

DAIRY SHEEP AND GOAT FARMERS: SOCIO-DEMOGRAPHIC CHARACTERISTICS AND THEIR ASSOCIATIONS WITH HEALTH MANAGEMENT AND PERFORMANCE ON FARMS

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OBJECTIVES

- Determine the socio-demographic profiles of
small ruminant farmers in Greece
- Study associations with management practices and with health
or production-related outcomes on their farms



PROCEDURES



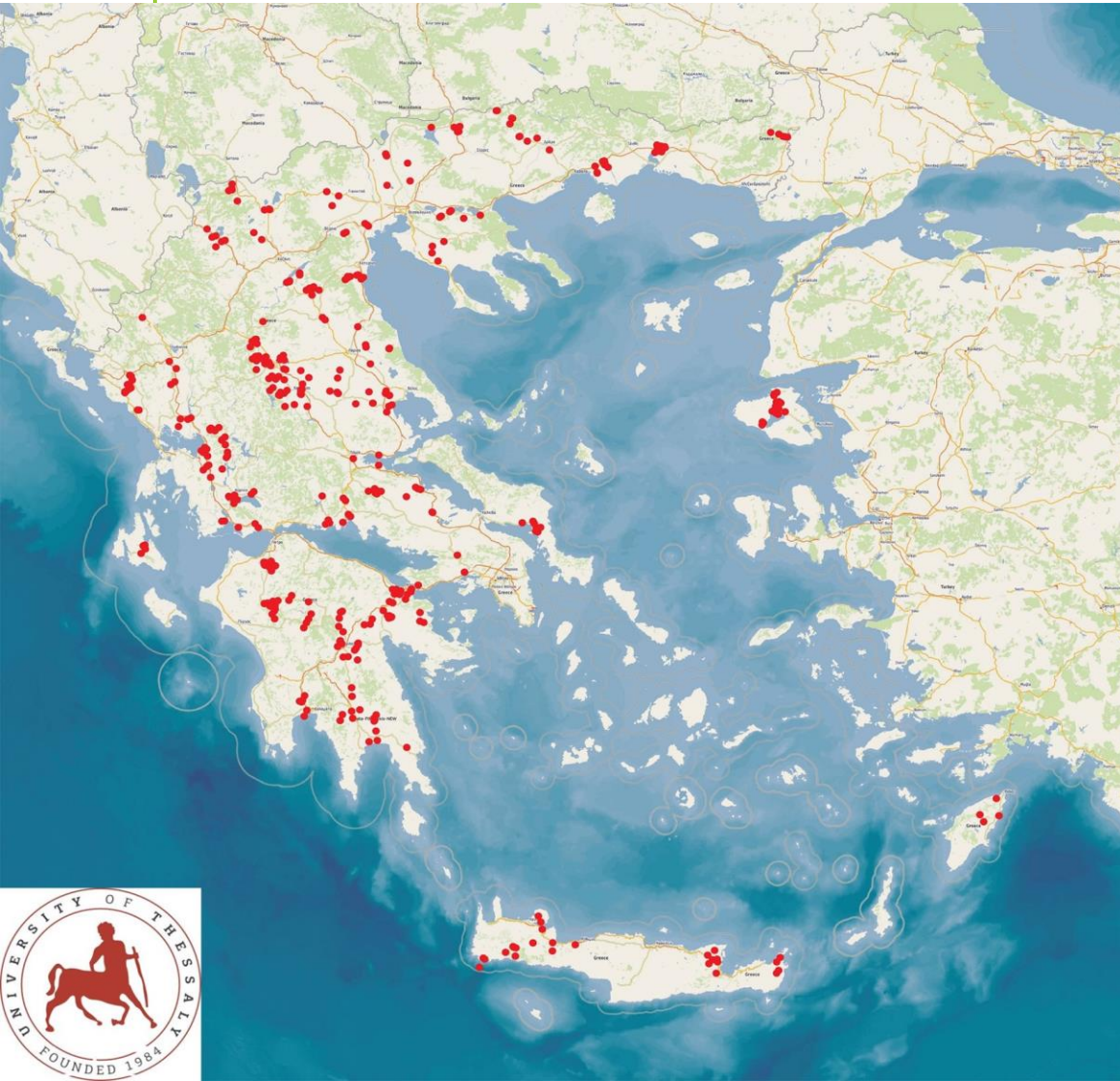
-444 farmers throughout Greece

-Interviews:

- 442 questions
- Details regarding farms:
infrastructure, animals, management, production, health
- Details about human resources



PROCEDURES



-Descriptive analyses

-Univariable and multivariable
analyses for predictors



RESULTS

Gender	Proportion of farmers
Males	93%
Females	7%

RESULTS



Age	Average (years)
All farmers	47.0 ± 0.6
Male farmers	46.9 ± 0.6
Female farmers	47.8 ± 2.6

RESULTS

Age of start of involvement with farming	Average (years)
Male farmers	22.0 ± 0.6
Female farmers	31.3 ± 2.9

RESULTS

Farming experience	Average (years)
All farmers	24.3 ± 0.8

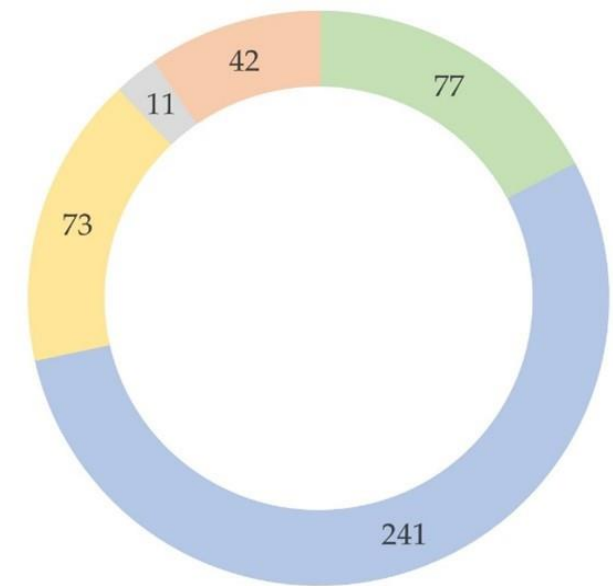
RESULTS

Professional work in farming	Proportion of farmers
Full-time	89%
Part-time	11%

RESULTS

Time spent at the farm	Average (hours)
Full-time	12.0 ± 1.9
Part-time	9.1 ± 0.7

RESULTS



Highest education level received	Proportion of farmers
Primary education	17%
Secondary education	54%
Post-secondary vocational training	16%
Tertiary education	14%

RESULTS

Seminars received	Proportion of farmers
Full-time	16%
Part-time	4%

RESULTS

Primary language spoken	Proportion of farmers
Greek	94.2%
Turkish	4.7%
Albanian	0.7%
Bulgarian	0.2%
Indian	0.2%

