



**FARM STRATEGY:**

- Long term: increase farm size
- Short term: improve animal welfare, increase age dairy cows

*“Don’t stare at limitations, but look for opportunities.”*

**FARM CHARACTERISTICS (2022):**

soil type	clay/sand
grassland (ha)	41,01
maize (ha)	0.0
cows	197
young stock	95
young stock/10 cows	2,2
milk production (kg)	1.780.772
milk production (kg FPCM/cow/yr)	9.026
intensity (kg FPCM/ha)	43.933
concentrate use (kg/100 kg milk)	2.653
milking parlour	40 positions carousel
stable	sun-lounge + cubicles
other particulars	grazing
	3 separate slurry storages

**MILESTONES:**

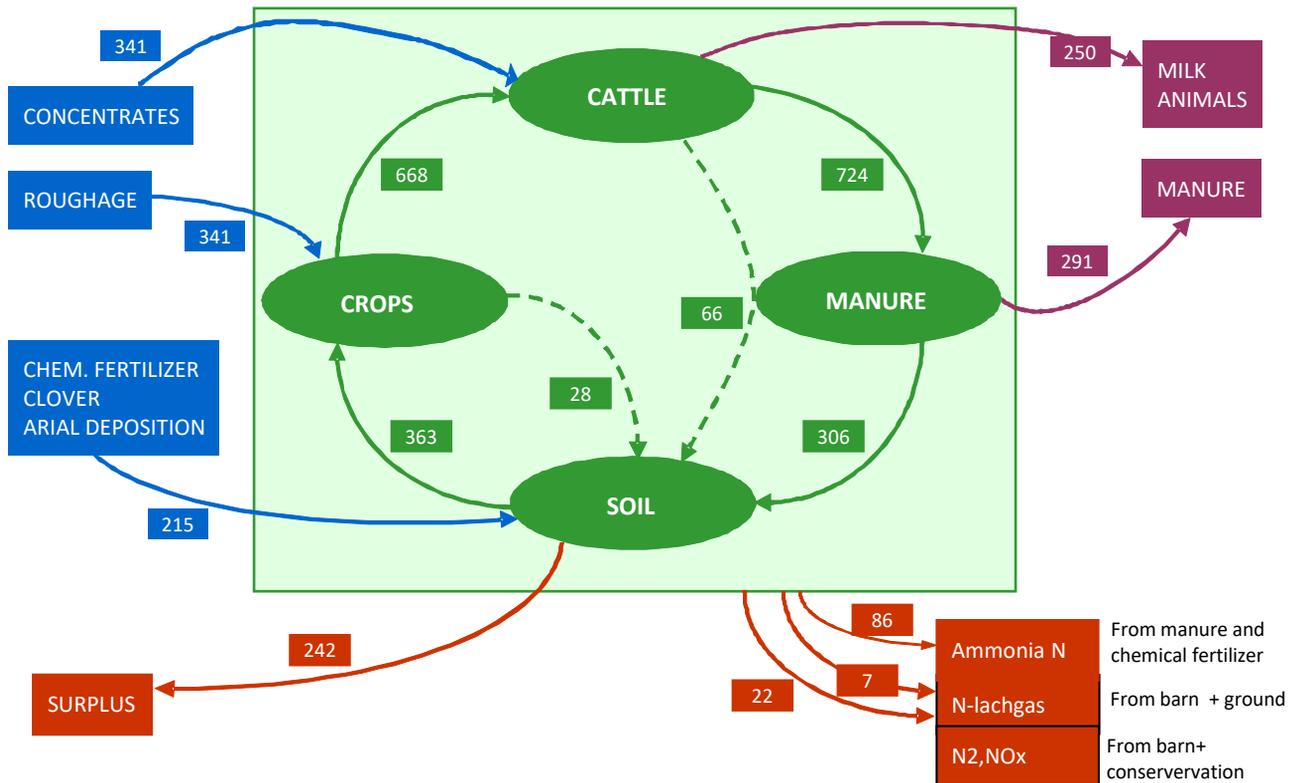
- 1998 - participant project Koeien & Kansen (Cows & Opportunities).
- 2005 - taking over the farm from father and brother and making plans to upscale the farm including plans for a new stable and milking parlour.
- 2010 - new stable and milking parlour.



