

Climate-smart agriculture at FAO

FAO activities and current status of CSA alliance

High-Level Forum on “Climate Change and Food Security
in the LLDCs and SIDs in Asia and the Pacific”

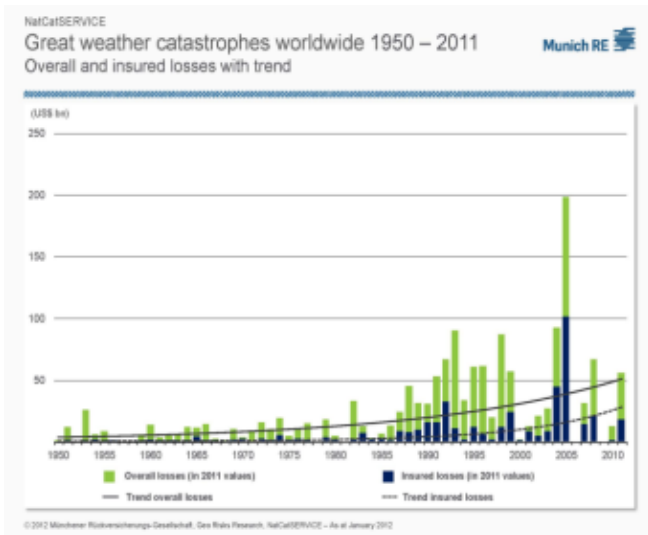
Ulaanbaatar, Mongolia, 12 March 2014



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Climate change impacts: short and long run



Short run: Increased variability

Increased frequency and intensity of shocks

Long run: Major changes in temperature & rainfall patterns

➤ Climate change **creates new** risks and **challenges** and **exacerbates existing vulnerabilities**

➤ **Loss of biodiversity, land degradation and water scarcity** are additional environmental challenges

Why is CSA needed?

- **Climate change** will have direct **impacts** on agriculture and food security of a growing population
 - World's population will increase by one-third by 2050
 - FAO estimates that agricultural production will have to increase by 60%
 - However, climate change is estimated to have reduced global yields of maize and wheat by 3.8 % and 5.5 % since 1980.

- **Agriculture (including land use change and deforestation)** contributes to **20–30 % of the anthropogenic GHG emissions**
 - GHG emissions from agriculture grew 1.1 % per year during 2000–2010

- **Main effects on agricultural production are:**
 - Increased variability of production
 - Decrease of production in certain areas
 - Changes in the geography of productions

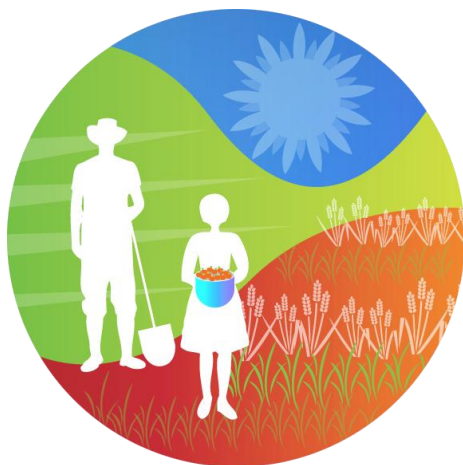
FAO's position on climate change

- **Agriculture should undergo a significant transformation**
 - **Agricultural systems need to sustainably produce more food with increased resource efficiency**
 - **A major shift is needed in the way natural resources are managed**
 - **Developing countries and smallholders in particular are the hardest hit by climate change and they require FAO's assistance to adapt to climate change**

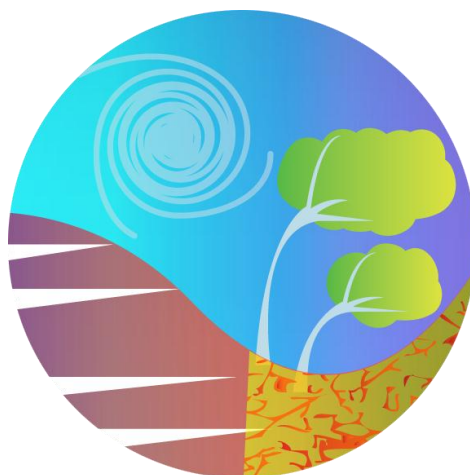
What is CSA?

