Food and Agriculture Organization of the United Nations

HRVATSKA AGENCIJA ZA HRANU

- Climate Smart Agriculture –

Sustainable development in a changing climate

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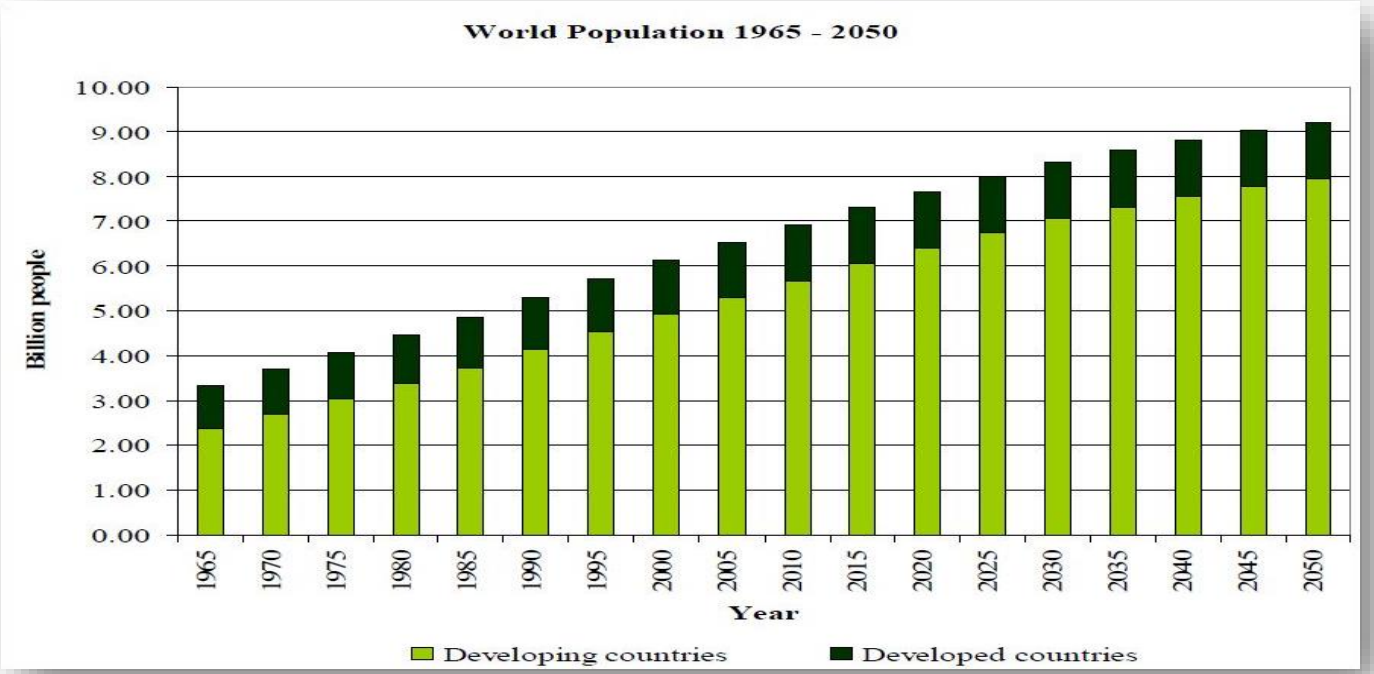
Outline

- Why was CSA created?
- What is CSA?
- Examples
- Next steps in the region

Why CSA? Global Trends

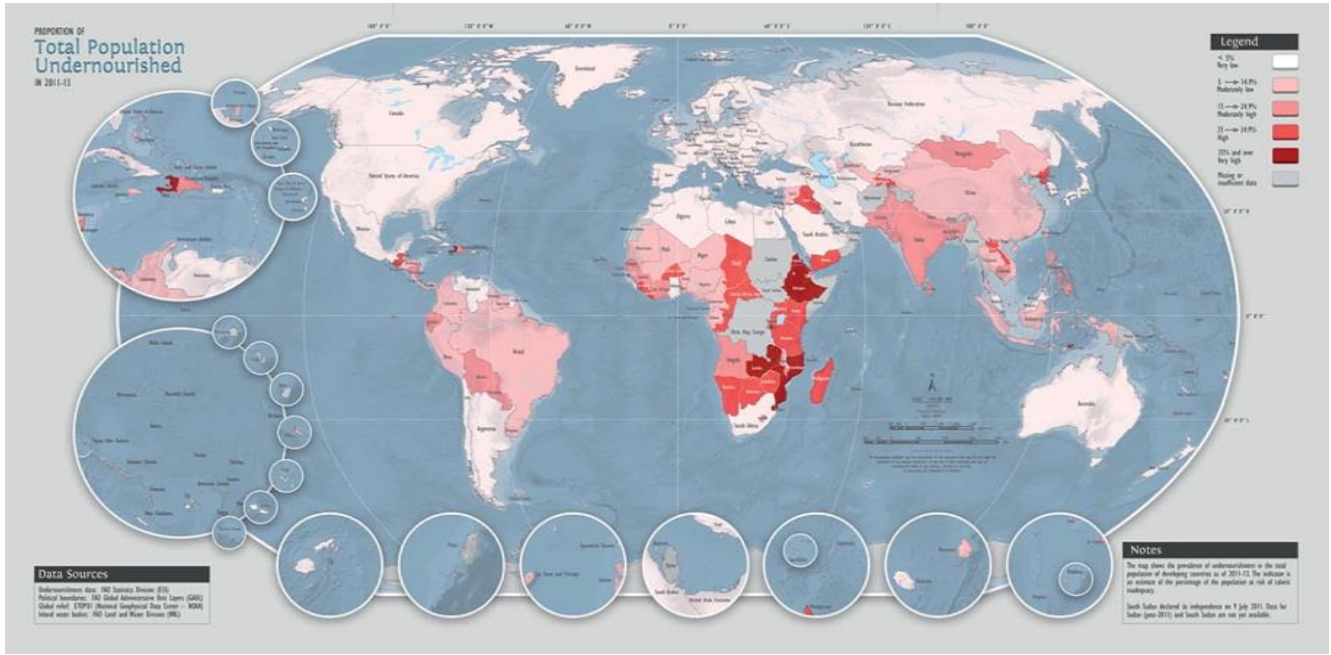
- Population growth
- Change in diets
- Unsustainable use natural resources
- Environmental degradation



Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007)

Why CSA? Climate change impacts

- Short run
- Long run

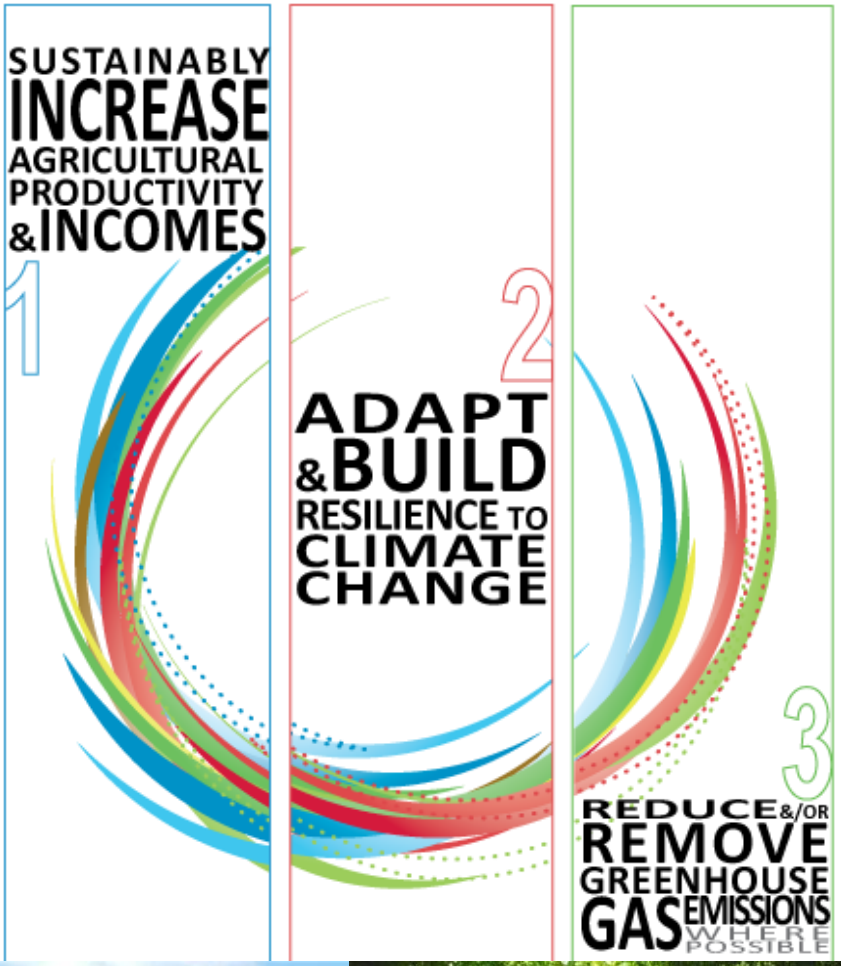


- Climate change **creates new risks** & **challenges** and **exacerbates existing vulnerabilities**

Why CSA? Uncoordinated responses

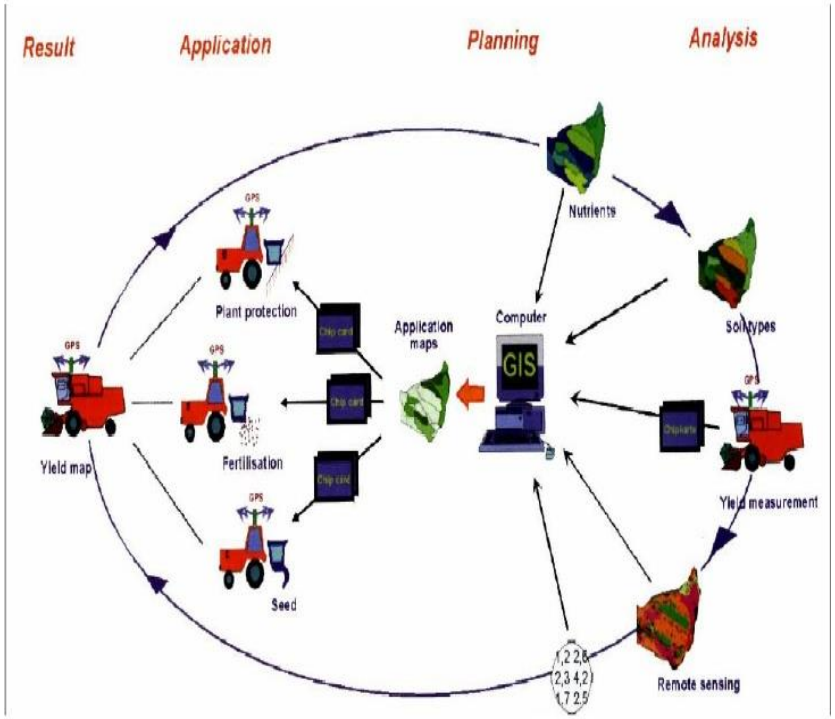
- Lack of coordination of responses between sectors
- Separation of adaptation and mitigation in UNFCCC
- Lack of understanding of the role of agriculture in CC and food security
- Need to link CCA/CCM and DRR into main agricultural and rural development interventions

