







# Expert Talk on Green Finance for the Cashew Sector: Mobilizing Climate Funds and Carbon Markets

Linking the smallholder's livelihoods to global climate finance



















#### Wim Simonse

- •Agribusiness developer, providing consulting services in value chains in Africa
- •25+ years' on-the-ground experience in supporting farmers, farmer cooperatives and factories
- •Value chains: cashew, vegetables
- •Innovation and technology, link to the EU market
- •Implementation: partnerships and a local network of service providers















Services















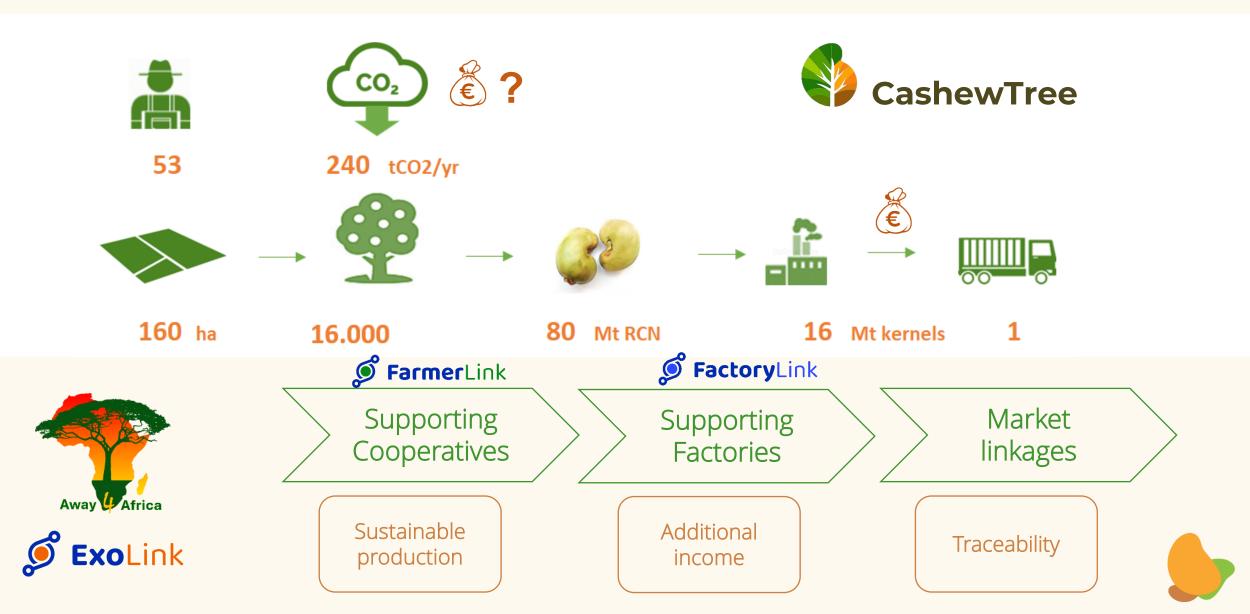


#### 2050 outlook: The farmer

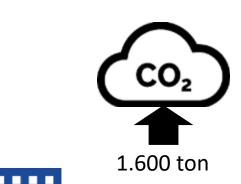
- Climate change: degraded soils, erratic rainfall, yields
- Cashew trees: multipurpose, climate-resilient, suitable agroecological space
- Africa as supply basket of the world's cashews
- Who will pilot the farming? Ensure sustainable production and environmental services?

Question: Can we structure finance to protect this future?

# Traceable and carbon compatible cashews



Project "Cashew Captures Carbon"





**Compensating** organizations





600 families in Benin have more to spend



10% extra income for farmers



600 farmers in Benin improve their cashew plantations (agroforestry, biodiversity, improved yields)



**120.000** trees on 1,000 ha sequestering 1,600 tons of CO<sub>2</sub> annually









# The 10 Core Carbon Principles



## **GOVERNANCE**

- 1. Effective governance
- Tracking
- Transparency
- 4. Robust independent third-party validation and verification

# **EMISSIONS IMPACT**

- 5. Additionality
- 6. Permanence
- 7. Robust quantification of emission reductions and removals
- 8. No double counting

# SUSTAINABLE DEVELOPMENT

- 9. Sustainable development benefits and safeguards
- Contribution to net zero transition









#### **Anchoring at different levels**

- 1. Farmer level
- 2. Organizational level and service provision
- 3. National and international level











