

ICT and (new) Farm business management “a farmers perspective”

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Our Dairy farm in the Netherlands: features

Family Farm, since 1939.

Dairy farming in co-operation with my father. (63 years old)

- 85 dairy cows (MRY breed)
- 36 ha of grassland
- 10.5 ha of maize (fodder crop)
- Production of 620,000 kg milk/year



History of ICT on our dairy farm

- 1982: proces computer for concentrate feeding
- 1985: Pilot farm for testing a prototype management programme, IMAG-Wageningen University
 - Prototype IMAG developed into Argos and Uniform Agri
- 1991: Switched to Agrovision (MIS)
 - Integration of financial software
 - Perspective for automated input
- 2004: Started milking with AMS
- 2009: Experiments with remote sensing
 - Crop and soil fertility management

Why ICT on our farm?

- Personal challenge to lower costs (on concentrate use)
 - Linking concentrate use on milk production
 - Accurate distribution of fertiliser and manure
 - Insight in cow health
- Saving time in administration
- Flexible time management

→ Conclusion: more flexible and less labour, less costs

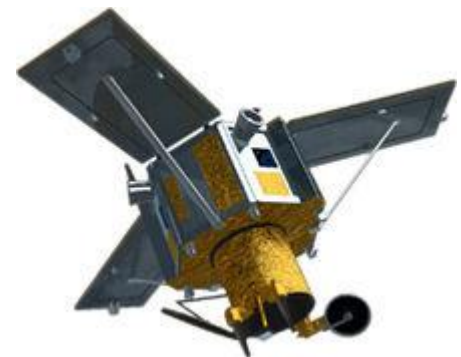
Goals dairy management (MIS)

1. Data collection (business, technical, legal, complementary info)
2. Data exchange
3. Data analysis
4. Benchmarking (dutch dairy farmers)

Data characteristics

1. Milk production and quality
2. Breeding
3. Health and medicine use
4. Feeding
5. Fertiliser and manure use
6. Cattle registration
7. Pasture management
8. Financial administration

Daily use of ICT



Automized input

Direct farm data (trough proces computers)

- Milk production
- Milk quality (AMS)
- Concentrates intake

External data (trough the internet)

- Breeding data
- Milk quality (dairy company)
- Medicine use (vetenarian)
- I&R information
- Invoices

Manual input

1. Breeding information (inseminations, bulling)
2. Health treatments
3. Fertiliser and manure quantities
4. Roughage quantities
5. Irrigation quantities
6. Supply and discharge of cattle
7. Stocks
8. Invoices (partially manual)



Status - van Laarhoven

Diernr. Units Lijsten

- + kudde [87]
- + Alle bedrijfsdieren [...]

Status - van Laarhoven

Melklijst Status

iernr.	Overschrijding melken	Tijd sinds laatste	Gem./dag, laatste 7 dgn	Verw. melkgift	% van verwachte	Opmerkingen	Type melk	Krachtvoer opn., laatste	Koe status	Omschrijving
508	10:46	16:56	21,54	14,94	99		Tank melk	5,86	Melken	
6842	07:32	07:33	19,09	6,58	14	Onvolledig (RV)	Tank melk	8,47	Melken	
205	07:24	07:24	34,57	14,36	76	Onvolledig (RV)	Tank melk	8,26	Melken	
21	07:10	13:20	28,53	15,06	26	Onvolledig (RV)	Blaas melk 1	2,70	Melken	
506	07:04	15:24	8,20	5,60	94		Tank melk	0,32	Melken	
270	05:10	12:10	14,17	8,12	95		Tank melk	3,51	Melken	
229	05:07	13:07	10,81	6,51	129		Tank melk	0,75	Melken	
214	05:02	11:12	41,86	18,65	99		Tank melk	6,01	Melken	
271	05:02	13:02	10,19	6,87	87		Tank melk	2,00	Melken	
499	04:43	11:43	21,05	11,60	89		Tank melk	7,13	Melken	
6829	04:33	11:03	23,10	11,32	104		Tank melk	6,95	Melken	
6685	04:02	10:32	16,20	8,33	80		Tank melk	1,46	Melken	
243	03:16	09:26	26,37	14,80	87		Tank melk	6,53	Melken	
245	02:55	09:05	31,64	13,36	100		Tank melk	8,73	Melken	
6691	02:52	09:52	17,34	7,15	95		Tank melk	3,09	Melken	
6825	02:46	09:16	20,24	8,77	108		Tank melk	4,68	Melken	
98	02:32	09:32	17,91	8,15	91		Tank melk	4,00	Melken	
78										

Units

Unit	Activiteit
ISO Proces	Offline
ms van laar	Melken koe 279
alpro	Online

Opmerkingen

Dag, tijd	Dier	Opmerking	Unit
26-01 07:29	6800	Aftrap (verw. melkgift 4741 g, ms van	
26-01 07:22	6834	Melkbeker niet in grijper waar ms van	
26-01 07:22	6834	Aftrap (verw. melkgift 3601 g, ms van	
26-01 07:21	6834	Aftrap (verw. melkgift 3601 g, ms van	

Bezoeken

Dag, tijd	Dier	Actie	Unit
26-01 08:28	73	Melkgift = 9.50	ms van laar
26-01 07:52	Sys	Hoofdreiniging (Duur =	ms van laar
26-01 07:51	6839	Melkgift = 11.34	ms van laar
26-01 07:45	6832	Geweigerd	ms van laar

Diernr. Transponder



administratie **Analyse** Fokkerij Uitwisseling Voercomputer Voeding Quotum

- Invoeren gegevens ▶
- Standaardoverzichten ▶
- Vruchtbaarheid ▶
- Ziekten ▶
- UGCN overzichten ▶
- Productie ▶
- Celgetal ▶
- Veevervanging ▶
- Jongveeopfok ▶
- SneZicht...
- Conditieverloop...
- Pootscore...
- Streefwaarden STO's...

