




Report of the third national workshop (NWS 3)

Estonia



Sm@ll Ruminant Technologies

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OBJECTIVES

2 main objectives for the third national workshops (NWS 3):

- Farm Demo in Andri Peedo goat digifarm (4 technologies: Milking parlour 2x24 GEA/Westfalia with EID eartags and readers; Postdried hay technology and feeding it by electric crane; Milk feeder for kids; Milking parlour 2x24 GEA/Westfalia with Automatic concentrate feeder according by EID ear tag.
- Get feedback on the innovative solutions tried in the morning training session

ORGANISATION AND ATTENDEES

For this meeting the face-to-face format is encouraged.

The agenda of the meetings

1. Demonstration of 4 technologies used in Andri Peedo goat digifarm. Those 4 technologies are: Milking parlour 2x24 GEA/Westfalia with EID eartags and readers; Postdried hay technology and feeding it by electric crane; Milk feeder for kids; Milking parlour 2x24 GEA/Westfalia with Automatic concentrate feeder according by EID ear tag.
2. Lunch at Piiri café
3. Workshop (Discussion and questionnaires)
4. Recording innovative farmer's testimonies (Wasala OY, Rehekivi OY)
5. Info for TNWS3

MINUTE BY COUNTRY

ESTONIA (MEAT SHEEP + DAIRY GOAT/SHEEP):

Date and place of the NWS 3: Andri Peedo goat digifarm, Misso, Estonia, 02.06.2022. Started 11 a.m., ended 5 p.m.

Present: Janika Mirka (sheep farmer), Rein Mirka (sheep farmer), Hillar Kalda (sheep farmer), Kermo Rannamäe (milk goat farmer), Linda Pajo (milk goat farmer), Mart Vaino (sheep farmer), Karen Nunez Arm (sheep farmer), Peep Piirsalu (researcher), Maria Soonberg (researcher)

Number of participants: 9

Apologies:

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Organisation: Estonian University of Life Sciences (EULS)

Solutions presented / tested and feedback: Milking parlour 2x24 GEA/Westfalia with EID eartags and readers; Postdried hay technology and feeding it by electric crane; Milk feeder for





kids; Milking parlour 2x24 GEA/Westfalia with Automatic concentrate feeder according by EID ear tag.

Each table is the synthesis of how many farmers / stakeholders gave each answer to each question.

Solution: Milking parlour 2x24 GEA/Westfalia with EID eartags

Farmer no.	BEFORE - what do you think of this technology?	BEFORE - would you put it on your farm?	AFTER - what do you think of this technology?	AFTER - would you put it on your farm?
1	Maybe	Maybe	Maybe	Maybe
2	Yes	Yes	Maybe	Maybe
3	Yes	Yes	Yes	Yes
4		Yes		Yes
5	Yes	Yes	Yes	Yes
6	Yes	Yes	Yes	No

Solution: Postdried hay technology and feeding it by electric crane

Farmer no.	BEFORE - what do you think of this technology?	BEFORE - would you put it on your farm?	AFTER - what do you think of this technology?	AFTER - would you put it on your farm?
1	Maybe	Maybe	Maybe	Maybe
2	Yes	Yes	Maybe	Maybe
3	Yes	Yes	Yes	Yes
4		Yes		Yes
5	Yes	Yes	Yes	Yes
6	Yes	Yes	Yes	No





Solution: **Milk feeder for kids**

Tool	Farmer no.	BEFORE - what do you think of this technology?	BEFORE - would you put it on your farm?	AFTER - what do you think of this technology?	AFTER - would you put it on your farm?
Milk feeder	1	Yes	Yes	Yes	Maybe
Milk feeder	2		Yes		Yes
Milk feeder	3	Yes	Yes	Yes	Yes
Milk feeder	4	Yes	Maybe	Yes	Yes
Milk feeder	5	Yes	Yes	Yes	Yes

Solution: **Milking parlour 2x24 GEA/Westfalia with Automatic concentrate feeder according by EID ear tag.**

Farmer no.	BEFORE - what do you think of this technology?	BEFORE - would you put it on your farm?	AFTER - what do you think of this technology?	AFTER - would you put it on your farm?
1	Yes	Yes	Yes	Yes
2	Maybe	Maybe	Yes	Yes
3		Yes		Yes
4	Yes	Yes	Yes	Yes
5	Maybe	Maybe	Yes	No

