Agricultural Innovation for Resilience
Global & Regional Initiatives - An FAO perspective

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Overview

1. FAO

2. Global Strategy – Climate-Smart Agriculture

3. Global Initiatives

4. Regional Initiatives
Global Goals

1. The eradication of hunger, food insecurity and malnutrition;

2. The elimination of poverty and the driving forward of economic and social progress for all; and

3. The sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generation.
Role of FAO

Facilitator
Catalyst
Bridge
Resource
FAO Action on Climate Change

Categories of action
- Support to the global climate framework & processes
- Guidance & knowledge for policies & strategies
- Specific plans, measures & interventions

Activities

Geographical Scope
- Global
  - Support to UNFCC Processes
  - Advocacy for Members
  - Technical Support to IPCC
- Regional
  - Facilitating global platforms to coordinate action on climate change
  - Forming partnerships
  - Developing tools & datasets to enhance adaptation & low emissions agriculture systems
  - Sharing good practices
- National
- Local
  - Implementing field programmes
  - Facilitating access to finance
  - Applying tools, technologies & practices
  - Facilitating climate field schools

Supporting development of:
- INDCs
- NAMAs
- NAPs
- REDD+
Global Strategy

Climate Smart Agriculture

An approach to help guide actions to transform and re-orient agricultural systems to effectively and sustainably support food security under the new realities of climate change.
More Productive
Resilient
Low Emission

Photo credit: FAO
Examples

- **Reduced** use of *resources* including water, seed, and fertilizer
- **Productivity** maintained or increased
- **Local capacity** to monitor climate *enhanced*
- Community supported measures to strengthen resilience such as stress tolerant varieties and water management practices adopted
FAO Support to enable CSA

Examples

- **Generous** donor support
- Drawing on **FAO technical expertise** across a range of disciplines
- Technical **norms** and **standards** developed
- Range of **data** and **information** produced to guide action
- **Lessons integrated** into policies, plans & programmes

Integrating Agriculture into NAPs (NAP-Ag)

Mitigating the Impacts of Climate Change in Agriculture (MICCA)

Reducing Emissions from Deforestation & Forest Degradation (UN-REDD)
FAO’s Work – Setting norms

- FAO is generating evidence on CSA at global, regional, national, sub/national levels
- Systems developed for different climatic, agro-ecological and socio-economic conditions – and from policies to practices
- Lessons harvested at different levels are being shared in various normative tools and products and policy and field programs
- Research and piloting CSA involves collaboration with national and international research institutions and development partners

FAO Guidance - CSA

- **CSA Sourcebook** – Module based guide covering all aspects of CSA implementation
- **Planning & Implementing CSA** – Guidance for small scale agriculture
- **Integrating gender** – Guidance for CSA practitioners
- **Costs & Benefits** – Assessments of CSA practices in Africa, Asia and Latin America
- **Best Practices** – CSA case studies from around the world
- **Media** – Videos, Webinars, Discussion Groups

FAO’s Work - Developing tools

• Solutions to challenges of monitoring and verifying the GHG emission reductions and other benefits

• FAO develops methods and tool for more and localized data on:
  – Potential impacts of climate change
  – GHG emissions from agriculture and related mitigation potential

Selected FAO Tools - Climate Change

• **Ex-ACT** – Prepare project-based GHG assessment for agriculture & land-use

• **GLEAM-I** – Develop livestock GHG assessments & inventories

• **OpenForis** – Prepare high resolution land-use accounts & monitoring systems with free and open-source software

• **MOSAICC** – Prepare agriculture climate change impact assessments

• **ASIS** – Prepare assessments of agriculture systems under stress

Challenges for Scaling up CSA

• Sector involves **many actors** across a wide range of landscapes.

• FAO has found that there is **low adoption** rates of more sustainable agriculture production systems such as **CSA** amongst individual farmers and **limited scaling up**.

• **Transitioning** to new, more sustainable systems **involves** upfront investment **costs**, producer **risk** and transactions costs.
Challenges for enabling investment in CSA

Perspectives from the private sector

Finance

Agri-business SMEs and Small Holder Farmers (SHF) have limited access to finance.

Banking sector perceives lending to agri-SMEs and SHF as relatively high risk.

Banks and larger agri-business companies do not incorporate CSA or sustainability into their investment decisions.

Figure - Risk Profiles along the Agricultural Value Chain
Illustrative Example

Source: World Bank, 2016, Making Climate Finance work in Agriculture
Challenges for enabling investment in CSA

Perspectives from the private sector

Communication

Limited channels for policymakers, businesses, SFHs, and financial institutions to exchange views

This leads to reduced ability to align government policy, private sector priorities and needs of SMEs & SHFs

Absence of opportunity to build business case for CSA investments

Source: USAID & FAO, 2017, Private sector perspectives on key challenges & priority actions to advance climate-smart investment in Southeast Asia
Challenges for enabling investment in CSA

*Perspectives from the private sector*

**Figure** – Global Share of Greenhouse Gas Emission from AFOLU Sectors in 2010
Percentage compared to other economic sectors

**Source**: FAO, 2016; Rosenstock et al, 2017; USAID & FAO, 2017, *Private sector perspectives on key challenges & priority actions to advance climate-smart investment in Southeast Asia*

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**Capacity**

SMEs & SHFs have limited technical capacity to collect, verify, and report farm-level data

Government has limited ability to aggregate, verify, and report emission reductions by stakeholders