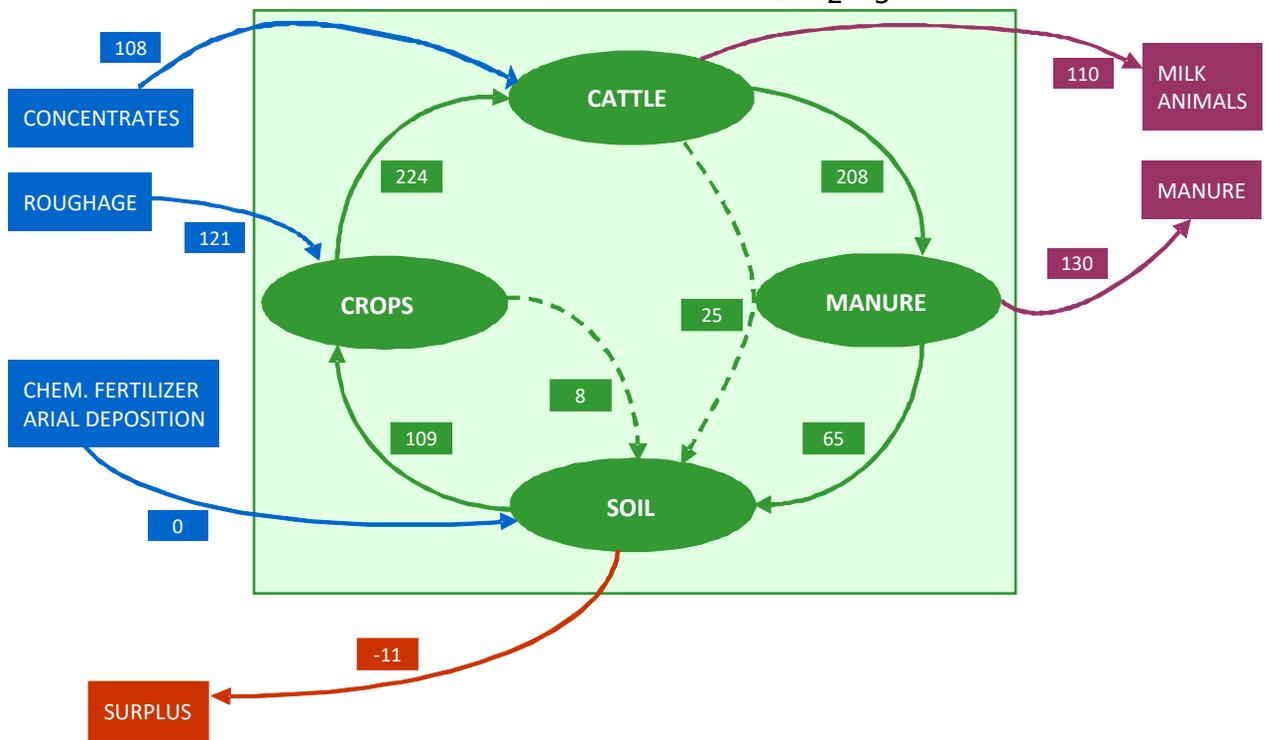
# Fertilization 2022

(per ha)	Productiegrasland			Maïspanland		
	m <sup>3</sup>	kg N	kg P <sub>2</sub> O <sub>5</sub>	m <sup>3</sup>	kg N	kg P <sub>2</sub> O <sub>5</sub>
Slurry	90	301	69	-	-	-
Chemical fertil.	-	178	0	-	-	-
Manure	-	71	21	-	-	-
Deposition		21			-	
Legumes		11				
<b>TOTAAL</b>		<b>582</b>	<b>90</b>			

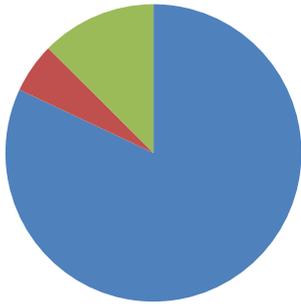
## Nitrogen cycle 2022 (kg N/ha)