CLIMATE-SMART AGRICULTURE 3 pillars

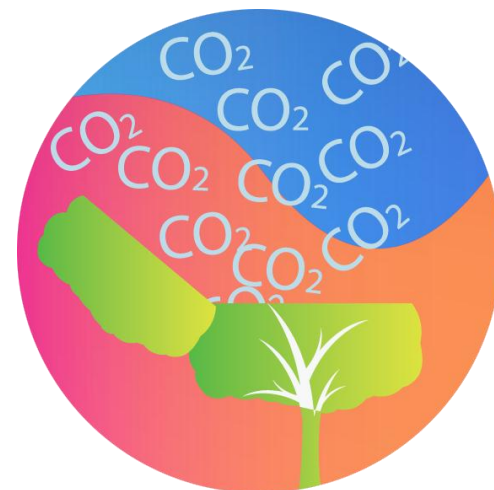
SUSTAINABLY INCREASING
PRODUCTIVITY AND INCOME



ADAPTING AND BUILDING RESILIENCE
TO CLIMATE CHANGE



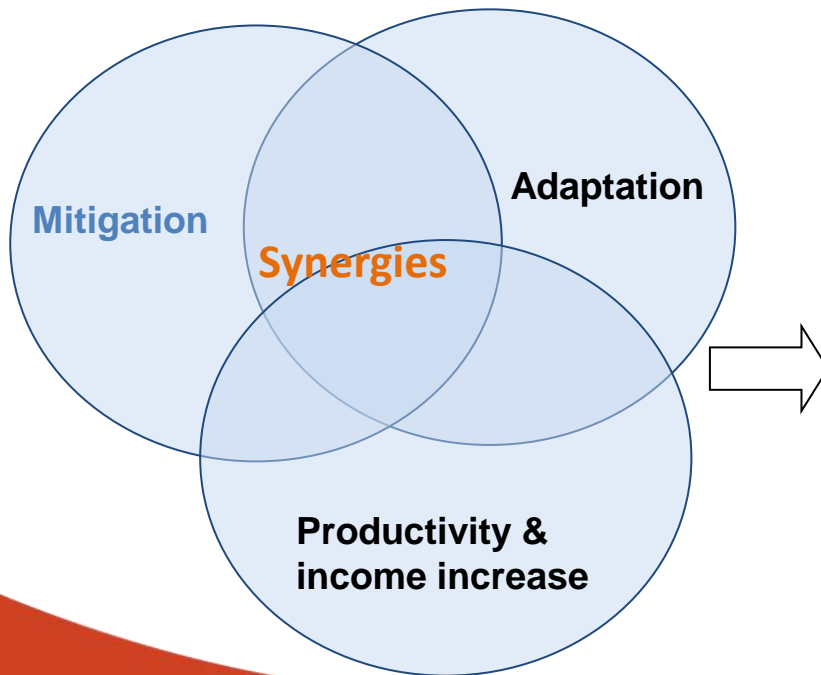
REDUCING AND/OR REMOVING
GREENHOUSE GASES EMISSIONS



FAO and CSA

....how to address the multiple demands placed on agriculture

CLIMATE-SMART AGRICULTURE Encompassing 3 pillars:



- creates synergies! between food security, adaptation and climate change mitigation

Main objective:

- Pathway towards **enhanced food security** and **development goals**

climate change mitigation is a potential secondary co-benefit, especially for low-income, agricultural-based populations

Key FAO publications on CSA

2010

"Climate-smart" Agriculture:
Policies, Practices and Financing
for Food Security, Adaptation
and Mitigation



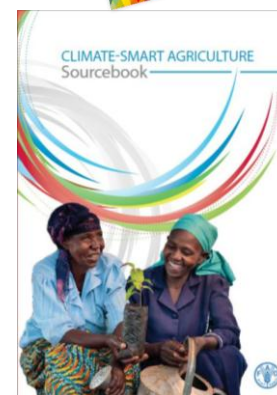
2012

3 FAO papers on CSA
developed for the Vietnam
Conference



2013

Climate-smart Agriculture
Sourcebook



CSA Sourcebook

structure and target audience

Section A

1. Concept and scope



2. Landscape approach



Section B

3. Farming practices



4. Farming systems



5. Food chains



Section C

6. Institutions



7. Policy



8. Finance



9. DRR



10. Safety nets



11. Capacity development



12. Assessment



TARGET
AUDIENCE

PLANNERS

PRATICITIONERS

POLICY
MAKERS

CSA knowledge portal



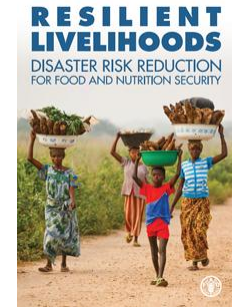
- **Web platform** as a dynamic hub
- **Constantly updated** with new information
- **Entry point for info** on how to make agriculture, forestry and fisheries part of the solution climate change's negative impacts
- Workspace for climate-smart practitioners to **share documents, exchange information** and **views**

