

SRUC Beef Research Centre Precision Livestock Farming -Some examples

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Farm resources - 2018

980 ha (~2420 acres)

hill 640 ha

upland 100 ha

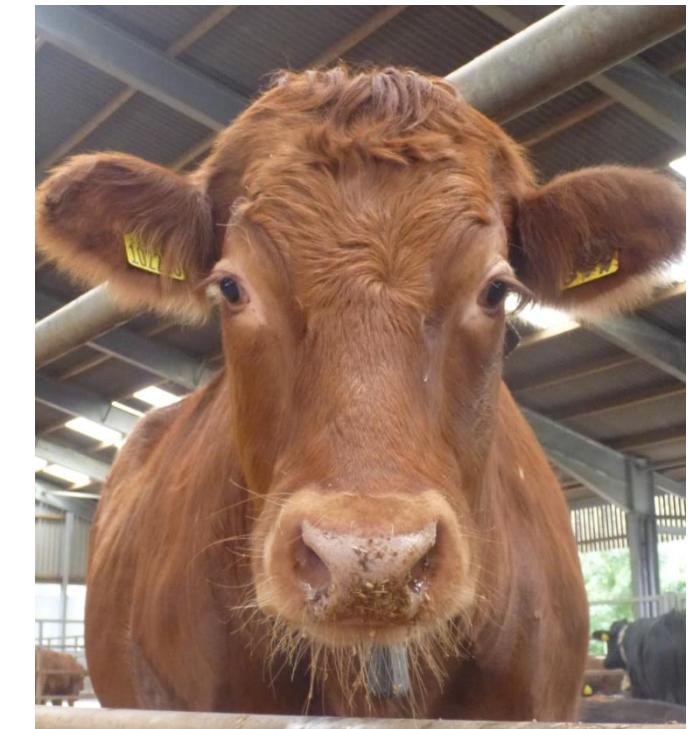
lowland 240 ha (arable ~40 ha)

Total 980 ha

Suckler beef enterprise (~350 breeding cows) +
dairy-bred finishers

Finish all progeny on farm

