

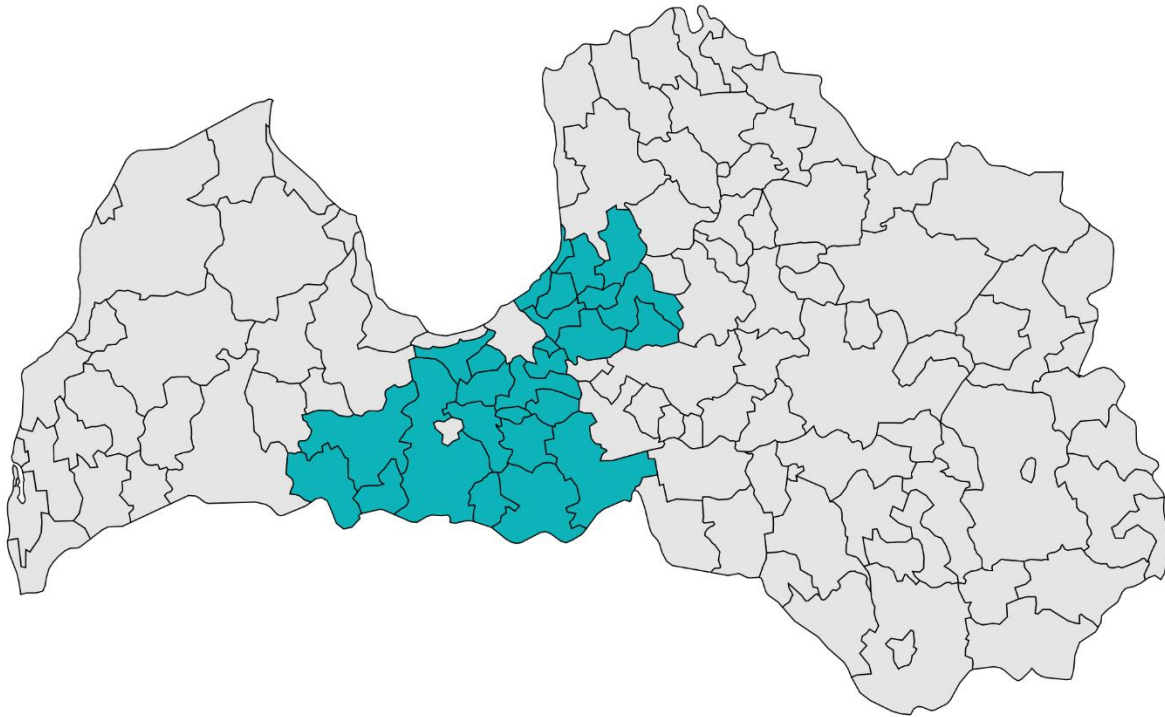
Manure storages in Latvia

Project GreenAgri

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Inventory of manure storages

Environmentally sensitive area of Latvia



Aim – To evaluate the provision of livestock holdings with manure storage facilities in the Latvian environmentally sensitive area

Farm distribution:

- 5-9 animal units
- 10-99 animal units
- >100 animal units

No of farms - 664

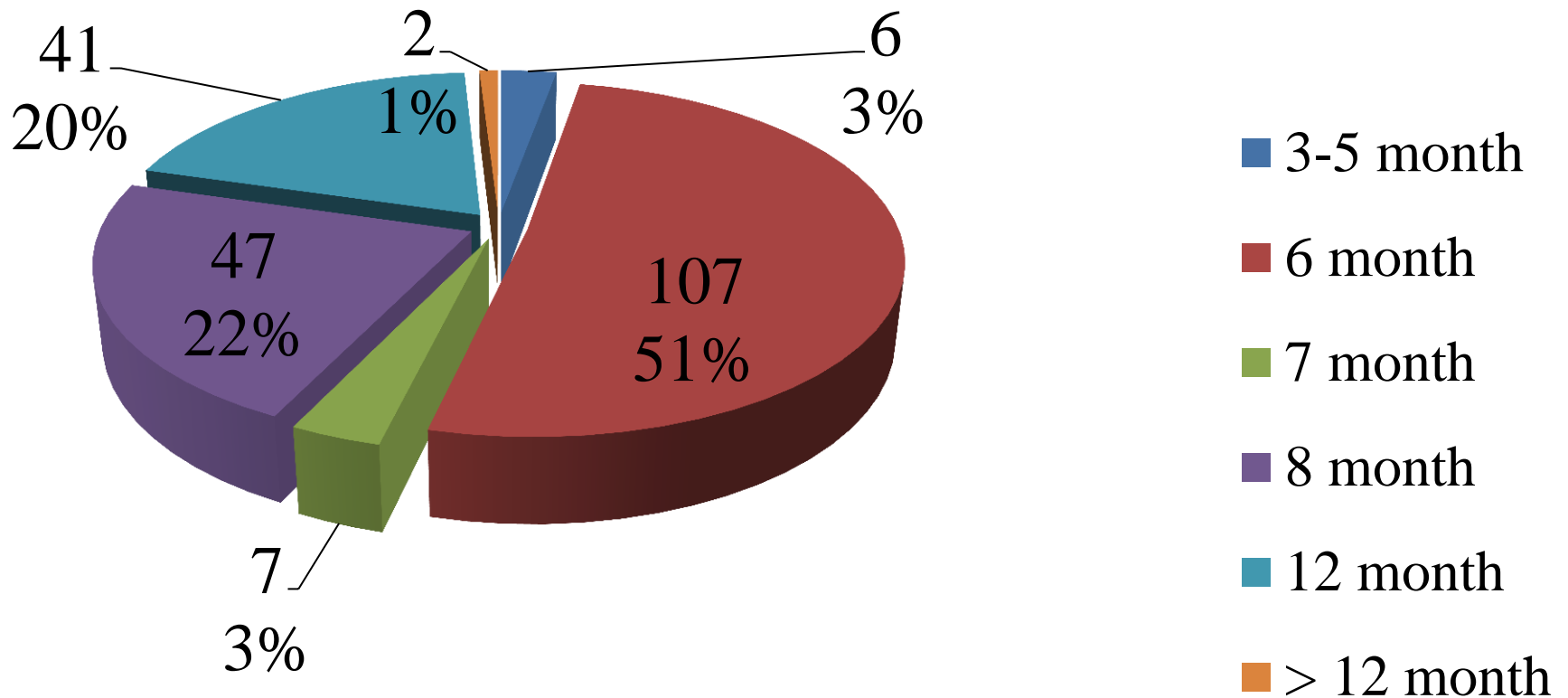
Provision of livestock holdings with manure storage facilities from 5 AU in a highly sensitive area.

No	Indicator	No of farms	%
1.	Total in sensitive area	664	-
2.	Questioned farms	519	100
3.	Farms with manure storage	211	41
4.	Farms without manure storage	308	59

