

### Environmental Working Group

July 2025

### mea AMEA Environmental Working Group

#### **Origins & Vision**

- Established: 2024 AMEA Global Convening in Delft; 4 meetings since 2024 Convening
- **Approach:** Focused on sharing learning and connections between professional farmer organizations, ISO 18716, and environmental outcomes.

#### Objectives in 2025-26

Our goal is to discover how BDS providers, strengthened farmer organizations, and Agri-SMEs can lead in:

- **Carbon Markets:** Investigating durable pathways to engage in voluntary carbon markets to more effectively distribute co-benefits to communities.
- **Regenerative Agriculture:** Understanding how professionalization can accelerate the adoption of regenerative practices that build resilience and enhance soil health.
- **Green Economic Opportunities:** Identifying how to best position professionally managed agri-SMEs to meet the growing demand for sustainable goods and access high-value markets.

#### **Underlying Assumption**

• **Professionalization:** Utilizing frameworks like **ISO 18716, BDS platforms, and network learning** to strengthen governance and management is key to unlocking the potential of FOs and Agri-SMEs as effective environmental actors.







### **Agribusiness & Nature Based Solutions**

### Strategies for Stability in Volatile Markets

#### **Expect A Dynamic Discussion On:**

- Enhancing income per hectare through NbS
- De-risking finance via ISO 18716 & technical assistance
- Opportunities for carbon markets and regenerative cocoa supply chains
- Real-world challenges and investment pathways for cooperatives





Matthew Aghai Arnoud de Villegas Reforestation & investment pathways Viridian Ecosystems





Casey Harrison Chief Sustainability Officer Nuru & AMEA

nuru



17TH JULY, 2025 14:00 GMT (60-90 MINS)

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### The 1<sup>st</sup> AMEA Environmental Webinar

with Viridian Ecosystems and Proforest



### Opportunities for carbon markets and regenerative cocoa supply chains

The Ghana Cocoa Forest REDD+ Programme (GCFRP)

James Parker, Proforest



### Proforest is a global organisation, locally led, with a shared mission

Agricultural and forestry production and sourcing that delivers positive outcomes for people, nature and climate



#### The Ghana Cocoa Forest REDD+ (GCFRP)

- GCFRP is the first Emission Reduction(ER) program to be developed under REDD+ in Ghana.
- Aims to reduce carbon emissions resulting from cocoa expansion into forest areas through the promotion of appropriate climate smart cocoa production systems (RegenAg & dynamic agro-forestry) to increase cocoa yields and improve rural livelihoods and economies

TROPENBOS GHANA



**Forestry Commission** 

**Ec** Care



**A ROC** 

GHANA

the sustainable trade initiative



World Cocoa

Foundation

proforest

### Performance indicators and contribution of Asunafo-Asutifi landscape



בב: Social performance indicators and respective weights

Social Performance Indicators	Data/Measurement	Weight
	Proxy	
Registration of farmers/farmer groups	No. of farmers	0.5
	registered per HIA/Sub-	
	HIA	
Launching of HIA Consortium	Documentation of	0.5
	launch	
Letter of Agreement/MoU to establish HIA governance	Letter/MOU	0.5
structure		
Development of management plan	Management Plan	1
	document	
Verified participation of Traditional Authorities in	Signature from TAs in	1
development of management plan	MP	
Establishment of HIA governance structure	Sub-HIA and HIA	1.5
	Constitutions and then	1.5
Adoption of CSC practices by farmer group &	By-laws	
Implementation of management plan	HIA annual report	1.5
Total		8

#### Table 32: ER indicators and respective weights

Emission reduction indicators	Weight
Increased deforestation in HIA	0.5
No net change in deforestation	1
Reduced deforestation	1.5



#### **GCFRP** Targets

- Produce a total of 294,395,567 million tCO2e emission reductions over 20 years
- Invest about USD 2 billion in Cocoa industry
- Increase cocoa yields from 400 kg/ha to 600-800 kg/ha, through adoption of climate smart agricultural practices
- Produce "sustainably" cocoa beans to support private sector's no deforestation supply chain commitments
- Sign Emission Reduction Programme Agreements (ERPA) with the Carbon Fund

#### **Carbon benefits**

- Performance based incentive payment.
- Farm input packages to support climate-smart cocoa production.
- Community development projects.
- Logistics for landscape monitoring and law enforcement.
- Support for implementation and monitoring of Safeguards.

#### **Non-Carbon benefits**

- Increased yields and incomes through adoption of CSC practices
- Sale of CSC beans at premium price
- Improved tree and land tenure security
- Access to financial credit and risk reduction instruments
- Livelihood diversification (additional livelihoods)

#### **Carbon Benefits outcomes**

- In 2019, Ghana signed the ERPA with the World Bank Carbon Fund.
- The ERPA cover the first 7 years of implementation of the GCFRP (2019-2025) and estimated to produce about 10 million tCO2e emission reductions to be transacted for USD 50 million.

