USE OF KEY PERFORMANCE INDICATORS
(Level 2)

Topic	Training & information Content
5.1	Dairy Cattle Breeds and Breeding
5.2	Breeding program for a dairy farm (medium & large)
5.3	Conformation, Type classification and judging
5.4	Cow handling
5.5	Milk production recording
5.6	Heat Detection
5.7	Artificial Insemination
5.8	Pregnancy Diagnosis
5.9	Fertility Management
5.10	Cows with abnormal discharge
5.11	Fertility disease recording
5.12	Calving recording
5.13	Use of Key Performance Indicators
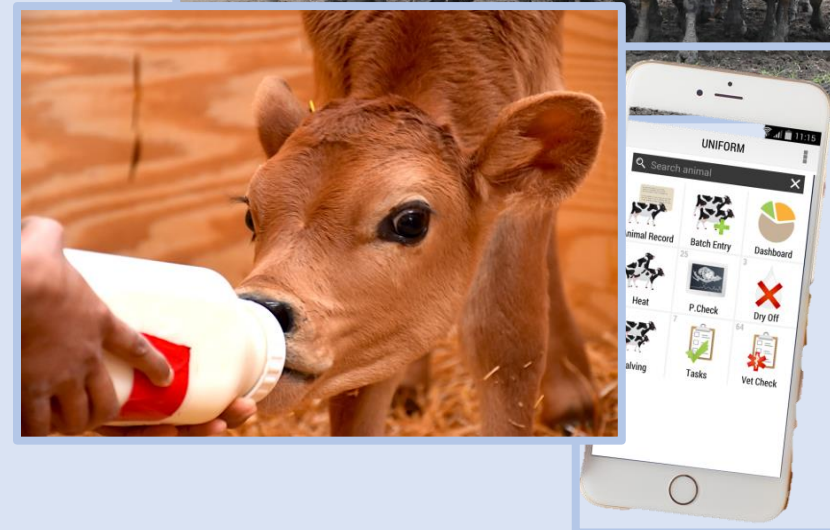
1. You will learn about (learning objectives):

- ❑ Key performance indicators (KPIs) and how to to come up with smart KPIs.
- ❑ Importance of setting KPIs.
- ❑ Registration/recording KPIs.
- ❑ How to successfully implement KPIs.

2. Introduction

- A Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives.
- KPIs help you understand how your business is performing compared with other dairy farms and highlight areas for improvement. Hence, KPIs are a set of figures that help you manage your farm by showing, at a glance, which areas are performing well and those that need review.
- A Key Performance Indicator (KPI) is often farm-related and dependent on all kinds of management aspects.

2.1 Introduction Cont'd…

- The level of a Key Performance Indicator (KPI), means whether the KPI has reached the proposed level, depends on the available SOP's (Standard Operating Procedures).

What is an SOP?
- An SOP (standard operating procedure) is a set of super clear, written directions for how to complete complex routine tasks e.g.
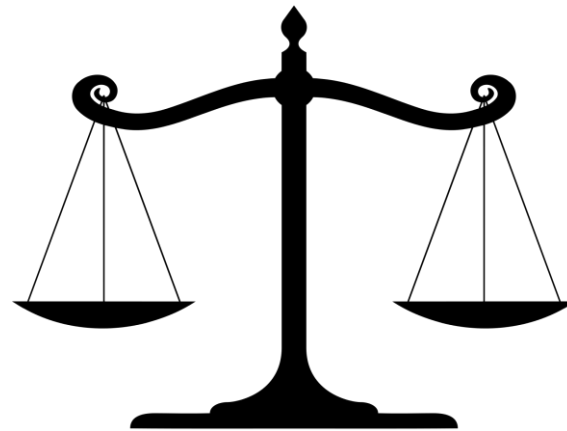   - Feeding.
    - Weighing.
    - Milking.
    - Harvesting.

