



How will climate change affect the agricultural sector?

Due to climate change, **temperatures will rise between 2°C and 2.7°C** until 2050 and extreme weather events will increase.



Climate Risk Analysis for adaptation planning in ZAMBIA

The south-west will be more impacted by climate change than the north-east of Zambia ...



... and less water will be available.

This will have **various impacts on agriculture**, for example a **decrease in sorghum yields**. However, sorghum is more resilient to climate change than other crops, such as maize.



Areas suitable for **maize and sorghum production will decrease** between 28 % and 37 % by 2050 and **move northwards**.



But there are multiple ways to adapt to climate change, as for example:



Conservation agriculture aims at minimum soil disturbance, including techniques like crop rotation and minimum tillage. It can buffer climate impacts in the near-term and even increase sorghum yields by 25 % to 31 % in drought-prone areas in Zambia.



By coupling location-specific climate and weather information with local knowledge, **early warning systems** enable farmers to better anticipate climate risks and make informed decisions about their agricultural practices.



Climate impacts are not gender-neutral and differences in the division of labour or access to land and resources can lead to gendered vulnerabilities. Carefully designed adaptation options can contribute to greater participation of women and other marginalized groups.

There are many **feasible and cost-effective options** to finance climate adaptation actions through domestic, international, public and private sources.

On behalf of



POTSDAM INSTITUTE FOR CLIMATE IMPACT RESEARCH



Federal Ministry for Economic Cooperation and Development

This infographic is based on the results of the Climate Risk Analysis for adaptation planning in Zambia. The study is a result of the AGRICA project which analyses current and future climate-related risks in various sectors and evaluates suitable adaptation options to promote climate-resilient agricultural intensification. The aim is to provide evidence-based information to deliver tailored policy advice and promote the uptake of the study results. Therefore, the project works closely with stakeholders in key sectors such as agriculture, water and finance. The full report and other results of the project can be found at www.agrica.de.