Climate Smart Agriculture

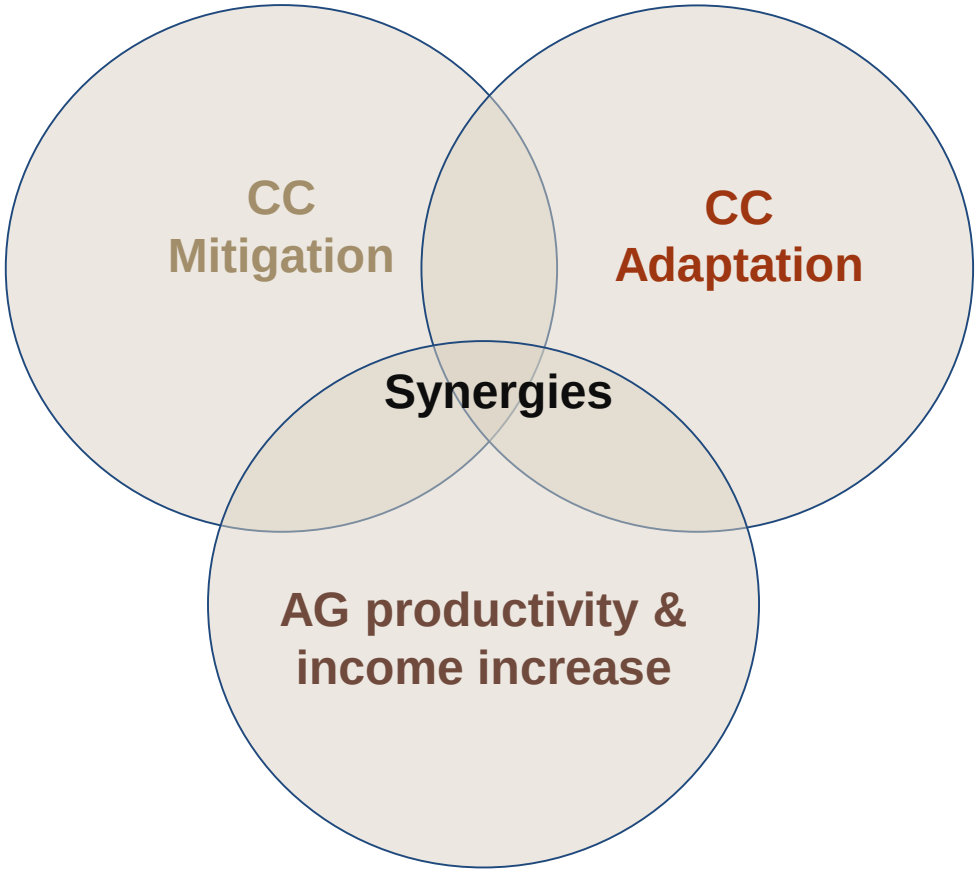


A global approach with locally appropriate actions

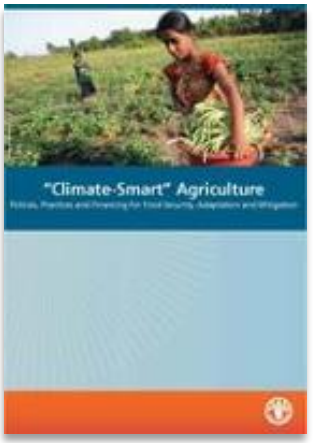
- CSA **is not** an agricultural practice or system *per se*
- CSA is **location-specific**
- CSA applies **across scales**
- CSA is **cross-sectoral**



Climate Smart Agriculture (CSA)



Concept evolution



- **2010:** CSA was introduced as a concept by FAO at the *Global Conference on Agriculture, Food Security and Climate Change* in the Hague.

- **2012:** CSA Landscapes, Country implementation, Green Economy

- **2010-2014:** Widespread interest in and uptake of the concept, both among partner organizations and countries. www.fao.org/docrep/018/i3325e/i3325e