RESULTS

Farming family tradition	Proportion of farmers
All farmers	87%
Male farmers	88%
Female farmers	73%
Full-time	87%
Part-time	71%

RESULTS

Size of family	Average (persons)
All farmers	4.3 ± 0.7
Family members working at the farm	2.2 ± 0.1

RESULTS

Employment of farm workers	
	35.4% of farms
Number per farm	1.6 ± 0.1

RESULTS

Employment of farm workers	Citizenship of workers
Greek citizens	15.3% of farms
Non-Greek citizens	90.4% of farms

RESULTS

Total workforce on farms	Average
	2.8 ± 0.1 persons

RESULTS



Associations

Socio-demographic characteristics of farmers

versus

management practices applied on farms

health-related outcomes

production-related outcomes

	Gender	Age	Farming Experience	Farming Work	Daily Period at the Farm	Education Received	Farming-Family Tradition	Family Members	Family Members at the Farm	Employment of Farm Workers
Location of farm (area of the country)			< 0.001					0.002		
Animal species farmed										
Management system followed in farm			< 0.001						0.026	< 0.001
Application of machine- or hand-milking		0.046			0.013	0.010				< 0.001
No. of animals in farm	0.009				0.037			0.027		< 0.001
Animal breed			0.033							0.002
Application of quarantine for new animals into a farm			0.013							< 0.001
Annual occasions of cleaning and disinfection							0.004			
Laboratory evaluation of feedstuffs and water			0.004							< 0.001
U/S examination for pregnancy diagnosis			0.024				< 0.001			0.008
Vaccination against clostridial infections			< 0.001		0.042		< 0.001			
Administration of 'dry-ewe' treatment						< 0.001	0.001			
Method of calculation of bodyweight			< 0.001			0.016		0.008		

RESULTS

Farming experience	
Management practices	<i>n = 10</i>
Health-related outcomes	<i>n = 2</i>
Production-related outcomes	<i>n = 2</i>

RESULTS

Employment of farm workers	
Management practices	<i>n</i> = 8
Health-related outcomes	<i>n</i> = 0
Production-related outcomes	<i>n</i> = 3



RESULTS

Farming experience
(years)

Management system applied in
farms

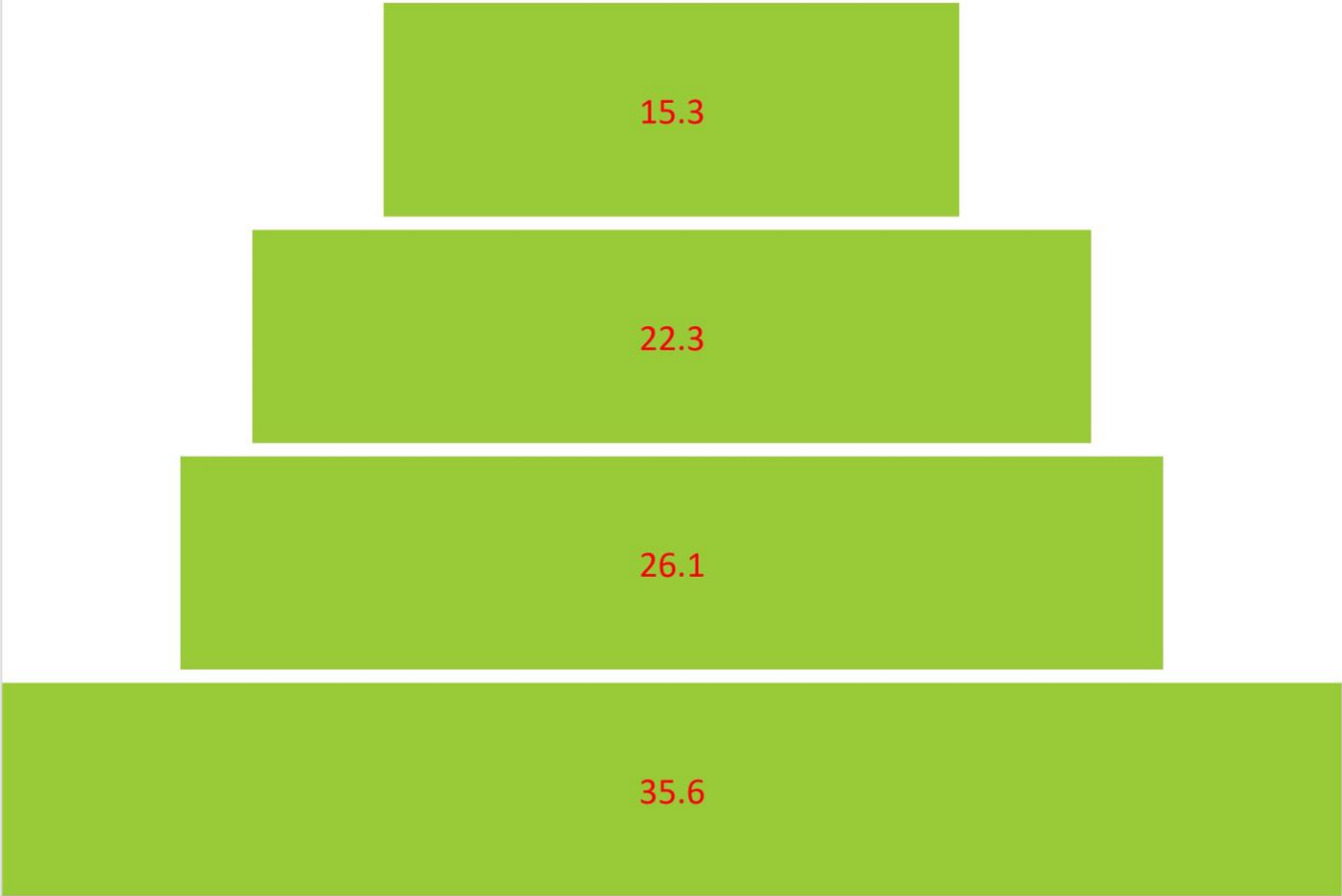
Intensive
Semi-intensive
Semi-extensive
Extensive