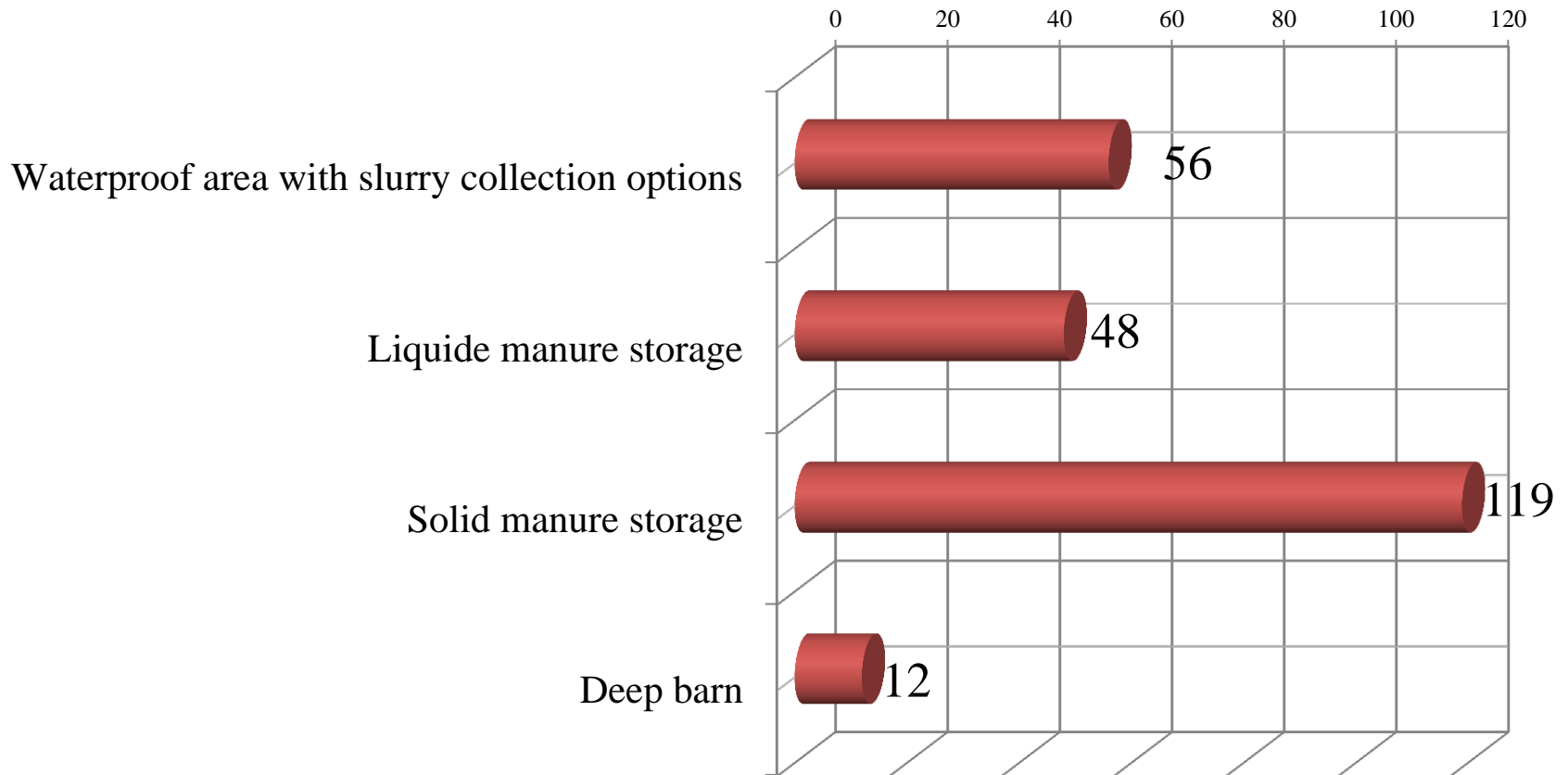
Distribution between farm groups

	Total	Farms with manure storage	Farms without manure storage	Farms with manure storage, %	Farms without manure storage, %
5 – 9 AU	184	17	167	9	91
10 – 99 AU	260	130	130	50	50
> 100 AU	75	64	11	85	15

How big is capacity of manure storage?, % of total



Type of manure storage (n-211)



Type of manure storage by AU

Type	5-9 AU		10-99 AU		>100 AU	
	Farms	%	Farms	%	Farms	%
Waterproof area with slurry collection options	4	24	35	26	17	21
Deep barn	0	0	7	5	5	6
Solid manure storage	11	66	75	56	31	38
Liquide manure storage	2	12	18	13	28	35
Kopā	17	-	135	-	81	-

Liquide manure storages

Type	No	%
Concreate	17	36
Lagoon	29	62
Metal	1	2

Manure storages with cover

- Of the 211 farms that had livestock manure storage facilities in 14 holdings, there was a cover for manure storage (6,6%)

Economic appraisal of manure management requirements

Aim - To study the impact of manure management requirements on economic indicators of farms.

Value of manure

- N – 0.56 EUR/kg
- P₂O₅ – 0,52 EUR/kg
- K₂O – 0,50 EUR/kg

After recalculation of results from analyses of manure (GreenAgri project farms)

Value of manure

- Slurry project farms – 3.06 up to 5.67 EUR/t
- Slurry normative – 4.4 up to 5.3 EUR/t

Spreading costs – 2.89 EUR/t

- Solid manure farms – 21.4 up to 30.28 EUR/t
- Solid manure normative – 6.0 up to 8.0 EUR/t

Spreading costs – 6.65 EUR/t

Limitation –N 170 kg/ ha

Solid manure – 10 up to 16 t/ha (typical 40 t/ha)

Slurry – 36 up to 88 t/ha

Costs of building

Solid manure storage

10 AU:

8 month - 12 173 EUR

10 month – 15 216 EUR

30 AU

8 month – 36 519 EUR

10 month – 45 648 EUR

Roof costs 43% of the costs for storage

- Slurry

75 AU:

8 month - 64 286 EUR (cylindrical) or 35 244 (lagoon)

10 month – 80 357 EUR (cylindrical) or 44 128 (lagoon)

