

Scope 3 Value Chain Interventions Guidance - Example

Overview: Company A purchases milk, supplied by smallholder farmers in Western Kenya. To improve sustainability, quality and yield as well as to reduce emissions, Company A conducts a series of interventions in the targeted 'supply-shed' from which it purchases. The interventions target Soil Organic Carbon (SOC):

- Residue Management
- Composting
- Cover Crops
- Agro-forestry

Baseline condition: Maize dominated subsistence smallholder crop-livestock system on degrading/degraded land

Boundary: The reporting boundary for Greenhouse Gas Protocol purposes includes all emissions associated with milk production. The intervention targets only those activities associated with SOC with other emissions data drawn from pre-existing datasets or defaults.

Supply-shed: The supply-shed includes 30,000 smallholder farmers across an area of 33,000 Ha in Western Kenya. The milk-yield (baseline) is 8,509,500 liters per annum.

Sustainable Development: Company A conducts stakeholder engagement to improve the intervention and applies safeguards against the potential negative impacts. Company A does this via Gold Standard certification.

Accounting method: A modelling approach is applied – specifically Rothamsted carbon model RothC – Ver. 26.3. The 'Impact Factor' (relative change in emissions brought about by the intervention). Company A should transparently describe the method, assumptions and levels of uncertainty.

Expected Results:

By using the soil model with the baseline data and the project assumptions, the potential SOC impact factor for the interventions implemented is derived as:

$\Delta\text{SOC}_{\text{Improved smallholder dairy farming system (100\% adoption)}} = 3.1 \text{ tCO}_2/\text{farm}_{(1.1 \text{ ha})}/\text{year}$
OR

$\Delta\text{SOC}_{\text{Improved smallholder dairy farming system (100\% adoption)}} = 10.9 \text{ kgCO}_2/\text{liter milk}_{\text{baseline milk yield}}$

OR

$\Delta\text{SOC}_{\text{Improved smallholder dairy farming system (100\% adoption)}} = 2.6 \text{ kgCO}_2/\text{liter milk}_{\text{project milk yield}}$

The potential impact over 30,000 farms would therefore be:

Area based	Total farmers	Total Area (ha)	Total annual SOC benefits (tCO ₂)	Total SOC benefits after 10 years (tCO ₂)
	30,000	33,000	92,836	928,356
Commodity based	Total annual milk production	Supply to cooperative (50%)	Total annual benefits (tCO ₂)	Total benefits after 10 years (tCO ₂)

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Baseline milk yield	8509500	4254750		
Post-intervention milk yield (6 l/cow/day)	36,000,000	18,000,000	46,418	464,178

Monitoring, Reporting & Verification (MRV): The intervention could either:

- Apply an activity-based MRV approach, wherein the expected results are assumed to be correct and the proponent monitors at the 'activity level' (i.e. that the proposed activities are taking place and therefore by proxy the results are being delivered) OR
- Conduct a soil sampling approach for more direct measurement of impact OR
- A combination of the two

Purchasing: Company A purchases 5,000,000 liters of milk per year from the supply-shed. The Company is not able to trace its milk purchases to specific farms in the region due to traceability challenges and changeable supply arrangements year to year. Company A can demonstrate however that the 5,000,000 liters do come from the smallholders in the region and that this is distinct from other milk purchases elsewhere.

Inventory Reporting & Communication: As Company A purchases 5,000,000 liters of milk per year from the supply-shed, the improvement of 2.6 kgCO₂/liter milk can be applied to this purchase.

For the remaining 31,000,000 yield per annum, Company A is free to describe the impact of its intervention in marketing materials and communications but cannot include this within its Scope 3 inventory.

Company A is also potentially entitled to issue carbon credits for this residual volume, subject to the specific requirements (including methodological) of the crediting scheme, for example Gold Standard.

Gold Standard Certification: The intervention is certified under [Gold Standard for the Global Goals](#). The standard enables Company A to quantify, certify and maximize their impacts toward climate security and the Sustainable Development Goals, while enhanced safeguards, holistic project design, management of trade-offs and local stakeholder engagement ensure Gold Standard certification provides the highest levels of environmental and social integrity. The benefits to Company A of certification include:

- Rigorous, third party verification and certification of emissions benefits and SDG impacts
- Ability to issue carbon credits and other products for the elements of the intervention outside the scope of reporting (other requirements apply)
- Reputational risks mitigated by highly credible assurance that stakeholders have been included and social and environmental safeguards are applied
- Ability to claim the intervention is 'gender sensitive' and 'water sensitive' (where applicable) through specific safeguards and stakeholder approaches

Carbon Credits: The example is based on an existing GS-VER project that wishes to add the Scope 3 reporting but maintain the option to keep issuing credits for the balance. In this case the project would need to continue to meet the GS

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methodological and product requirements applicable to it aswell as demonstrating additionality (which is not mandatory) for Scope 3.