3. Key Performance Indicators

- Working with KPI's, is a matter of weighing and counting and comparing results with others.
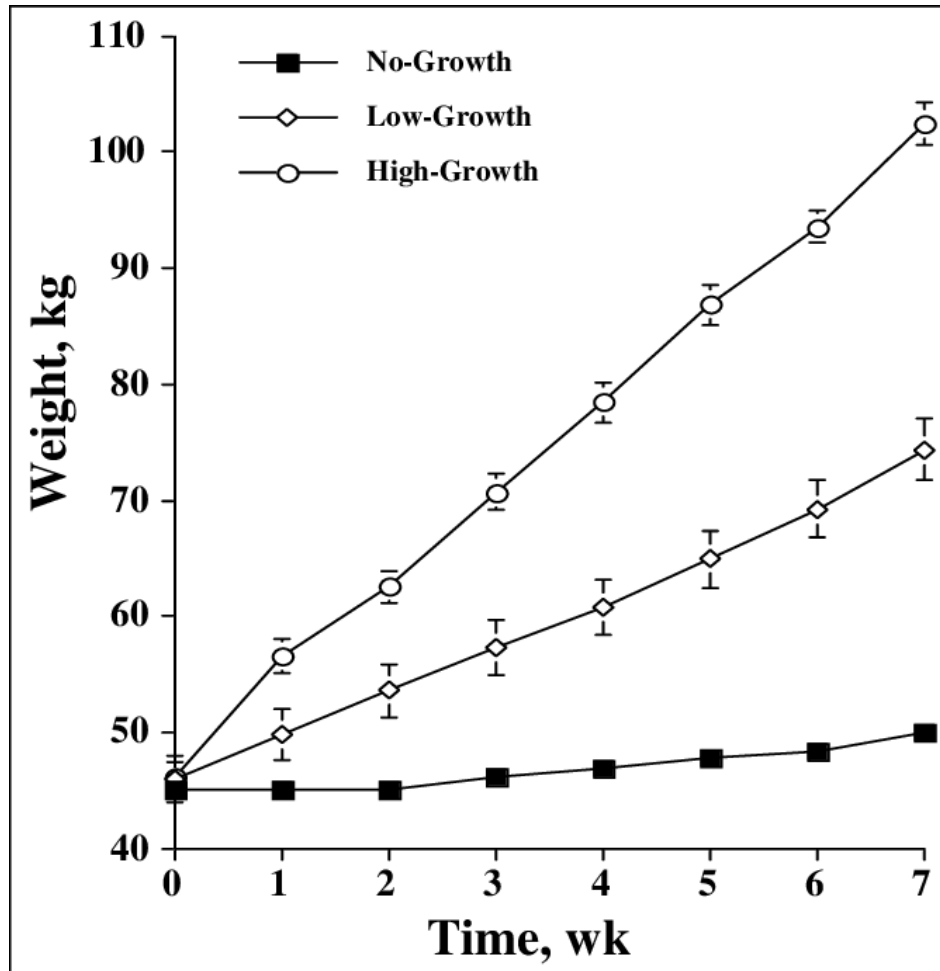
4. KPI: Body weight

- Body weights at any moment during a cow's life can easily be transmitted into a very useful KPI.

KPI.

4.1 KPI: Body weight Cont'd...

Tip: With a little bit of guidance the animal's body weight can be summarized into a graph where farmers can see how animals are growing/doing.

4.2 KPI Cont'd…

- Developing/implementing KPI's in your daily management routines means you want to either improve or optimize your results.

To simplify

Satisfied at the end of the week/month/year.

Disappointed at the end of the week/month/year.
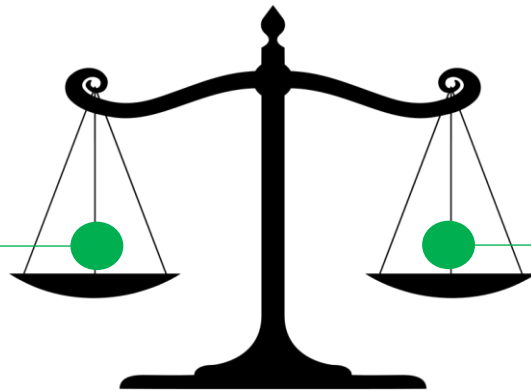
4.3 KPI Cont'd…

• Simply means finding the right balance between what you spend and what you earn.

