

Low Carbon Farming :

Measuring Emission Reductions

Family **demographic data** is captured and irrefutable identification established. **GPS coordinates** are recorded on each field to delineate discrete plots, and meticulous mapping done. Each plot is assigned a **unique Land ID**. Standing crops, soil type, water usage, baseline carbon stock, livestock, etc. are **documented**.



Programmes to interpret sustainable agriculture as Low Carbon Farming are replicable, aggregation is possible, and we deliver full transparency in the process to build complete confidence in results.



5 grassroots NGOs formed an LCF Coalition. 5,500 small, marginal and drought affected farmers will undertake sustainable agriculture practices on 8,000 hectares of land.

Objectives and purpose are fully understood. Farmers have taken ownership. Project development, implementation and monitoring processes have been demystified. Tasks and jobs are seen as totally doable.

Environment Defense Fund, New York, and the Indian Institute of Science, Bangalore, provide the science. The Coalition has the methodology and

algorithms to demonstrate real and legitimate emissions and reductions. Cutting edge science is used and the logic is fully comprehended. Complex work flow and activity processes are broken into simple linked tasks that are easily executed by schooled farmer youth.

- *Family demographic data captured.
- *Livestock details collected.
- *Landholdings recorded and assigned



unique Land IDs.

- *Soil type, gradient, irrigation, main crops and standing trees on each landholding recorded.
- *GPS coordinates taken to delineate discrete plots and exact area calculated.
- *Shape maps generated and overlaid on land use satellite imageries.
- *Title documents scanned.
- *Carbon Contracts to aggregate credits executed.

Emission reductions are calculated for each crop mix and sustainable agriculture practices, against various baseline scenarios.

Each year, for every crop season, the actual sustainable agriculture practice undertaken on each discrete plot is recorded. This is compared against baseline emissions for that particular plot to calculate actual reduction. Verified reductions are traded in the non compliance market, revenues given to participating farmers, and they are incentivised to stay in sustainable agriculture.

