

Centre for Coordination of Agricultural Research & Development for Southern Africa Centre De Coordination De La Recherche Et Du Développement Agricole De L'atrique Australi Centro para a Coordenação da Investigação e Desenvolvimento Agrário na África Austral





Climate change and agriculture









Situation analysis - SADC region

- The SADC region is extremely vulnerable to the effects of climate change
- Agriculture sector most affected, whereby 70 % of the region's population depend on agriculture for food, income and employment
- Extreme weather events like floods and droughts are increasing as well as average temperatures
- Already low yields are decreasing, heavily impacting on regional food security









Situation analysis – SADC region II

- Regional drought disaster declared in July 2016.
- Climate induced crop failures: cereal deficit: 9,3 Million tons
- 643.000 cattle perished in the drought
- Food insecure population increased by 31% since 2015
- **40 Million people** in SADC **are food insecure** (2016-2017 marketing year) and will need humanitarian assistance.











Data from the SADC region – 2016

- * All data from SADC regional update on El Nino induced drought, Report 1, May 2016
- 2015 cropping season was the driest in the SADC region in 35 years.
- 13 out of 15 countries in the SADC region declared national drought disaster.
 - Angola: up to 75% crop losses in the southern part
 - **Botswana:** 50 % increase in livestock feeds
 - Lesotho: 80% harvest losses
 - Madagascar: 80% of the population in the 7 most affected districts food insecure
 - Malawi: 2.8 Mio people food insecure, expected maize deficit 2016: 1.07 tonnes
 - Mozambique: 1.5 Mio people food insecure in southern and central regions, 64% reduction in maize harvest.





Data from the SADC region – 2016

- Namibia: 370.000 people at risk of food insecurity
- South Africa: Maize harvest 25 % reduced (compared to 2015, 40% compared to 5 year average), cereal deficits in maize and wheat,
- Swaziland: 64 % reduction in maize harvest (2016), 320.000 people in need of food assistance, 64.000 cattle perished
- **Tanzania:** some flooding events, not affecting the performance of the country agriculture in general
- Zambia: Good harvest, agricultural production not negatively affected
- **Zimbabwe:** Extensive crop failure and food insecurity, 2.8 Mio people food insecure



and 2016/2017 ????

- Extraordinary rainfalls (e.g. Gaborone dam first time filled since 2001)
- Excess of water, floods, fields washed away, damages in agriculture through too much water
- Increased emerging of pests and diseases (army worm, locust, leaf diseases and other)
- → Climatic conditions are getting harsher and more unpredictable
- → Extreme weather events are increasing
- → Climate Change has come to stay, its not going to disappear
- → Agriculture needs to react, take strategic decisions and build resilience





What are SADC, CCARDESA and GIZ doing to support Climate Change Adaptation in the agricultural sector ?

SADC programme "Climate Change Adaptation in Rural Areas in Southern Africa" - ACCRA, implemented by CCARDESA with support through GIZ.

Focus on:

1) Regional knowledge dissemination on Climate Change Adaptation in Agriculture and Climate Smart Agriculture

- Trainings, Conferences and Exchange visits (e.g. CCAA/ CSA, Accessing Finance, Proposal Writing)
- Internet based information and knowledge platform for all 15 SADC countries, access free of charge, possibility for all MS to up- and download information.
- Information material and knowledge products: Guidelines, leaflets, factsheets, videos, training materials and more as free downloads.



Centre for Coordination of Agricultural Research & Development for Southern Atrica Centre for Coordination of Agricultural Research & Development Agrook De Lahaya Australi Centre De Coordination De La Recharger & Du Development Agrook De Lahaya Australi Centre De and Econderactico de Investigación de Texanoviennes Advisoria Atrica



What are SADC, CCARDESA and GIZ doing to support Climate Change Adaptation in the agricultural sector ?

2) Climate proofing of priority agricultural value chains

- Vulnerability analysis for value chains.
- Recommendations for CSA technologies and best practices to reduce or mitigate climate risks (Climate Proofing).
- Piloting of selected technologies.
- Feasibility studies to document evidence for the benefits and impacts of CSA practices and technologies.



- Support to institutions in the SADC member states for writing investment proposals for up-scaling and disseminating CSA.
- Support for mobilizing financing.