Sheep flock (hill) ~1000 Scottish blackface ewes





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Hill

Unimproved
upland

Improved
upland

Lowland



Main R&D suckler herds

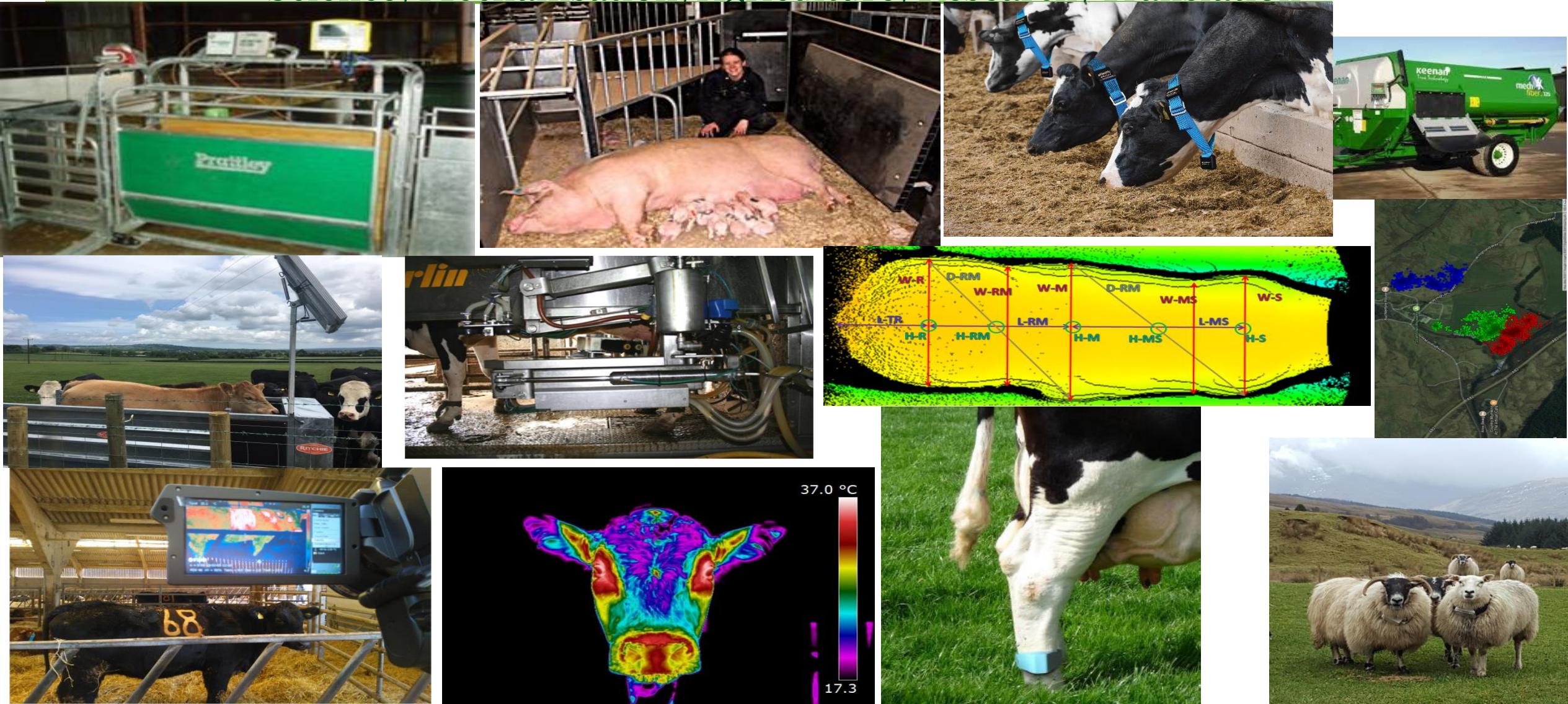
- ~120 AAxLIM cows
 - ~120 LIMxAA cows
 - Criss-cross herd management system
 - 110 Purebred Luings
-
- Split between Spring and Autumn calving
 - AI programme