## 1. Farmer in the lead:

- o Active involvement and
- o Direct and indirect benefits for farmers and the plantations

## 2. Three interventions:

- o New tree planting
- o Improved plot management
- o Avoided degradation











## How do we work: Project metrics

1. Results 1.1 tCO2e/ha/yr (including a 10% buffer)

No	Intervention type	Sequestration rate	Area realized	Sequestration baseline
		tCO2/ha/yr	ha	tCO2/yr
1	. Avoided degradation	0,387	633	245
2	Improved plot management	0,586	735	431
3	New tree planting	1,329	102	136
	Total		735	811

2. FarmerLink as data platform





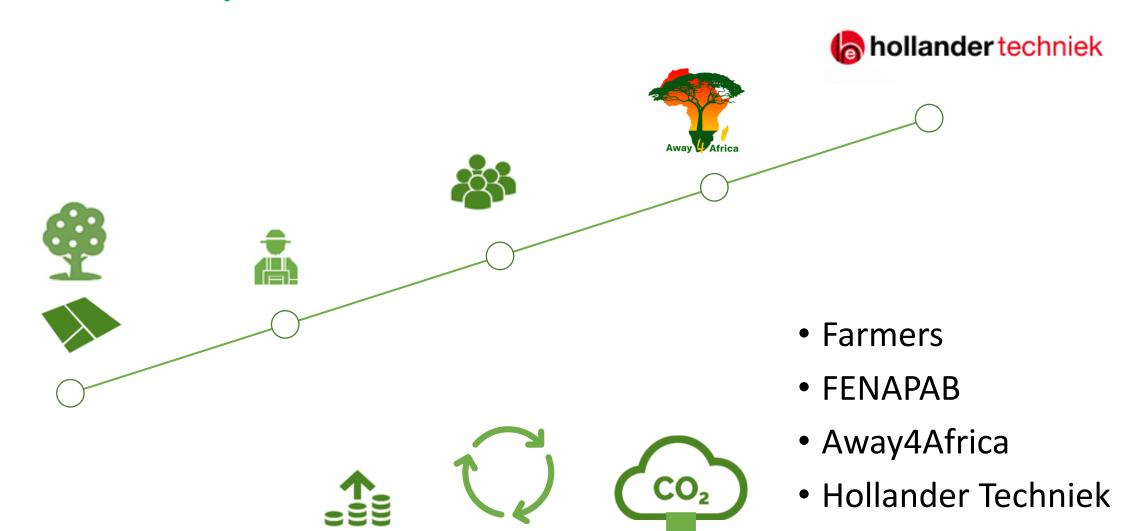




### **Additionality: Investments in plantations**

- a. Ensure the application of good agricultural and management practices in the planting, cultivation and maintenance of **existing and new plantations and trees**:
  - Tree inspection
  - ii. Tree maintenance (pruning)
  - iii. Fertilization (organic)
  - iv. Protection of the plantation (fire corridors)
  - v. Protection of trees (through phytosanitary measures and treatments)
  - vi. Replacement of trees with new ones (or by grafting)
  - vii. Prevent burning of pruned branches, but removal of wood and use or sale for renewable energy or timber
- b. In addition, for **new plantations** that are created:
  - i. Carbon-friendly land clearing: no burning of forests or trees to clear land for new plantations
  - ii. Use of good quality planting materials and techniques for new trees and ensure a survival rate of >80%

# Carbon Capture Chain











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# **Tracking & Transparency**



# Data capture and sharing FarmerLink





1. Cooperatives



2. Producers



3. Plots



4. Tree measurements



5. Revenues



6. Investments



7. Biodiversity



# **Empirical method**

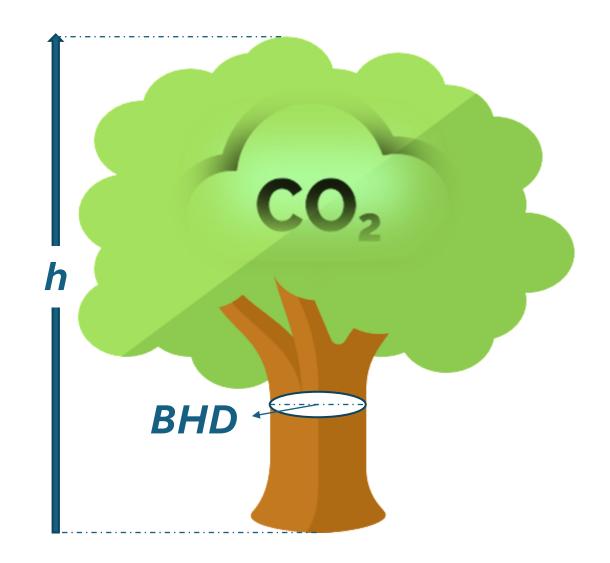
Biomass estimation

Circumference/ $\pi$  = BHD (Breast Height Diameter)