15.3

22.3

26.1

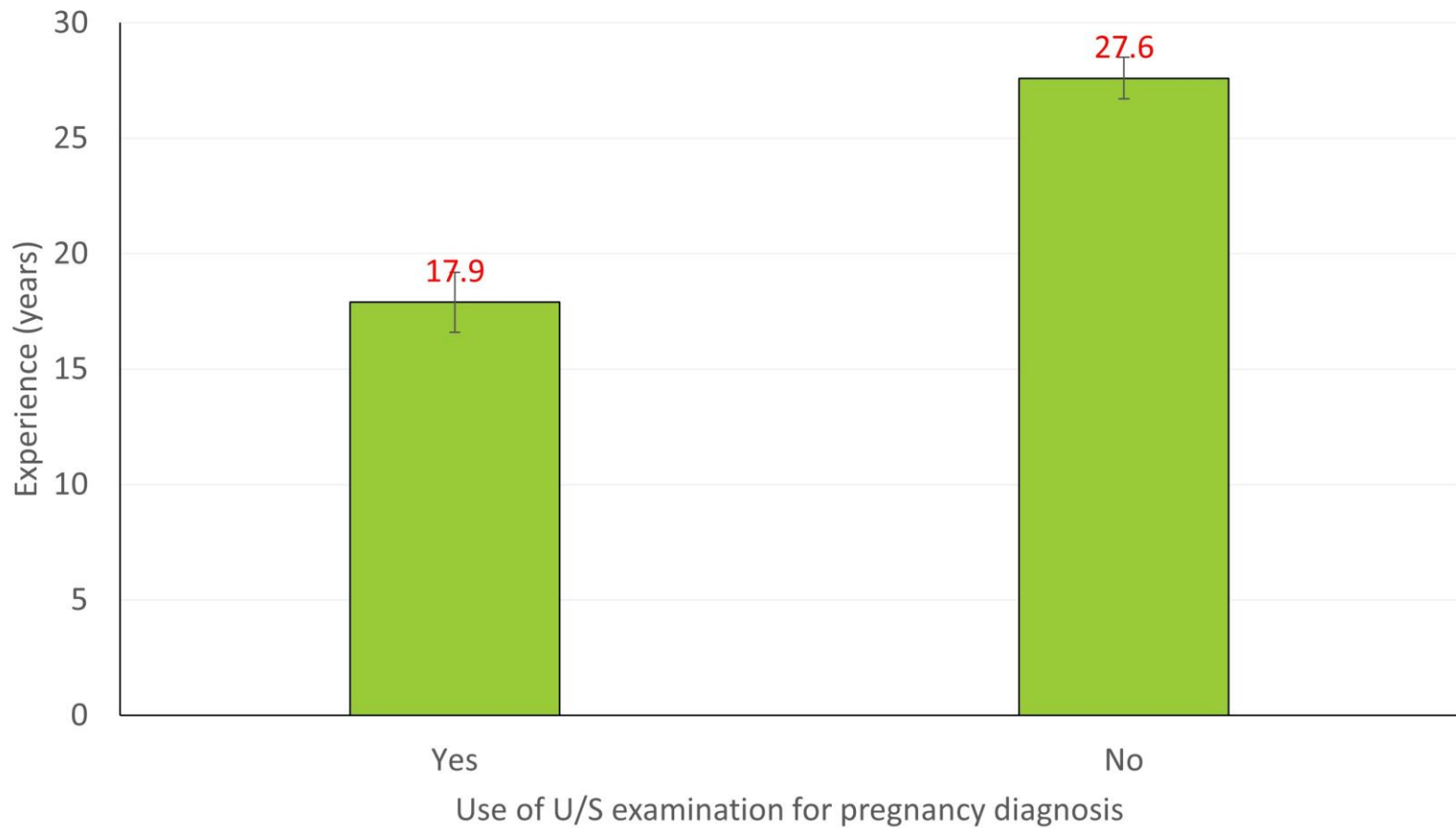
35.6





Farming experience
(years)

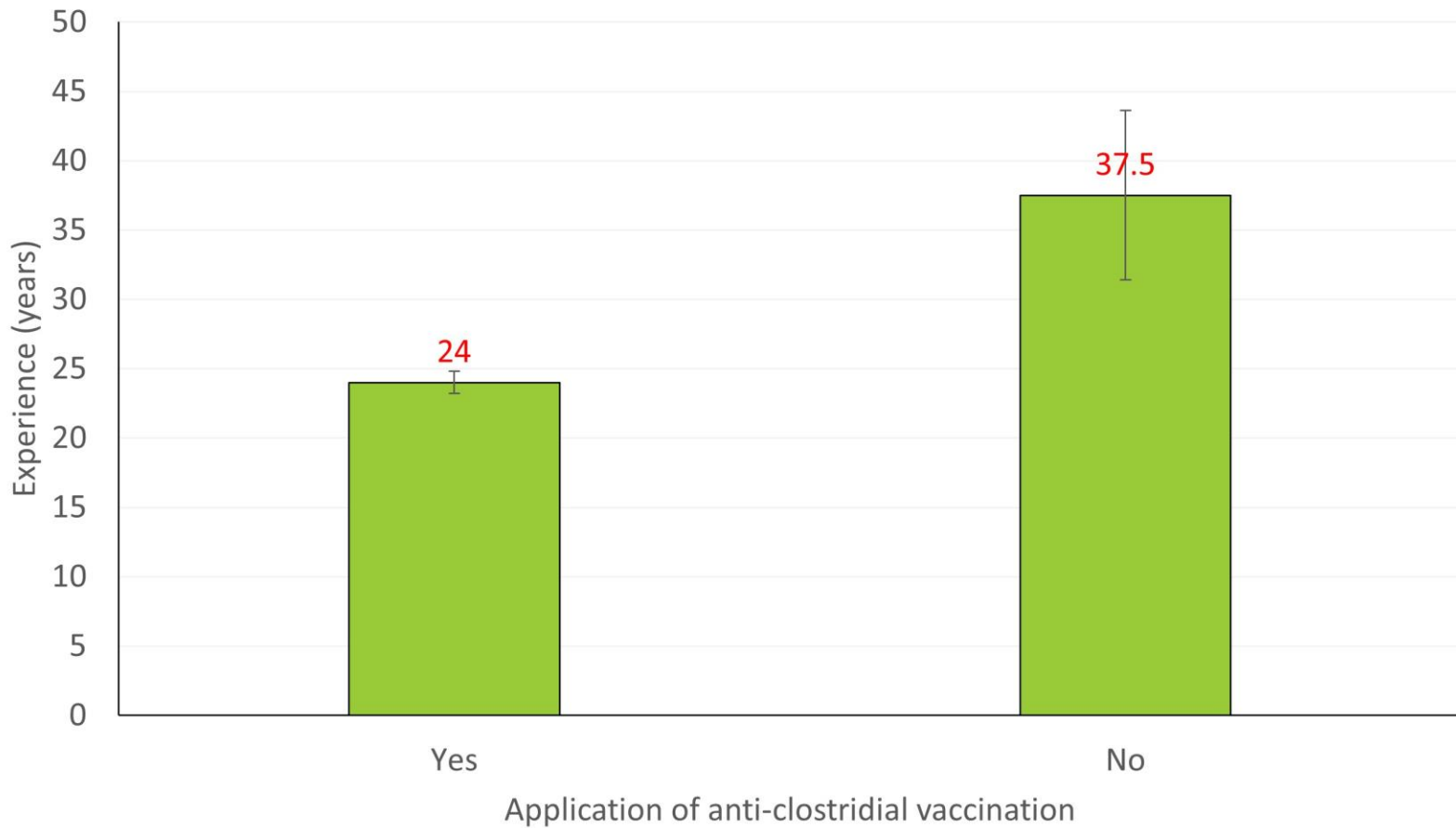
Use of U/S examination for
pregnancy diagnosis



