

Potential impacts of urbanisation processes on dairy cattle health in Greater Bengaluru, India

A03

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Background

Due to rapid urbanisation, public grazing lands for urban cattle are declining, which increases the dependency on lakeshores (Fig.1), roadsides and leftovers. In this study, we explore the impact of urbanisation on well-being of dairy cattle in the megacity of Bengaluru, India.

Results

determinants

health

Cattle

Only 60% of farmers thought their animals were provided with a sufficient quantity of feed and 20% admitted the animals had sufficient access to drinking water (Fig. 2).

Feed supply

Sufficient

Insufficient



Method	lo	logv
		55



Fig. 2 Frequency of cattle health determinants in surveyed farms (n = 151)

Results of the logit model showed that exotic cattle genetics and



sufficient feed supply affected cattle well-being in a positive way, while the use of lakeshore fodder had a negative impact (Table 1).

Table 1. Coefficient estimate (β_i) , standard error (SE) and average marginal effects (AME) of the logit model

Determinants	β _i	SE	AME
Constant	-14.06	882.74	-
Feed supply	1.00*	0.39	0.19
Concentrate use	13.20	882.74	0.60
Use lake fodder	-1.50* *	0.41	-0.30
Leftover use	0.37	0.44	0.05
Water supply	-0.97*	0.47	-0.19
Shed space	0.37	0.44	0.07
Shed temperature	-0.52	0.58	-0.10
Breed	0.97*	0.40	0.18

** and * indicate significance at 1 % and 5 % probability levels, respectively.



Analysis

Descriptive statistics Logit model: ln=(p_i/1-p_i)

Highlights

Feeding lakeshore fodder and insufficient supply of

drinking water had adverse impacts on cattle well-being.

This calls for studying the safety of lake fodder and water.



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