Prospective Strategies for Sustainable Mitigation of the Impact of Climate Change on Agriculture and Food Security

Consultative Workshop for the West Africa, North Africa and Central Africa Sub-Regions on the African Climate Change Strategy

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Outline

• Outlook of food insecurity and malnutrition in Africa
• The Challenge to African Agriculture as a Result of Climate Change
• Opportunities for Integration
• Options for Striking a Balance between GHG Mitigation and Resilient Food Systems
• Interventions with Potential Impact on Agriculture & Food Security
The Grim Picture of African Agriculture

Yields for aggregated commodities in Africa and Asia, 2018

Source: FAO
The Grim Picture of African Agriculture

Growth in projected yields for selected crops and countries, 2021-2023

## Entrenched Food Insecurity and Malnutrition: The Stats

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Africans that are chronically undernourished</td>
<td>↑</td>
<td>250.3 million</td>
</tr>
<tr>
<td>Number of Africans experience moderate food insecurity</td>
<td>↑</td>
<td>426 million</td>
</tr>
<tr>
<td>Number of Africans who experienced food insecurity or hunger and required urgent food assistance</td>
<td>↑</td>
<td>73 million</td>
</tr>
<tr>
<td>Proportion of African who cannot afford a “nutrient adequate” diet</td>
<td>↑</td>
<td>51%</td>
</tr>
<tr>
<td>Proportion of African who cannot afford an “energy sufficient” diet</td>
<td>↑</td>
<td>11.3%</td>
</tr>
</tbody>
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Source: FAO
The Challenge to African Agriculture as a Result of Climate Change

- Rising trends in incidences of drought, esp. in Northern and Southern Africa, as a result of rising temperatures
- Increased intensity of extreme weather events
- Fluctuating rainfall decreasing crop and livestock yields
Opportunities for Integration: High Policy Anchoring of “Sustainability”

**AU Summit**
Paradigm shift to “sustainable agriculture” in the AU flagship for agriculture sector growth and transformation – CAADP

- 2014 Malabo Declaration stresses enhanced conservation and sustainable use of natural resources through coherent policies

**Global Ambition**
The centrality of “sustainable development” in the SDGs

- SDG 1: “Zero hunger: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture”

**Africa Agenda 2063**
Ambition #1: “Inclusive growth and sustainable development

- “We aspire that by 2063, Africa shall be a prosperous continent, with the means and resources to drive its own development, with sustainable and long-term stewardship of its resources”
The Opportunities for Integration: Growing Support for Cutting GHG Emissions

- Creation of Global Research Alliance on Agricultural Greenhouse Gases
- Growing global and regional shift for climate smart agriculture
- CGIAR Research Program on Climate Change, Agriculture, and Food Security (CCAFS)
Options for Striking a Balance btw GHG Mitigation and Resilient Food Systems

Demand side: Shift current consumption patterns
- Vigorous mobilization toward consumption of less carbon-intensive diets
- Reductions in food loss and waste

Supply side: Efficient food production
- Improved and efficient production of inorganic fertilizer vs. use of organic alternatives (e.g. increased use of stored manure)
- Reduction in enteric fermentation emissions from the largest cattle herd through improved rangeland management systems

Enforcement of regulatory frameworks
- Enforcement of greater transparency and accountability in corporate supply chains
- Incentives for strict compliance to international standards (e.g. UNFCCC and WTO)

Improved management and preservation of soil carbon
- Improved maintenance of soil organic matter as a strategy for reducing carbon sequestration

Interventions with Potential Impact on Agriculture & Food Security

Crop and Livestock insurance schemes and social protection strategies
- Drought and other agriculture risk insurance
- Targeted subsidies
- Budget allocations for social protection for conditional cash transfers

Improvements in production systems
- Adjustments in what is planted
- Use of smart and innovative agricultural irrigation technologies
- Increased use of inorganic fertilizers and pest-control substances

Scaled adaptation of proven strategies
- Diversification of livelihoods and food production
- Scaled up implementation and monitoring for results of the Hyogo Framework for Action on DRR
Thank You