

Voluntary Report – Voluntary - Public Distribution

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Report Name: South Africa Committed to Climate Change Interventions in the Agricultural Sector

Country: South Africa - Republic of

Post: Pretoria

Report Category: Climate Change/Global Warming/Food Security

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Report Highlights:

South Africa prioritized the reduction in the emission of greenhouse gases in the global fight against climate change. As a result, South Africa identified seven Climate Change Flagship Programs including the Agriculture, Food Systems and Food Security Flagship Program. The agriculture climate change program seeks to enhance agricultural productivity and climate resilience by decoupling agricultural growth from increase greenhouse gas emissions through Climate Smart Agricultural production systems. The need to support and train South Africa's extension practitioners on Climate Smart Agriculture was identified as the immediate priority by the Department of Agriculture, Land Reform and Rural Development. Post works with various institutions in South Africa to support more Climate Smart Agricultural practices, including through fellowship programs, biotechnology seminars, and cooperative research and exchange programs.

Introduction

South Africa committed to climate change intervention in its agricultural sector by introducing the Agriculture, Food Systems and Food Security Flagship Program. The goal of the program is to enhance agricultural productivity and climate resilience at all scales of production and to reduce greenhouse gases and increase agricultural competitiveness. South Africa's President, Mr. Cyril Ramaphosa, has reiterated the need for South Africa to prioritize the reduction in the emission of greenhouse gases in the global fight against climate change due to the devastating impact climate change has on lives and livelihoods. On April 22, 2021, Mr. Ramaphosa expressed these sentiments during the virtual Leaders' Summit on Climate convened by United States' President, Mr. Joe Biden, in the run-up to the next international climate conference taking place in Scotland by the end of 2021.

Background

Although South Africa's climate change bill has not yet been approved, the National Climate Change Response White Paper (see also [Whitepaper](#)), approved by Cabinet in October 2011, guides South Africa's response to climate change. This White Paper presents the South African Government's vision for an effective climate change response and the long-term transition to a climate-resilient and lower-carbon economy and society. South Africa's response to climate change has two objectives, namely:

- Effectively manage inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity.
- Make a fair contribution to the global effort to stabilize greenhouse gas concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable manner.

This response is guided by principles set out in South Africa's Constitution, the Bill of Rights and the National Environmental Management Act. South Africa's commitment to climate change interventions is also guided by the United Nations Framework Convention on Climate Change, the Millennium Declaration and the Paris Climate Agreement. The South African Government ratified the UN Framework Convention on Climate Change in August 1997.

South Africa identified seven Climate Change Flagship Programs, that is discussed in detail in South Africa's third climate change report published in 2018 (see also [SouthAfricas-3rd-climate-change-report](#)). These seven Climate Change Flagship Programs are (see also Figure 35 on page 86 of the Climate Change Report for a summary):

1. The Water Conservation and Demand Management Flagship Program;
2. The Renewable Energy Flagship Program;
3. The Energy Efficiency and Energy Demand Management Flagship Program;
4. The Transport Flagship Program;
5. Agriculture, Food Systems and Food Security Flagship Program;
6. The Waste Management Flagship Program;
7. Low Carbon Climate Resilient Built Environment, Communities and Human Settlement Flagship Program.

Currently, South Africa's main focus in terms of its response to climate change is on renewable energy and energy efficiency. The state-owned power utility, Eskom, is responsible for most of South Africa's carbon dioxide emissions through coal burning.

Climate Change Intervention in the South African Agricultural Sector

The Agriculture, Food Systems and Food Security Flagship Program seeks to enhance agricultural productivity and climate resilience at all scales of production, decoupling agricultural growth from increased greenhouse gas emissions and increase the competitiveness of the South African agricultural sector. The primary program objective is the simultaneous implementation of a comprehensive, cohesive and integrated set of climate change mitigation and adaptation measures to build Climate Smart Agricultural and food production systems. The program seeks to ensure that an inclusive and complementary set of climate change response measures are implemented in a systematic way to bring out clear climate change response benefits, as outlined below:

- Increased productivity and production efficiency;
- Reduced risks and enhanced disaster preparedness and management;
- Enhanced sustainability of agricultural and food systems.

The Department of Agriculture, Land Reform and Rural Development (DALRRD) supports the implementation of Climate Smart Agriculture as an approach that promotes adaptation by enhancing the resilience of agricultural production systems, mitigation against the adverse impacts of climate change and ensures food security. DALRRD's situational analysis report for the development of its Climate Smart Agriculture Strategic Framework has highlighted the importance of enabling DALRRD and the sector on technical issues relating to Climate Smart Agriculture and climate change. The need to support and train South Africa's more than thousand extension practitioners on Climate Smart Agriculture was identified through various interactions and engagements as the immediate priority.

Post works with DALRRD and other institutions in South Africa in multiple areas to support more efficient agricultural practices, including through fellowship programs, biotechnology seminars, and cooperative research and exchange programs:

Memorandum of Understanding Between USDA/ARS and ARC: USDA's, Agricultural Research Service (ARS), and the Agricultural Research Council of South Africa (ARC), signed a new Memorandum of Understanding (MOU) in 2019 to strengthen collaboration between the two countries in areas of mutual interest in agricultural research through cooperative research programs and exchanges. The MOU prioritizes cooperation in natural resources, water management and conservation; crop protection and biological control; plant production, breeding and genetic improvement; food quality and safety; animal production and genetic improvement; animal health and zoonotic diseases control; germplasm exchange and collections; biosecurity and biosafety; and exploring the virtual laboratory approach.

Collaboration with South Africa on Biotechnology: The United States and South Africa are proponents of the use of biotechnology to increase food security and reduce inputs such as irrigation, fertilizers, herbicides, and pesticides. In 2019, Post collaborated with AfricaBio and Biosafety South Africa to engage agricultural stakeholders in South Africa on new innovative plant breeding technologies, such as genome editing, to support understanding and alignment amongst farmers, scientists and policy makers. The program included supporting two experts to participate in two separate events in South Africa as keynote speaker and panelist. This year (2021), Post is collaborating with Croplife South Africa to provide a virtual platform to discuss genome edited products in the global pipeline and propose ways to help governments develop effective, science- and risk-based policies that facilitate the uptake and trade of these products, rather than impede it. This virtual platform focuses on participation by regulators, policy makers, public and private researchers, biotechnology associations and tech developers both in South Africa and the broader African continent.

Collaboration between the California Department of Agriculture and the Western Cape Department of Agriculture: For the past three years, the departments of agriculture of the State of California (CDFA) and South Africa's Western Cape Province (WCDA) have reinvigorated their efforts to collaborate in the areas of climate change and efficient water-use systems. In 2019, the CDFA's Secretary led a delegation to Cape Town to visit various agribusinesses, farms, non-profit organizations, government entities and a university with the aim of sharing experiences in efficient drought management and in enhancing water utilization. Since this visit, CDFA and WCDA continue to engage in these areas, holding numerous webinars on these topics and capitalizing on the ripeness of this issue in today's agricultural landscape.

Forest Service's All Hazards Program: From 2003-2018, the USDA Forest Service worked extensively with partners to implement the Southern Africa All Hazards program. The Forest Service used fire management training, shadow and exchange opportunities, and on-the-ground disaster response to augment emergency management capabilities in Southern Africa. The program adapted the National Incident Management System, a comprehensive, national approach to incident management that helps stakeholders work together to prevent, protect against, mitigate, respond to and recover from disasters.

Attachments:

No Attachments.