### Landscape Governance Structure



#### **Activities**

- Working with **4 farmers groups** with a total of number of about **20,000 farmers**, traditional authorities and landscape communities.
- Implementing climate smart agricultural practices (RegenAg, dynamic agro-forestry), restoring degraded forests, diversifying livelihoods, addressing social issues including child labour and linking farmers to sustainable markets.

### Benefit sharing Plan





#### **Benefits**

- A total of USD 37.5 million has been paid by World bank Carbon fund and USD 19.5 million shared. The Asunafo-Asutifi landscape has received a total of USD 4,480,453.21 (about 23%)
- The average productivity of cocoa in the GCFRP area has increased from 400 kg per hectare to 600 kg per hectare since 2019 (World Bank, June 2023)
- All cocoa farms in the GCFRP area have been mapped and polygons capture. All cocoa farmers have also been registered. Ghana COCOBOD is working with Verra (VCS) to develop and pilot a Landscape Standard (LS) for cocoa that will enable certification of sustainable landscapes beans for differentiated marketing and pricing.

#### Challenges

- Funding to scale up interventions
- The EUDR has shifted the attention of key private sector actors. This has slowed down investment in the cocoa sector
- Functionality at all levels of governance structure
- Reluctance to on-farm investments (unchanging attitude of older cocoa farmers)
- Data sharing and management
- Coordination at the national level



# **NEVIRIDIAN**



# **Viridian Ecosystems**

Partnering with AMEA to Cultivate Natural Capital in Agri-SMEs.

Regenerating Land, Livelihoods, and Legacy [now expanding into Rural Africa].

#### **Presenters:**

- Matthew Aghai, Chief Executive Officer
- Arnoud de Villegas, Chief Commercial Officer



## Who We Are

#### 01

#### In Forestry.

- Led the development of the first vertically integrated reforestation technology company in the U.S.
- Created a FOAK natural capital project finance model benefiting fire-affected landowners.
- Built the largest reforestation supply chain in the Western U.S.
- Shaped policy discussions on resilience and natural capital markets in D.C.
- Integrated applied science with commercial execution across the reforestation value chain.

#### 02

#### Beyond

- Experience in finance, operations and complex logistics, M&A, technology, and scaling small to medium sized companies across diverse industries around the world.
- Collectively, we have lived and operated across North America, Latin America, Europe, Asia, and most recently Africa, navigating both conventional and high-stakes environments.



# **Our Team**



#### Matthew Aghai

Chief Executive Officer, Co-Founder

Fmr Chief Science Officer, Mast Reforestation



Fmr Univ of Washington Pack Forest, Univ of Idaho



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Arnoud de Villegas

Chief Commercial Officer, Co-Founder

Fmr VP of BD, Mast Reforestation

Fmr CalForest, GEM, Hayground Cove, Petercam Capital



John Hall

COO & CFO, Co-Founder

Fmr COO/CFO at Mast Reforestation



Fmr Convoy, Amazon, U.S. Marine Corp Aviator



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Joe Bardenheier

Head of Corporate Development

Founding Exec and Fmr SVP Corp Dev, Endurance International

Adjunct Professor, Montana State University





Solomon Dobrowski

Chief Scientist & Co-Founder

Professor, Department of Forest Management, University of Montana. Climate; Forestry; Wildfire; Landscape Ecology





**Chris Samuel** 

Chief Impact & Corporate Affairs Officer [Fractional]

Fmr. Head of Global Communications, U.S. Soybean Export Council

Fmr. Bayer, Monsanto, Madison PR



# **Our Team**



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#### Lord Ameyaw

Principal | Agroforestry & NBS

Assistant Professor. University of Nebraska School of Natural Resources





#### Kacy Hutchison

Advisor | Government Affairs & Advocacy

Chief of Government Affairs & Advocacy, Lykos Therapeutics

Fmr VP of North America Government Affairs at Gilead Sciences

Sierra Quitiquit

Advisor | Climate Advocacy

CEO, Time For Better

Professional Skier | Climate Activist | NATO Youth representative USA





Fmr Head of Carbon at Mast Reforestation. Fmr NewForests. Weyerhaeuser, US Congress

Jonathan Loevner

Acting COO, Carbon

Assets

Lockdown

Advisor | Carbon & Real



Hunter Oetinger

Advisor | Marketing & Communications

Head of Marketing at Reuben's Brews

Docklight and Sierra Nevada Brewing



Fmr Head of Marketing at Mast Reforestation, Fmr







#### Nuru International :

- Global non-profit.
- Support the development of independent agricultural businesses in conflict-impacted countries.
- Operations in Kenya, Burkina Faso, Ethiopia, Ghana, and Nigeria.