CSA Sourcebook

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

PLANNERS

PRATICTIONERS

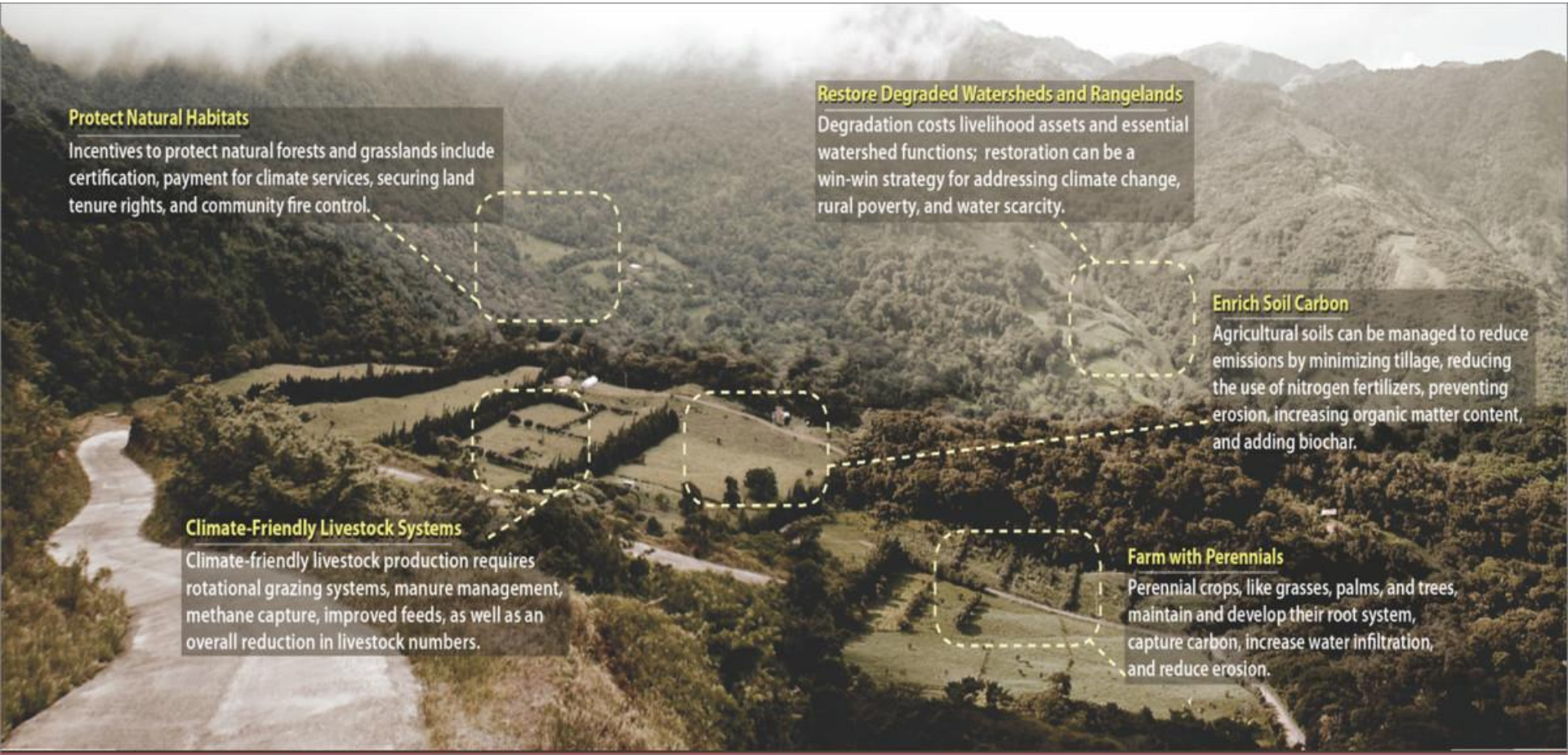
POLICY MAKERS

Identifying suitable on farm and agricultural options

- Intensification of production
- Sustainable & efficient use of resources
- Climate smart agriculture practices

Landscape & ecosystem level

- Integrated landscape approach: synergies for AG production through coordinated actions at farm, ecosystem & landscape scales.



Scherr et al. 2012

CSA – value chains

Reducing food losses and waste - challenge and opportunity

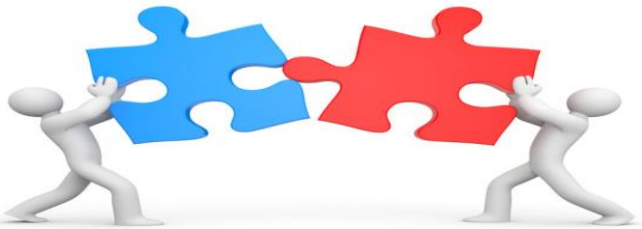
Enabling environment

Local and national

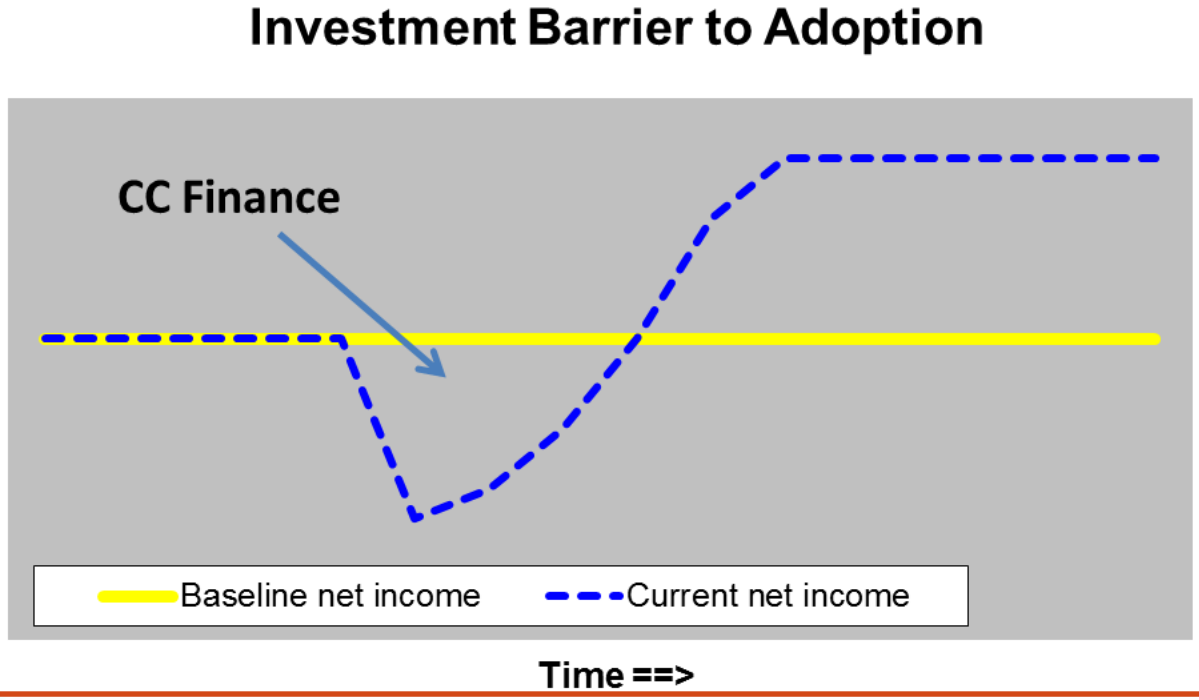
Policy alignment
Legislation
Incentives/taxation
Financial flows
Coordination