RESULTS

Farming experience
(years)

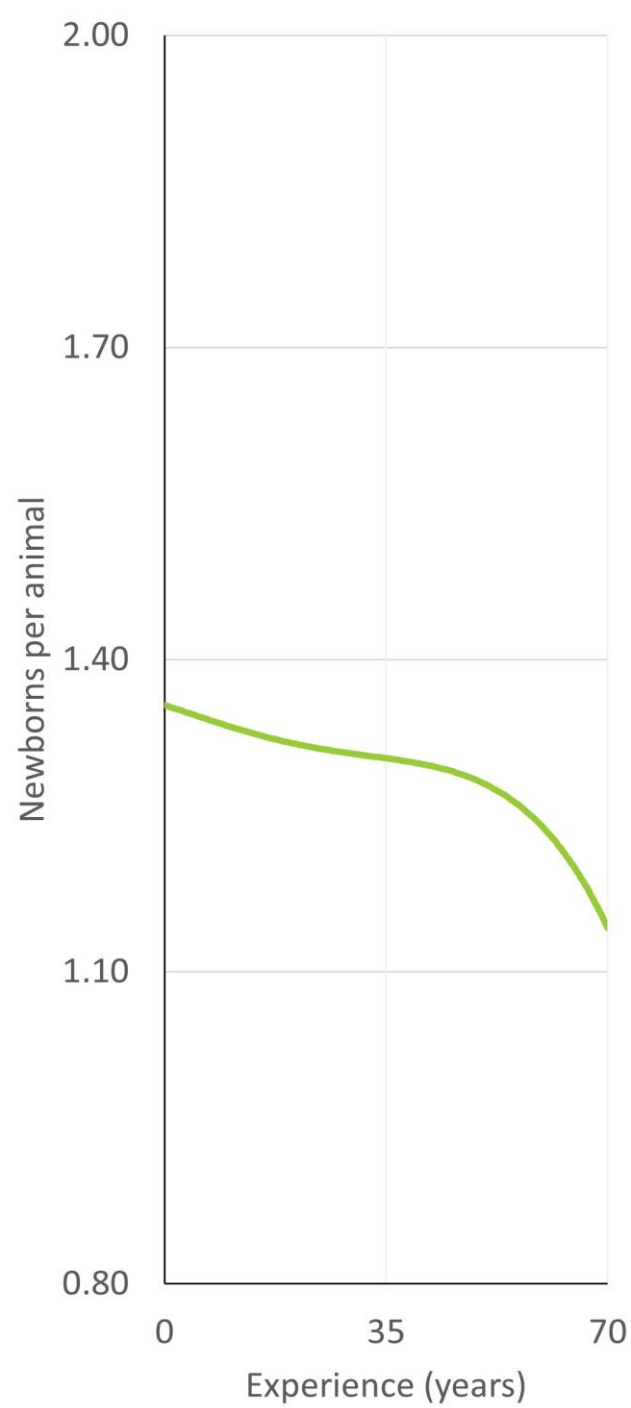
Application of anti-clostridial
vaccination



RESULTS

Farming experience
(years)

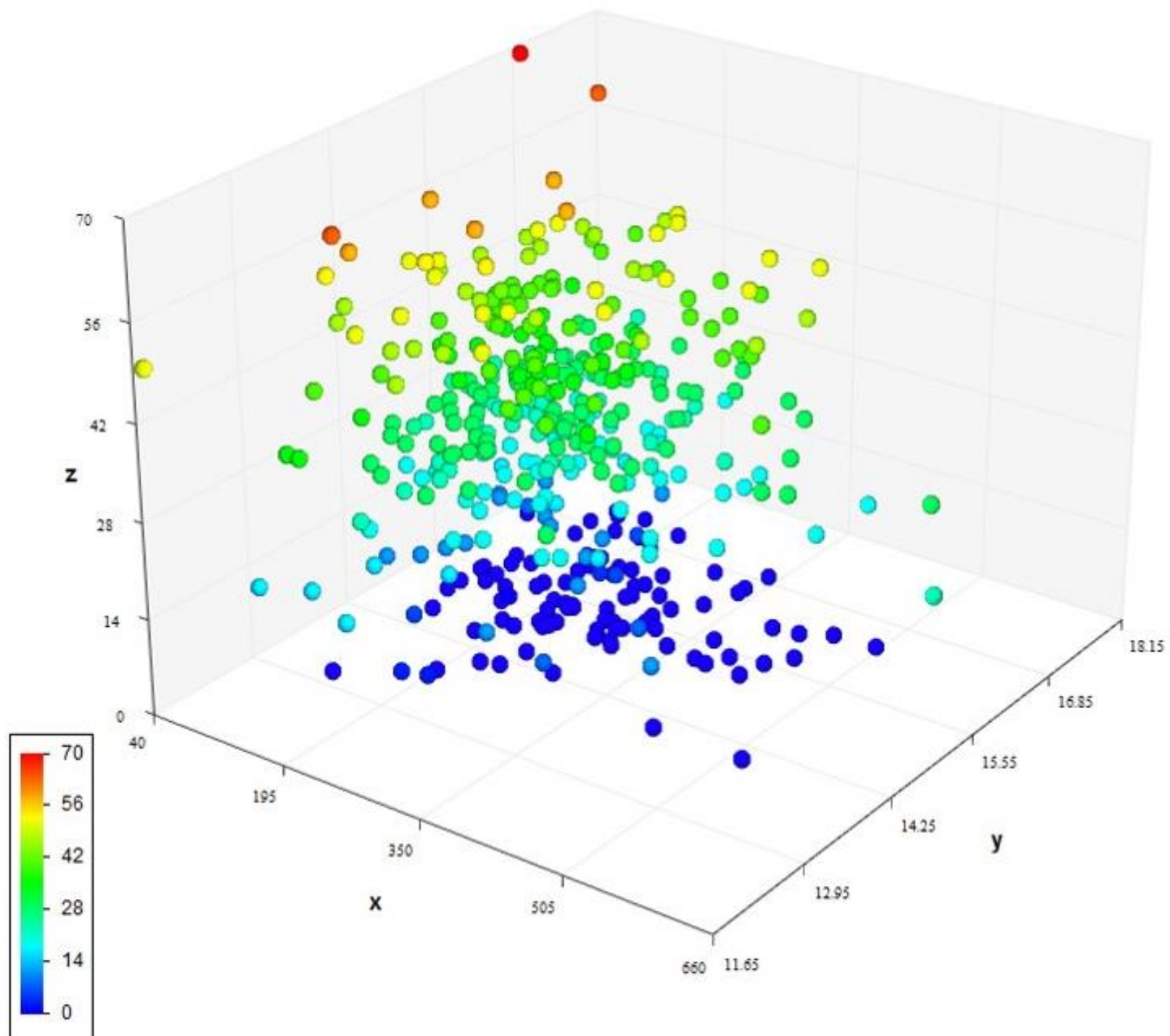
Newborns per animal



RESULTS

Farming experience
(years)