What you SPEND

What you EARN

5. Setting smart KPIs

- All the KPI's mentioned on the next slide are "SMART".

- One can use these KPI's as a starting point and immediately decide where you want to be/go within a given period (2 years).

	Actual KPI.	Future KPI.
12. The number of parturitions with dystocia.	= 12 %	2 years < 5 %
13. The number of cows with retained placenta.	= 25 %	2 years < 10 %
14. The number of inseminations per pregnancy.	= 3.1	2 years 2. 5
15. The milk production per day.	= 165	2 years 300
16. The milk production per cow per day.	= 11kg/cow	2 years 20 kg/cow.

5.1 Setting smart KPIs Cont'd…

1. The number of cows in the farm.
2. The number of milking cows.
3. The number of dry cows.
4. The number of cows that have calved last 12 months
5. The number of cows that have been culled.
6. The number of cows that have been died.
7. The number of cows confirmed pregnant.
8. The number of pregnant heifers.
9. The number of virgin heifers.
10. The number of female calves.
11. The number of parturitions without assistance.
12. The number of parturitions with dystocia.
13. The number of cows with retained placenta.
14. The number of inseminations per pregnancy.
15. The milk production per day.
16. The milk production per cow per day.
17. The milk production per cow per year.
18. The body weight of your cows.
19. The bodyweight of heifers at 1st insemination.
20. The weight of heifers at 12 months.
21. The weight of heifers at 6 months.
22. The weight of calves at weaning.
23. The weight of calves at birth.
24. The dry matter intake per cow/day.
25. The kg's concentrate per cow/day.
26. The veterinarian costs per month.
27. The breeding costs per month.
28. The milk cheque(money)/month.
29. The concentrate costs /month.
30. Amount of milk/calf till weaning.
31. Amount of roughage needed/month.
32. Number of acres needed to be self sufficient.
33. Fertilizer costs per acre.
34. Number of cows per full-time equivalence (FTE).
35. Kg's milk per FTE.
36. …. And many more …………………..!

