

# CLIMATE RISK MANAGEMENT & BUSINESS OPPORTUNITIES

## - AGRO-PROCESSING OF TEA AND COFFEE IN RWANDA -

### Why adaptation to climate change matters for businesses!



„Climate action is not about sacrificing growth, but rather making sure that development gains can be sustained for generations to come.”

**Dr. Vincent Biruta**

Rwandan Minister of Natural Resources

Climate change is ALREADY taking place in Rwanda...

A changing climate puts the manufacturing industry at RISK



The mean annual temperature has risen by about 1.4°C since 1971.

- Longer dry seasons cause a **delay in the flowering** of coffee. **Less rain** in March **prolongs the ripening process** of coffee cherries. This may lead to **the inability to fulfill contractual agreements** for product delivery.
- **Shorter harvesting periods** can cause **higher peaks in tea and coffee** processing than the processing capacity allows, resulting in **spoilage of raw produce and thus business losses**.
- Prolonged dry periods may damage varieties of **drought-sensitive tea bushes** leading to **less supply of tea and business losses**.
- **Availability/costs of energy sources** for powering the energy-intensive tea drying processes may be constrained/increased by droughts, heat waves and flooding.



Unusually heavy rains occurred in the North and more severe droughts in the East and South in the last two decades

...and will become more severe in the future



Annual temperatures are projected to increase up to 2.5°C by 2050 and up to 4°C by 2080



Most parts of Rwanda are projected to experience an increase in precipitation with more intense rainfalls.



The rainy seasons will be shorter and more intense. Rainfall is likely to become more erratic.



The South and South-East of Rwanda is expected to have more intense and frequent droughts

Source: [Rwanda Baseline Study on climate change adaptation in the private sector](#) from 2014 which is accessible through the adelphi website.

Source: Grosse-Rüschkamp, Alois (2012): Socio-economic impact of potential adaptive measures to climate change in the coffee sector. Initiative for Coffee & Climate.

## What ADAPTATION to climate change means for ENTERPRISES



Ensuring **BUSINESS CONTINUITY** by **BUILDING RESILIENCE** to negative climate impacts



Creating **COMPETITIVE ADVANTAGE** through **positive side-effects** of adaptation measures, e.g. by increasing efficiency, creating reputational effects



Creating **BUSINESS OPPORTUNITIES** from climate change through **NEW PRODUCTS & SERVICES**

## Climate change adaptation MEASURES are available for the manufacturing industry

### Short- and medium-term measures



- Improved irrigation systems
- Pest control
- Mulching
- Introducing shade trees and using them as windbreaks
- Planting of cover crops
- Water harvesting / terracing

### Long-term measures



- Capacity building of employees / workers on climate change impacts
- Mapping of climate data
- Developing / planting drought and disease resistant tea/coffee varieties
- Diversifying out of coffee and/or shift production to more suitable areas
- Communication and joint action in the value chain
- Building resilient infrastructures (e.g. drainage system at company premises)

More information on adaptation measures for the coffee industry is available at the [Coffee&Climate website](#) and the [4CAssociation website](#). Information on the adaptation in the tea industry is available at the [Ethical Tea Partnership website](#).

## COMPANIES in RWANDA are already adapting to climate change



Rain-fed water tank

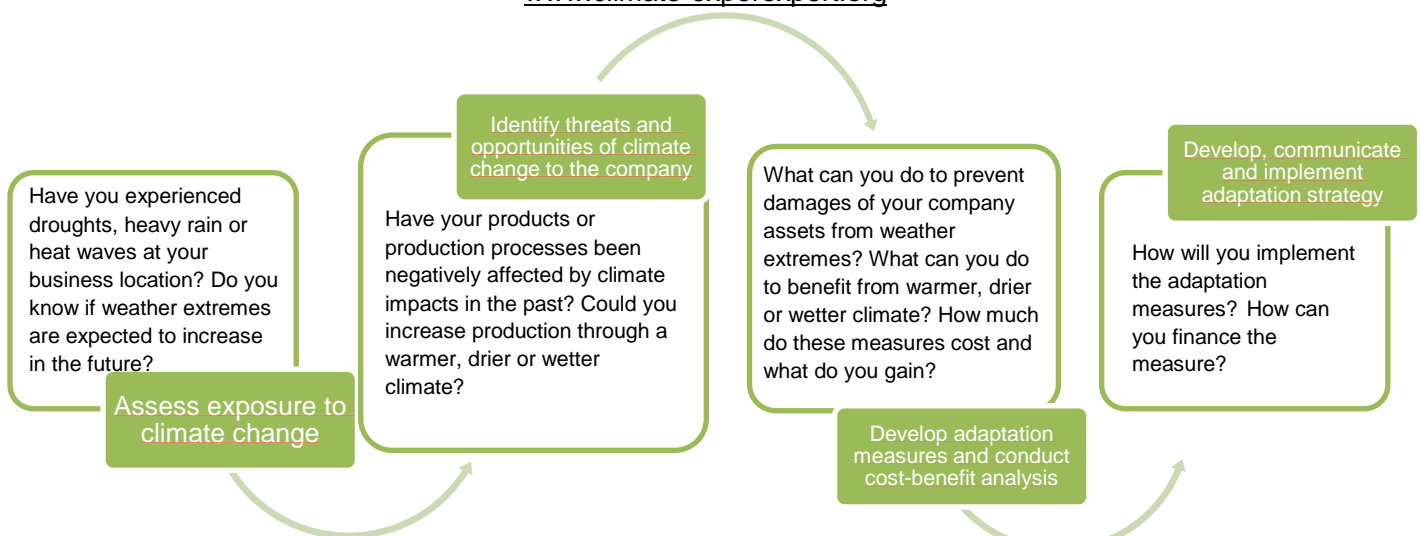
A beverage company has started its own maize farm with an **efficient irrigation system** reducing their dependence on rain and **contributing to a steady supply and quality of maize**.

Small tea farms have formed a saving initiative for procuring a **rain-fed water tank** that will be shared among them making a **shortage of supply in case of drought less likely**.

Tea companies are **using tea plants that are more robust** against weather extremes than older varieties **contributing to a reliable supply** of tea leaves.

## PREPARE for climate change – TAKE ACTION and adapt

The self-assessment tool for climate change adaptation for companies is accessible on [www.climate-expertexpert.org](http://www.climate-expertexpert.org)



## Building RESILIENCE and increasing COMPETITIVENESS of the private sector in RWANDA

### GIZ supports private sector in Rwanda in its adaptation efforts

The GIZ global programme 'Strengthening the Capacities of the Private Sector to Adapt to Climate Change' (from 2014 until 2017) supports associations, private enterprises and consultants in their efforts for climate change adaptation. Under the project pilot activities with private sector actors will be implemented in Bangladesh, Central America, Morocco, and Rwanda.

#### Our offer for businesses

- Individual climate change adaptation assessments
- Trainings on climate change adaptation and access to adaptation finance
- Value chain analyses on adaptation

#### Our offer for public authorities

- Providing awareness raising materials on climate change adaptation in the private sector
- Dialogue rounds with private sector actors on climate change adaptation

#### Our offer for associations

- Training of Trainers on climate change adaptation assessments of companies
- Providing awareness raising materials on climate change adaptation in the private sector

#### Our offer for financial institutions

- Dialogue round on financing needs of private sector actors
- Matchmaking between companies seeking funding for adaptation measures and financing institutions



### Get in touch

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