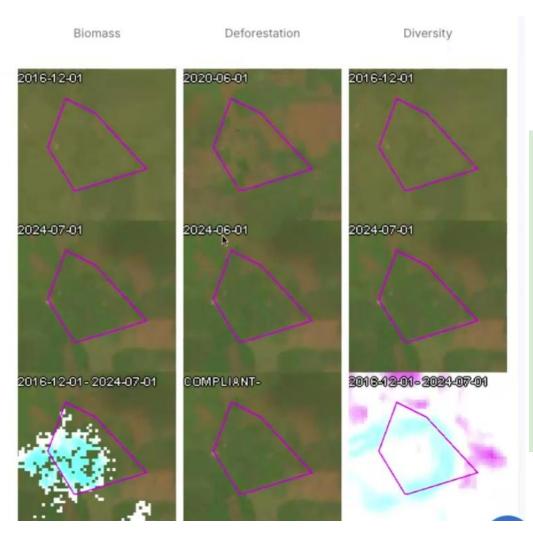
- Diameter at breast height
- Canopy height (h)
- BHD x h x factor



- Age of the tree
- => Carbon sequestration per year



# Independent verification and validation



# Valid Representation Statement - results 2024





#### Project Developer's Claim

• The Intervenor's intent is to claim 1240 Carbon Certificates (representing 1240 tCO2) over the period starting 01-01-2024 and ending 31-12-2024

#### Quality assurance

Verification of the Claim is done using the instruments and methods listed below, included in the guidelines of ISO14064-3:

- Peer-reviewed research regarding cashew tree growth
- Site inspections by remote sensing
- Site inspections of reference areas with remote sensing
- Ground-truthing of remote sensing models with partner-collected data

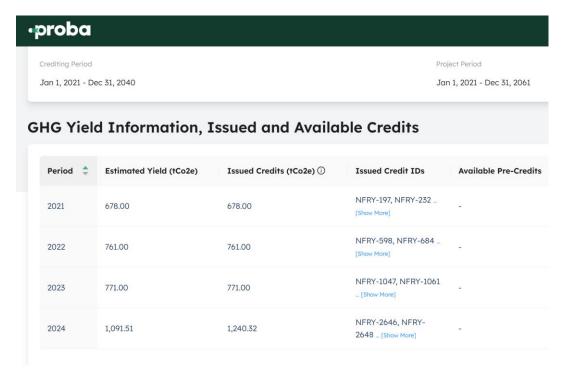


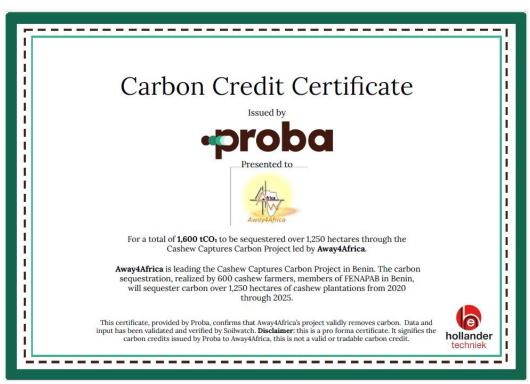






## Certified carbon credits registered





Published registry: <a href="https://registry.proba.earth/PROBA.2023.0001">https://registry.proba.earth/PROBA.2023.0001</a>









## Land use management plans

Develop with the farmers and communities land use management plans to protect the environment











#### **Carbon Credit Eligibility Procedure**

1. Implementation partners and initial data collection with **STREATH FARMED** 



- 2. Compile a Project Identification Note (PIN)
- 3. Alignment with the national policies and NDCs
- 4. Establish a baseline, scoping areas, types of reforestation, deforestation risk analysis (validation by a third party)
- 5. Determine carbon sequestration accounting: potential, method, growth rates (by a thirdparty audit)
- 6. Compile a Project Design Document (PDD) and external audit
- 7. Approval by the certification body to issue **certified carbon credits**









## Capturing carbon with us

- High integrity Certified carbon credits
- •Based on the Gold Standard, ISO 14064 GHG protocol
- •First Certified carbon credits through cashew in Africa
- •Embedded in value chain development
- •Transparency and connection through
- •Low overhead costs
- High potential for extension and upscaling













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#### Who are the buyers of carbon credits?