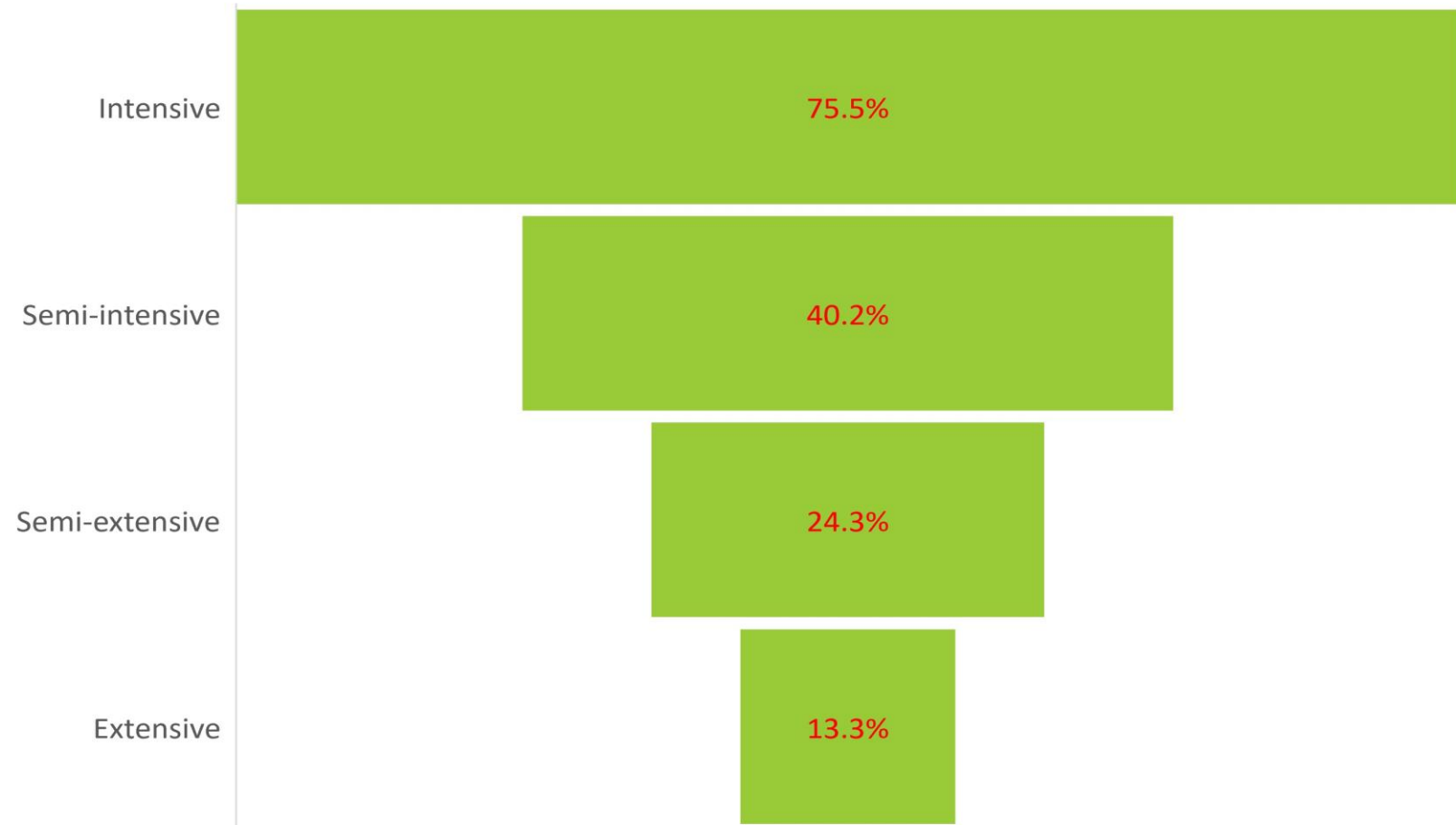
Annual milk production per animal
Somatic cell counts in bulk-tank milk

