

RESTORING LAND
RESTORING HOPE



United Nations
Convention to Combat
Desertification



UNCCD
COP17
ULAANBAATAR 2026

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**GREEN
MONGOLIA
HUB**

UNCCD COP17 GREEN ZONE | FINANCE DAY

DIGITAL MRV & CARBON FINANCE

Advancing Land Restoration and Sustainable Livelihoods

Evidence → Trust → Capital → Restoration → Livelihoods

Turning digital monitoring from a verification requirement into infrastructure for credible, investable and inclusive carbon finance.

EVENT AT A GLANCE

DATE	TIME	VENUE	LOCATION
Monday, 24 August 2026	13:30 - 15:00 (GMT+8)	Tsagaadai Hall	Ulaanbaatar, Mongolia

Co-organised by The Energy and Resources Institute (TERI), Value Network Ventures (VNV) and Green Mongolia Hub (GMH)

Official event page: [COP17 Green Zone – Digital MRV & Carbon Finance](#)

CONCEPT NOTE

1. Event Overview

Carbon finance can mobilise significant private capital for land restoration, climate-smart agriculture, agroforestry, biodiversity conservation and community-based natural-resource management. Its ability to scale, however, depends on one fundamental condition: trust in the evidence behind claimed climate and restoration outcomes.

Digital Measurement, Reporting and Verification (Digital MRV) is transforming how projects establish baselines, map eligible areas, monitor interventions, quantify outcomes and demonstrate performance. Satellite observations, geospatial analytics, AI-enabled models, digital field data, traceable activity records and interoperable registries can improve accuracy, lower monitoring costs and shorten the path from implementation to finance. Yet digitalisation alone does not create integrity. Weak historical baselines, fragmented datasets, opaque algorithms, uncertainty, poor interoperability and high transaction costs continue to exclude many smallholder and community-led projects from carbon markets.

**The panel will move the conversation from “How do we digitise MRV?” to
“How do we turn trusted evidence into investable restoration?”**

2. Relevance to UNCCD COP17 and Finance Day

The session directly links the UNCCD land-restoration agenda with the finance architecture required to deliver it at scale. It will examine how credible Digital MRV can help governments, investors, standards, project developers and communities identify restoration opportunities, establish defensible baselines, monitor performance, manage risk and channel finance toward measurable land, climate and livelihood outcomes. The discussion will connect project-level innovation with the need for shared, transparent and interoperable evidence systems that can support national restoration priorities and high-integrity carbon markets.

3. Overall Objective

To identify a practical, scalable Digital MRV architecture that improves carbon-market integrity, reduces transaction costs, de-risks investment and expands access to restoration finance for landscapes and communities.

4. Specific Objectives

- Define the minimum evidence required for credible land- and nature-based carbon projects, from eligibility and historical baselines to field calibration, uncertainty and audit trails.
- Demonstrate how satellite data, AI/ML, field measurements and digital activity records can operate as a hybrid MRV system rather than isolated tools.

- Identify cost-reduction approaches, stratification, risk-based sampling, automated QA/QC and aggregation models, that preserve integrity while enabling smallholder participation.
- Explore interoperability across project platforms, standards, registries, public datasets and financial institutions.
- Show how Digital MRV can support finance before final credit issuance through milestone-linked evidence, risk management and investment-readiness assessment.
- Embed safeguards, consent, data rights, transparent benefit sharing and livelihood outcomes within digital carbon-finance systems.

5. From Monitoring to Finance: Five Solution Pillars

1 FOUNDATION	Evidence before crediting Clear project boundaries, land eligibility, historical land-use evidence, baseline carbon stocks, additionality and rights to participate.
2 MEASUREMENT	Hybrid MRV Satellite observations + field plots + AI/ML + digital activity records, with transparent calibration, uncertainty and audit trails.
3 INTEROPERABILITY	One evidence chain Common parcel identifiers, compatible classifications, registries and data-exchange protocols to reduce overlap, fragmentation and double counting.
4 ACCESS	Lower cost, not lower integrity Risk-based sampling, stratification, automation and institutional aggregation through farmer and community organisations.
5 FINANCE	Evidence that unlocks capital MRV data designed for investment decisions, milestone-linked finance, performance tracking, benefit sharing and restoration outcomes, not only final verification.

6. Key Discussion Questions

- What is the minimum evidence stack that every land- and nature-based carbon project should disclose before registration?
- Which MRV functions can be automated reliably, and which require field measurement or independent verification?
- How can Digital MRV reduce transaction costs for smallholders without creating a lower-integrity tier of carbon projects?
- What interoperability standards are needed to connect project platforms, national systems, carbon standards, registries and financial institutions?
- How should uncertainty, algorithm transparency, data ownership, consent and community safeguards be governed?
- What MRV evidence do banks and investors need to finance projects before carbon-credit issuance?
- How can carbon monitoring expand beyond tonnes of CO₂ to capture land health, biodiversity, resilience and livelihood outcomes?

7. Intended Participants

Representatives of UNCCD Parties and government agencies; carbon standards and registries; financial institutions and investors; climate-project developers; restoration and agriculture organisations; research and technology institutions; civil-society organisations; farmer and community institutions; biodiversity and ecosystem-restoration practitioners; and private-sector actors seeking credible, scalable pathways for land- and nature-based climate finance.

