

## Scope, applications and prospect of Precision Dairy Farming

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## What is Precision Dairy (Livestock) Farming?





# An environment conducive to the development of Precision Dairy Farming

#### Evolution of farms structure

 $\succ$   $\nearrow$  herd size and work productivity  $\rightarrow$   $\nearrow$  monitoring needs

## Change in the economic context

 $\succ$  Prices volatility and end of quotas  $\rightarrow$  need to improve efficiency

## New societal demands

- Consumers : welfare, environment, products quality
- Farmers : workload, constraints, income

## ICT tools availability

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## The rise of sensors and automatisms in Dairy Farming



And it is only the beginning !

## **Precision Dairy Farming (future) possibilities**

## Animal level

- Future technologies (3D imaging, drones,...) = new opportunities
- Improvement of alerts detection performances (sensitivity/specificity)

#### Farm/Farmer level

- Need to deliver advice and not only information or alerts
- > Autonomous decision or action  $\rightarrow$  towards the farm without farmer ?

## Animal population level

- Can sensors data be useful to detect emerging epizootic diseases (as Twitter)
- Genetic selection on new traits recorded by sensors

#### Consumer/population/governmental level

New demands like animal welfare : how to measure it is a challenge ?
Could sensors data be used by policy makers (subsidy, control,...) ?



# Thanks !