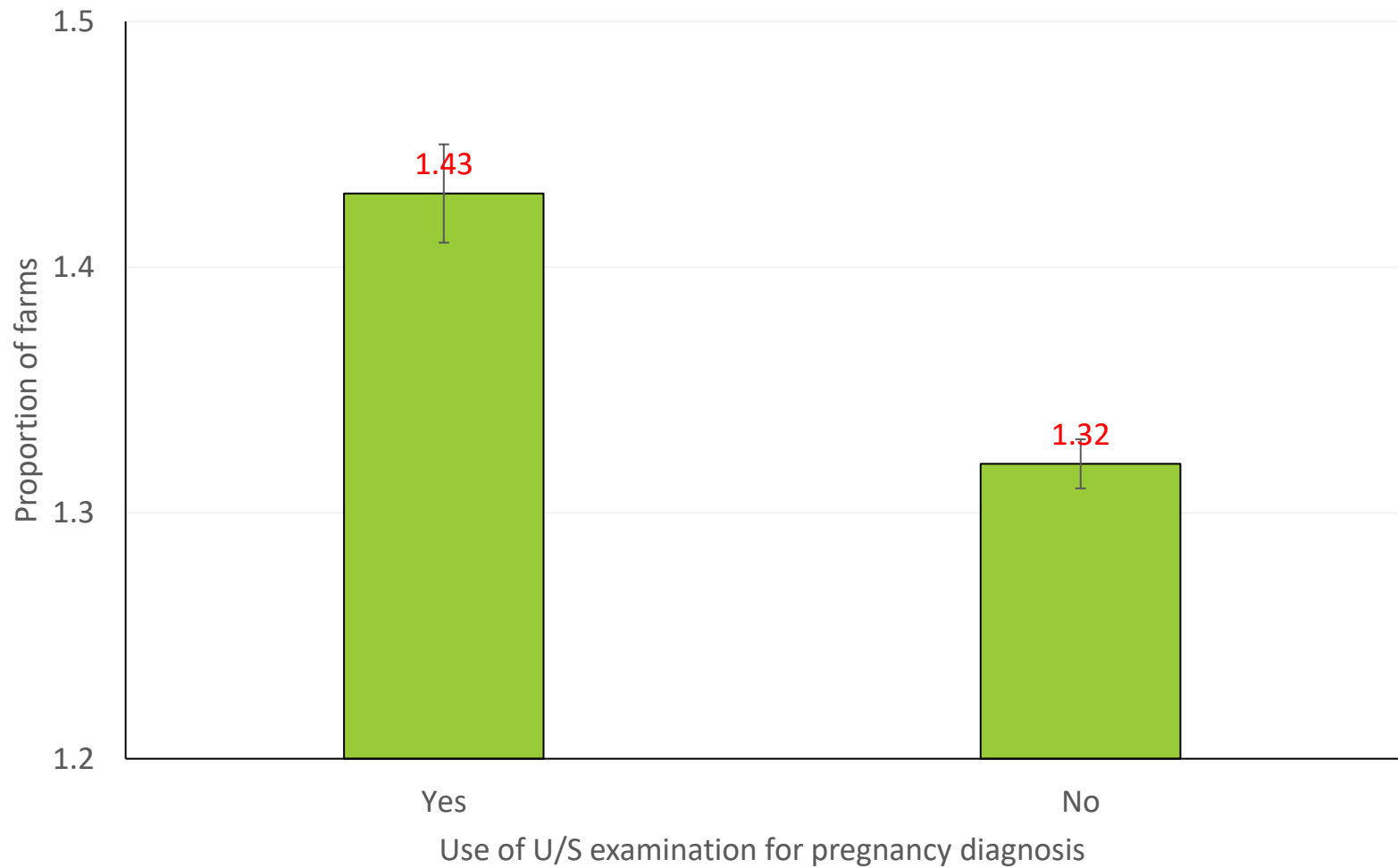


RESULTS

Employment of farm workers

Management system applied in farms





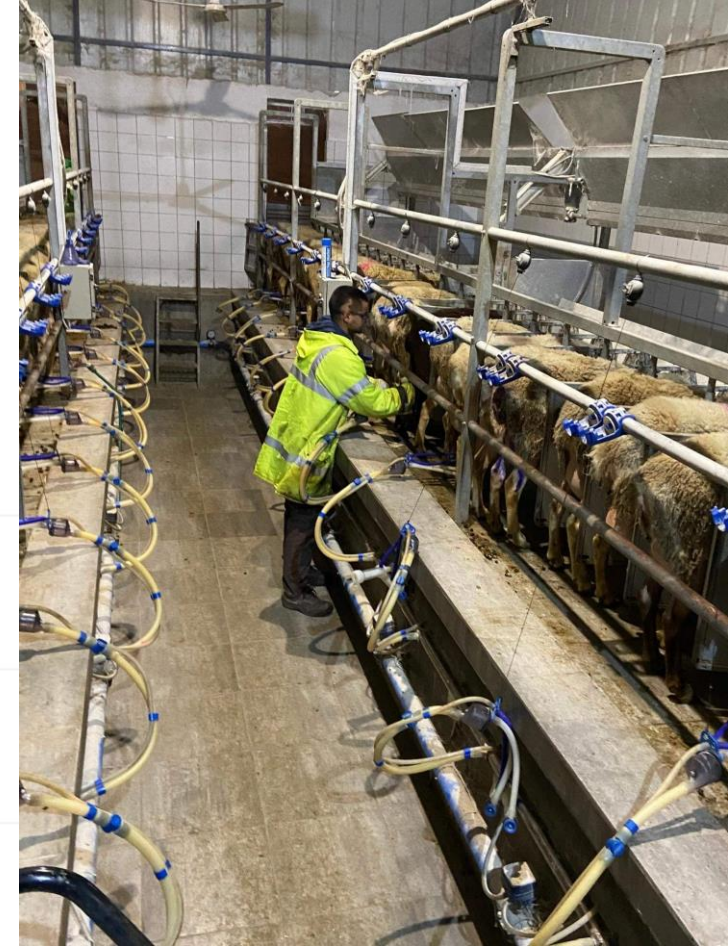
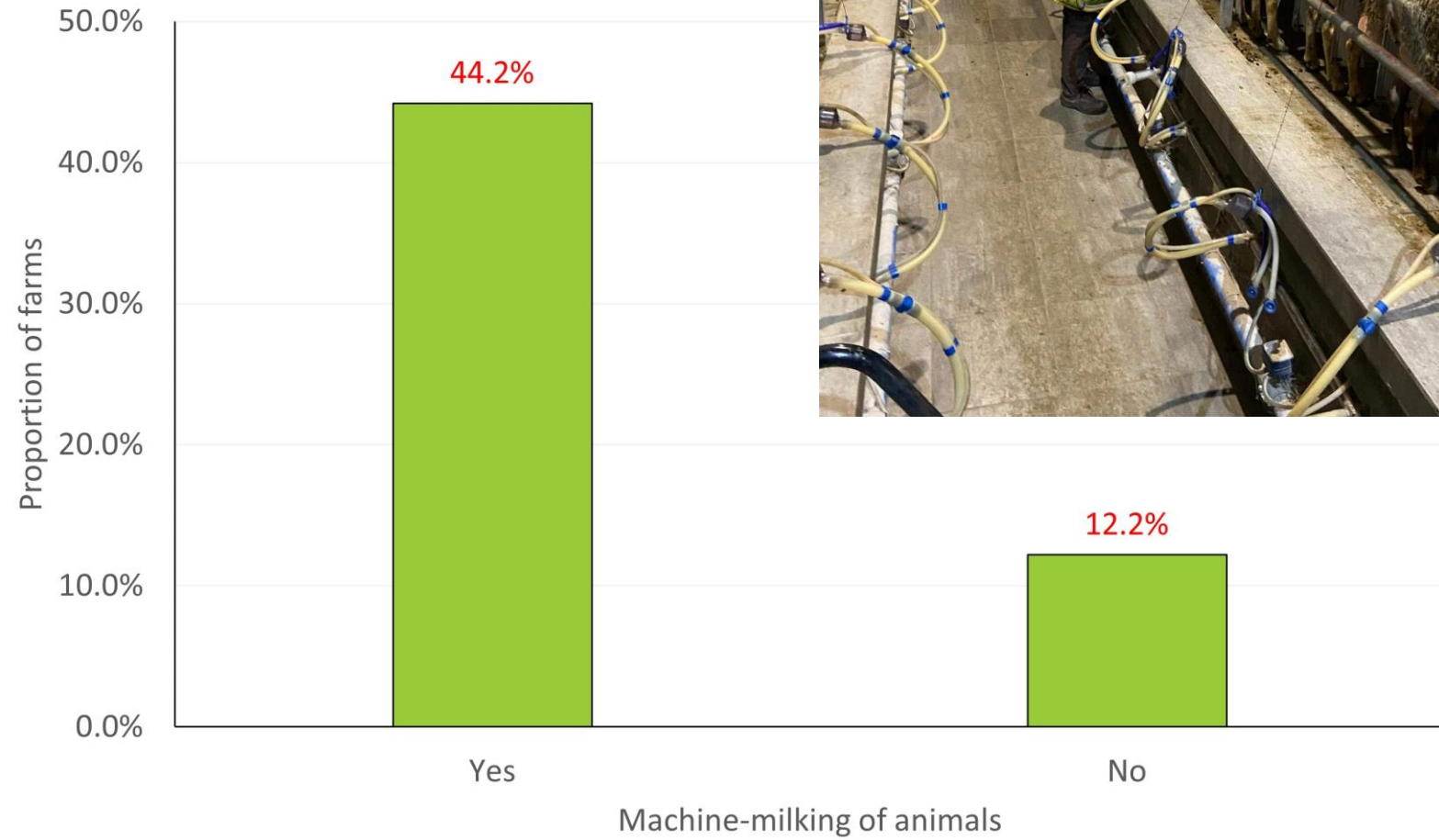
Employment of farm workers