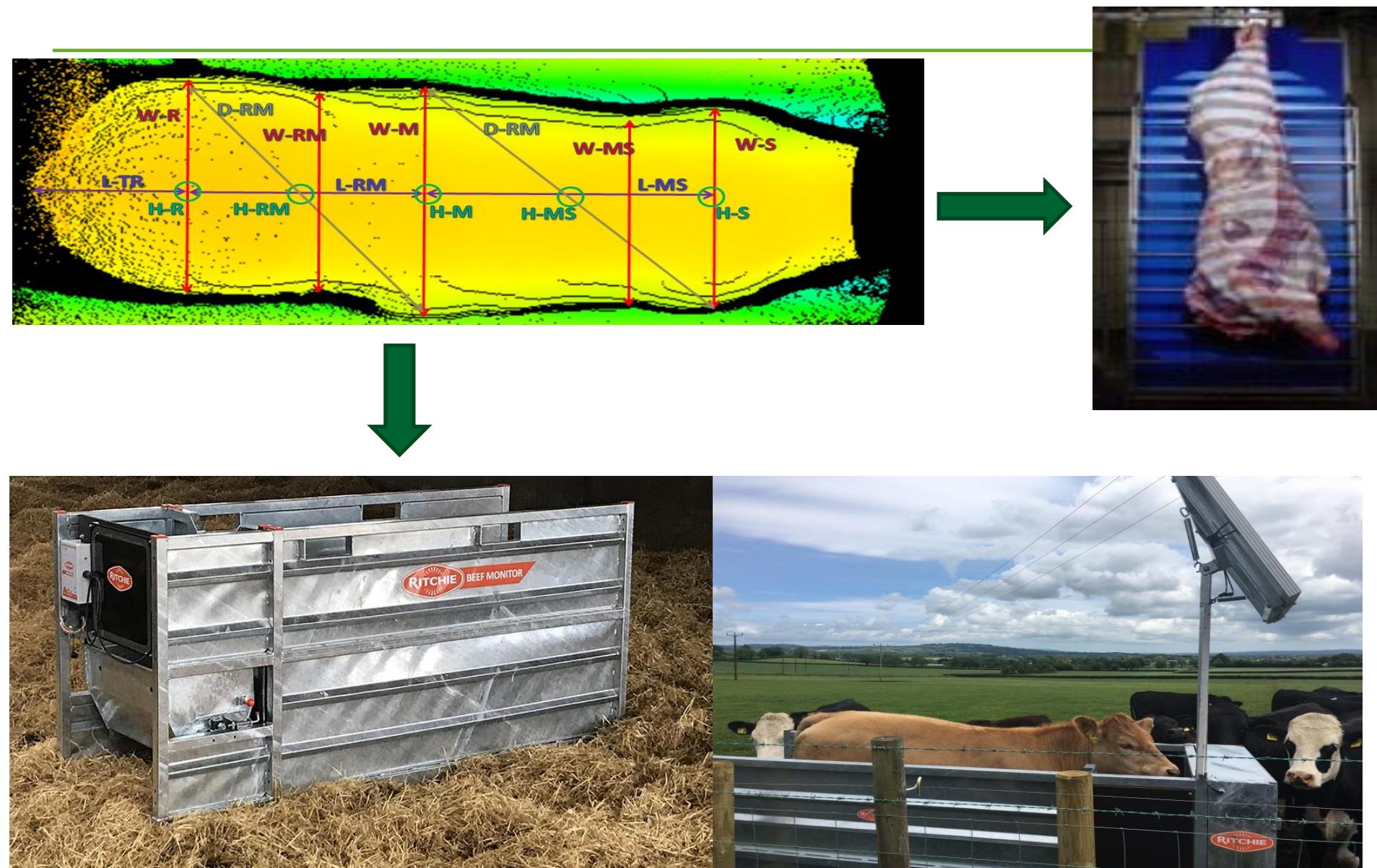
SMART Farming Solutions

Science, Mechanisation, Agriculture, Research, Translation





Beef Monitor – productivity and carcass value



Project co-funded by:

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GILDEN
photronics

KEENAN®
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Vital know-how in every drop

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QUALITY LIVESTOCK NUTRITION



MORRISONS

Precision Beef – individual animal intake?

- Two output streams from this project
 - Silent Herdsman collar to detect eating and rumination
 - Keenan feed wagon with in-built NIR feed analysis of TMRs
- Combined decision support system
 - Feeding behaviour (eating and rumination)
 - Feed intake
 - Feed analysis (dry matter, crude protein, energy, starch etc.)
 - Combine with animal weights to measure **efficiency**

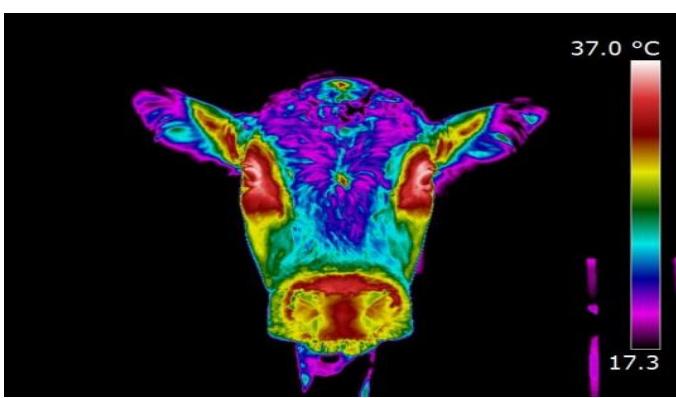


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Calf health monitoring?