**Data**

Lack of systematic way to aggregate, report, and verify emission reductions in agricultural and forestry commodity value chains
Broad principles for scaling-up CSA

- Base investments on value chain analysis
- Leverage domestic investment in agriculture and make it more sustainable
- Link research and good practices to farmers
- Reduce or transfer risk with safety nets
- Provide facilities to reduce upfront costs
- Build and strengthen monitoring and reporting systems
- Link green infrastructure to sustainable producers

Figure - Estimated Annual Investment in Agriculture
By Source US$ billion

Global Initiatives

GACSA

A multi-stakeholder platform for open and transparent dialogue for sharing, learning & exchange of knowledge, experience, expertise and views on scaling up CSA
GACSA Platform

• Secretariat housed in FAO HQ

• Rapidly expanding and increasingly diverse CSA platform

• 180 GACSA Members

• New members demonstrate increasing stakeholder diversity both geographically and in organization type

• Member CSA work occurring in more than 100 countries

Source: GACSA Member Survey
GACSA Objectives

Primary Focus

• Improve food security and nutrition in the face of climate change by working towards sustainable increases in the productivity of food systems

• Help relevant stakeholders to adapt food system policies and practices to the dictates of climate change and promote efficient and sustainable use of natural resources

Aspirational Outcomes

• Sustainable and equitable increases in agricultural productivity and incomes;

• Greater resilience of food systems and farming livelihoods;

• Reduction and/or removal of GHG emissions associated with agriculture where possible
GACSA Structure

1. The Annual Forum – High level platform
2. The Strategic Committee - Two elected Co-Chairs:
3. Facilitation Unit
4. Action Groups (on Knowledge, Investment, Enabling Environment)
GACSA Activities

*Through concrete action and initiatives*

- **Knowledge**: Increase & promote translation of knowledge, R&D into technologies, practices & policy approaches for CSA; and sharing thereof
- **Investment**: Improving the effectiveness of public and private investments that support the three pillars of CSA
- **Enabling Environment**: Integrating CSA into policy, strategies and planning at regional, national, and local levels and across landscape

Cross-cutting projects, e.g. Country case studies
GACSA Resources

- GACSA Knowledge products and guidance
  - Country case studies
  - Practice briefs and knowledge products
- GACSA’s YouTube Channel
  - 160 + CSA videos from across the membership and across the world; Consumption of webinars on YouTube can significantly broaden the audience
- Online courses in CSA practice
  - One developed by Climate-KIC, Wageningen University, and Reading University.
  - Another course developed by the University California, Davis
Partner Global Initiatives

- USAID - Feed the Future and Climate Economic Analysis for Development, Investment and Resilience
- CGIAR Programme on Climate Change Agriculture and Food Security - Climate Smart Villages
- World Bank – Investment in CSA
- World Business Council on Sustainable Development – CSA Action Agenda
Regional linkages – a constellation

How to foster collaboration to achieve greater impact

- GACSA
- Africa CSA Alliance
- West Africa CSA Alliance
- East Africa CSA Platform
- Central Asia and Central America
- North America CSA Alliance
- ASEAN Climate Resilient Network
- Europe CSA Network
Regional Initiatives

CCRI

Engage with country governments, private-sector and partner organizations to facilitate dialogue on scaling up action in support of agriculture and forestry contributions under the Paris Agreement.
Basis - Paris and Asia-Pacific

- Under the Paris Agreement, developing countries in Asia-Pacific have signaled Agriculture (crops, livestock, forestry, fisheries and aquaculture) as a key concern.

- Countries have identified 256 INDC priority actions for the Agriculture sectors.

- The way INDCs prepared clearly influences perceived need for action.

**Figure** - Number of INDC actions for agriculture and land-use sectors in Asia-Pacific.

By country.
Action in ASEAN - Example

- In September 2016 senior officials from ASEAN Member States proposed a **common regional position** on agriculture and climate change based in part upon the INDC analysis presented in this paper.
- This position was later **officially adopted** by ASEAN Ministers of Agriculture and Forestry.
- The position was presented in **coordinated** manner by ASEAN at UNFCCC COP22 in Marrakesh and also influenced negotiating positions of the Group of 66 Plus China.
- Process was supported by ASEAN CRN, CCAFS and FAO.

**Figure** - INDC Actions by sub-sector

By country ASEAN
## Regional Initiatives

### FAO Flagship Initiatives

<table>
<thead>
<tr>
<th>Climate Change</th>
<th>One Health</th>
<th>Zero Hunger</th>
<th>Blue Growth</th>
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<tbody>
<tr>
<td>• Support for agriculture NDC implementation strategies and enhanced transparency</td>
<td>• Preventing and mitigating health threats at the Animal-Human-Plant-Environment interface</td>
<td>• Strengthened national food security policies, data collection and analysis</td>
<td>• Increased resilience of inclusive aquaculture and fisheries value chains</td>
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<td>• Covers Antimicrobial Resistance (AMR), Emerging Infectious Diseases (EID), Pests and Food Safety</td>
<td>• Improved nutrition-sensitive interventions</td>
<td>• Improved access to quality inputs, technologies and markets</td>
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Summary

• FAO, GACSA and partners working with member countries to put climate-smart innovations in the hands of farmers

• Challenges to scale-up CSA are being identified and addressed

• Being connected to CSA networks and partners can open up opportunities to engage, learn and act at global, national and local levels
Thank You

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