Farmer

Access to services
Access to knowledge
Access to Markets
Safety nets



Linking CC finance to overcome agriculture investment barriers



Rice Production System

Alternate wetting and drying in irrigated rice

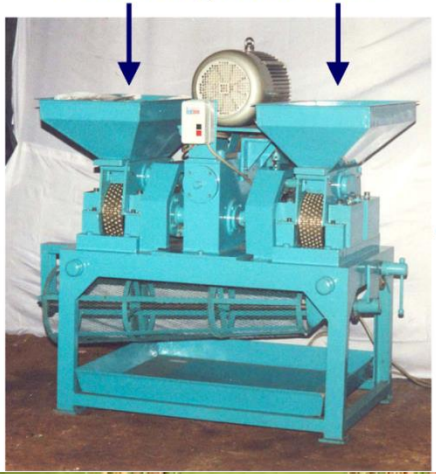
- Reduce methane emissions by 48%
- Reduce water use up to 30%
- Lower energy use
- No fish system
- Biodiversity ecosystem loss

Fertilizer Deep Placement

Production of briquettes

Its production in the village…

Prilled or granular urea



Briquettes bagged and sold to farmers near the village

IFDC

Increase yield by 18 percent

More labor intensive (woman)

Reduced fertilizer use by 1/3

Less water contamination

Liquorice - Glycyrrhiza glabra

Leguminosae: nitrogen fixing

Salt tolerant

Low water requirements

High protein fodder

High value export commodity

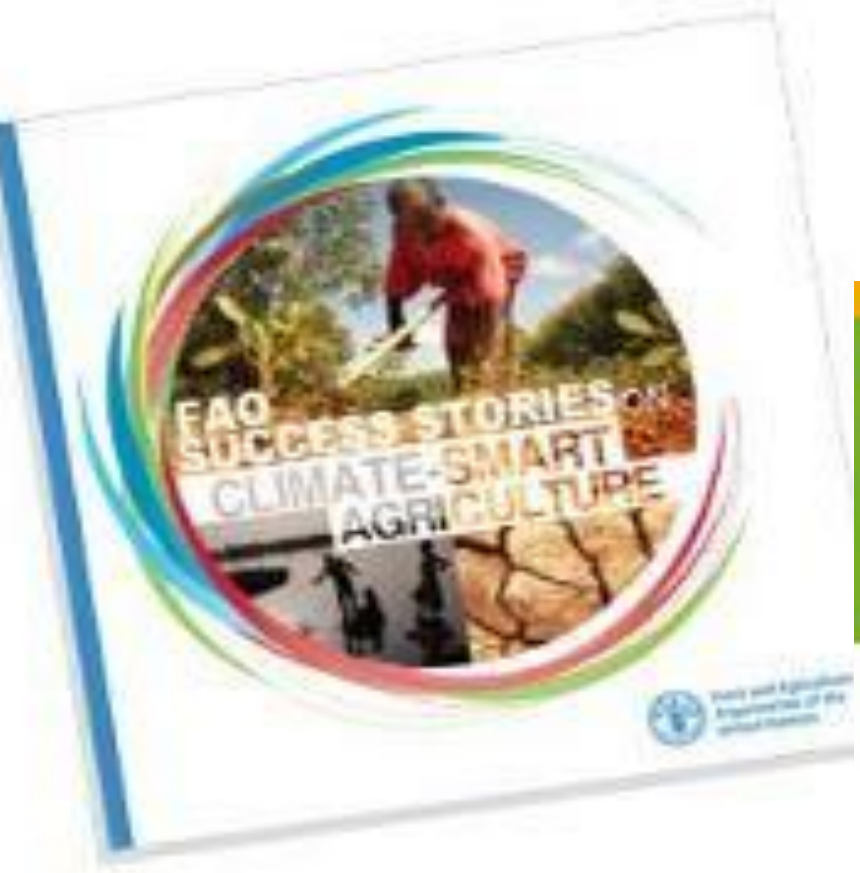
Salinity reduced and water content imp.

