

16<sup>th</sup> ACA Annual Conference



**ACA**  
AFRICAN  
CASHEW  
ALLIANCE

## STRENGTHENING SUSTAINABLE KERNEL & BY-PRODUCTS MARKETING IN THE AFRICAN CASHEW INDUSTRY

*Sheraton Abuja Hotel, Abuja, Nigeria*  
12-15 September 2022



**giz**

# Climate-resilience practices for farmers – Insights in GIZ-MOVE/ComCashew



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14.09.2022



# Overview

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- Experiences and practices on climate action
- Pilots and Successes
- Collaboration and Scaling up going forward



# Experiences and practices

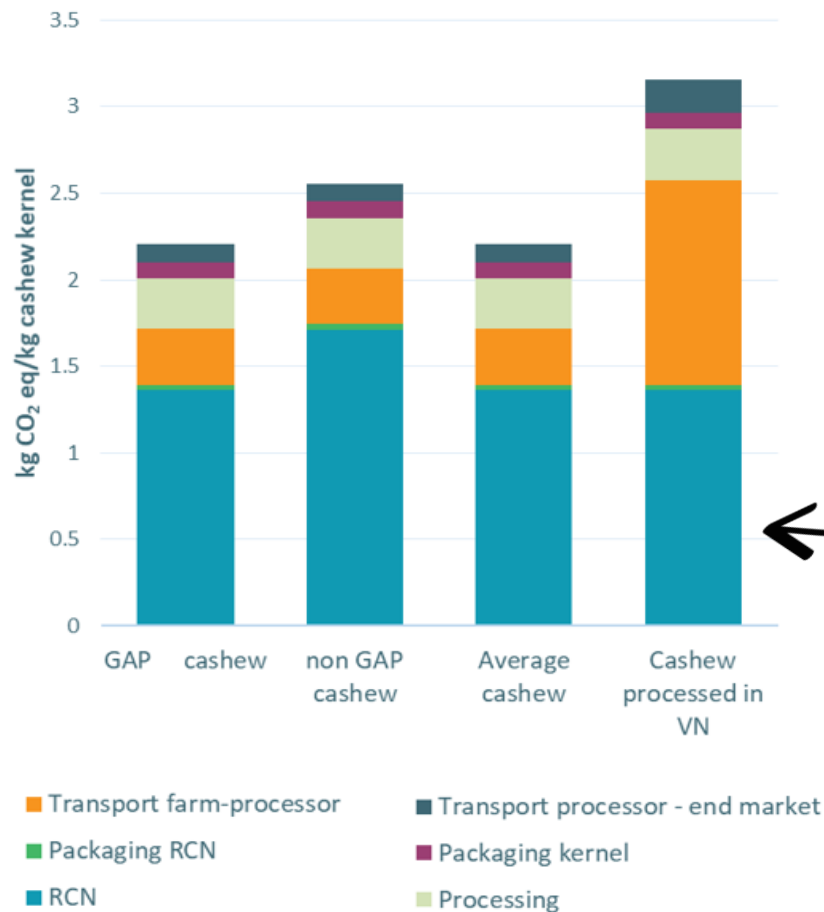




# Study on life cycle assessment (LCA) of cashew cultivation

Comparison Ghana and Vietnam - Focus: ecological footprint of Comcashew

Climate change impact of 1 kg cashew kernel



Results: The local processing of cashews from ComCashew farmers in Ghana emits an **average of 30% less greenhouse gases** than the cashews processed in Vietnam.

The cashew cultivation follows GAP criteria (good agricultural practices). As a result, CO<sub>2</sub> emissions are lower (than when CAP is not used) and the ecological footprint is lower than with other production methods.

Even if the processing stage in Ghana were 3x less efficient than in Vietnam, the total footprint of the core would still be 22% lower.

The results show the environmental benefits of promoting local production and processing of cashews in Ghana.



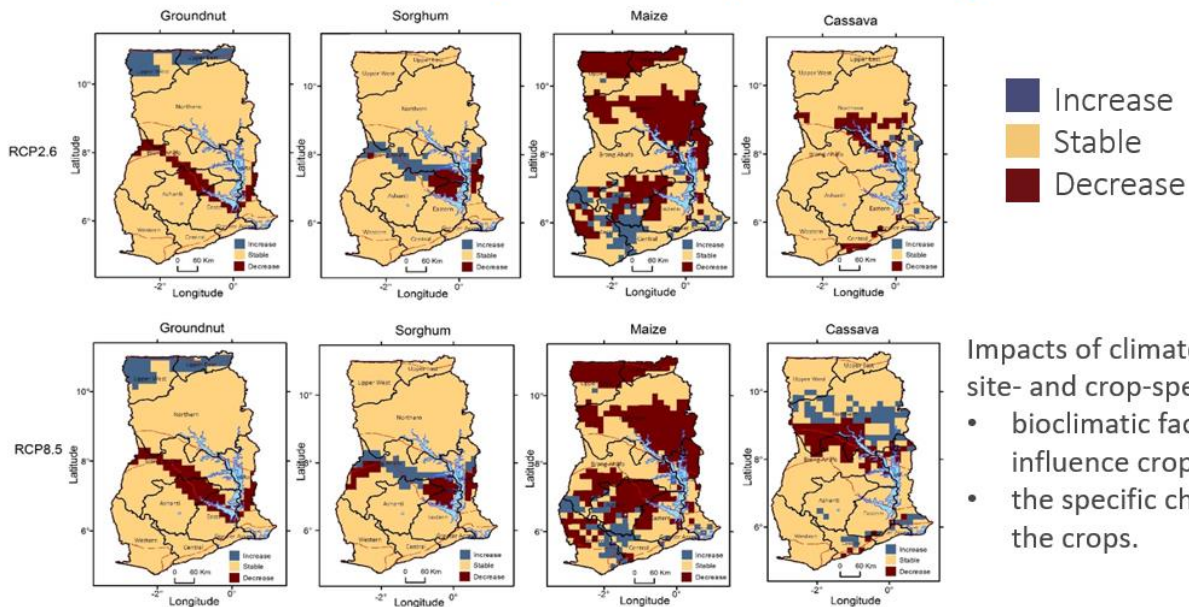
# Climate resilience profiles for northern Ghana

