

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



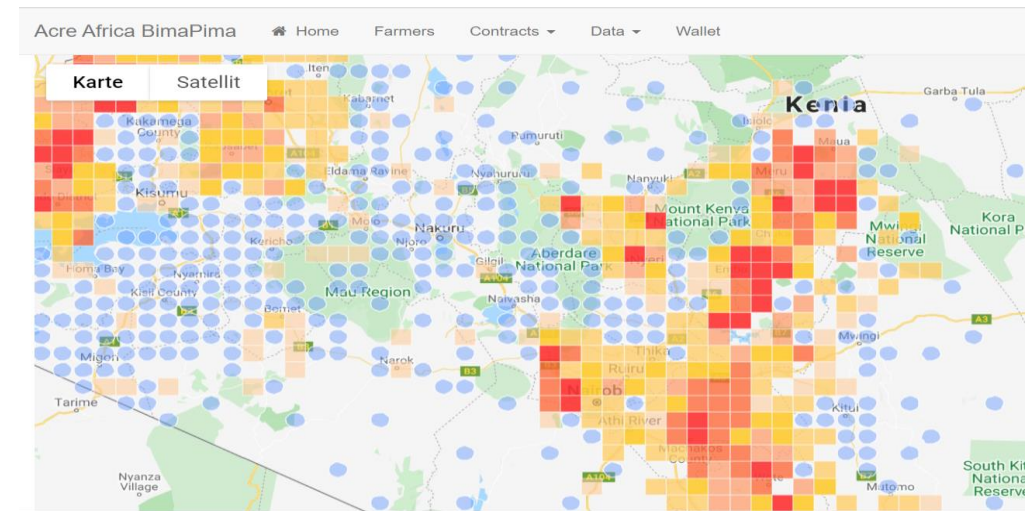
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Etherisc Climate Risk Insurance for smallholder farmers

– using an existing digital platform in Kenia 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



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, ...

	Great Potential Issues where digitalisation can improve robustness of quantification	Low/ unclear potential Issues where digitalisation provides limited or no improvement
Clean Cooking	<ul style="list-style-type: none"> • Get rid of default values • Usage time/ frequency • Efficiency, Wood/ fuel used • Support household surveys • <i>Tracking of revenues impact</i> 	<ul style="list-style-type: none"> • Fraction of non-renewable biomass • Charcoal emissions • Permanence • Leakage
Nature Based Solutions	<ul style="list-style-type: none"> • Determination actual biomass, tree cover, species • Historic time series • <i>Tracking of revenues impact</i> 	<ul style="list-style-type: none"> • 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