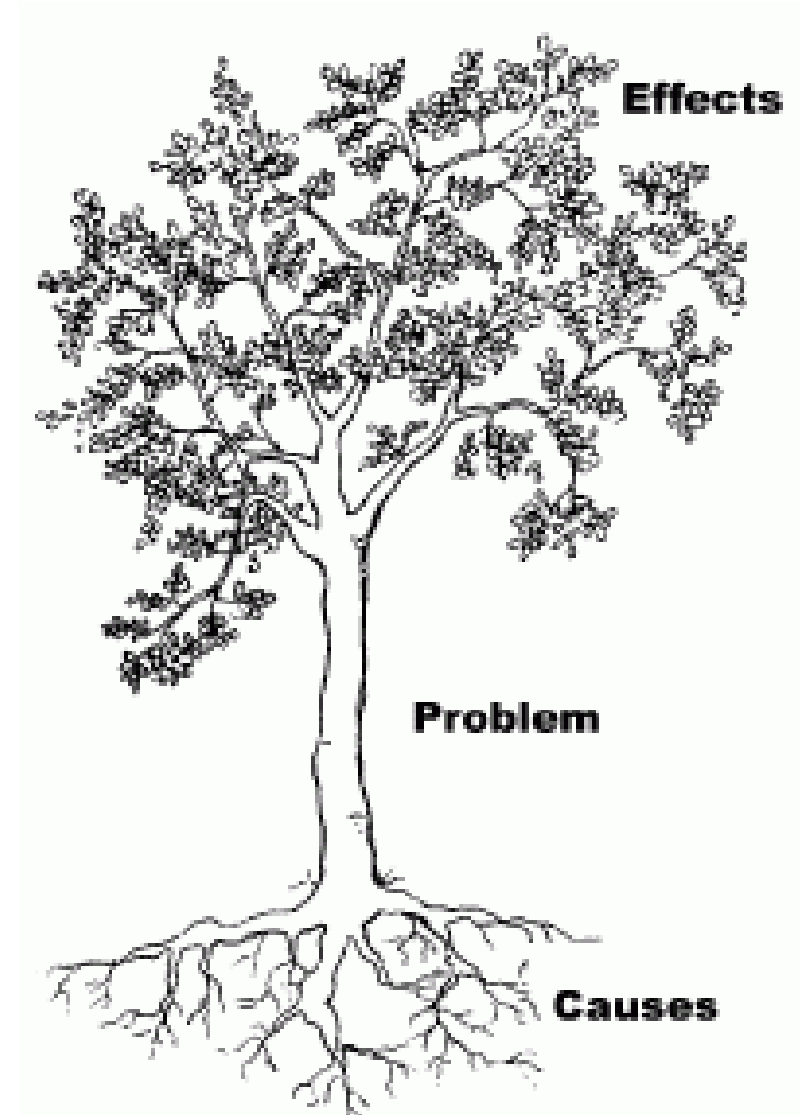# 6. Smart KPIs explained

1. The number of cows in the farm.

This must be attuned to;
- Acres/hectares available.
  - What can the available acres/hectares deliver (grasses/other products).
- Number of FTE's available in the farm.
- Genetic potential.

10. The number of female calves.

Must be attuned to;
- Number of cows.
- Actual replacement rate and age of the cows.

7. Importance of knowing KPIs

- Using KPI's can only take place with information/data from the past.
- Important that the farmers knows how different KPI's have been realized.

For example;

A. What has been the influence of the weather on the level of the KPI?
B. What has been the impact that my farm manager did left the farm?
C. What was the reason there were so many cows with retained placenta last year?

A. Always be prepared for the unexpected.(* enough silage, fertilized land, paddock management).
B. Make sure that not all the responsibilities, skills and tasks comes down to one person.
C. Always find out the reason of a particular problem that appeared into your farm.

7.1 Importance of knowing KPIs explained…

19. The weight of heifers at 12 months

Assumptions;
- At 12 twelve months the calves are expected/supposed to weigh 250 kilogrammes.
- Several SOP's (see below) must be followed to achieve this result.

8. Registration/recording of KPIs

Calving date	Calving details	Calf sex+ nnumber	Milkfever	Retained-placenta	Reproductive Disorder. 1,Endometritis 2.CysticOvaries 3.Others.	1st Heat	2nd Heat	Bull name	AI technician	1st Service date	2nd Service date	3th Service date	4th Service date	5th Service date	6th Service date	PD Date +/-	Exp Calv date	Dry off date	Remarks

FERTILITY CHART;..........................202............../................202...........

Registration.......to find out if several KPI's are accomplished.

- % dystocia < 5%.
- % retained placenta < 10%.
- First Heat within 40 days.
- First insemination 60-80 days.
- Conception rate 1st AI ..... 50 %.
- PD between 35 -45 days.
- Calving Interval < 420 days.

8.1 Registration/recording of KPIs Cont'd…
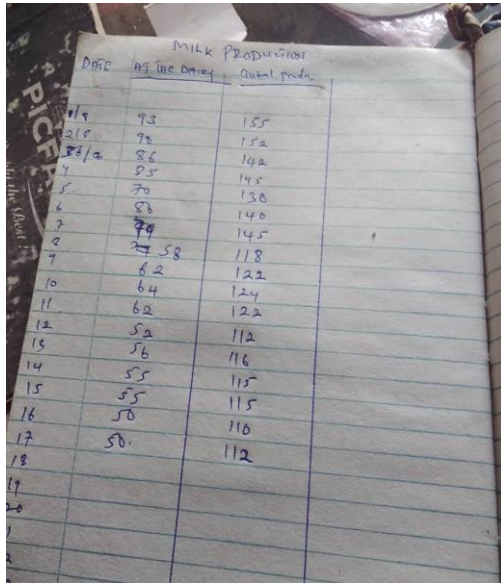
- Only a fertile cow will be able to earn money!

KPI.

