

## Climate Smart Agriculture online learning event

Summary, May 2014

The learning event on Climate-Smart Agriculture (CSA) clarified the meaning of CSA and discussed the options for the implementation of this approach.

The event, organized by the Food and Agriculture Organisation of the United Nations (FAO), consisted of two webinars with five expert presentations from CCAFS, IFPRI and FAO, combined with contributions from over 270 participants to online discussions. This document reflects the webinar presentations, the question and answer sessions, as well as the email contributions to the forum. 1,800 participants working on CSA in 104 countries took part in the webinars and e-mail discussions or watched the webinar recordings afterwards.

### **Webinar 1: Climate-Smart Agriculture – Definition and approach**

Before an audience of over 100 participants, presenters from FAO and CCAFS explored examples of concrete CSA technologies and practices and reflected on existing knowledge gaps. These knowledge gaps need to be addressed for CSA to be implemented in different agro-ecological zones. CSA was defined as a future-focused approach that aims to balance **resource efficiency** with **resilience to change** in agricultural systems. As such, CSA seeks to tackle a **triple challenge** to:

1. Sustainably increase agricultural productivity in order to produce more food in quantity, quality and diversity everywhere and for everyone;
2. Adapt and build resilience to climate change;
3. Reduce and/or remove emissions of greenhouse gases (GHG) where possible.

Alexandre Meybeck established that there is not a defined list of CSA practices. Instead, CSA draws on a vast range of good and established agricultural practices, which should be applied in a context-appropriate manner. Some options for CSA in different regions, levels and across different types of farming (e.g. in crops and fields, livestock management, fisheries and aquaculture) were considered.

A quick poll among the webinar participants revealed that 71 percent of participants felt CSA actions should be focused on **value chains and whole food systems**. This was in line with the findings of [Working Group 2 of the latest IPCC report](#), which highlights the need to reduce the emission intensity of our diets and reduce our dependence on climate-vulnerable species.

Lucia Palombi presented the findings of the **open consultation** held by the [Knowledge Action Group](#) of the [Global Alliance on Climate-Smart Agriculture](#) in April 2014. Many of the overarching concerns raised in the consultation were echoed in the webinar discussion. These included the need to clearly communicate different technical interventions and practices that could compose a CSA ‘basket of options’; the need for CSA to be farmer-centred and farmer-led; as well as the need for practical guidance on overcoming barriers to adoption and managing trade-offs. Priority areas for action are being identified based on a detailed analysis of the consultation’s results. Webinar participants who would like to stay informed and/or contribute to these action areas are invited to contact [climate-change@fao.org](mailto:climate-change@fao.org).

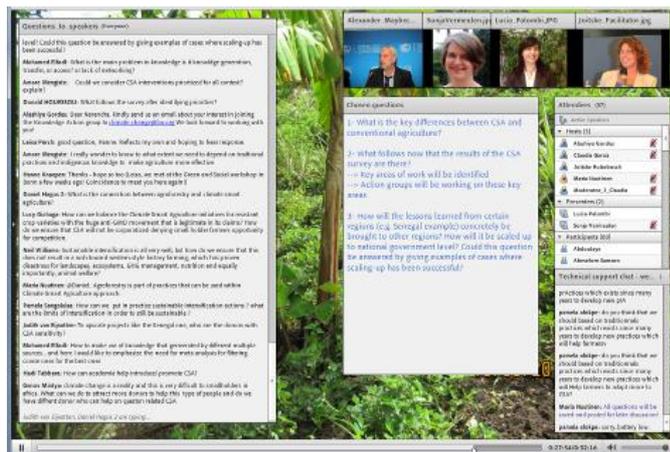
The webinar's participants raised many important **questions**: the differences between CSA and conventional agriculture; the impact of policy coherence with regard to CSA implementation; how climate risk management fits into the CSA approach; resilience at ecosystem, economic and social level; the importance of the private-sector (small and large-scale) in CSA and new opportunities for business in CSA; the importance – and challenges – of monitoring and evaluation; as well as trade-offs between efficiency and resilience.

In **summary**, participants noted that the key conclusions they took home from the discussion were:

- This **triple challenge** emphasises the key differences between CSA and conventional agriculture.
- The **context-specific nature of CSA interventions and practices**, illustrated by diverse examples from the field.
- The need to find a **balance between efficiency and resilience** in agriculture.
- Without **mitigation** (where possible), agriculture will reach a point where **adaptation** to climate change is no longer possible.
- The private sector plays an important role in investing in relevant research on CSA
- Better tools are needed for more effective assessment of data.
- A country wishing to implement CSA needs sustainable agricultural policies that are gender-sensitive.

## Links to parts of Webinar 1: Climate-Smart Agriculture – Definition and approach

- [Introduction to the learning event](#)
- [Why climate-smart agriculture - Alexandre Meybeck, FAO](#)
- [Climate-smart agriculture - options for practices and systems - Sonja Vermeulen, CCAFS](#)
- [Knowledge gaps within climate-smart agriculture - Reuben Sessa and Lucia Palombi, FAO and Question, answer and discussion session](#)



## Webinar 2: Climate-Smart Agriculture – Policies and Institutions

In the second webinar of the event, the presenters and participants explored how policy can help create an enabling environment for CSA and looked in detail at the policy and field interplay of CSA in Senegal.