#### Project partners : Ghana & Ethiopia.

- Blended-finance models:
  - → Agroforestry <> Natural Capital.
- System design & project development in-country.
- Stakeholder engagement & funding.
- Broad technical support and supply chain evaluation.

### Viridian & Nuru in Ghana



# Catalyzing Restoration & Land-Based Finance

#### Our Mission:

We design, fund, and manage projects that deliver landscape-scale ecological impact alongside robust financial returns by valuing nature in financial systems. Our expertise lies in creating durable and sustainable practices for integrating trees into landscapes.



# The Critical Context in Africa

The global imperative to restore landscapes:

Land degradation impacts 2.6 billion people globally, severely affecting over 2 billion in drylands. This threatens food security and rural incomes.

Africa holds one-fifth of the world's remaining forests but is experiencing the fastest rates of loss.



# Agroforestry: Multifunctional, Resilient, and a Key Nature-based Solutions (NbS)

Agroforestry intentionally combines trees with crops and/or livestock, offering diverse agronomic, socioeconomic, and environmental advantages.

01 Climate Mitigation & Adaptation

Trees sequester carbon and improve soil health, while also providing shade and water regulation for climate resilience. Agroforestry can offer a "multiple-win solution". sustainable wood products, grants applications, forest inventory, and environmental services.

#### 02

Livelihood Diversification

Provides varied income sources from timber, fruits, and other products, crucial for smallholder stability.

#### 03

Enhanced Soil Health & Biodiversity

Reduces erosion, improves nutrient cycling, and provides habitats.



# Quantified Agroforestry Impact

#### **Global Potential**

Agroforestry could mitigate up to 0.31 Pg C yr-1, comparable to reforestation.

#### African Context

Systems stock an average of 24.2±2.8 Mg C ha-1 in biomass and 98.8±12.2 Mg C ha-1 in soil. Large-scale deployment in West Africa could sequester up to 135 Mt CO2/year over two decades.

#### Sources

Hart et al. 2023. Priority science can accelerate agroforestry as a natural climate solution

Roe et al. 2019. The potential of natural climate solutions in mitigating global climate change: a meta analysis.



# Bridging the Finance Gap through NbS

#### 01

The "Missing Middle" Solution

Blended finance models combine catalytic capital (reducing risk) with private investment to unlock funds for agri-SMEs and cooperatives that are too large for microfinance but too risky for commercial banks. Every \$1 of catalytic capital can unlock up to \$4 of private investment.

#### 02

#### Carbon Markets as a Revenue Stream

Carbon credits offer a performancebased incentive, allowing projects to generate revenue from emissions reductions or removals, providing a long-term sustainable financing mechanism (20-30 years).



# Our Collaborative Approach: Building Investment Readiness

Aligning Incentives, Standards, and Local Realities for Scalable Impact

#### 01

Criticality of Technical Assistance (TA)

#### 02 Community-Led Ownership

#### 03 The Human Element

#### 04

Proven Partnership Model

Building capacity and quality in environmental projects is paramount for de-risking finance and ensuring stable supply chains. This includes support for fundamental business management and organizational capacity. Empowering professional cooperatives, aligned with ISO 18716, ensures that project benefits improve livelihoods and climate resilience directly within local communities. While technology extends reach, trusted local actors are essential for building relationships, ensuring uptake, and translating complex solutions on the ground. Our work with Nuru in Ghana and Ethiopia aims to demonstrate how blending community-driven solutions with natural capital investment can foster resilience, impacting hundreds of thousands of people through professionalized agribusinesses.

# AMEA & Viridian: Accelerating Regen Ag & NbS at Scale

#### **Our Shared Ambition**

We are committed to scaling regenerative agriculture and Nature-based Solutions in practical, profitable, and scalable ways for smallholder farmers and agri-SMEs across Africa.

#### How We Can Collaborate

**Leverage Viridian's Expertise:** Discuss how our knowledge in natural capital project development, blended finance, and robust MRV can directly support your initiatives in Africa.

**Co-Create Solutions:** Work together to bridge the technical insights of NbS specialists with the practical knowledge of agronomic experts, BDS providers, and smallholder farmers.

### **Our Collective Goal**

To equip local actors with the knowledge, partnerships, and tools necessary to effectively respond to intensifying biodiversity loss and climate impacts, building resilient landscapes and livelihoods.



# amea **NEVIRIDIAN**



### Questions

#### **Discussion:**

- How can technical assistance and business development services build investment readiness and prepare cooperatives for nature-based finance?
- Noting the risk of "standards fatigue" for farmers, Agri-SME leaders, and investors, how can ISO 18716 guidelines act as a "gateway" rather than another "barrier" to positive environmental outcomes?
- What are some of the keys to unlocking nature-based solutions at scale? Is there a role for networks of professionally managed Agri-SMEs to create change across a landscape?