280 DAYS

Examples of KPIs to check for;
- % dystocia < 5%.
- % retained placenta < 10%.

- % dystocia < 5%.
- % retained placenta < 10%.
- Conception rate 1st AI ….. 50 %.

FERTILITY CHART; …………………202../…………………………202…

| Cow number	Calving date	Calving details	Calf sex+ number	Milkfever	Retained placenta	Reproductive Disorder. 1,Endometritis 2.CysticOvaries 3.Others.	1st Heat	2nd Heat	Bull name	AI technician	1st Service date	2nd Service date	3th Service date	4th Service date	5th Service date	6th Service date	PD Date +/-	Exp Calv date	Dry off date	Remarks
430	10/1	E	F901	-	-	-	14/2	7/3	Bar	Ron	28/3						17/5 +			
508	26/1	E	Bull	-	-	17/3 Cystic Ovaris	18/2		Dar											
317	13/2	N	Bull	-	-	-	1/3		Joh	Ron	22/3	13/4	6/5	30/5						
320	17/2	E	F902	-	-		13/4		Dar											
478	1/3	Dyst	Bull	Yes	Yes		31/3	20/4	Bar	Ron	10/5									
511	13/3	E	Bull	-	-	¼ Endometrits	10/4	23/5	Bar											
510	21/3	E	F 903	-	-	-	8/5	31/5	Bar											
381	11/4	N	F904	-	Yes		1/6		Joh											
333	19/4	N	F905	-	-		20/5	13/6	Bar											
400	1/5	Dyst	Still Born	-	Yes		20/5	9/6	Dar											
398	14/5	Dyst	Bull	-	-		11/6		Dar r											
531	4/6	E	Bull	Yes	-				Joh											
450	18/6	E	F906	-	-				Joh											
710	18/6	N	Bull	-	-				Dar											

8.3 Registration/recording of KPIs Cont'd…

- Records can be hand written or be done/transferred in a herd management soft ware application (App).
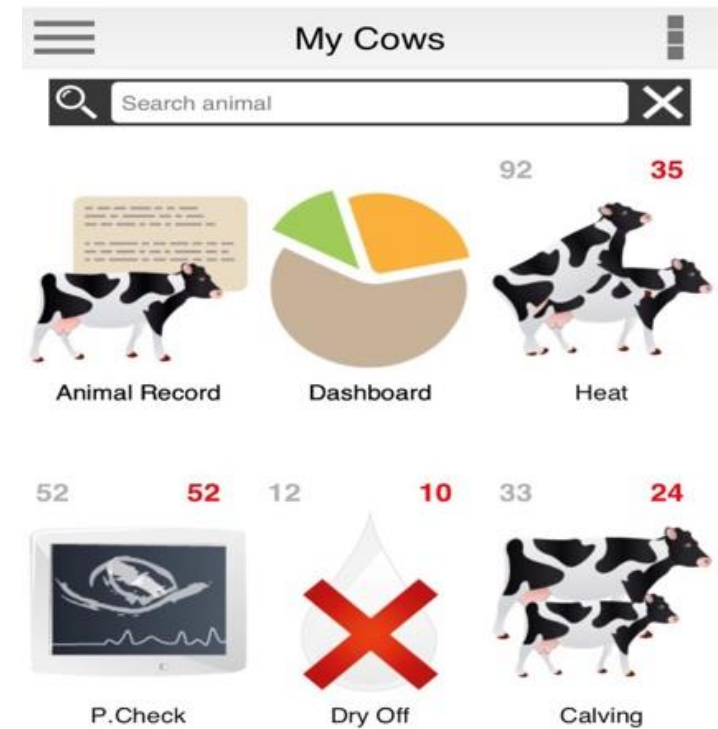
9. Where there are no KPIs set

- Not everything is suitable to turn into KPI's. For example, growth/length of horns, skin colour might be interesting for farmers but cannot be measured and be processed into measurable figures (KPI).

NO KPI.

Dairy Key Performance Indicators

Key performance indicators (KPIs) help you understand how your business is performing compared with other dairy farms and highlight areas for improvement.

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