Key messages from Leslie Lipper's presentation - to support CSA, policy-makers need to:

- Develop a vision for how to achieve food security despite climate change.
- Devise an **evidence-based** and **context-specific strategy** on how to achieve CSA's triple objectives: food security, resilience and reduction of emissions.
- Be prepared to **cope with uncertainty** (e.g. through risk management and flexible solutions);

- Deal with different types of agricultural policies **holistically** (integrating forestry, fisheries, livestock and crops).
- **Reach beyond agricultural policy** to other relevant policy areas (e.g. climate change, social policy, health policy) to ensure they are appropriately aligned and mutually supportive.
- Address **barriers to adoption** (e.g. tenure security, limited access to innovation or the up-front burden of adopting methods).

Leslie Lipper shared **examples** from the [Economics and Policy Innovations for CSA \(EPIC\)](#) programme in Vietnam, Zambia and Malawi, and Siwa Msangi from the [International Food Policy Research Institute \(IFPRI\)](#) presented a detailed [country case](#) study from Senegal. Senegal has seen a decline in mean annual rainfall and an average temperature increase of 0.9°C since 1960. However, while most climate models predict further decreases in rainfall, some are predicting increases. To manage uncertainties like this, CSA policy needs to strive for **resilience and flexibility** in agricultural systems. We also learned that, while various future climate scenarios exist for Senegal, the different models give quite different estimations e.g. in terms of expected crop yields. The **livestock** sector still needs similar attention.

The speakers also noted the **emerging opportunities** for CSA, such as the [Global Alliance on Climate-Smart Agriculture](#) and Climate finance (such as the Green Climate Fund and the new Global Environment Facility funding phase).

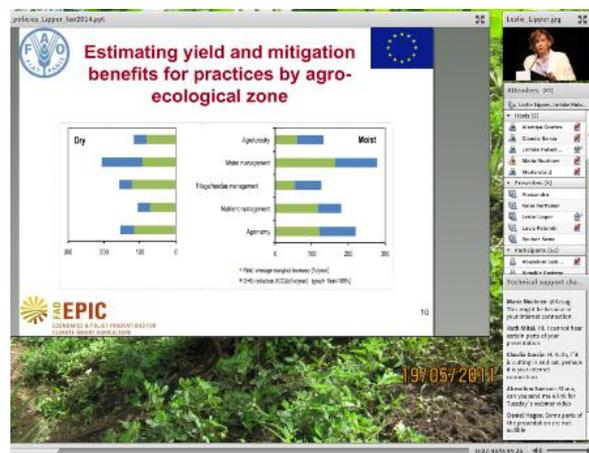
Key topics mentioned by the participants were:

- The importance of financial mechanisms to help farmers overcome net yield and/or income decline in the first years of CSA adoption.
- Limitations and benefits of different climate models in informing policy decisions.
- The potential of the carbon market versus other means of climate finance.
- Development of policies to support climate-friendly consumer choices.
- The integration of gender, food security and climate change issues within CSA.
- The need to test CSA technologies before encouraging farmers to use them.
- Ensuring CSA practices are fully adopted also after trial projects.

Two quick polls held during the event told us that 71 percent of participants **worked with CSA-related policies** in some form (e.g. as policy advocates or researchers). 95 percent of participants found the seminar useful (with 66 percent finding it very useful, extremely useful and inspiring).

## Links to parts of Webinar 2: Implementing Climate-Smart Agriculture – Policies and institutions are key

- [How can agricultural policies best support climate-smart agriculture?](#) - Leslie Lipper, FAO
- [Country case of policy and field interplay for climate-smart agriculture](#) - Siwa Msangi, IFPRI
- [Question, answer and discussion session](#)



## Results of the discussion forum

- The most popular topics in the discussion forum were: communicating CSA to farmers; extension services; mainstreaming youth in CSA; gender in CSA; CSA in dry conditions and sustainable intensification.
- It was emphasised that transition costs need to be considered and where possible lowered and covered. The long-term aim being to reduce emissions without substantially affecting production capacity.
- FAOSTAT has a full range of emissions data for all countries in agriculture, forest and land use sectors that can be used to identify mitigation options and support policies.
- Farmers, government officials, extension workers and other key agricultural stakeholders can contribute to making the change towards climate-smart agricultural systems.
- There is a need for incentives to promote CSA.
- Additionally, CSA policies should address the inherent challenges of agriculture in developing countries. A key challenge is financing the extension services for an increased uptake of CSA practices.
- CSA policies should aim towards fostering farmer-based experimentation.
- CSA policies should integrate cropland and livestock strategies.
- Technology must be developed and tested before being put into use by farmers.

**Event facilitators:** Joitske Hulsebosch, Maria Nuutinen and Claudia García

**A warm thank you for Community members and the colleagues who wrote and contributed to the summary:** Elizabeth Mumbajja Kasujja, Abeselom Samson Yosef, Alberto Camacho-Henriquez and Padampd Bhusal. FAO: Alashiya Gordes, Maria Nuutinen and Christabel Clark.

The organizers would also like to thank members of the CSA Community of Practice for their participation and the experts who shared their knowledge.

## About the event

The online learning event was organized in collaboration with the Climate, Energy and Land Tenure Division of the Food and Agriculture Organization of the United Nations.

- Final product of the event: [14 Take-home messages on Climate-Smart Agriculture from the online learning event](#)
- Link to the recorded webinars and presentations: [www.fao.org/climatechange/micca/79527](http://www.fao.org/climatechange/micca/79527)
- To join the discussion forum on CSA (Dgroups) [click here](#)

The [MICCA Programme](#) of FAO organizes [learning events](#) and webinars throughout the year within its Communities of Practice.