

Disruptive Innovation in sheep breeding for ensuring complete traceability of lambs



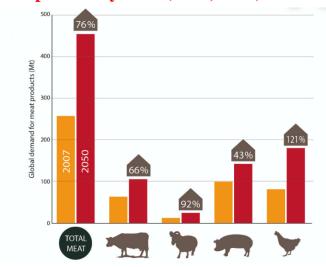


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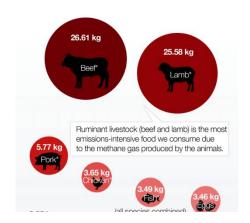
Problem Statement

Meat consumption is projected to rise nearly 76 percent by 2050 (FAO, 2011).



2

Environment impact is a problem.

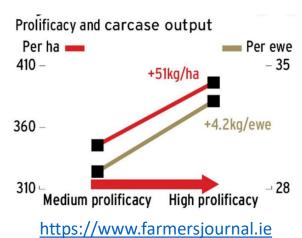


Animal welfare is a concern!

3



We should improve on productivity per head



Sheep Breeding & Technology

 Sheep breeding benefited little from monitoring and processing techniques contrary to other livestock





Industrialized Sheep Breeding

Industry 1.0



Traditional breeding

- Small scale
- Mixed livestock
- Pasture based
- Human decision based
- Predator and Parasites

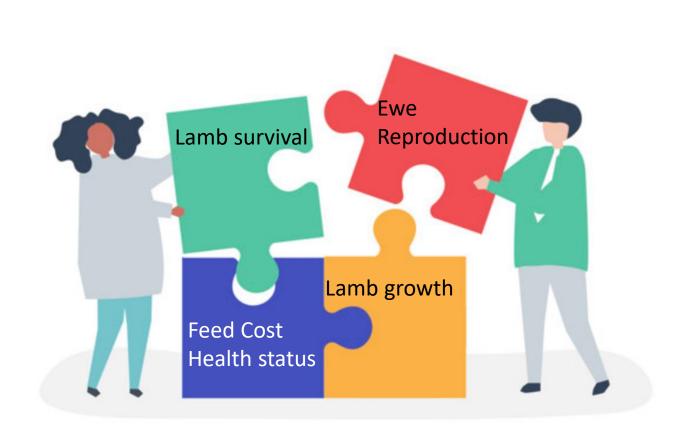
Industry 4.0



Technologic breeding

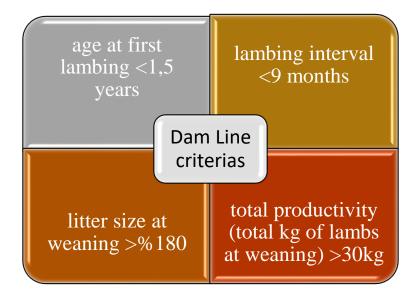
- Large scale
- Single livestock
- Intensive
- Systematic
- Data-driven control
- Profitability

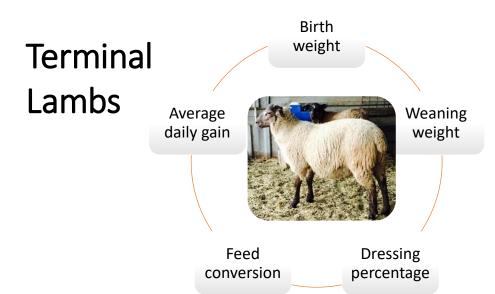
Areas to excel in Sustainable-Profitable Lamb Production

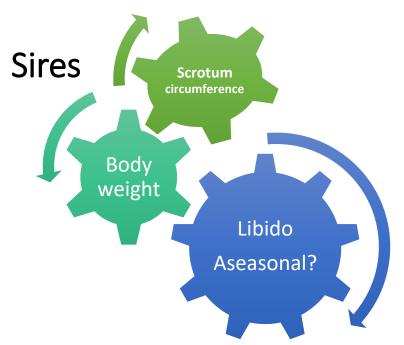


Performance Indicators

Ewes







Kuzufab Cloud

Precision Flock Management

Mobile/Cloud/IoT combined with Farm Usability

Machine Learning
Enabled Data Services



data synchronization

Observe dashboard and receive suggestions, alerts in your IOS/Android app



Best ewes, Cull ewes, Daily weight gain, market readiness for lambs, etc ...



Unique architecture; Android powered RFID reader integrated with 3-way drafting crate. Cloud ready, Mobile ready IoT Architecture



kuzufab.com

Automated counting, weighing, 3-way drafting crate

Sheep Handling Unit

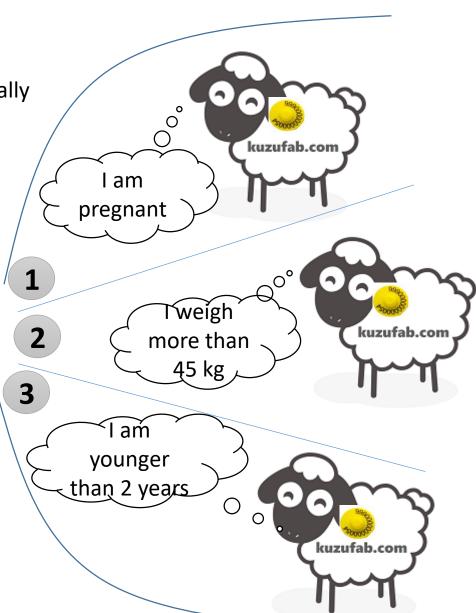
Connected via Bluetooth

Doors operate automatically



Automated counting, weighting and drafting crate

Drafting criteria is configurable through the mobile interface
Based on age, cull criteria, pregnancy, weight, etc...



