Romanian Dairy Sheep Farming Sustainability Benchmarking

Romania - YEAR 2021

DAIRY SHEEP FARM PROFILE (AVERAGE (MIN-MAX))

Land use & area

Total Sheep Area (UAA): 18 (0-498) ha
Main Forage Area (MFA): 75 (0-1600) ha
Stocking rate: 42 (0-246) ewes/ha

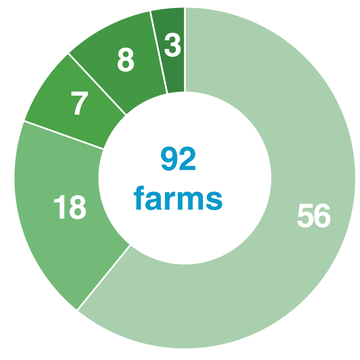


Productivity & dairy performance

Flock size (N° of ewes): 370 (50-2000)
Milk Yield: 110 (38-560) kg FPCM*/ewe/year
*FPCM = Fat and Protein Corrected Milk 75-55

Useful Dry Matter (UDL): 123 (100-142) g/l
Litter size: 1.09 (0.8-1.8) lambs/ewe

Dairy sheep systems



ENVIRONMENTAL AND ECOSYSTEM SERVICES FOR ROMANIAN DAIRY SHEEP FARMS

Food performance*
16 (0-132) *people/ha UAA*
**PerfAlim. Cereopa*

Maintenance of biodiversity*
0.13 (0-1.0) *ha biodiversity eq/ha UAA*
**Hedgerows included*

Nitrogen balance surplus*
54 (0-874) *kg N/ha UAA*
**(N_{inputs}-$N_{outputs}$)*

Direct fossil energy
3.64 (0-12) *MJ/kg FPCM*
**Fuel & Electricity consumption*

CARBON FOOTPRINT ASESSMENT

Gross GHG* emissions
4.46 (1.55-6.47) *kg CO_2 eq/kg FPCM*
**GHG = GreenHouse Gases (CO_2 + CH_4 + N_2O)*

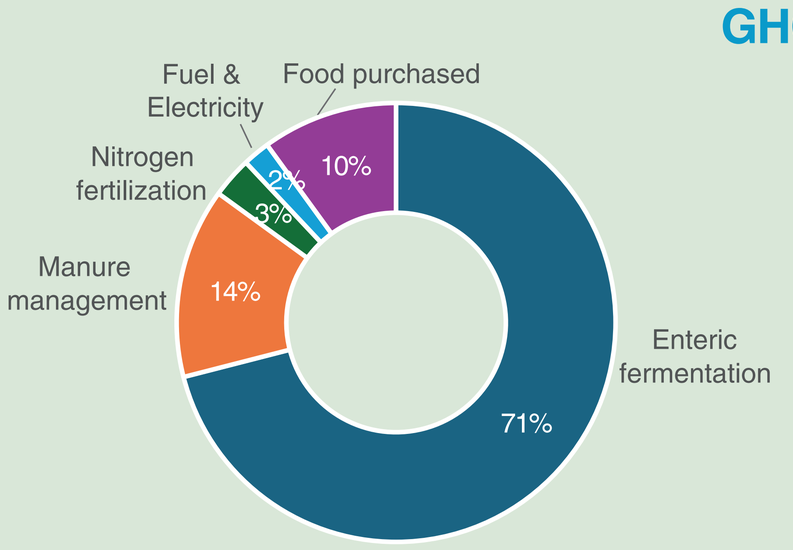
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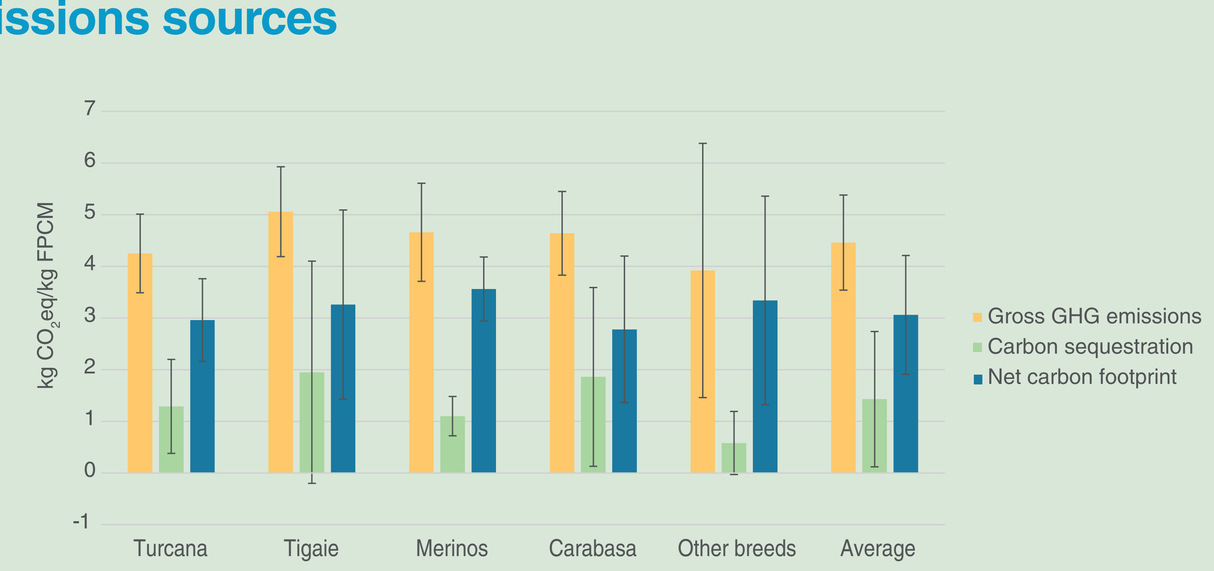
Carbon sequestration*
1.43 (-0.22-6.78)
kg CO_2 eq/kg FPCM
**Hedgerows included*