3-5 years before cropping

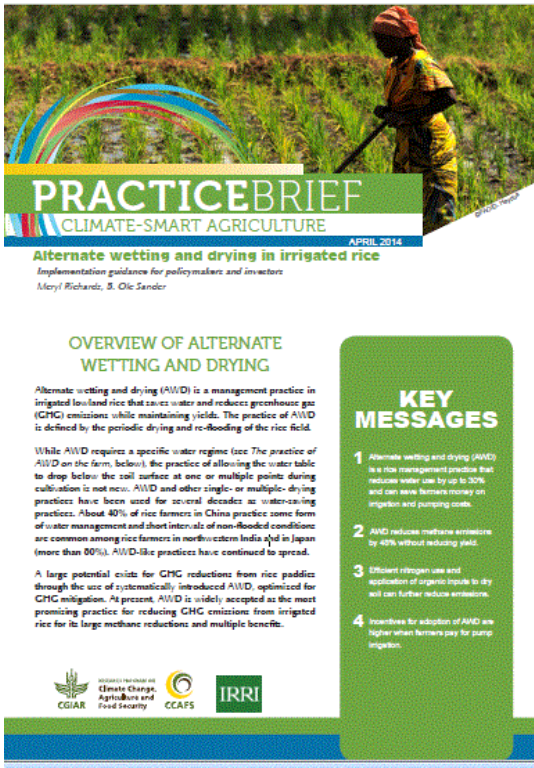
on of the United Nations

CSA in practice

More examples of CSA interventions



www.fao.org/gacsa/resources/csa-documents/en/



www.fao.org/3/a-i3817e.pdf

Western Balkans

Transitioning from emergency response to preparedness and natural hazard reduction

In particular floods and drought

Albania, BH, Macedonia, Montenegro, Serbia

AG interventions for reduction of natural hazards

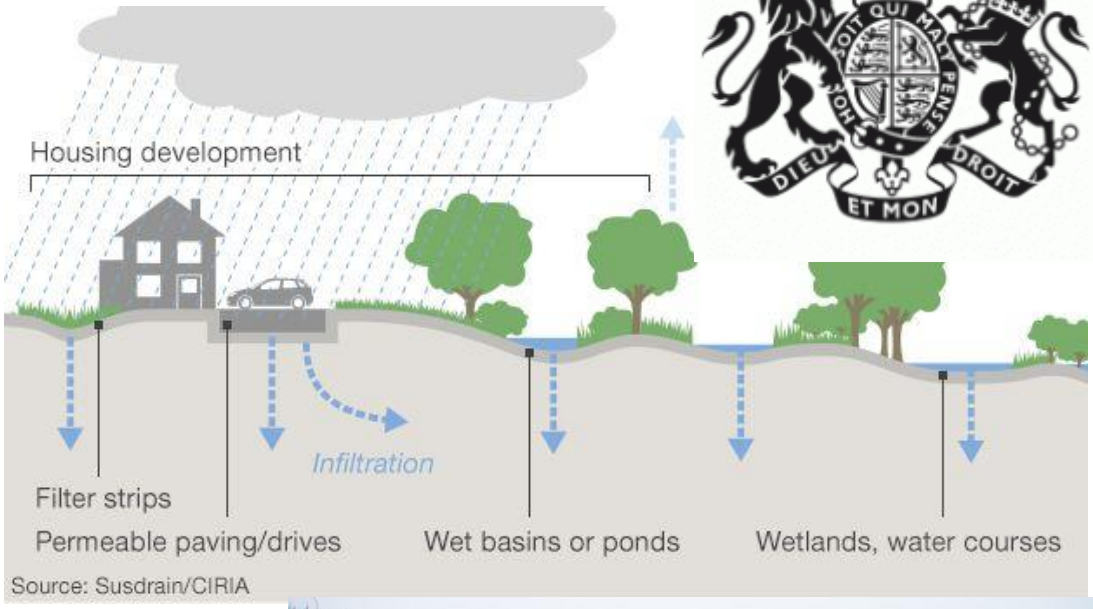
Incentive schemes to farmers to manage their land to reduce natural hazards.

