

Climate Smart Agriculture

'Climate Smart Agriculture' (CSA) has become a buzz word. This briefing paper gives an overview of the concept. Current as of August 2013.

Origin and concept

World Bank and FAO both claim to have coined the term. There is agreement that 'climate smart' has three pillars:

1. Dealing with the adaptation challenge
2. Contributing to climate change mitigation
3. Increasing food security, typically through increased productivity

FAO emphasize the mitigation element, the World Bank look at a 'triple win' (equal weighting of the three pillars and some of the academic authors emphasize the adaptation and consider mitigation and productivity as co-benefits, recognising that there are often trade-offs between the three.

World Bank and FAO attach the label 'climate-smart' strictly to individual *practices and technologies* (i.e. building blocks of agriculture at the lowest level). However some academic authors expand the concept to *systems* level (production systems, information and data systems, financial and market systems etc.).

A CCAFS author collective puts CSA in the service of the concept of a 'safe operating space for agriculture', which they define as a set of conditions that demonstrably meets human needs within local and planetary limits. Agriculture is 'climate-smart' if it brings us closer to safe operating spaces.

DFID uses an expanded definition which adds elements of general sustainable agriculture and is, in fact, difficult to differentiate from common concepts sustainable agriculture, except that it explicitly includes climate change.

Main proponents

Idea and term are strongly promoted by UN agencies (**FAO, World Bank, Global Mechanism, World Food Programme, UNEP**), by the CGIARs' Climate Change, Agriculture and Food Security mega-programme (**CCAFS**), and **UC Davis** and **Wageningen University** on the academic side. USAID and IFAD tend to avoid the term and talk specifically about smallholder adaptation.

In the business community, **PwC** has taken on thought leadership, using the above World Bank definition of SCA and focusing on questions of scaling up climate smart practices, measuring its benefits, its market opportunities and financing CSA.

Political relevance

CSA is quickly gaining political traction. The World Bank will announce a Climate Smart Agriculture Alliance at the UNFCCC COP 19 in November 2013, with up to 1 bn USD of pledged support for the adoption of CSA. It forms an important part of President Jim Yong Kim's strategy. Various donor agencies have adopted the concept into their policies, formally or informally.

Criticism

CSA received opposition from various angles:

- Because the interactions between the three dimensions are not clearly defined and poorly understood, virtually any practice that contributes to any of the three dimensions can be described as 'climate-smart', so CSA can easily be appropriated for a wide range of (even conflicting) agendas
- CSA typically misses to look at incentives for farmers – a practice can be 'climate smart' yet still not attractive to farmers – while harbouring an expectation that farmers will readily take up any practice once it has been labelled 'climate-smart'
- Reduction of sustainability to climate change-related issues: Reducing GHG emissions or improving resilience may still lead to biodiversity loss, degradation of cultural heritage or increased social inequity or long-term ecosystem instability
- CSA is almost exclusively used in the context of developing countries because food security and development are often understood as issues only in the developing world. This focus has engendered opposition from those who fear that some developed countries may insist on mitigation of agricultural GHG emissions as a condition of continued development aid
- Finally, the term does not translate well into many other languages.

Challenges

There remain conceptual challenges:

- What are concrete examples of 'climate-smart technologies and practices? How transferrable are they between sites/systems?
- How do you measure climate-smartness? What are appropriate indicators at the level of individual practices and technologies, food and farming systems, and policies and programmes?
- How do you quantifying and evaluate trade-offs between the three elements adaptation, mitigation and food security?

Events

- There is a bi-annual **CSA science congress**. The 1st one was in 2011 at Wageningen, the 2nd at UC Davis (March 2013), the next one will be in 2015, hosted by CIRAD in France. Smaller science meetings (World Bank and CCAFS) planned in the interim
- There is a bi-annual **political conference**, organised by World Bank and FAO, alternating with the science meeting. The 2012 one was in Vietnam
- CSA may be lifted onto the **WEF agenda in Davos**, following the World Bank lead from COP 19.

Resources

CCAFS is developing compendium on CSA (inventory of practices with evidence), due to be released online on www.climatesmartagriculture.org later in 2013

Central Climate Smart Agriculture website run by CCAFS, FAO, Global Mechanism, World Bank, World Food Programme, UNEP: www.climatesmartagriculture.org/en/

FAO: www.fao.org/climatechange/climatesmart/en/

PwC: www.pwc.co.uk/sustainability-climate-change/issues/climate-smart-agriculture.jhtml, reports on www.pwc.co.uk/sustainability-climate-change/publications/climate-smart-agriculture-case-studies.jhtml.