

# National Workshop Nr. 2.



Sm@ll Ruminant Technologies



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16<sup>th</sup> of March, 2022  
Virtual meeting on Skype

Sm@RT

## OBJECTIVES

3 main objectives were identified for the first national workshops (NWS 1):

- Present Sm@RT project progress to stakeholders
- Propose innovative solutions to answer the needs identified by the farmers in NWS1
- Have an idea of means communications used

## ORGANISATION AND ATTENDEES

Due to the Covid, 2 different organisations were proposed: face-to-face meetings and virtual conferences depending on the context of each country. The generic agenda of the meetings is detailed on the annex 1.

## HUNGARY: MEAT SHEEP

### Date and place of the NWS 2:

16<sup>th</sup> March 2022, 1:30 pm to 4 pm, virtual meeting on skype

### Present:

#### Number of participants:

Dr. Oláh János (Farmer, researcher, UD AKIT DTTI), Orsolya Nagy (NF, UD), Tímea Milisits-Németh (Farmer), István Egerszegi (Farmer), Nóra Dr. Pálfyné Dr. Vass (Researcher), Krisztina Sándor (Advisor), Dr. Renáta Knop (Researcher), Zsuzsanna Borovka (Advisor), Dr. Sándor Harangi (Farmer),

### Apologies:

István Monori (Farmer), Levente Lajkó (Farmer), Mariann Tóth (Researcher), Zsuzsanna Nagy (Farmer)

### Organisation:

Beginning of the meeting Dr. János Oláh welcomed all participants and they gave a short introduction about themselves. Orsolya Nagy talked about the agenda of the day then she presented the Sm@RT project progress.

Because of the few member of the meeting the whole group worked together.

After the first session there was a coffee break.

After the coffee break the group talked about the communication.

In the end of the meeting János thanked the participants and announced the next TNWS.

### Solutions identified for needs and votes/prioritization:

The delegates were asked to identify the three favoured technologies/solutions.

Feeding / Grazing		
Need / challenge	Solutions	Prioritization
Moving electric fences is very time-consuming and complicated - and issue of no fences on the hill ground/fencing, wolf free fences	Virtual fencing	5

Identification of sick animal, move animals in big lots		2
Distribution/Management of concentrate allocation during lambing - Physical, repetitive work		1
Grazing monitoring (pasture optimisation, virtual fences, connected fences, grass growth...)	Automated grass measures	
	Relevant softwares	
Control/Fear around predators (surveillance of the flock)		
Knowing how much sheep grazing days are left in a field/Grass allocation/measurement		
Deciding on feeding groups/Link between the state of the animals & feeding	EID tags & EID-enabled weigh crate	6
Auto drafting ewes for nutrition management	EID tags & EID-enabled weigh crate	4
Lamb surveillance on pasture	Drone	
Get information on behaviour on pasture (accelerometer information)		
In pasture, distribute the concentrate with all the ewes around you		
Measuring grass heights (time-consuming)/Automatic grass measuring	Automated grass measures	
	Relevant softwares	
Technology is not that simple to use (make it simple!)		
Mowing grass under wireline		1
Establishing paddocks on other farms/locations		
Water distribution is time consuming/Feeding/water to ewes in individual pens post lambing		
DAC/automated feeder/distribution (how to use?)		
Knowing which sheep are using hopper/feeders or not in the field		3
Water supply to grazing groups		
How to avoid bullying ewes during concentrate feeding?		
Every day flock control in a very large area of pasture		
Making/maintaining fences		
Expensive technology (NoFence, GPS) - needs improvements		5
Ewe/Lamb proximity sensors /bond		

Fattening		
Need / challenge	Solutions	Prioritization
Lamb weighing (in barn and also in pasture)	EID tags & EID-enabled weigh crate	6
Animal sorting, manipulations, moving	EID tags & EID-enabled weigh crate	
Parasitism detection/Faecal egg sampling/when to treat	EID tags & EID-enabled weigh crate	3
	Faecal egg count testing technology	3
Outdoor condition / barn condition to monitor / adapt	Electronic weather station	5
	Automated grass measures	
Help for the farmer to know when the lamb is ready for slaughter (with BCS, autosorter, weight in function of what do the lamb eat)	EID tags & EID-enabled weigh crate	1