UK EU farm grants

Whole river catchments

Benefit wildlife, slow the flow of water and improve water quality

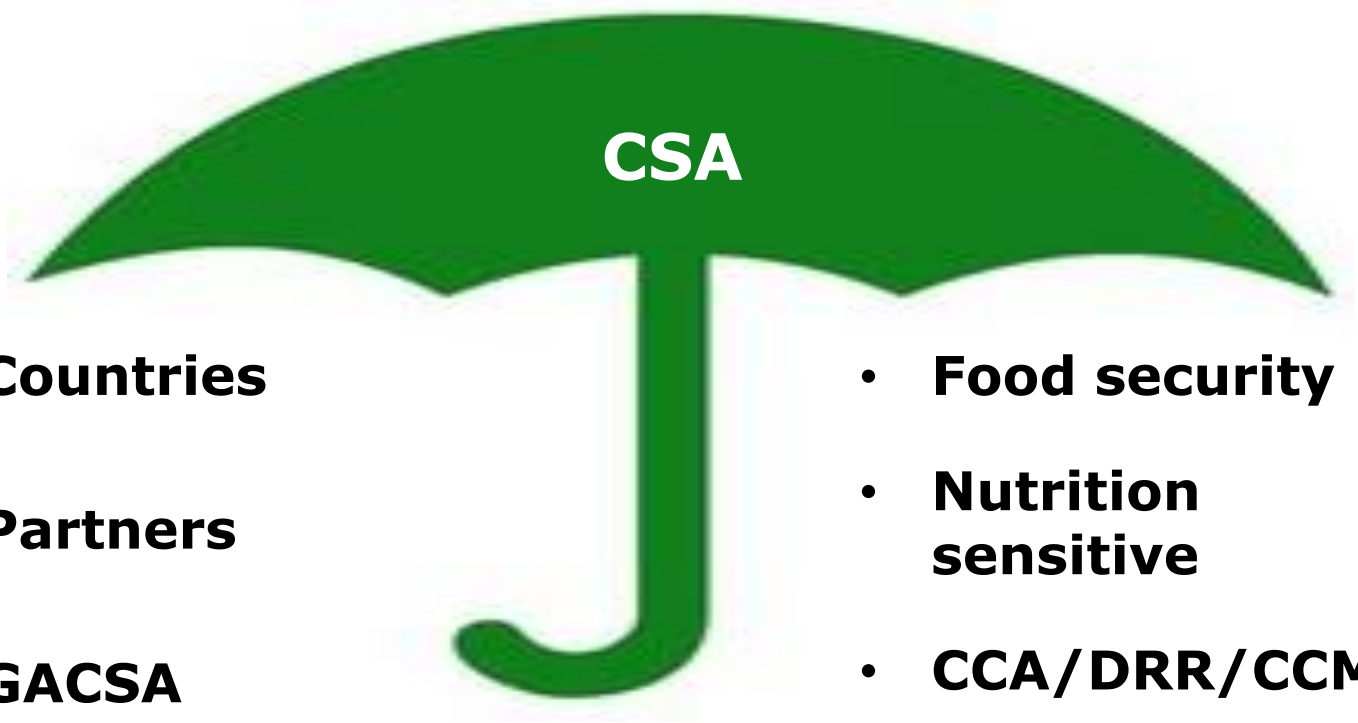
underpinned by scientific evidence



Next steps in the region

- Continue to provide climatic services to member countries
- Further test, validate and replicate DRR/climate smart practices that aim to reduce impact of e.g. droughts, floods, salinity;
- Investment in filling data and knowledge gaps, in particular to tailor climate services to farmer's needs;
- Promoting enabling policy & institutional environment.
- Development of national and regional CSA programme in Central Asia, including FAO's EPIC application;
- **" Flagship" country for CSA approach**

CSA Umbrella programme



- **Countries**
- **Partners**
- **GACSA collaboration**

- **Food security**
- **Nutrition sensitive**
- **CCA/DRR/CCM**
- **Environment**
- **Energy**

Making the CSA vision a reality

23-24 September 2014:

- Launch of the Global Alliance for Climate-Smart Agriculture (GACSA)

- Voluntary membership

- Multi-stakeholder partnership

- 3 action groups

GACSA

GLOBAL ALLIANCE FOR CLIMATE-SMART AGRICULTURE

AFRICA CSA Alliance

CONVENOR

NEPAD CAADP

TECHNICAL MEMBERS

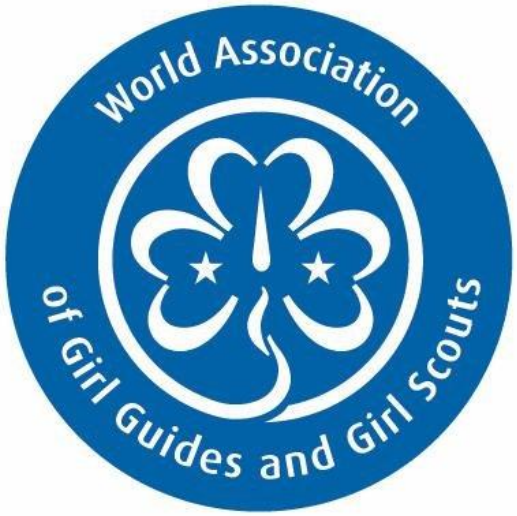
CGIAR FANRPAN FAO FARA

INTERNATIONAL NGO MEMBERS

care CONCERN worldwide CRS CATHOLIC RELIEF SERVICES OXFAM World Vision

Initial target countries:

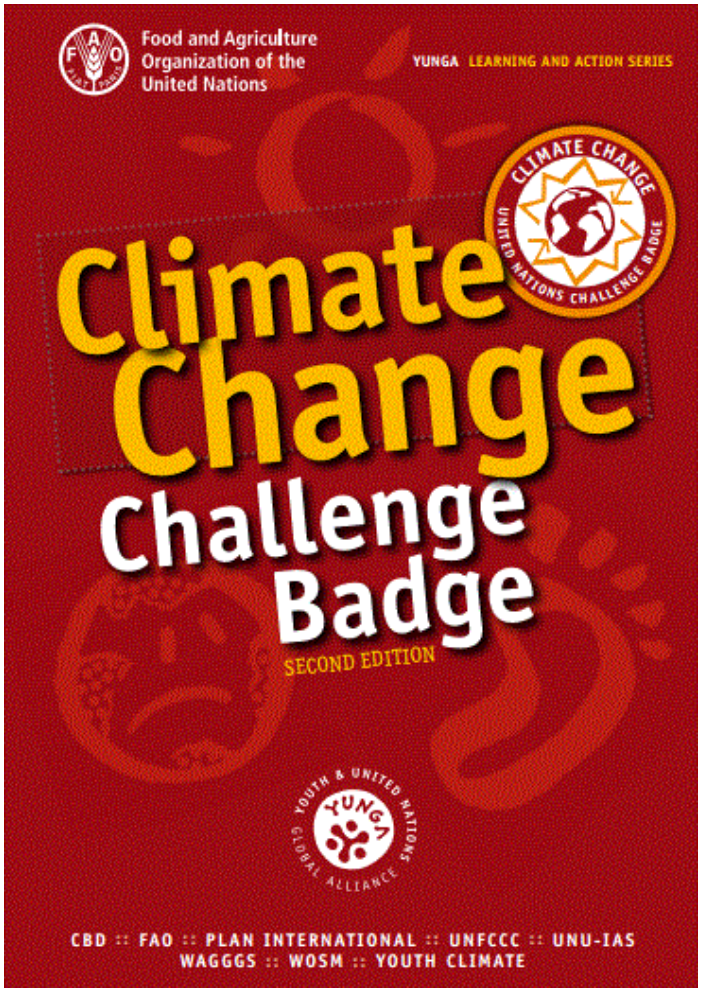
Children and youth engagement

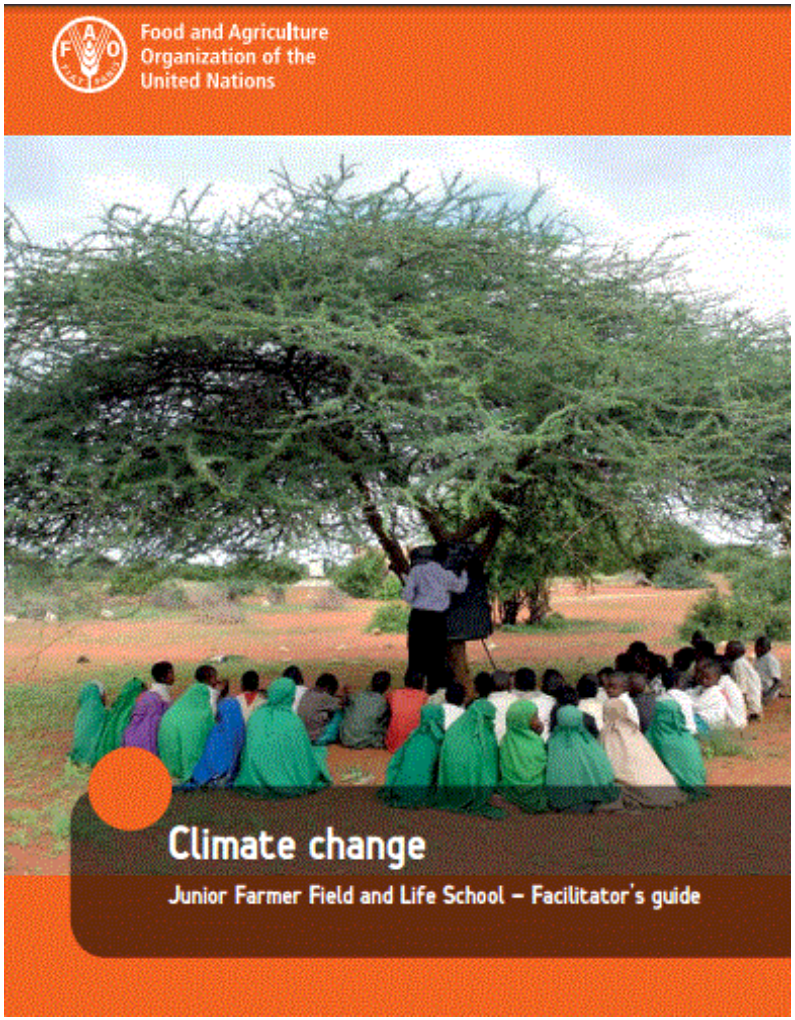


50 million

Youth 1.1 billion **18 percent**
Children 1.9 billion **31 percent**

Youth: non-formal education





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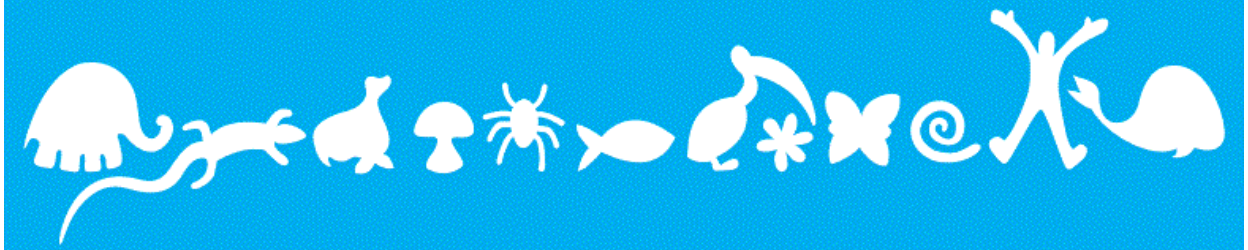
MAKING IT COUNT

INCREASING THE IMPACT OF CLIMATE CHANGE AND FOOD SECURITY EDUCATION PROGRAMMES



SUSTAINABLE DEVELOPMENT GOALS

FAO Agroecology meeting

- 23-25 November 2016
- Budapest
- Europe and Central Asia

Thank you!

For more information, please visit:

www.fao.org/climatechange

and

www.fao.org/climate-smart-agriculture

and

www.fao.org/gacsa