## Phosphate cycle 2022 (kg P<sub>2</sub>O<sub>5</sub>/ha)



# Farm economics (2022)

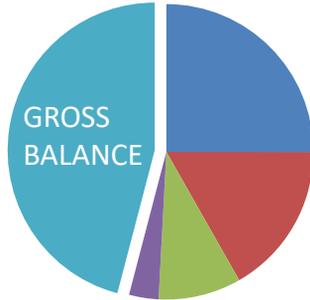


## YIELDS

- milk
- animals
- other

## COSTS

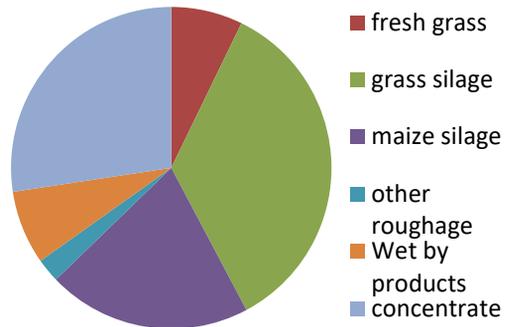
- concentrate
- roughage
- animal costs
- crop costs



€/100 kg milk	
<b>YIELDS</b>	
milk	39,0
animal	2,6
other	6,0
	47,5
<b>COSTS</b>	
concentrate	10,9
roughage	7,3
other fodders	2,1
breeding	0,5
animal health	1,6
other animal costs	1,1
fertilization	0,6
other crop costs	0,1
Cost for manure disposal	0,1
Other. variable costs	1,9
<b>Total costs</b>	<b>1,6</b>
<b>GROSS BALANCE</b>	<b>20,0</b>

## Animal Nutrition

Ration characteristics complete herd	
VEM (energy)-content ration (g/kg dm)	991
RE-content total ration (g/kg dm)	158
P content (g/kg dm)	3,6
kg concentrate / 100 kg milk (incl. young)	35
Nitrogen efficiency complete herd (%)	25,8
Phosphate efficiency complete herd (%)	34,8
kg FPCM / kg dm feed intake	1,20
Ration(%)	
fresh grass	7
grass silage	35
maize silage	21
other roughage	2
Wet by products	7
concentrate	27



## Improvement projects

### ECONOMY

- Increase farm size to reduce cost price
- Minimize obliged slurry removal
- Increase mineral efficiency
- More grazing on economy

### LABOUR

- New stable for the cows
- Carrousel milking parlour
- Prepare the company for possible succession

### ENVIRONMENT

- 3 Separated slurry storages
- Slurry separation (liquid+solid fractions)
- Fertilization on crop demand
- Investigate grazing possibilities

## Steps

Period	Action	Improvement
2011	Improve feeding	reduce costs. N-P losses and GHG and increase mineral efficiency
2011	Slurry separation	increase mineral efficiency
2011	Balanced P fertilization	reduce costs and improve soil fertility
2011	More maize	increase N efficiency and reduce costs (higher yields)
2011	Start BES-Pilot	balance P fertilisation
2015	Increase percentage of own protein	

*"The BES pilot gives us the opportunity to apply phosphate balance fertilization and thus work on sustainable soil fertility."*



### Animal Nutrition

- 6.0 kg DM grass silage
- 6.0 kg DM maize silage
- 0,5 kg hay
- 0.5 pea fibres
- 2.5 kg concentrates (flour)
- 3,0 high protein concentrate

} Mixed ration

*"Sustainable dairy farming needs sustainable environmental policy and thus needs sustainable legislation!"*

*"I already take care of sustainable energy myself!"*



Pilot farmers are also members of the Dutch project Cows & Opportunities. In this project 16 dairy famers. KTC De Marke. Wageningen UR and advisory services cooperate. On request of the ministry of Agriculture and the Dairy Board the project evaluates and improves the effectiveness and feasibility of the (proposed) environmental legislation in farm practice and supports the Dutch dairy sector with its implementation. Cows & Opportunities works at a future for neat dairy farmers. The results are found at: [www.koeienenkansen.nl](http://www.koeienenkansen.nl) (in Dutch).