

POSITION STATEMENT



Agriculture and Climate Change

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CABI envisions a world in which the agricultural sector is able to supply sufficient, safe, and nutritious food, and is embedded in a healthy and climate resilient landscape with clean water and air, healthy soils, and functional ecosystem services.

Background

Climate change is impacting agriculture in a number of ways (eg through changes in precipitation and/or temperature, increases in extreme weather events, etc.), with smallholder farmers in developing countries generally being the most vulnerable and disproportionately affected. Climate change is also influencing the distribution and severity of crop pests, including invasive species, which is further affecting crop production. Evidence suggests that, overall, climate-induced pest problems are likely to become more unpredictable and larger in amplitude. This poses an additional threat to global food security, particularly as a significant amount of agricultural production is already lost to pests. At the same time, agriculture is also a major climate change driver, since it remains the world's second largest emitter of greenhouse gases.

CABI recognises that there is a need for immediate implementation of adaptation strategies at farm and landscape levels to decrease vulnerabilities of individual farmers and entire agricultural economies to the adverse effects of climate change, as well as mitigation efforts to reduce global climate change, sustain food production and maintain livelihoods. CABI therefore welcomes the outcomes of the 23rd Conference of the Parties (COP23), which pave the road for consolidated climate action in the agricultural arena, and supports the FAO-launched concept of Climate-Smart Agriculture (CSA).

CABI's contribution

- CABI has been mandated by its member countries to support national climate change adaptation and mitigation activities in order to fulfil their Nationally Determined Contributions (NDCs) and contribute towards the +2°C target under the Paris Agreement, as well as to support relevant Sustainable Development Goals (SDGs)
- CABI actively promotes agricultural diversification to improve climate resilience and nutrition of smallholder farmers and their families, while leading the actions of the Global Action Plan for Agricultural Diversification (GAPAD), which contribute to the achievement of SDG 2 (zero hunger)
- CABI's core expertise in the areas of knowledge creation, knowledge management, and knowledge dissemination plays a key role in facilitating the transition of food and agricultural systems to become more resilient to climate change
- CABI's strong expertise in strengthening capacities of national stakeholders (eg extension, research, education) and facilitating an enabling environment (eg policies, human/social capital) is key to increasing the resilience of farming communities and landscapes to climate change
- CABI's internationally-recognised research capacities support improved understanding and forecasting of climate change impact on pests and pest management strategies, as well as the development of context-specific adaptation and mitigation approaches
- CABI's broad network of multi-level partners (eg the Global Alliance for Climate Smart Agriculture (GACSA) and the Global Research Alliance on Agricultural Greenhouse Gas Emissions (GRA)) strengthens the capacity for innovation and implementation of climate-smart agricultural approaches and practices



CABI's goals and activities

CABI recognises that contributing to food security through adapting to, and mitigating the effects of, climate change cannot be fulfilled without more decisive action, and therefore works towards three overarching goals at corporate, project/programme, and member-country levels:

GOAL 1

Strengthened coordination and delivery of CABI's work on climate change adaptation and mitigation

This goal aims to strengthen internal mechanisms for the coordination, innovation, and fulfilment of climate adaptation and mitigation activities and goals. In particular, CABI will:

- Continue to build its own core expertise in climate change and ensure that climate change adaptation and mitigation are reflected in all major projects/programmes of the organisation so as to ensure maximum climate-responsiveness of its activities

GOAL 2

Enhanced sustainability and climate resilience of agricultural systems, their dependant livelihoods, and surrounding environments

This goal aims at reinforcing and strengthening CABI's role as a climate adaptation and mitigation advocate through implementation of projects and programmes in the broader areas of sustainable agriculture, invasive species management, and trade and commodities. In particular, CABI will:

- Build institutional capacities of **extension support systems**, promote **integrated crop management approaches** (including climate-smart pest management, responsible use of agricultural inputs, improved soil management and use of quality seeds), and support nutrition-sensitive agriculture, as well as provide higher education programmes for agricultural professionals and policymakers from developing countries to promote access to, and uptake of, context-specific and climate-responsive best management approaches and technologies by farmers
- Promote climate-resilient production of **agricultural commodities** through disseminating best practice information, facilitating coordinated action by public and private sector organisations, integrating climate change into capacity building activities along the entire supply chain, and facilitating delivery of appropriate policies, in order to support adaptation of farmers and rural societies, and contribute to global food security
- Encourage **agricultural diversification** by promoting nutritious indigenous crops (particularly fruits, vegetables, grains, and pulses) that are better adapted to changing climatic conditions and enable continued improvement of agricultural productivity while supporting human health
- Build national and regional capacities to prevent and manage **invasive species** and promote integration of climate change into invasive species risk assessment, in order to increase climate resilience of natural habitats and agricultural systems



- Capitalise on CABI's expertise in the development of **information resources and ICT-driven tools** in order to effectively collate, validate, ensure accessibility of, and disseminate information to multiple stakeholders across broad geographical scales and support large-scale adoption of climate resilient agriculture and landscape management approaches
- Lead **research** projects and programmes aimed at improving understanding and forecasting of climate change impacts on pests and pest management strategies (especially in developing countries), thus informing the development of context-specific adaptation and mitigation strategies
- Increase the commissioning and **publication of climate change-related books/ebooks** and strengthen the climate change focus of CABI's internet resources and multimedia products to support the capacity for innovation and governance across multiple geographical scales

GOAL 3

Enhanced capacities of member countries on climate change adaptation and mitigation

This goal aims at providing direct support to individual member countries through national institutions to address critical issues that currently hinder the development and implementation of climate-responsive activities. In particular, CABI will:

- Facilitate access to climate financing, promote interactions between CABI and UNFCCC focal points, and facilitate linkages to regional/national CSA alliances in order to directly support implementation of Nationally Determined Contributions by CABI member countries

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