

Livestock Carbon Footprint

Program –HCPG v.1 2023-

- Carbon footprint verified
- Low carbon
- Carbon Neutral

v.1 Bovine and ovine cattle

STAGE 1: Seed to Animal –STA-

Subsystem Type 1.1. : Closed Production System (No living animal purchase)

- Seeds (Raw material)
- Fertilizer (Raw material)
- Living cells for insemination (Raw Material)
- Electricity
- Fuel, lubricants, oil, refrigerants(machinery)
- Cleaning , administrative, and maintenance goods
- Fuel, lubricants, oil, refrigerants (Human Labor transportation)
- Fuel, lubricants, oil, refrigerants (Goods transportation)
- Water (Raw Material)



Capital Goods: Land/Machinery/Cow for breeding

Process: a) Photosynthesis (Seed to vegetal protein)

- b) Breeding (breed /gestation/lactation)
- c) Production/fattening (Vegetal protein convert ion into animal protein)
- d) Nutrients recirculation as raw material (Manure management)
- e) Effluent treatment
- f) Cleaning and maintenance
- g) Administration, Purchase, Sales, and Marketing

h) Organic Carbon Sequestration in Soil



- CO2 (Raw material)
- + Light UV



- Water (Raw Material)
- Livestock (living Kg)
- GHG emission

STAGE 1: Seed to Animal –STA–

Subsystem Type 1.2. : Open Production System (Living animal purchase)

- Seeds (Raw material)
- Fertilizer (Raw material)
- Living animals (Raw Material)
- Electricity
- Fuel, lubricants, oil, refrigerants(machinery)
- Cleaning , administrative, and maintenance goods
- Fuel, lubricants, oil, refrigerants (Human Labor transportation)
- Fuel, lubricants, oil, refrigerants (Goods transportation)
- Water (Raw Material)



Capital Goods: Land/Machinery

Process: a) Photosynthesis (Seed to vegetal protein)

b) Production/fattening (Vegetal protein conversion into animal protein)

c) Nutrients recirculation as raw material (Manure management)

d) Effluent treatment

e) Cleaning and maintenance

f) Administration, Purchase, Sales, and Marketing

h) Organic Carbon Sequestration in Soil



- CO2 (Raw material)
- + Light UV



- Water (Raw Material)
- Livestock (living Kg)
- GHG emission

STAGE 1: Seed to Animal –STA–

Subsystem Type 1.3. Hybrid Production System (Breeding + Living animal purchase)

- Seeds (Raw material)
- Fertilizer (Raw material)
- Living cells + animals (Raw Material)
- Electricity
- Fuel, lubricants, oil, refrigerants(machinery)
- Cleaning , administrative, and maintenance goods
- Fuel, lubricants, oil, refrigerants (Human Labor transportation)
- Fuel, lubricants, oil, refrigerants (Goods transportation)
- Water (Raw Material)



Capital Goods: Land/Machinery/Cow for breeding

Process: a) Photosynthesis (Seed to vegetal protein)

b) Breeding (breed /gestation/lactation)

+ Production/fattening (Vegetal protein conversion into animal protein)

c) Nutrients recirculation as raw material (Manure management)

d) Effluent treatment

e) Cleaning and maintenance

f) Administration, Purchase, Sales, and Marketing

h) Organic Carbon Sequestration in Soil



- CO₂ (Raw material)
- + Light UV



- Water (Raw Material)
- Livestock (living Kg)
- GHG emission

II. ELIGIBILITY REQUIREMENTS

- National Legal Compliance
- All livestock produced through the same process within the limits of the establishment
- Livestock traceability system (100%)
- Rotational grazing in managed grassland
- Soil under non-carbon equilibrium condition
- Low-density grazing (0,8 head/ha or lower)
- GHG inventory for emission and removals of the production establishment (Categories 1-5 Cradle to farm gate, ISO 14064-1 or ISO 14067 with PCR)

III. THIRD -PARTY ASSESSMENT PROCESS

- Control Points for ISO 14064-1/14067 Verification
 - Legal compliance (ownership, health, social and environmental)
 - All process within the limits of the establishment according to the scope
 - Direct Emission and removals Sources
 - Indirect Emission data registration –Supply Chain Management (Life Cycle approach)
 - Data registration and quality
 - Carbon footprint calculation and uncertainties
- Certification of the results from carbon footprint assessment of the production process (LCFP Standard criteria)
 - Carbon footprint verified
 - Low carbon production
 - Carbon neutral production

IV. CERTIFICATION CLAIM: ENVIRONMENTAL PERFORMANCE OF LIVESTOCK PRODUCTION (GWP Impact)

1. Carbon Footprint verified: ISO 14064-1 favorable verification opinion, reasonable assurance, 10% total materiality , and 5% direct emission
2. Low Carbon production: Carbon footprint at least 10% lower than national media value (official)
3. Neutral Carbon Production: Negative net value of the total inventory of emission and removals of the entire establishment operation (Life Cycle Approach)

V. CYCLE OF ASSESSMENT

1. Annual programmed assessment
2. Programmed and no programmed evaluations for the use of label and claim