Milk recording reform in Finland – was it worth it?

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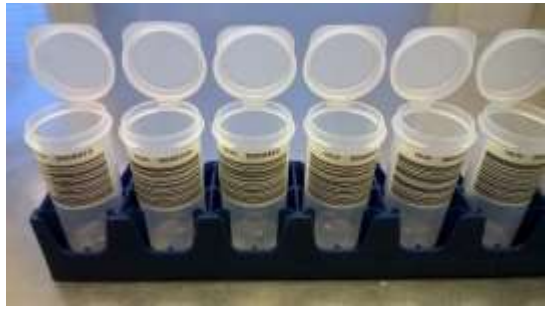
Introduction to Finnish Milk Recording

- **5500 recorded herds, 42 cows in average**
- **800+ robotic herds**
- **93% farmer recording (B)**
- **75% of data capture done by farmers**
- **Milk meters mainly owned by farmers**

Goals for the reform



- New service model and technologies
- 90% of all cows recorded
- Less than 10% unofficial data
- Reports reformed, new key figures
- Pre-coded vials
- Data capture within 5 days from recording
- Better work efficiency

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Changes made

- Differentiation of jobs
- Pricing
- Sampling services
- Remote access
- Attention to timely reporting
- Variety in recording intervals
- Introduction of vacation month

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Data Quality Management - 2015

Data Quality Points
- Every recording
- Annual average determines if data fit for use

Recorder – farmer or independent?

Milk meter register
- Testing dates

Recording intervals

Bulk tank comparison
- Milk & fat

Sampling intervals

Plausibility checks
- In farm software
- At the entrance

Supervised recording
- Small number of leading herds
- Done by ProAgria

Milk Recording Periodic Report - Herd Summary

[redacted]

Recording day	5.10.2016		
Cows in herd	156		
Cows dry	30	Feeding days since Jan 1st	279
Target average yield 2016: 11500 kg/cow			

20.10.2016
BT44
5

Test day yield		Milk, kg			F%	P%	Cells	Urea	F / P
Cows in milk	Pcs	Act.	Target						
Herd average	**126**	**36,7**	**39,2**	↓	**4,13**	**3,60**	**217**	**32**	**1,15**
Herd total		**4618,2**							
First-calvers	39	30,8	34,7	↓	4,13	3,59	115	31	1,15
2nd lactation	35	39,3	40,8	→	4,12	3,64	198	32	1,13
Older cows	52	39,3	42,5	↓	4,12	3,58	289	33	1,15
<60 days in milk	29	45,7	44,2	→	4,03	3,48	180	29	1,16
60-120 DIM	20	42,1	47,1	↓	3,71	3,34	147	33	1,11
121-180 DIM	18	37,4	42,8	↓	4,19	3,67	177	34	1,14
>180 days in milk	59	30,1	33,1	↓	4,35	3,79	289	34	1,15

12-month rolling yield	Cows	Milk	Fkg	F%	Pkg	P%	ECM
Herd	**148,6**	**11706**	**463**	**3,95**	**391**	**3,34**	**11595**
- Dairy delivered milk kg		10886		4,05		3,26	
Ayrshire							
Holstein	148,5	11710	463	3,95	391	3,34	11600
Finnish cattle							
Other breeds	0,1	5125	132	2,57	174	3,40	4228

Annual yield by last test							
Herd	150,3	9208	363	3,94	307	3,33	9106
ECM per day of life, cows in herd							13,2

Fertility	Act.	Target			Act.	Target
Calving interval, d	404	395	→	Days open	79	
Age at first calving, m	25,6	25,0	→	Service period, d	35	
Average lactation	2,5	2,3	↑	Dry period, d	79	
Services/calving	2,18	1,90	↓	56-day non-return rate, %	60	

Milk recording average

Recording day	Cows	Milk	F%	P%	Cells	DIM	Points	Delay
13.10.15	106	32,8	3,94	3,30	116	166	10	2
13.11.15	110	35,9	4,08	3,51	194	149	10	0
13.12.15	108	39,5	4,07	3,44	303	152	10	1
14.01.16	118	42,0	3,94	3,30	139	137	10	0
09.02.16	123	42,6	4,01	3,33	141	146	10	3
10.03.16	123	43,2	3,88	3,29	199	150	10	0
10.04.16	125	42,9	3,96	3,28	142	158	10	4
11.05.16	121	41,6	3,84	3,26	174	167	10	0
05.06.16	124	42,0	3,87	3,32	204	174	10	11
07.07.16	119	39,0	3,84	3,26	314	176	10	14
07.08.16	120	35,7				167	10	1
09.09.16	119	36,9	4,04	3,37	254	166	6	3
05.10.16	126	36,7	4,13	3,60	217	165	10	2

