



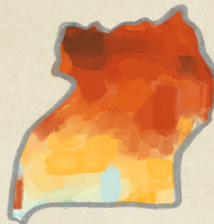
# Climate Risk Analysis for adaptation planning in UGANDA

## How will climate change affect the coffee value chain in Uganda?

In Uganda, **temperatures will rise between 1.1°C and 1.5°C** until 2050. Unpredictable precipitation will increase and the number of hot days and hot nights are projected to steadily rise ...



... especially in the north of the country.



This will have **various impacts on the coffee value chain.**

Climate change **reduces the suitable area** to grow Arabica coffee by 20%. The area to grow Robusta coffee will slightly reduce (5%) and shift.



Climate change **reduces the suitability of banana production**, which will have a negative effect on coffee-banana intercropping.



Higher humidity leads to **mould or musty flavours** in coffee beans.

Increasing rain during the harvest makes it **harder to dry coffee.**



More rain increases **problems in transportation.**



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



**Agroforestry systems** combine the cultivation of trees and crops on the same piece of land. In this way, they can save water, improve the microclimate and enhance soil fertility.

Growing **shade trees**, such as *Ficus natalensis* and *Cordia africana*, could buffer between half to all of the reductions in areas suitable for Arabica and Robusta coffee by the end of century.



Gunny (jute) bags and high-quality pallets lifted from the ground can **improve the storage of coffee**, as coffee beans are prevented from drawing moisture and moulding.



Climate impacts are not gender-neutral. Farmers are diverse and have different capacities to adapt. For example, some adaptation options can be difficult to implement for women due to **limited access to resources such as land or credit.**



Infographic by Sarah Heuzeroth