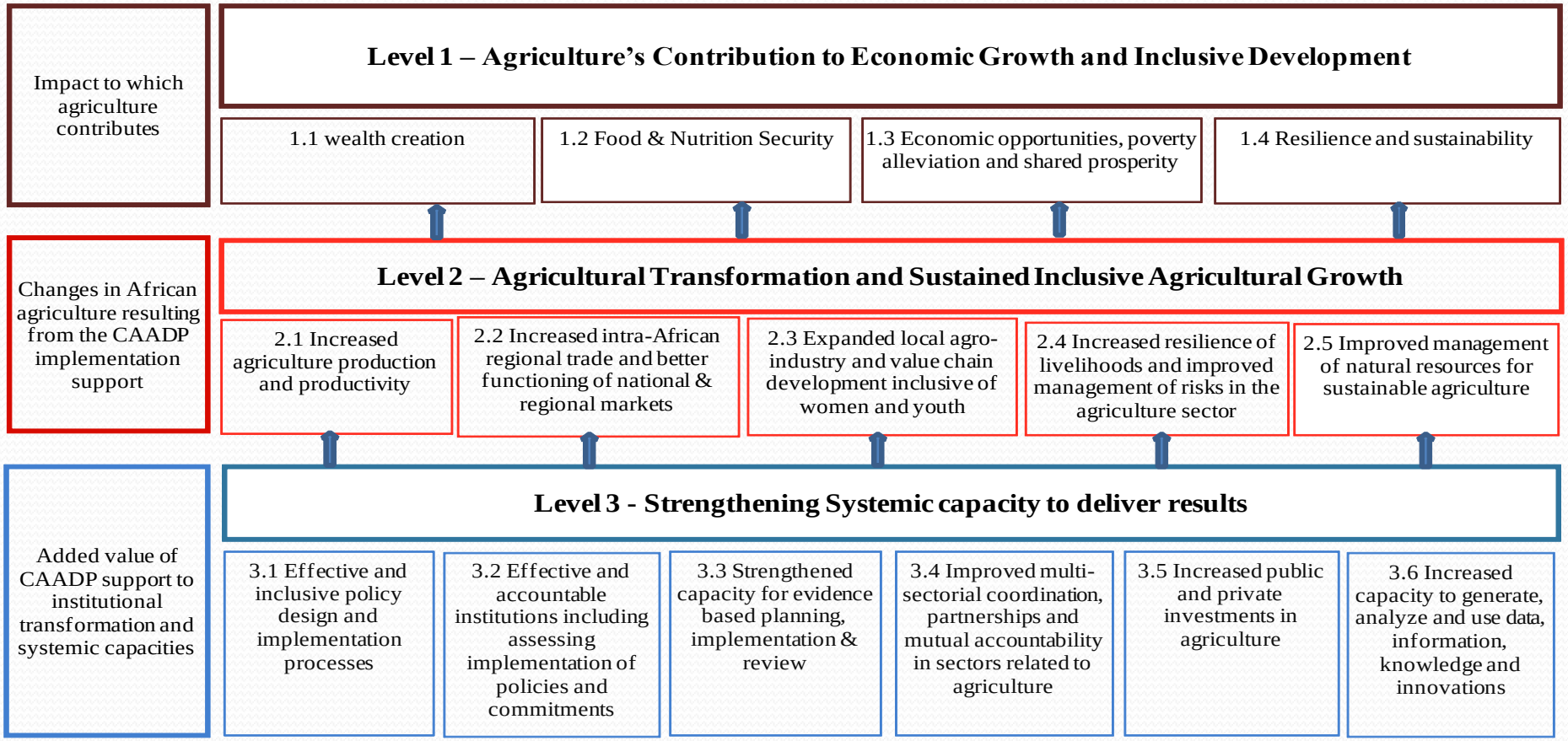
Profiling Climate Smart Agriculture - Pathways, Prioritization, and Plans

- Intended Nationally Determined Contributions (INDC)
  - Agriculture and the UNFCCC negotiations
  - Agriculture is prominent in the African INDCs
    - Climate smart agriculture
  - Most proposed interventions depend on the availability of external finance

Comprehensive Africa Agriculture Development Programme (CAADP)



CAADP 2015-2025 RESULTS FRAMEWORK



Integrating CSA in to Safety Net Program – Ethiopian experience

- Government of Ethiopia notes persistent food insecurity and ecological degradation remain a major problem in many parts of the country
- Rehabilitating degraded land as part of a strategy to build the resource base and reduce competition for natural resources
- Enhanced set of activities to strengthen the capacity of households to generate income and increase asset holdings
- Includes emergency response, climate adaptation and investment to support livelihood transformation

CSA for climate resilient landscape and household asset building

- Ensure that households in vulnerable areas are able to diversify their income sources and increase productive assets
- Build resilient social-ecological systems

- Productive safety nets help to create public goods by conserving the environment
- Important source of income for the poor during slack seasons

- Degraded land turned into grassy pasture land
- Favorable grass species have sprouted all over the area
- Massive soil movement owing to torrential rain was prevented
- Infiltration enhanced water table of springs
- The environment is being reclaimed.

- Assisted in the preparation and implementation of business plans using rotating loan fund from the Food Security programme budget
- Ensure that the business plans are the outcome of household decisions, not the supply-driven
- Grain reserves also used to protect households from distress sale of asset during drought

Thank you !!!!

Ayalneh Bogale

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