Drafting fat lambs /lamb to keep	EID tags & EID-enabled weigh crate	2
Additional feeding lambs during weaning time	Ration software	
Added value of digital technologies (cost, use of technologies at some periods)	Farm management software	
Setting up the weighing scales		
Ration formulation	Ration software	
Timely weaning	EID tags & EID-enabled weigh crate	
	Automated grass measures	
Body condition score evaluation		1
Lamb self-weighing whilst feeding – and drafting	EID tags & EID-enabled weigh crate	
Ration allocation/trough management	Ration software Feed intake system	
Performance recording (growth rates, slaughter data etc.)	EID tags & EID-enabled weigh crate	1
	Hand-held data loggers	
	Farm management software	
Automatic foot bathing		2
Lamb identification (with eyes)		
Shearing of the last lambs		2
Make sure your auto-drafter/new handling system fit your current handling system		
Snacker is difficult to manage in bad weather/wet ground		
Identification and management of lame lambs		1
Lambs always in one large group, bigger lambs push away smaller ones before weaning time and on pasture too		

Health / Welfare		
Need / challenge	Solutions	Prioritization
Early detection of health issues /identifying disease issues	EID tags & EID-enabled weigh crate	
Detection common parasites/manage external parasites/and treatment	EID tags & EID-enabled weigh crate	1
	Faecal egg count testing technology	2
Identification of sick animal for a better follow (mastitis, worm, etc.)	EID tags & EID-enabled weigh crate	6
	Hand-held data loggers	
	Farm management software	
Training on existing tools		
Tools adaptation needed for each farm		
Recording/collecting/analysing health data is time-consuming/recording tags health issues, including withdrawal period	EID tags & EID-enabled weigh crate	5
	Hand-held data loggers	3

	Farm management software	
Combining of individual health data and all other data	Farm management software	
Not overdrenching - so having an autodrench gun based on weight would be great/ dosing & FEC monitoring	Autodrench gun	
Large predators and birds of prey- ravens		
Parasite warning system (from climate data)		
Udder health/mastitis		
Need tools to observe animals and help the farmer for the decision	Drone	
Following of water consumption	Water intake recording crate/flow meter	
Physicality of treating lameness (turning the animal)/footbathing & treating lameness	Conveyor or other handling systems	
How to separate the animals who are lame?	EID tags & EID-enabled weigh crate	
BCS general handling / lack of knowledge of ewe body scoring		2
Shearing		
Welfare is not easy to define and apply to all systems, how to measure the welfare ?		
Coping with extra 'health' handling at key periods (time-consuming)		
Good layout of handling systems		3
Availability of drugs can be limiting in some contexts		
undernutrition of ewes in many flocks, using low quality feed		
Cost of parasite analysis (e.g. FEC, etc.)		5
Regular monitoring of weight		
Suitable stocking density inside/sufficient indoor area (to high animal density)		
Using data recorded in the Sheep recording system		

Reproduction		
Need / challenge	Solutions	Prioritization
Flock management software which integrate all data from devices + easy transfer from one device to another		5
Monitoring the reproduction (tool to identify ewes for insemination/tupping dates)/Ram health monitoring/fertility testing		
Automatized following of the reproduction (warnings at every steps)		6
Deseasoning monitoring (light treatment)		
Coordinate reproduction with sales		
Scanning and dividing ewe groups for appropriate nutrition	Pregnancy scanning	
	Hand-held data loggers	
	EID tags & EID-enabled weigh crate	
Measurement of BCS (time-consuming)		2
Selecting/drafting ewes for rams/replacements	EID tags & EID-enabled weigh crate	
Difficult to manage flock with different mating groups	Genomic parentage	3
How to collect IDs automatically outside (through gates?)		

Lambing records/ewe performance	EID tags & EID-enabled weigh crate	5
	Hand-held data loggers	
	Farm management software	
Availability issues of new breeding material from abroad and in a country		
Identification of the young ewes		
Raddling rams		2
Sourcing stock with right history/rearing		
Have more time for the lambing		
Easier organisation of the grazing / barn with a lot of batch		2
Tag reading distance is too short		
Identifying/controlling abortion issues		1
Bolus use/drenching		1
Protection from predators of different mating groups at mating		
Too large mating groups		

Flock management		
Need / challenge	Solutions	Prioritization
Recognising and/or weighing your sheep automatically	EID tags & EID-enabled weigh crate	2
Difficulties foot-trimming	Conveyor or other handling systems	7

### Means communications:

Each participant vote with a cross along a line on a board on the means of communication they use or not.

Communication methods	Never			Always	
Facebook	1	1			7
YouTube			1	2	6
Twitter	8	1			
Instagram	4	3		2	
Newsletters				1	8
Farm Open day/Visits				1	8
Farming column in Press					9
Podcasts	6	3			
Websites (farm websites)		3	3	4	
Farming groups			7	1	1
Trainings			2	6	1