8. Moderator and Panel

Speaker	Role / Organisation	Core Perspective
Mandukhai Tsogtbal	Moderator Chairwoman, Green Mongolia Hub	Digital MRV, green carbon, land restoration and market governance
Sandeep Roy Choudhury	Opening Panel Speaker Co-Founder & Director, VNV	Community-scale climate ventures, carbon finance, investment and livelihoods
Sayanta Ghosh	Panelist Senior Associate Fellow, TERI	Geospatial MRV, AI/ML, historical baselines and land- based carbon integrity
Sharyn RossRakesh	Panelist Director of Strategic Planning, Earthbanc	Technology-enabled MRV, pre- feasibility screening and restoration investment decisions
Rieko Lee	Panelist New Business Development Manager, Green Carbon Inc.	Nature-based carbon projects, agriculture and scaling MRV in Asia-Pacific
Carolyn J. Einig	Panelist Director of Science, Lifezone Ecological	Ecosystem restoration, biodiversity integrity and science-to-finance pathways
Broderick Gunning	Panelist President & CEO, NUE Power Corp.	Capital markets, infrastructure investment and bankability of climate assets

9. Detailed 90-Minute Agenda

Time	Min	Segment	Purpose / Focus	Lead
13:30–13:35	5	Opening & Moderator's Framing	Why Digital MRV must move from project technology to trusted finance infrastructure.	Mandukhai Tsogtbal
13:35–13:42	7	Opening Panel Intervention	From Carbon Accounting to Investable Climate Assets: linking evidence, implementation, community ownership and capital.	Sandeep Roy Choudhury
13:42–13:49	7	Solution Spotlight I	Digital MRV as Evidence Infrastructure: geospatial baselines, hybrid monitoring, uncertainty and audit-ready land carbon systems.	Sayanta Ghosh
13:49–13:56	7	Solution Spotlight II	From Pre-feasibility to Performance: digital systems for screening restoration opportunities and improving capital allocation.	Sharyn RossRakesh
13:56–14:03	7	Solution Spotlight III	Scaling Nature-Based Carbon in Asia: agriculture, restoration and practical digital MRV implementation.	Rieko Lee
14:03–14:10	7	Solution Spotlight IV	Beyond Carbon: integrating ecological restoration, biodiversity and resilience into high-integrity monitoring.	Carolyn J. Einig
14:10–14:17	7	Solution Spotlight V	What Makes Climate Assets Bankable? investor expectations for evidence, risk reduction and scalable infrastructure.	Broderick Gunning
14:17–14:37	20	Moderated Panel Round	Five bottlenecks, five solutions: integrity, interoperability, transaction cost, inclusion and finance-readiness.	Moderator + all panelists

14:37–14:50	13	Audience Interaction	Questions from governments, investors, project developers, researchers and civil-society participants.	Moderator + panelists
14:50–14:56	6	Action Synthesis	Capture a practical Digital MRV action framework: minimum evidence, interoperability, inclusive access and finance triggers.	Moderator + panelists
14:56–15:00	4	Closing & Transition	Three takeaways for COP17 and next-step collaboration.	Organisers

10. Expected Outputs: From Discussion to Action

A. DIGITAL MRV MINIMUM EVIDENCE STACK

A practical checklist covering project boundaries, eligibility, historical baselines, field calibration, uncertainty, audit trails and safeguards.

B. INTEROPERABILITY & DATA-GOVERNANCE CHECKLIST

Priority requirements for parcel identifiers, data exchange, algorithm transparency, registries, data rights, consent and double-counting controls.

C. SMALLHOLDER COST-REDUCTION PATHWAY

Scalable approaches using aggregation, stratification, risk-based sampling and automated QA/QC while maintaining verification quality.

D. FINANCE-READINESS DATA PACKAGE

The evidence investors and financial institutions need for project screening, milestone-linked finance, implementation tracking and risk management before final issuance.

E. COP17 ACTION POINTS

A concise set of recommendations and partnership opportunities for moving Digital MRV from isolated project tools toward shared infrastructure for credible carbon finance and restoration.

11. Expected Contribution and Outcomes

The session is expected to strengthen the case for Digital MRV as an enabling layer for credible and inclusive land-based carbon finance. It will clarify where technology can reliably reduce costs and increase transparency, where field evidence and independent assurance remain indispensable, and how project data can be structured to serve both carbon-market integrity and investment decisions.

By bringing together research institutions, project developers, restoration practitioners and finance actors, the panel will connect measurement with capital allocation and community outcomes. The intended result is a shared shift from monitoring as a compliance exercise to MRV as a system of evidence and accountability, one that can help de-risk investment, accelerate restoration finance, strengthen benefit sharing and make high-integrity carbon markets more accessible to communities and smallholders.

The future of carbon finance will not be decided by how much data we collect, but by whether that evidence is **credible enough for markets, useful enough for investors, scalable enough for institutions and fair enough for communities.**

12. Post-Event Follow-up

- Prepare a concise outcome note capturing the Digital MRV action framework, key recommendations and priority partnership opportunities.
- Share the outcome with participating organisations and relevant UNCCD COP17 stakeholders.
- Explore technical collaboration on interoperable MRV, restoration investment screening and smallholder-inclusive carbon-finance models.
- Identify opportunities for demonstration projects that connect high-integrity monitoring with earlier and lower-risk restoration finance.

13. Organisers

The Energy and Resources Institute (TERI) India www.teriin.org	Value Network Ventures (VNV) Singapore vnv.earth	Green Mongolia Hub (GMH) Mongolia www.green-mongolia.com
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