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Net Carbon Footprint
3.06 (0-4.61)
kg CO_2 eq/kg FPCM

GHG emissions sources





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GHG EMISSIONS AND TECHNICAL RESULTS WITHIN EACH SYSTEM

Turcana

Indicators		10% of farms that have the lowest emissions	Average (of the group)	10% of farms that have the highest emissions
GHG emissions	*kg CO_2eq/kg FPCM*	3.21	4.25	5.48
Carbon sequestration	*kg CO_2eq/ha UAA*	250.4	249.9	249.9
Technical indicators for Flock Management and Production				
Milk Yield	*kg FPCM/ewe/year*	148	111	80
Litter size	*lambs/ewe*	1.04	1.06	1.02
Concentrate consumption	*kg/ewe*	138	104	77
Concentrates self-sufficiency	*%*	34	63	80
Technical indicators for Land Management				
Mineral Nitrogen	kg N/ha UAA	35	11	0
Organic nitrogen pressure	kg N/ha UAA	533	287	286
Permanent grasslands & pastoral areas	%	0	9	25
Technical indicators for Manure management				
Grazing days for Ewes	days/year	183	183	183
Hours outside for Ewes	hours/day	20.0	18.1	17.4
Technical indicators for Energy consumption				
Electricity	kWh/kg FPCM	0.03	0.02	0.00
Fuel	litres/ha UAA	150	81	34

Tigaie

Indicators		10% of farms that have the lowest emissions	Average (of the group)	10% of farms that have the highest emissions
GHG emissions	*kg CO_2eq/kg FPCM*	3.85	5.06	6.44
Carbon sequestration	*kg CO_2eq/ha UAA*	250	198	250
Technical indicators for Flock Management and Production				
Milk Yield	*kg FPCM/ewe/year*	135	90	91
Litter size	*lambs/ewe*	1.05	1.02	0.9
Concentrate consumption	*kg/ewe*	143	121	136
Concentrates self-sufficiency	*%*	59	38	11
Technical indicators for Land Management				
Mineral Nitrogen	kg N/ha UAA	0	9	84
Organic nitrogen pressure	kg N/ha UAA	719	375	176
Permanent grasslands & pastoral areas	%	0	20	0
Technical indicators for Manure management				
Grazing days for Ewes	days/year	365	365	365
Hours outside for Ewes	hours/day	20	18.4	20
Technical indicators for Energy consumption				
Electricity	kWh/kg FPCM	6	86	71
Fuel	litres/ha UAA	165	108	80