

Climate-Smart Agricultural Initiatives in Africa Aslihan Arslan, PhD, Natural Resource Economist, FAO

Climate smart agriculture (CSA) is an approach to guide actions to transform and re-orient agricultural systems to effectively and sustainably support food security.1 CSA incorporates actions at various scales within the full range of farm plots, farming systems, landscapes, national and global. The approach aims, within the context of national food security and development goals, to tackle three main objectives:

- I. Sustainably improving food security by increasing agricultural productivity and incomes;
- II. Building resilience and adapting to climate change;
- III. Developing opportunities to reduce greenhouse gas emissions compared to expected trends, where possible.

The concept was first launched by FAO in 2010 in a background paper prepared for the Hague Conference on Agriculture, Food Security and Climate Change. Since then it has gained increasing momentum in the development agenda both globally (Global CSA Alliance) and regionally (e.g. Africa CSA Alliance and the West African Alliance for CSA).

The FAO, through the EPIC programme, has been working with three partner countries (Malawi, Vietnam and Zambia) on a project entitled "CSA: Capturing the Synergies between Mitigation, Adaptation and Food Security" funded by the European Commission since 2012. The project represents the first applied attempt at developing a CSA methodology and testing its application on the ground. The CSA approach as applied at country level by FAO-EPIC consists of three main areas of activities: i) building an evidence base; ii) building enabling technical, institutional and policy frameworks; and iii) enhancing financing options, and has built-in feedback loops between research and policy.

Given the fact that CSA is highly site-specific, it is important to build regional coordinated initiatives to support national policies to implement the three main areas of activities mentioned above. The regional initiatives help streamline processes to enhance the integration of CSA in to national development plans, agricultural sectoral policies and NAIPs. They also facilitate the sharing of scientific evidence base to support national and regional policies to improve food security. FAO is supporting CCAFS to build a global CSA database that documents the contributions of more than 100 field level practices to the three pillars of CSA in the literature to date (screening >7,000 publications). The first meta-analysis will focus on Africa to identify most promising options and gaps in scientific literature as well as highlight institutional barriers to adoption. This initiative will support the activities of global and regional CSA Alliances in improving food security and resilience under the realities of climate change.

Aslihan Arslan, PhD is a Natural Resource Economist for Economics and Policy Innovations for Climate-Smart Agriculture (EPIC), Agricultural Development Economics Division (ESA) of the FAO.

¹ "Agriculture" includes crop and livestock production, as well as fisheries and forest management.