Data Quality Points	Points	Target 0-10 points	
Year 2016 average	9,6		
12-month rolling average	9,7		
Last recording 5.10.2016	**10**	**Good**	
Recorder	5	Value	Target
Recording interval, d	0	26	<35
Recordings in 12 m	0	13	>10
Sampling interval, d	0	26	<35
Samples in 12 m	0	12	>10
Meter testing, d	0	604	<667
Farm use, l/cow/d	0	1,1	0,1-1,5
Milk deviation 4 m	-2	105	96-104
Fat deviation 4 m	0	0,09	-0,20-0,20

Milk Recording Cow card

20.10.2016

[redacted]

ProAgria Etelä-Pohjanmaa

Cow identfication and parentage

Ear nr.	Name	Breed	HB number	Birth date	EU ID	Breeding value	
80	Helmi	HOL		19.5.2010	FI000010214755-7	2016.10	-9
Sire	Tiu Akilles ET	HOL	F 94826 B	22.2.2008	FI000009343491-3	2016.10	-6
Sire's sire	J-L MRSHLToystory ET	HOL	FFF 94137 B	7.5.2001	FI000008777607-2	2016.10	-5
Sire's dam	Risbak-UliaET	HOL	111739 FFF	29.11.2005	FI000008128499-7	2016.10	-8
Dam	Aulikki (53)	HOL		23.2.2008	FI000008815030-9	2016.10	-15
Dam's sire	Magliana Ford Transit ET	HOL	FFF 94360 B	18.6.2001	IT004902063229-9	2016.10	-3

Annual yield

Year	Yieldyear	Milk, kg	F-kg	F-%	P-kg	P-%		ECM	ECM
2012	0	1817	79	4,35	66	3,63	358	1918	2,00
2013	1	9093	376	4,14	320	3,52	137	9324	8,50
2014	2	8491	385	4,53	298	3,51	378	9110	12,06
2015	3	10371	417	4,02	370	3,57	542	10528	15,04
2016	4	10487	416	3,97	377	3,59	466	10599	17,67
Total		40259	1673	—	1431	—	—	41479	—
Average		9318	393	4,21	329	3,53	352	9654	—
Herd average 2015		10808	430	3,98	366	3,39	216	10756	—

Highest daily yield

Milk, kg	Fat, kg	Protein, kg	DIM	Rec. method	Milk frequency
28,8			76	BTS8	5
36,0	1,396	1,256	99	BTS8	5
42,5	1,625	1,459	58	BTS8	5
53,3	1,966	1,860	74	BT44	5
53,4	2,046	1,769	64	BT44	5
42,8	1,759	1,586			

Calving

Time	Date	Calv. int.	Ins.
1	16.10.2012		2
2	23.9.2013	342	1
3	3.11.2014	406	2
4	7.12.2015	399	2

Calf

Ear nr.	Sex	Use	Sire
868	L	1	FFF 95209 C
1196	S	3	F 95473 B
41	L	1	F 96848 B
142	L	3	LiN 85939

305 day yield

Milk, kg	F-kg	F-%	P-kg	P-%
7492	312	4,16	264	3,52
9216	409	4,44	325	3,53
11289	452	4,00	396	3,51
11569	465	4,02	419	3,62

Livewt.