Licentienr.: 19635.1
C. van Laarhoven
Loonse Molenstraat 45
5175 PS LOON OP ZAND

Daginvoer opmerkingen

Koeien aan het kalven: 2
 Controle op 3 weken: 5

Procescomputer

Lts.comm: Voer:24-01-11 23:57 Melk:24-01-11 2

Informatie

MPR 17-1-2011 BSK 33,8 NO 1995 V 4,36% E
 Tankmelk 23-1-2011 5127 Kg V 4,32% E 3,71
 Ltst.uitwisseling Webservices Veehouderij 25-01
 Er zijn 91 vrije levensnummers aanwezig

Memo's

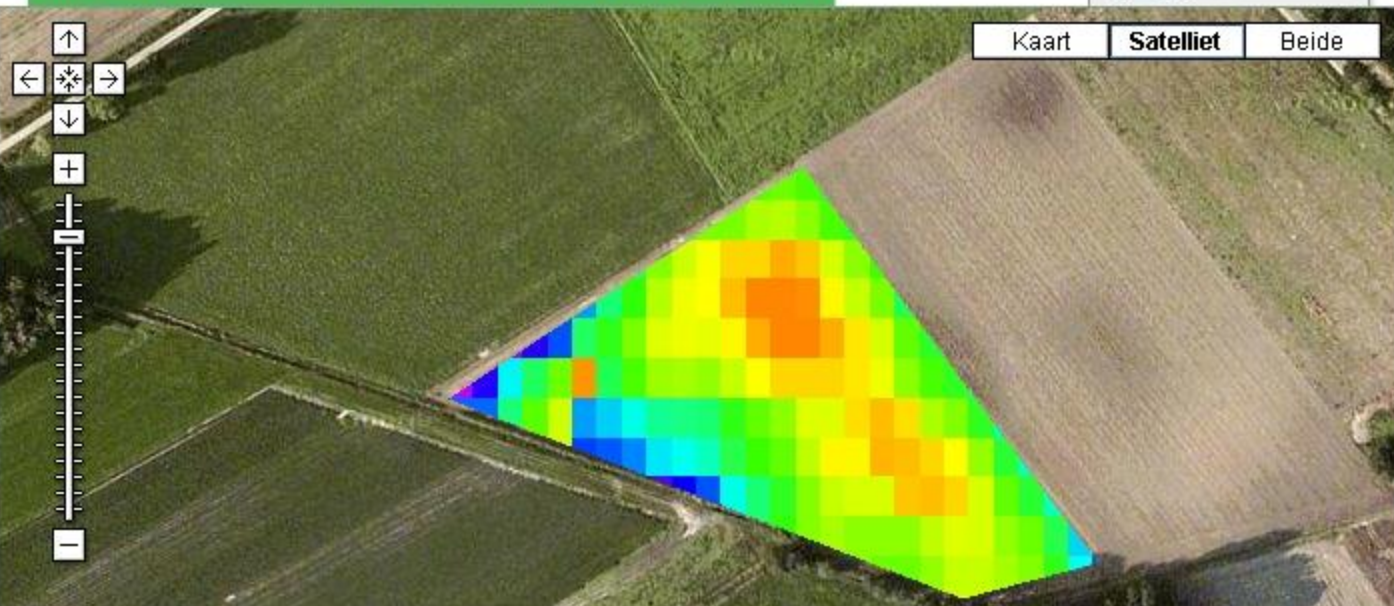
Internet sites

www.z-factuur.nl
 Friesland-Campina
 Bankieren
 Brameco-zon



Biomassa productie over de periode van 18 June t/m 24 June 2009

Bewerken



Google, GeoContent, Aerodata International Surveys, GeoEye, Kaartgegevens ©2009 Tele Atlas



Gemeten in: kg/halweek



Gemeten in kg per ha

Aerodata International Surveys, GeoEye

Dutch colleague dairy farmers: an impression

Need for data analysis and benchmarking seems high,
however

- Low extensive use of ICT and administration tools
 - Complicated
 - Limited to legal requirements (I&R, accounting)
 - Family partner/external advisor
- Time spent on input is very limited
- Farmers <35 are better users of ICT

Situation in arable farming

- Development in precision farming
- Development in remote sensing and satellite information
 - Crop growth,
 - Water management,
 - Soil fertility
 - Pest control
- Data exchange in the Agro Food chain with supply and retail

Needs

- More automated input
- Easy access to information: where ever, when ever
- Customized information (users perspective),
eg. alerts
eg. innovations
eg. legal developments
- Crop related aspects better integrated with MIS

Dreams

On the spot management and business advice:

- Real time information on crop production and nutritional values
- Real time benchmarking/data exchange with co-farmers