Cooperation with the Potsdam Institute for Climate Impact Research (PIK)



Objective: Climate risk analysis to identify and weigh up adaptation strategies in Ghana;  
Creation of various profiles and analysis of the suitability of different crops for cultivation.

## Crop suitability modelling



Impacts of climate change are site- and crop-specific,

- bioclimatic factors that influence crop viability &
- the specific characteristics of the crops.



# Strengthening resilience through re – and afforestation



Goal: Sustainable and inclusive improvement of the rural economy through increased implementation of gender-sensitive climate adaptation and mitigation practices

Conservation Agric.  
Demonstration  
Areas (CADAs) –  
Babile Agric Station  
6acre area (cashew,  
mango, cassia as boundary  
hedge, groundnut and maize as  
intercrops)

Farmer Managed  
Natural  
Regeneration  
incorporation in  
plots with *Faidherbia*  
spp., shea etc;

Digital mapping and  
digital libraries at  
local Ministries and  
District Assemblies  
to produce land use  
maps for building  
climate-resilience



Planting of trees - Cashew predominantly and also other native trees



# Conservation agriculture and Agroforestry in 200 communities in Ghana



Objective: Communities practice CA and AF on their own  
Increase resilience to climate change, while enhancing adaptation measures, including bettering soil health, reducing input costs and diversing income through intercropping

## Example on minimum soil disturbance

- 400 acres of farmlands have been ripped and planted rather than ploughed
- 2500 farmers are being sensitized on converting from ploughs to rippers and harrows





# Conservation agriculture and Agroforestry in 200 communities in Ghana



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Example on economic cover crops and intercropping:

35 communities with 4000 farmers have been piloting selected cover crops are being promoted with 2000 farmers across 18 communities (Pumpkins, Fonio, Mucuna, Canavalia)





# Climate Finance Pilot with MOFA, Microsoft und Rabobank on Co<sub>2</sub>-Sequestration

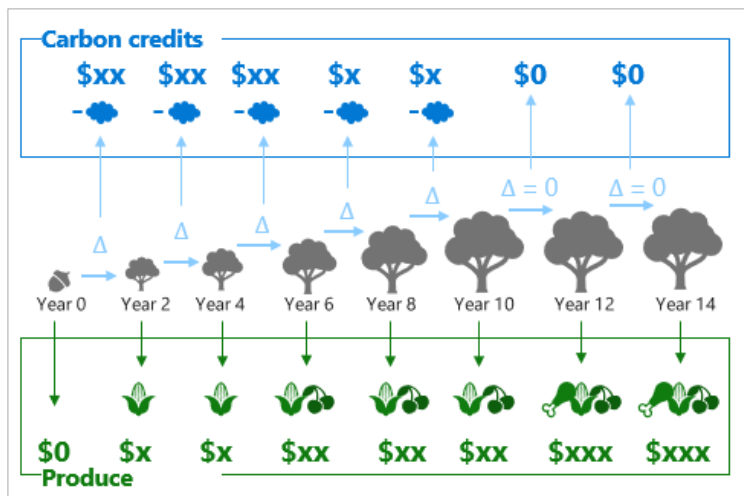


Objective: To promote and **finance agroforestry systems** for smallholder farmers who can offer their sequestered carbon on the emissions market in conjunction with a marketplace and thus diversify their income. Use of satellites and remote sensing technology (AI, ML). Pilot started 03/2021 and handed over to MOFA in Ghana 2022. in Cote d'Ivoire, Ghana and Burkina Faso



Different benefits for smallholder farmers:

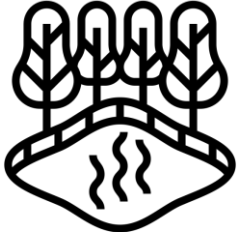
- At the same time as the **trees**, the **carbon credits "grow"**
- Carbon credits serve as **transitional financing** of a sustainable agroforestry system
- Price per ton of Co<sub>2</sub> is ca. 20 USD (Projection up to 200 USD)
- Agroforestry enables better and more diverse production conditions in the long term



**Scalability via MOVE into other green businesses and countries**



# "Climate awareness" throughout project and environment



Elements of FBS training include climate-resistant cultivation methods and aim to increase healthy tree populations



Combustion of cashew bowls as an alternative energy source in cashew processing (peeling) by women / biomass gasification of the cashew bowl



- Political dialogue (national and regional), with support of the Conseil International Consultatif du Cajou (CICC)
- Promotion of South-South exchange (Brazil, Colombia, India and Vietnam)
- Establishment of the Sustainable Nut Initiative (SNI) ...

... to highlight all topics around cashew and climate change in relevant documents for development of the sector



Use of **digital solutions** such as the cashewlator and cashew TDR and KOR measurements for the more efficient and controllable use of production methods



# Take home message

- Lots of underutilised potential for climate finance in Cashew
- Reliable (private) partners need to be on board
- Legal framework for farmers to sell carbon credits needs to be secured
- More attention on cashew agroforestry systems to build climate-resilience and conserve biodiversity – and food security