Management and Decision Support App



- Scoring ewes for production traits.
- Culling alert for underperforming ewes.
- Daily task list guides breeding strategy
- Supports Android and IOS platforms, designed for farm management
- Farm KPIs reported in real-time
- Animal handling operations are notified in real-time











PLF achievements

- Neonatal lamb mortality decreased from %13 to %5
- Pregnancy rate in ewe lambs increased from %70 to %94
- 20% reproductive efficiency (estrus, conception, litter size, pregnancy, ...) increase in the mature ewes in accelerated 8monthly lambing schedule.
- Total meat production productivity of ewes was recorded as average 44 kg which is 14 kg more than previous years.
- Barren ewes' ratio was significantly reduced from 10% to 3%.
- 23% decrease recorded for total feed used per ewe.

FINE-TUNE FLOCK MANAGEMENT



Mobile flock management of intensive sheep farm



Total productivity of ewe was increased 3X with Precision Mobile
Flock Manager by reducing lamb mortality, increasing reproductive performance of ewes and saving from feed sources



REMARKABLE PROLIFICACY

iSAGE

Evaluation of reproductive performance of crossbreeds of Romanov and Turkish Native Breeds

2004

Prolific Dam Line ANAROM
,developed using high assisted
reproductive technologies and
high genetic merit, is highly
adopted to different region,
climate and management system.



CONTROL OVER HOW YOU EARN





Controlling reproduction in Sheep & Goats and developing easycare breeds



6 kg meat being produced per ewe with estrus synchronization and superovulation.

Ideal mothering ability requires at least 15 minutes of time spent for grooming.



GROWING TREND FUNCTIONAL FOOD



Functional food production from goat milk and lamb meat



CLA intake with strategic

feeding and breeding



Dissemination through Social Media





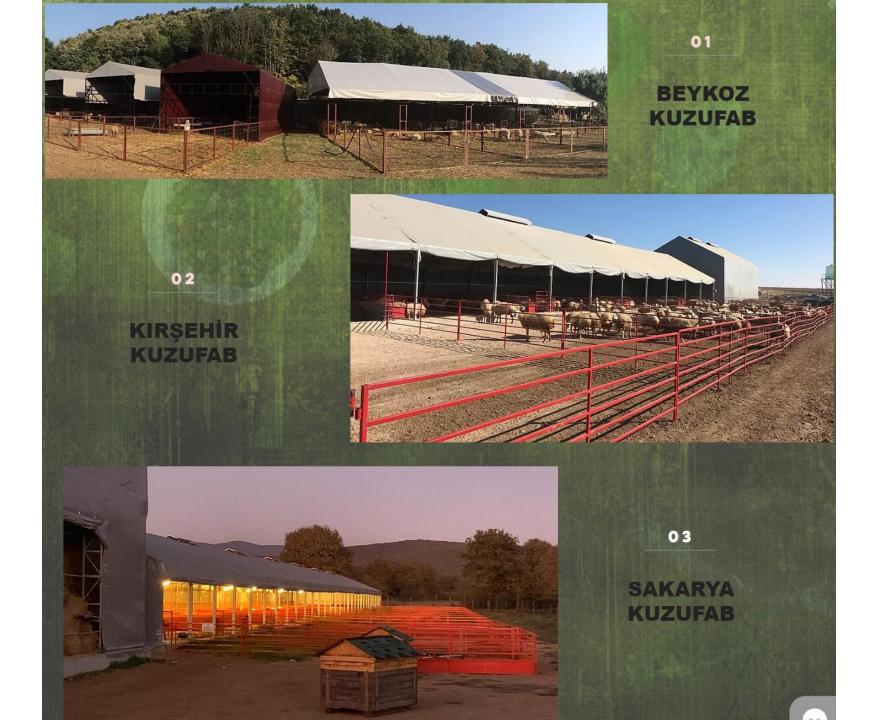














■ COSMOTE **10:11** %46 ■ pp.kuzufab.com

Kuzu Bilgileri

Küpe Numarası:	792023400714449
Resmi Küpe Numarası:	TR34000714449
Plastik Küpe Numarası:	359
lrk:	Anarom
Doğum Tarihi:	03-07-2019
Doğum Ağırlığı:	5 kg
Aşı Tarihi:	31-10-2019
Aşı Tipi:	Entratoksemi

Kullanılan Kesif Yemin İçeriği

zu Fabrika	ISI		
Gebe Koyun	Koyun Süt	Kuzu B.	Toklu Besi
88.26	88.42	88.61	88.19
13.56	16	17.6	14
25	22	34	33
15.91	14.36	7.77	11.21
32.11	30.99	21.13	25.3
6.54	6.04	5.42	6.01
3.49	4.45	3.11	3.4
0.88	0.75	0.65	0.68
0.7	0.72	0.63	0.66
	Gebe Koyun 88.26 13.56 25 15.91 32.11 6.54 3.49 0.88	Koyun Süt 88.26 88.42 13.56 16 25 22 15.91 14.36 32.11 30.99 6.54 6.04 3.49 4.45 0.88 0.75	Gebe Koyun Koyun Süt Kuzu B. 88.26 88.42 88.61 13.56 16 17.6 25 22 34 15.91 14.36 7.77 32.11 30.99 21.13 6.54 6.04 5.42 3.49 4.45 3.11 0.88 0.75 0.65

ə (1,5 Kg/Ton) A-D-E Vitamin ve İzmineraller haricinde B ıs vitaminler de içermektedir. Kil bazlı toksin bağlayıcı ve olarak da Biosprint-S kullanılmaktadır. Nişasta kaynağı ağırlıklı olarak mısırdan elde edilmektedir.

Tüketilen Kesif Yem Analizi