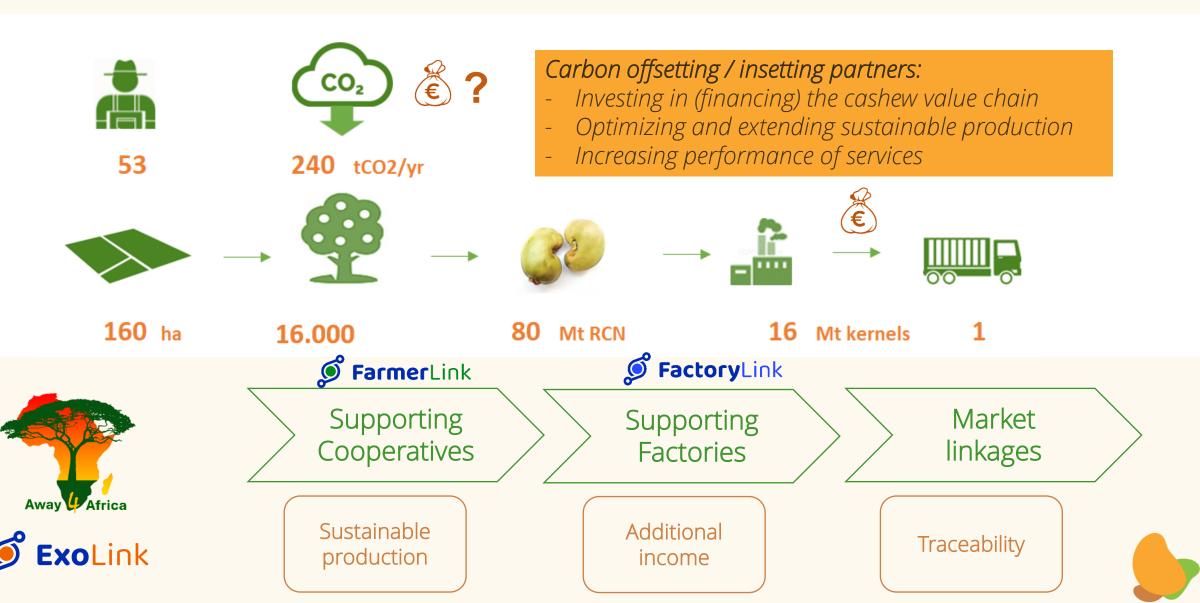
#### **Insetting / Off-setting:**

- Corporations with having an exceeding carbon emissions on their carbon balance
- Organizations with sustainability or CSR commitments

#### Legal and commercial considerations for EU:

- •CSDDD (Corporate Sustainability Due Diligence Directive) not directly regulate carbon credits, it incentivizes the use of traceable and climate-positive value chains
- •SBTi (Science-Based Targets initiative) removal-based carbon credits
- •EU ETS (Emissions Trading System) creates indirect demand

# Traceable and carbon compatible cashews











## **Carbon finance in African cashew**

2025 2050

Revenues RCN sales	2.000	M USD
Area	5	M ha
Yield	500	kg/ha
RCN produced	2,5	M Mt
Number of farmers	2,5	M

Extra revenues-%	5,0%
Revenues from carbon	100 M USD
Sequestration service	20 USD/ha
Carbon yield	5 MtCO2/yr
Carbon yield	1 tCO2/ha/yr

#### Farmers business and resilience

Revenue per farmer	800	USD/yr
Revenues from carbon	40	USD/yr

Investments in productive and sustainable plantations

>	Yield	750	kg/ha
	Area	5	M ha
	Revenues RCN sales	3.000	M USD
	Carbon yield	1	tCO2/ha/yr
	Carbon yield	5	M tCO2/yr
	Sequestration service	20	USD/ha
	Revenues from carbon	100	M USD
	Extra revenues-%	3,3%	

2,5 M 3,75 M Mt

Number of farmers

RCN produced

Revenue per farmer	1.200	USD/yr
Revenues from carbon	40	USD/yr









## Carbon finance for Traceable and carbon compatible cashews







- √ Farmer in the lead
- ✓ Certified carbon credits
- ✓ Investments in productive and sustainable plantations
- ✓ Empowering farmers
- ✓ Processing with performance
- ✓ Connecting actors in supply chains