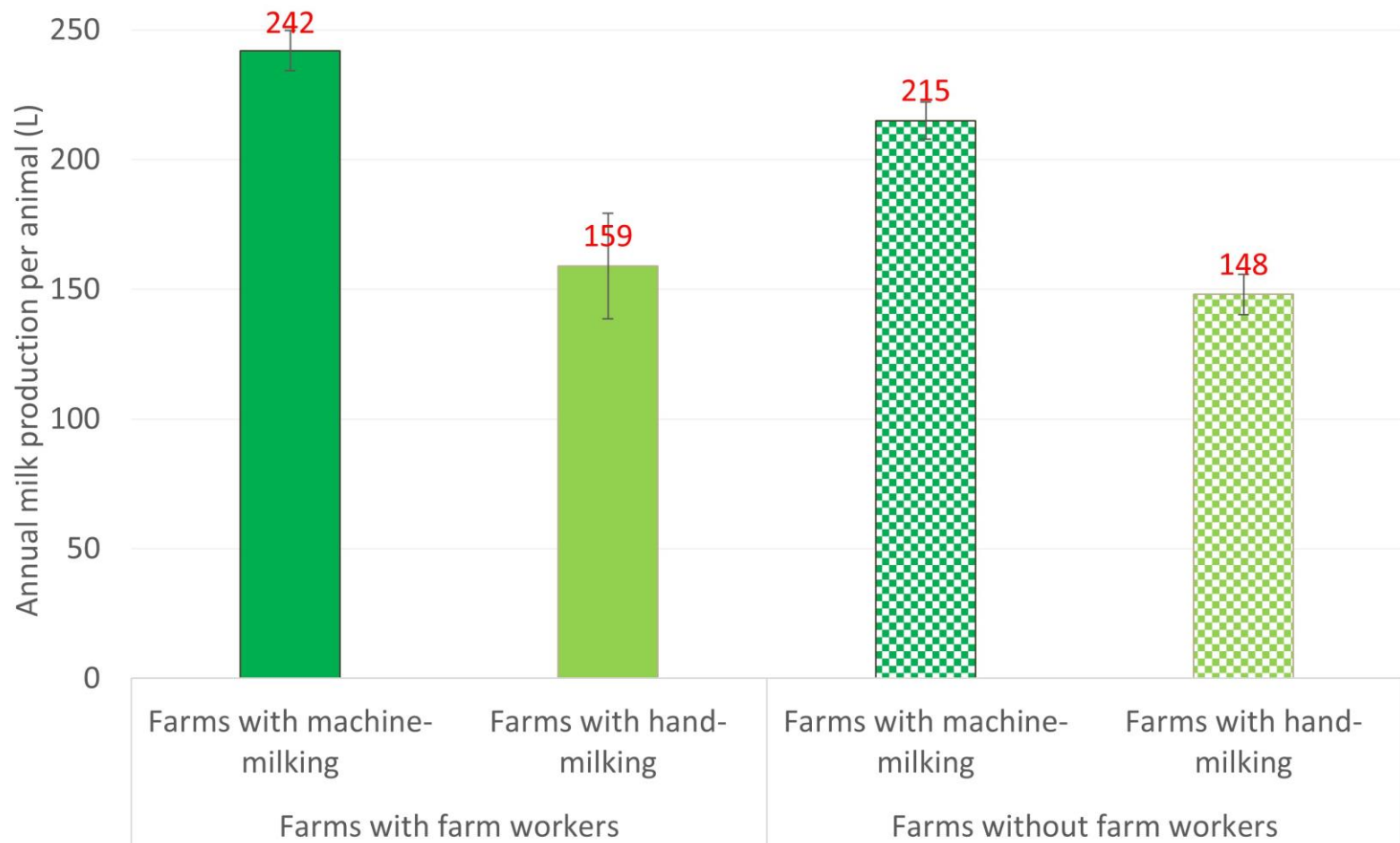
Use of U/S examination for pregnancy diagnosis

