Role and importance of standards for the voluntary carbon market – notes for smallholder farmers’ projects

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Voluntary Carbon Market

Formed with the aim of driving finance to activities that promote climate action

C credits and offsets are a transition tool
1) Towards decarbonized economy
2) Part of broader strategy
3) Aim to catalyze climate action

Government action alone falls short given the urgency of climate crisis

Photo Credit: Steve Kamenar, Unsplash
What makes a good carbon credit?

Verra Projects issue unique carbon credits known as

**Verified Carbon Units = VCU**
Voluntary Carbon Market Stakeholders

**SUPPLY**
- Project developers
- Communities/Farmers
- NGOs

**GHG CREDITING PROGRAMS**
- VCS Standard
  - Accounting methodologies
  - Independent auditing
  - Registry system

**INTERMEDIARIES**
- Brokers
- Trading platforms

**DEMAND**
- Corporates
- Philanthropies
- NGOs
- Individuals
- Other buyers
Agriculture methodologies in the VCS Program

- C credits generated through:
  - Increases in C pools (soil, trees, roots, biochar)
  - Reductions in emissions ($N_2O$, $CH_4$, $CO_2$)

→ A broad range of improved land and livestock management practices

VCS methodologies:

- VM0042
- VM0022
- VM0017
- VM0026
- VM0041
- VM0032
- VM0044

VCS = Verified Carbon Standard
Benefits of agricultural carbon projects

- Higher yield (stability) and resilience
- Higher (and diversified) income
- Human health benefits through lower use of agro-chemicals
Smallholders – challenges and opportunities (1)

- High transaction costs and small land sizes
  - Grouped projects aggregating many farmers supported by NGOs and coops
  - Automated management data collection
  - Projected Carbon Units to cover upfront investments
- Subsistence-oriented production (traditional, non-industrial farming) as opposed to commodity-oriented agriculture limits access to supply chains, crop insurance and larger C finance
  - Development aid projects as catalyzers
  - Combination with SDG assets (food security)
  - Safeguards regarding land rights
Smallholders – challenges and opportunities (2)

- Larger impact of soil heterogeneity resulting in high costs for monitoring
  → New tech:
  - Cost-efficient spectroscopic measurement techniques
  - Remote sensing supported stratification and farm activity data monitoring/verification
  - Robotics to lower sampling/laboratory costs
  - Scientific advances in biogeochemical models
Thank You

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