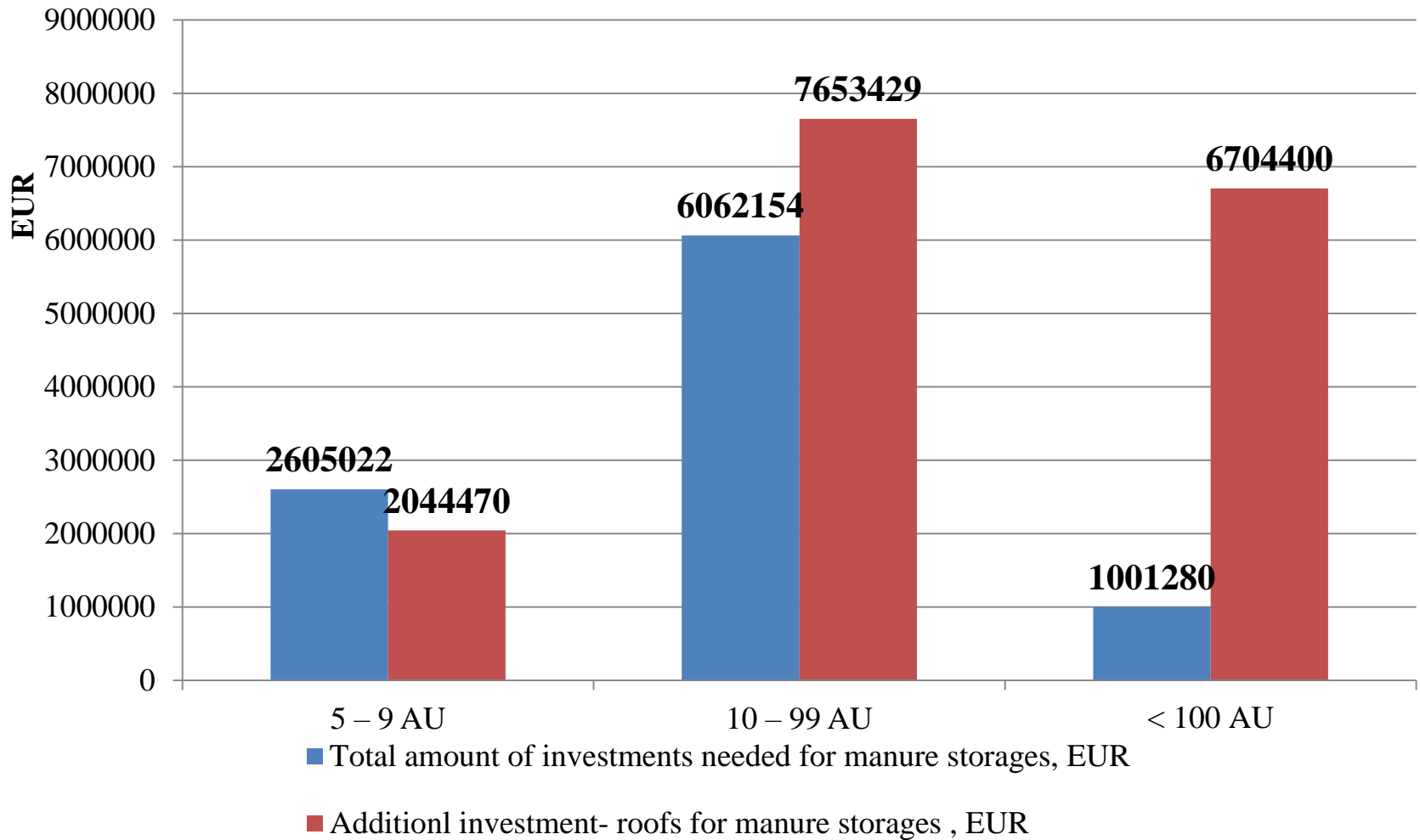
150 AU

8 month – 128 571 EUR (cylindrical) or 71 520 (lagoon)

10 month – 160 714 EUR (cylindrical) or 90 336 (lagoon)

Roof costs 7% of the costs for storage for cylindrical

Investments



A close-up photograph of a textured, golden-brown surface, possibly a piece of fabric or paper. The surface is covered in intricate, wavy patterns that resemble ripples in water or the texture of a woven material. The lighting is warm, creating a rich, golden hue. In the center of the image, the text "Thank you!" is overlaid in a simple, black, sans-serif font. The text is positioned slightly above the horizontal center and is clearly legible against the textured background. There are some small, dark specks and a few tiny, circular indentations scattered across the surface, adding to its organic feel.

Thank you!