RESULTS

Employment of farm workers

Machine-milking of animals





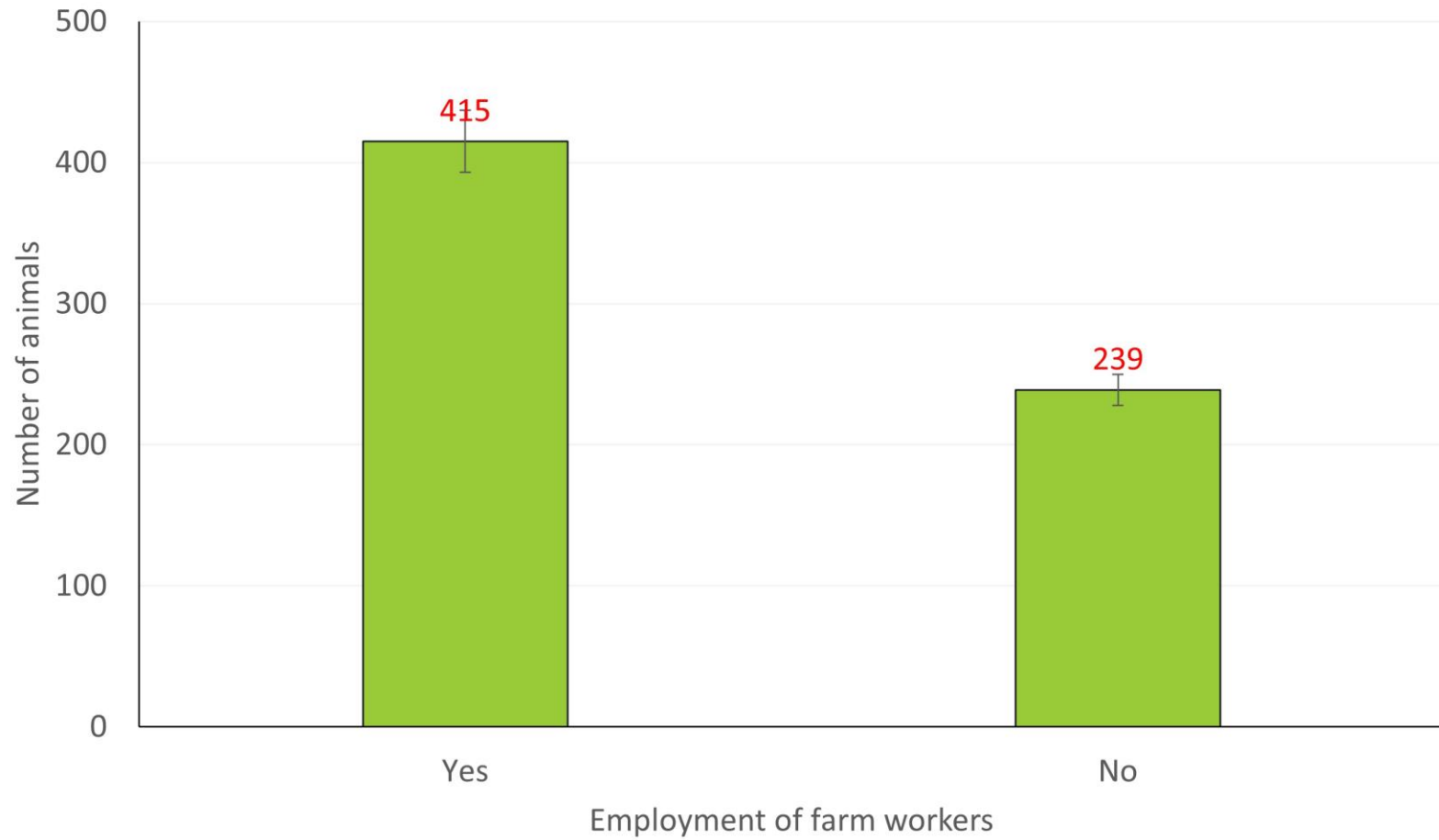
Employment of farm workers

Annual milk production per animal

RESULTS

Employment of farm workers

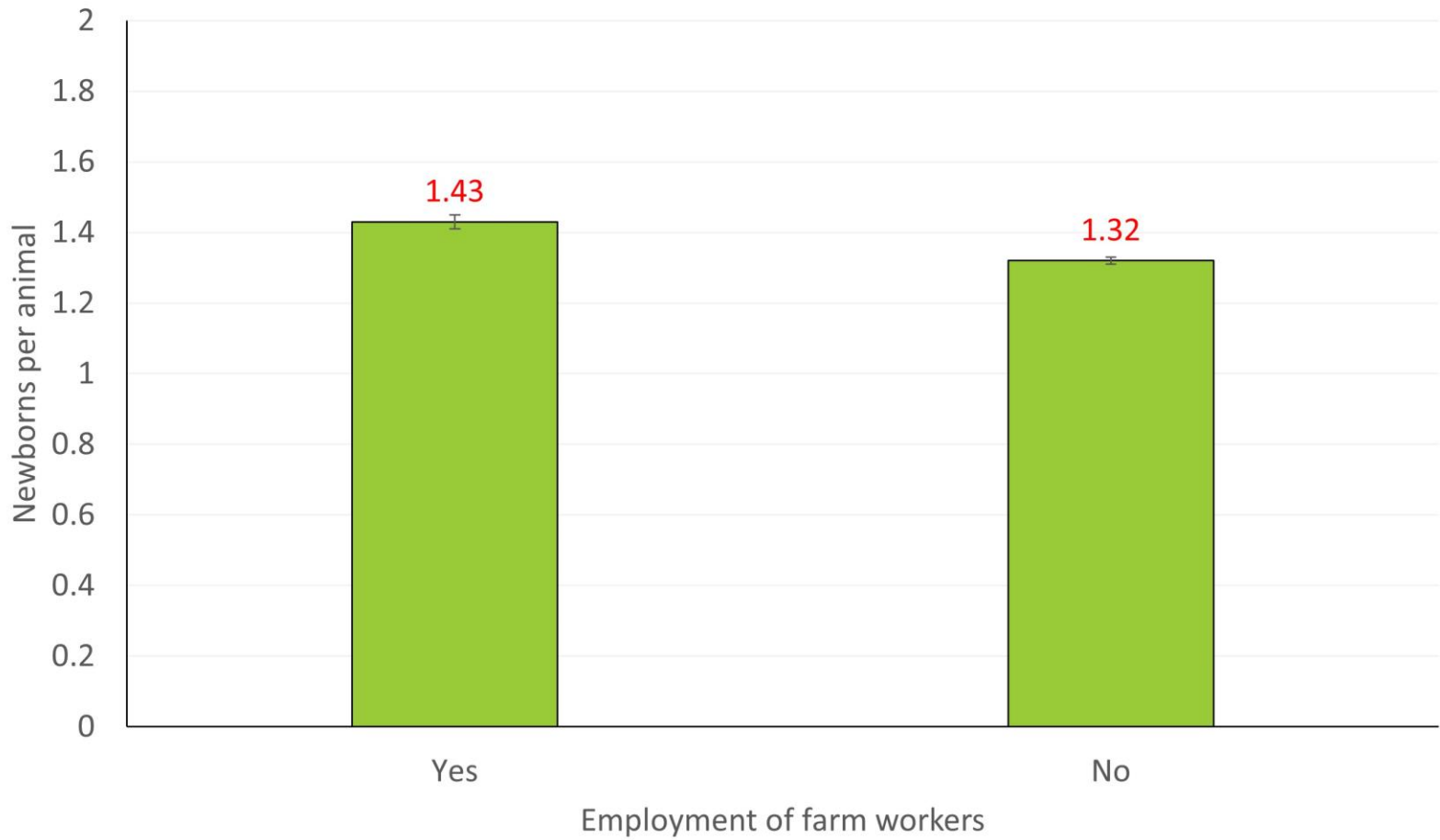
Number of animals in farm



RESULTS

Employment of farm workers

Newborns per animal



FINAL COMMENTS

- Sheep/goat farming in Greece: still a family-driven business
- Increased proportion of younger farmers, with at least secondary education

FINAL COMMENTS

-Socio-demographic characteristics -> management practices

applied in farms -> production- and health-related outcomes

-Most significant characteristics regarding human resources:

- Length of farming experience
- Employment of farm workers

Article

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