EED OpenHAP low cost sensors for cook stoves – designed, made and calibrated in Nairobi

- Locally made sensors for cooking activity and indoor air pollution
- Sound statistics partially compensates for lower sensor quality
- Getting a grip on uncertainty will be key to robust quantification

www.climateledger.org
Etherisc Climate Risk Insurance for smallholder farmers – using an existing digital platform in Kenya for D-MRV

- Existing: Mobile phone and blockchain based index-insurance for 50'000 smallholder farmers against climate impacts
  Collaboration with farmers organisations and VanderSat
- Use this platform for D-MRV of land use based carbon projects
- Other platforms with D-MRV potential: pay as you go PV, industry control systems, open data remote sensing

www.climateledger.org
Examples of digital approaches for future methodology standards: Issues of robust quantification and the potential of digitalisation

Digitalisation includes MRV platforms, Sensors, IoT, smart phones, remote sensing, drones, machine learning, ...

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<th>Great Potential</th>
<th>Low/ unclear potential</th>
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<td>Issues where digitalisation can improve robustness of quantification</td>
<td>Issues where digitalisation provides limited or no improvement</td>
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**Clean Cooking**

- Get rid of default values
- Usage time/ frequency
- Efficiency, Wood/ fuel used
- Support household surveys
- Tracking of revenues impact

**Nature Based Solutions**

- Determination actual biomass, tree cover, species
- Historic time series
- Tracking of revenues impact

- Fraction of non-renewable biomass
- Charcoal emissions
- Permanence
- Leakage

- Quantification of counterfactual baseline deforestation rates
- Weak selection of reference areas
- Leakage

D-MRV will help to scale projects and improve quantification. *But no silver bullet for key meth issues.*

Source: Preliminary analysis by Climate Ledger Initiative/ INFRAS for ACW 2023