Supplementary Material C

Table C: Representative property of the region São José do Rio Preto using no grains in lamb feed (simulation)

i. Qualitative characteristics (no grain in lamb feed scenario)

Characteristics	Description
Total property area	220 ha
Area used for sheep farming	15 ha
Land price	R$20,000.00/ha
Soil fertility	Medium
Is sheep farming the only activity?	No
Other activities developed	Sugar cane
Sheep farming time	4 years
Sheep farming administrator	Owner
Sheep farming time	5 days/month
Technical aid	Yes, 1day/month
Number of employees registered	1
Number of matrices	300
Number of sires	3
Traded lambs/year	343
Herd stabilization	Yes
Male replacement	Male Dorper x female woolless
Female replacement	Itself
Male replacement	Purchase
Steps taken in the cycle	Full cycle
Breeding system	Semi-finishing
Major station	Yes
Pregnancy diagnosis	No
Weaning procedure	Controlled breastfeeding
Type of animal facilities	Recycling of dairy cattle ranches
Type of troughs used	Recycling for other materials
Tractor availability	Yes, 75 cv
Implements and/or equipment	Carriage, forage harvester, chopper
Pastures	
Type	Tifton 85
farmed for sheep?	Yes
Capacity	Need make the count
Does it rotate?	Yes
Does it perform fertilization?	Yes, limestone
Extra voluminous	Yes
Type	Sugar cane
Origin	Itself
Concentrated	Yes
Type	Formulated
Origin	Purchased ingredients, made on the property

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ii. Technical indicators of simulated sheep production system (no grain in lamb feed scenario)

Technical indicators	Scenario
Pregnancy rate (%)	85
Prolificacy rate (%)	140
Lambing interval (months)	11
Birth weight (kg)	4
Weaning age (days)	60
Weaning weight (kg)	20
Pre weaning ADG (kg/day)	0.267
Pre weaning mortality (%)	12
Finishing days	120[a]
Post weaning ADG (kg/day)	0.07[a]
Slaughter live weight (kg)	28.4[a]
Slaughter age (days)	180[a]
Carcass yield (%)	48

[a]Values obtained from Galina et al. (2007);

iii. Scheme adopted for allocation of sheep production costs (no grain in lamb feed scenario)

A. VARIABLE COST	Scenario 2	
Feed	R$	US$
Lamb		
Mineral salt	1,760.68	454.96
Sugar cane silage	20,277.59	5,239.69
Soybean Meal	-	-
Ground Corn	-	-
Ewes		
Mineral salt	6,522.22	1,685.33
Forages	25,575.21	6,608.58
Sugar cane silage	7,101.58	1,835.03
Soybean Meal	6,643.84	1,716.75
Ground Corn	2,533.09	654.55
Ram		
Mineral salt	81.53	21.07
Forages	505.14	130.53
Sugar cane silage	117.08	30.25
Subtotal - Feed	*71,117.96*	*18,376.74*
Veterinary expenses		
Lamb		
Anthelmintic	37.39	9.66

Supplementary Material C

Table C: Representative property of the region São José do Rio Preto using no grains in lamb feed (simulation)

Vaccines	957.12	247.32
Ewes		
Anthelmintic	98.18	25.37
Vaccines	418.91	108.25
Ram		
Anthelmintic	1.96	0.51
Vaccines	4.19	1.08
Subtotal - Veterinary expenses	1,517.75	392.19
SUBTOTAL - VARIABLE COSTS	*72,635.71*	*18,768.93*
B. FIXED OPERATING COSTS		
Manpower		
Fixes	9,120.00	2,356.59
Wage workers	10,200.00	2,635.66
Social charges	200.00	51.68
Services (Technical assistance)	180.00	46.51
Subtotal - Manpower	*19,700.00*	*5,090.44*
Energy and fuels		
Fuel (except pasture maintenance)	404.40	104.50
Electricity	1,224.00	316.28
Subtotal - Energy and fuels	*1,628.40*	*420.78*
Depreciations		
Housing	2,325.59	600.93
Purchased rams	197.92	51.14
Tractor	327.93	84.74
4-wheel trailer	236.18	61.03
Forage Harvester	310.07	80.12
Weighing machine	33.91	8.76
Subtotal - Depreciations	*3,431.60*	*886.72*
Maintenance and conservation		
Machinery and implements		
Tractor	121.84	31.48
4-wheel trailer	87.75	22.67
Forage Harvester	115.20	29.77
Facilities	-	-
Housing	691.08	178.57
Fences	378.00	97.67
Pastures	-	-
Limestone	10,275.00	2,655.04
fertilizers	2,000.00	516.80
Subtotal - Machinery and implements	*13,668.87*	*3,532.00*
Others fixed costs		
Taxes charges	400.00	103.36
Subtotal - Others fixed costs	400.00	103.36

Supplementary Material C

Table C: Representative property of the region São José do Rio Preto using no grains in lamb feed (simulation)

SUBTOTAL - FIXED OPERATING COSTS	*38,828.87*	*10,033.30*
C. OPERATING COST (A + B)		
SUBTOTAL - OPERATING COST	*111,464.58*	*28,802.23*
D. INCOME OF FACTORS		
Remuneration on variable capital	1,146.74	296.31
Remuneration on fixed capital (except land)	613.01	158.40
Land (opportunity cost of lease)	4,460.34	1,152.54
Subtotal - Income of factors	*6,220.09*	*1,607.26*
E. TOTAL COST (C + D)	117,684.67	30,409.49

The rate of change in carrying out this study was R$ 3.87 per US$ 1.00

References

Galina, M.A., Guerrero, M., Puga, C.D., 2007. Fattening Pelibuey lambs with sugar cane tops and corn complemented with or without slow intake urea supplement. Small Rumin. Res. 70, 101–109. https://doi.org/10.1016/j.smallrumres.2006.01.014

ICPC - Índice de Custo de Produção do Cordeiro Paulista, 2019. Informativo mensal do índice de custo de produção do cordeiro paulista. Available at. https://www.lae-fmvz-usp.com/informativos-mensais. Access in: 11 nov. 2019.

Raineri, C., Nunes, B.C.P., Gameiro, A.H., 2015a. Technological characterization of sheep production systems in Brazil. Anim. Sci. J. 86, 476–485. https://doi.org/10.1111/asj.12313.

Raineri, C., Stivari, T.S.S., Gameiro, A.H., 2015b. Development of a cost calculation model and cost index for sheep production. Rev. Bras. Zootec. 44, 443–455. https://doi.org/10.1590/S1806-92902015001200005.