EARLY-DETECTION
OF DISEASE



DATA DRIVEN
DECISIONS



IMPROVED HEALTH

REDUCED ANTIMICROBIALS

IMPROVED PRODUCTIVITY

INCREASED ECONOMIC EFFICIENCY

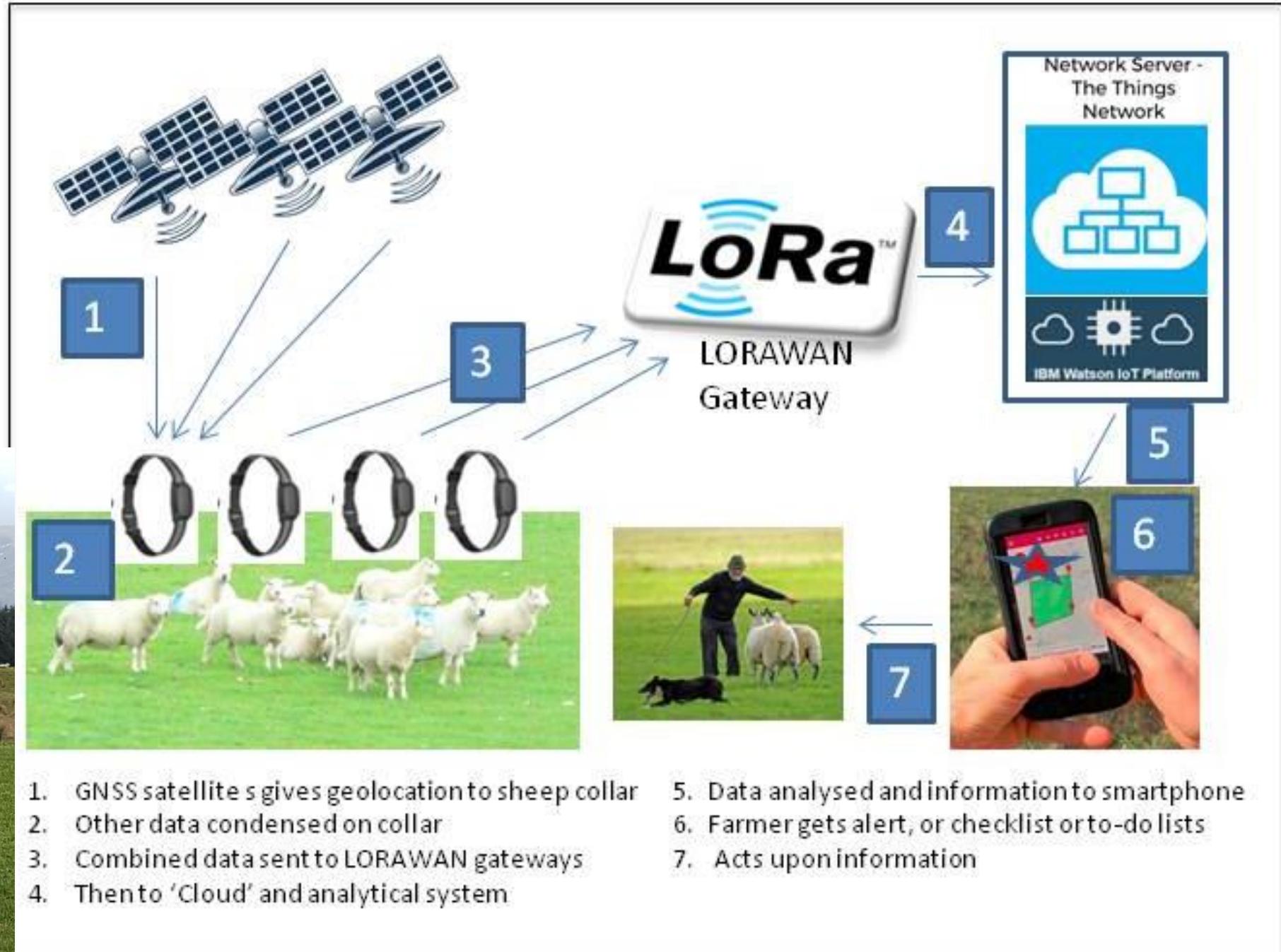
Geolocation in extensive systems

- Known losses due to poor environment
 - mortality, ill-health, predation
- On-farm theft an increasing issue
- Large “unexplained” or “black” loss
 - 2 year study in the scottish highlands (4 hill farms)
 - **18.6%** lambs lost to black loss



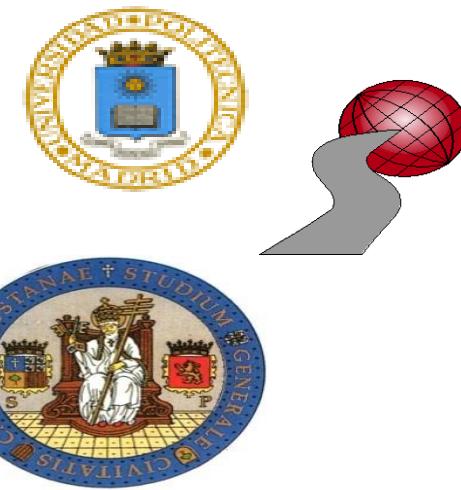
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