<http://www.climatesmartagriculture.org/en/>



FAO's work on CSA is linked to other important FAO Climate Change initiatives (1)

- FAO-Adapt: Framework Programme on Climate Change Adaptation
- Climate change adaptation (CCA) and Disaster Risk Reduction (DRR)



- Better data on emissions & mitigation options
 - Analysis on **climate-smart farming practices**
 - Capacity development and policy advice
- Direct in-country support and international functions to get countries ready for REDD+ under UNFCCC
 - FAO focus: Monitoring & Governance



FAO's work on CSA is linked to other important FAO Climate Change initiatives (2)

Economics and Policy Innovations for CSA

Supports countries to formulate **agricultural investment proposals** to increase resilience to climate change and **promote CSA**



FAO's Forest and CC Programme

Works with partners at **local, national, regional and international levels** to enhance knowledge, expertise and action in CC



FAO's Fisheries and Aquaculture CC Programme

Code of Conduct for Sustainable Fisheries and **Ecosystem Approach to Fisheries and Aquaculture** (EAF/A) and Global Partnership for Climate, Fisheries and Aquaculture



Sustainable Crop Production Intensification

Productive agriculture that **conserves and enhances natural resources**



Selected FAO success stories on CSA



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The Three Rivers Sustainable Grazing Project

- A pilot project in the Qinghai province of **China**
- Yak- and sheep-herding households select management options related to grazing intensity, grass cultivation and animal husbandry

Project's goal

- Restore degraded grazing land and sequester soil carbon, increase productivity, build resilience and improve livelihoods in smallholder herder communities
- The average annual mitigation potential in the first 10 years of the project were an estimated 63 000 tonnes of CO₂ eqv. per year.



Works with governments, research centres, universities and other institutional partners to support the transition to CSA by using **economic and policy analysis**

Vietnam (Northern Mountains)

- Conservation land management practices for maize systems in the uplands and barriers to their adoption
- Diversification of productive activities into other crops (such as coffee and tea)

Sustainable Forest Management in the Philippines

A three-year FAO project

Promoting assisted natural regeneration for effective low-cost forest restoration, as a means to halt further forest degradation while increasing carbon sequestration and contributing to climate change mitigation.



Towards the CSA Alliance



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Main events

- October 2010: 1st Global Conference on Agriculture, Food Security and Climate Change (AFC Conference), The Hague. Launch of FAO Concept & Concrete Roadmap for action. 60 Ministers attended.
 - March 2011: 1st Global Science Conference on CSA, Wageningen University.
- September 2012: 2nd Global AFC Conference Hanoi, Vietnam. Outcome: stocktaking and follow-up actions, launch CSA Platform.
 - March 2013: 2nd Global Science Conference on CSA, UC Davis University, California
 - October 2013: Consultative meeting to create Alliance on CSA, The Hague.
- **December 2013: 3rd Global AFC Conference in Johannesburg, South Africa**: Outcome: Launch of Design Phase of the Alliance on CSA.
- January 2014 SG's Climate Summit Retreat, New York. Alliance on CSA among topics Summit Agenda for Action.
- January - September 2014: Regional Consultative Meetings leading to the Secretary –Generals Climate Summit in September 2014. Followed by implementation phase.

Nature and objectives of the Alliance

Goal of the Alliance

Catalyze coordinated and effective initiatives for action on the ground to address food security and climate change challenges through CSA.

The Alliance will be:

- A food security focused, agriculture-driven and action-oriented coalition;
- An all-inclusive platform for dialogue and debate, advocacy and inspiration for a CSA vision.

Membership

- The Alliance will be a self-governed voluntary consortium open to governments, international and regional organizations, institutions, civil society and private organizations

Functions of the Alliance

- To facilitate the identification of the potential key and priority areas of work, three action groups have been created on:
 1. Knowledge
 2. Investment
 3. Enabling Environment
- A team of partners is developing a proposed alliance structure and protocols for its operation
- Consultations are currently underway
- If you are interested in finding out more about the Alliance, please contact climate-change@fao.org

THANK YOU



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