Kg
594
631

Treatments

Date	Code	Illness
29.11.2012	301	Acute clinical mastitis
30.7.2013	821	Dry-off treatment
3.3.2014	301	Acute clinical mastitis
5.9.2014	821	Dry-off treatment
24.9.2015	821	Dry-off treatment
16.3.2016	371	Arthritis

In

Date

22.9.2012

Previous owner

[redacted]

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Person responsible for sampling

Resp.	% of cows	Avg herd size
A (techn.)	2	100
C (mixed)	5	70
B (farmer)	93	41

Chosen recording and sampling intervals

Interval	Rec. cows, %	Herd size	Sampled cows, %	Herd size
2 wk	2.8	78	0.1	55
4 wk	90.6	42	11.3	63
6 wk	0.5	43	0.5	44
8 wk	6.1	35	88.1	40

Herds taking advantage of the vacation month: 3 %

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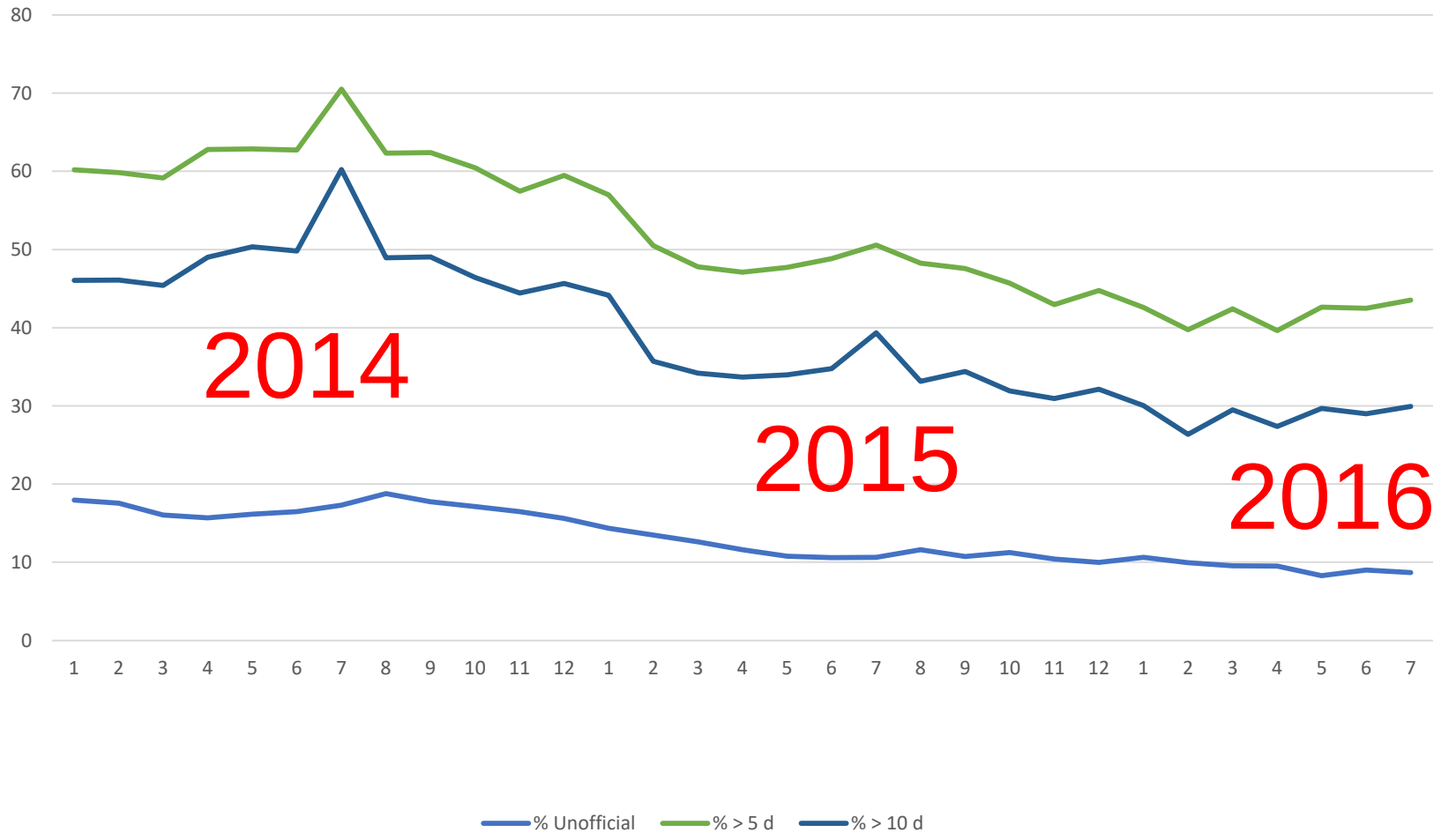
Reporting delay and unofficial records by month



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