Name of the tool (Postdried hay technology and feeding it by electric crane)				
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		3	2	
2. Did you like it?			4	1
2. Was it easy to use?			3	2
3. Would you have the		3	2	





infrastructure needed to implement it?				
4. Could you implement it on your farm easily?			5	
5. Is it affordable to you?		2	2	1
6. Could you justify investing in it?			4	1
7. Do you think it would take long to pay it back?	1	1	2	1
8. Do you understand better after training?			5	
9. Would you recommend to somebody else?			5	
Total number of participants	5			

Name of the tool Milk feeder for kids (
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		4	1	
2. Did you like it?			5	
2. Was it easy to use?	1		3	1
3. Would you have the infrastructure needed to implement it?		3	2	
4. Could you implement it on your farm easily?			5	





5. Is it affordable to you?		2	2	1
6. Could you justify investing in it?			4	1
7. Do you think it would take long to pay it back?	1	1	2	1
8. Do you understand better after training?			5	
9. Would you recommend to somebody else?			5	
Total number of participants	5			

Name of the tool Milking parlour 2x24 GEA/Westfalia with Automatic concentrate feeder according by EID ear tag.				
<i>Number of answers</i>	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		4	1	
2. Did you like it?			5	
2. Was it easy to use?			5	
3. Would you have the infrastructure needed to implement it?		2	3	
4. Could you implement it on your farm easily?			5	
5. Is it affordable to you?		2	2	1





6. Could you justify investing in it?		2	3	
7. Do you think it would take long to pay it back?		3	2	
8. Do you understand better after training?			5	
9. Would you recommend to somebody else?			5	
Total number of participants	5			

Peep conducted a group discussion by technologies seen in a farm demo/training session and farmers farmers expressed their opinions as follows:

1. Group discussion: Postdried hay technology and feeding it by electric crane

2. What is the main barrier to you?

Why?

How to set up a system in an old farm? Actual high electricity cost? The whole investment is very high. The entire installation and construction of the new farm was a total of 2 million euros, post dry hay technology in total 285000 eur (storage, dryer, crane, facilities)

3. What is main advantage to you?

Why?

Complete solution for the whole farm. High-quality feed ensures high-quality production (raw milk and milk products). Good animal health. Pure air in a barn. Optimization of working load (1 person could feed and milk 500 goats a day).

4. Do/Would you use it for something else?

Opportunity to market hay for pet rodents (additional income)

5. What would you modify to implement it?

Can be used to dry other material. Greater use of solar panels in the future

2. Group discussion: Milking parlour 2x24 GEA/Westfalia with EID eartags and readers

1. What is the main barrier to you?

Why? The ear tag panel reader is in a bad place, because the animals can change places afterwards

2. What is main advantage to you?

Why? Enough speed to milk 500 goats, because 230 goats are milked in 1 hour to 1.5 hours





3. Do/Would you use it for something else?
4. What would you modify to implement it?

The ear tag reader must be attached to the concentrate feeding machine. Adding milk meters for individual milk performance

3. Group discussion: Milk feeder for kids

1. What is the main barrier to you?
Why? The system needs maintenance 2 times a week. Meat sheep farms would only be suitable for a very large number of animals
2. What is main advantage to you?
Why? Lambs learn quickly and from each other.
3. Do/Would you use it for something else?
Can also be used in meat sheep herds, so not only in dairy goat and dairy sheep farms
4. What would you modify to implement it?
The necessary prevention of running out when it breaks

4. Milking parlour 2x24 GEA/Automatic concentrate feeder according by EID tags

1. What is the main barrier to you?
Why? The ear tag panel reader is in a bad place, because the animals can change places afterwards. Only group feeding is possible at a moment (not individual)
2. What is main advantage to you?
Why? Enough speed to feed 500 goats with concentrates in only few minutes.
3. Do/Would you use it for something else? -
4. What would you modify to implement it?
The ear tag reader must be attached to the concentrate feeding machine

Video recordings of innovative farmer's testimonies (Wasala OY, Rehekivi OY) and NF presentation

Finally Peep gave info about TNWS3 in France. Destination Toulouse, 4.-7. July 2022, program information etc.





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