



# Thematic review of Climate Smart Agriculture

**The thematic review aggregates and synthesises existing evidence from a portfolio of FCDO programmes supporting Climate Smart Agriculture (CSA) to draw out learning on reducing smallholder farmers' vulnerability to climate variability and shocks. It also seeks to draw out learning on secondary environmental benefits from CSA.**

The review covers thirteen programmes seeking to reduce poverty by building resilience or raising productivity through diverse strategies, including agricultural development, market systems development, livelihoods, food security, landscape and environment focused approaches. The CSA interventions that are integrated into these broader programmes seek to manage synergies and trade-offs between the three pillars of CSA: productivity, adaptation and mitigation.



## Key Findings

- CSA approaches are more likely to be adopted when they have been developed with beneficiary participation, where they are productive and profitable to farmers and businesses, and where the necessary resources and services to enable adoption are available.
- Most programmes focused on potential synergies between CSA pillars (sustainable productivity, adaptation and mitigation) rather than being explicit about trade-offs between them (for example, mechanisation creating trade-offs between productivity and mitigation).
- Programmes largely focused on delivery of CSA interventions rather than measuring their secondary environmental co-benefits.
- Sufficient synergies between the CSA pillars may require the judicious use of temporary subsidies, long-term private sector investments, and governments that demonstrate their commitment to CSA with matching fiscal expenditure.
- While most programmes had a goal of increasing resilience to climate variability and shocks, approaches to defining and measuring resilience were insufficient and inconsistent across the programmes. This made it challenging to identify common factors for success in building resilience.
- Terms like CSA and Nature-based Solutions (NbS) were used generically by programmes. This obscured the linkage between CSA activities and the design and monitoring of productivity, adaptation and mitigation outcomes. This limited learning on what works, when and for whom.
- Significant time-periods (10-20 years) may be required to bring about changes in resilience, though programme funding or activities often cover shorter periods.



## Defining Resilience in BRACED

The BRACED programme sought to build resilience through activities that develop capacities to adapt to, anticipate, and absorb climate shocks as a foundation for transformation, where adaptive capacity and sustainability are linked. If adaptive abilities cannot be sustained, it raises questions about whether projects can claim that resilience has been built. This definition informed the ICF KPI 4 methodology on measuring resilience, used across FCDO resilience-building programmes that use climate finance.



## Recommendations for FCDO Programmes

1. **Resilience and sustainability:** Embed engagement, monitoring and learning about resilience and sustainability as foundational aspects of the programme, including the capacity to continue to adapt after the programme ends. Secure resources for ex-post evaluation to improve learning on resilience or sustainability where evidence gaps are identified.
2. **Achieving adoption:** Ensure time for participatory scoping of CSA options to achieve government commitment, private sector participation and sufficient intrinsic benefits of CSA interventions to motivate adoption. Ensure inclusive sustainable access to services, markets and inputs for different smallholders and stakeholders.
3. **Focus on relevant outcomes:** Develop consistent, accessible definitions for CSA and NbS processes and realistic, measurable outcomes related to the three pillars of CSA, incorporating participant voices throughout the process.
4. **Enabling environment:** Include components addressing CSA policy, private sector support and community organisation into design to enable sustainability and replication. Consider the type, level, timing, and need for incentives, bearing in mind their impact on sustainability.
5. **Carbon finance:** Consider opportunities to increase CSA and NbS adoption and sustainability through complementing development finance with blended longer-term carbon sequestration and/or ecosystem services finance.
6. **Timeframes:** Project timeframes should be based on realistic estimates of the time needed to achieve not only immediate objectives but longer-term sustainability, resilience and transformation. Consider establishing mechanisms to overcome incentive time-lags between adoption and farmer benefit, such as carbon finance or collaboration with other donors who can support activities over longer periods.



## Programmes included in the review

Adaptation for Smallholder Agriculture Programme (ASAP)

Building resilience and adaptation to climate extremes and disasters (BRACED)

Climate Smart Agriculture in Africa (CSAP/VUNA)

Livelihoods and Food Security Programme (in Zimbabwe) (LFSP)

Market Development in Northern Ghana (MADE)

Partnerships for Forests (P4F)

Programme of support to Agriculture in Rwanda (PoSA)

Promoting Conservation Agriculture in Zambia (CSAZ)

Rural and Agriculture Markets Development programme for Northern Nigeria (PrOpCom Mai-karfi or PM)

Support to develop and deploy the next generation of agriculture technology to support poor farmers by CGIAR

Sustainable Agricultural Intensification Research and Learning in Africa (SAIRLA)

Sustainable inclusive Livelihoods through Tea Production in Rwanda (SILTPR)

Zimbabwe Resilience Building Fund Programme (ZRBF)