« Conception of remote detection software for grassland monitoring and management in collaboration with Walloon farmers»

David Mathy (CRA-W)

The starting point : two technologies available

Meteorological data

Soil data

Agromet

GRASS GROWTH MODELLING

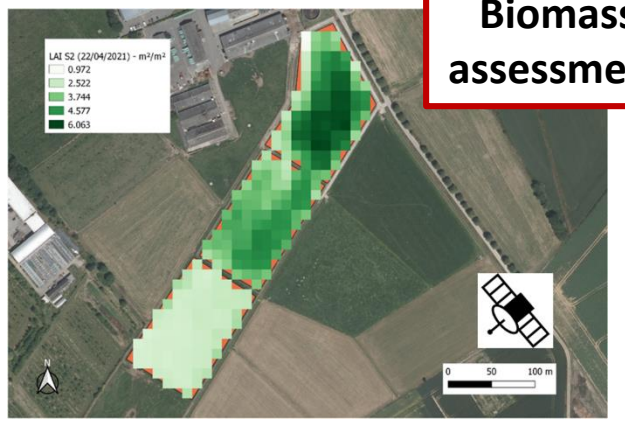
Biomass predictions

TEST AND VALIDATION

On-field measures

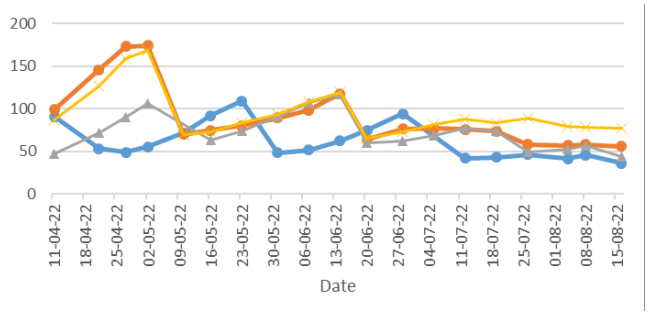
Training algorithms

Remote sensing data



Biomass assessment

Real-time knowledge of biomass



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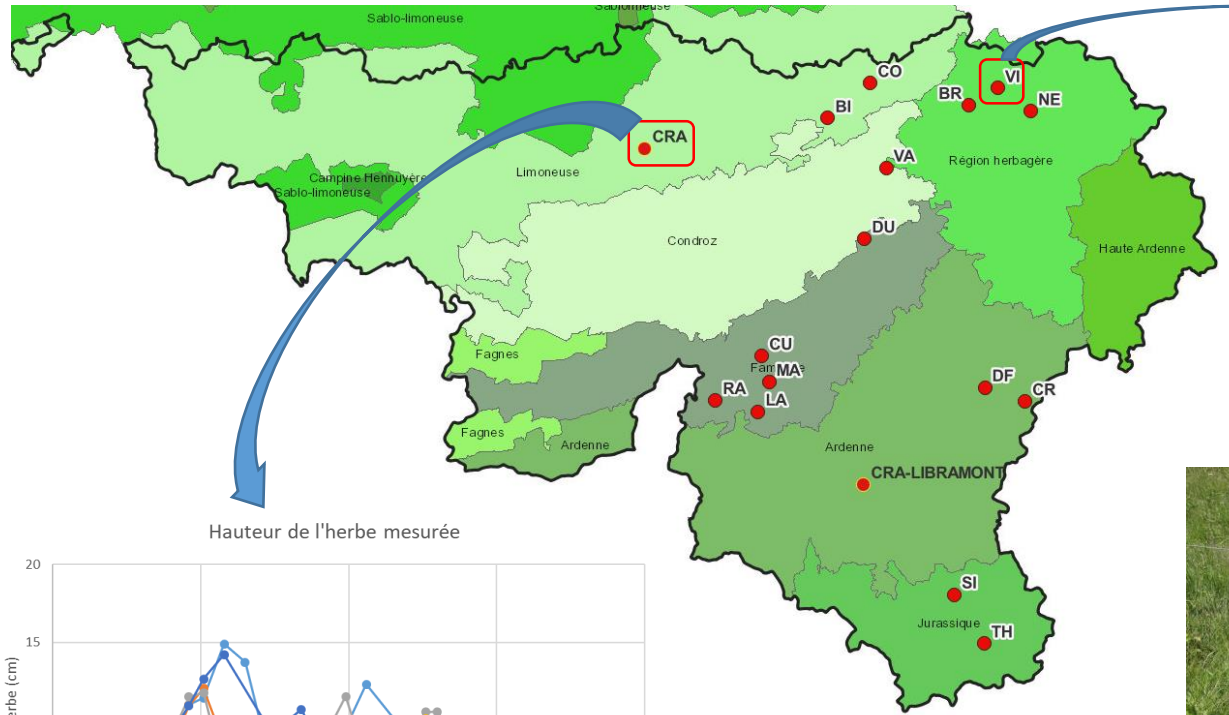
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Condroz
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Région herbagère
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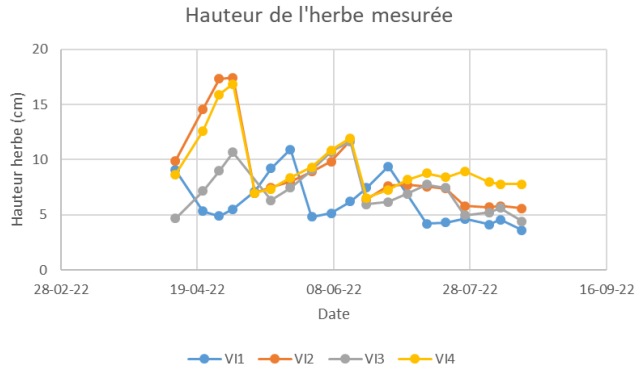
Hauteur de l'herbe mesurée
Hauteur herbe (cm)
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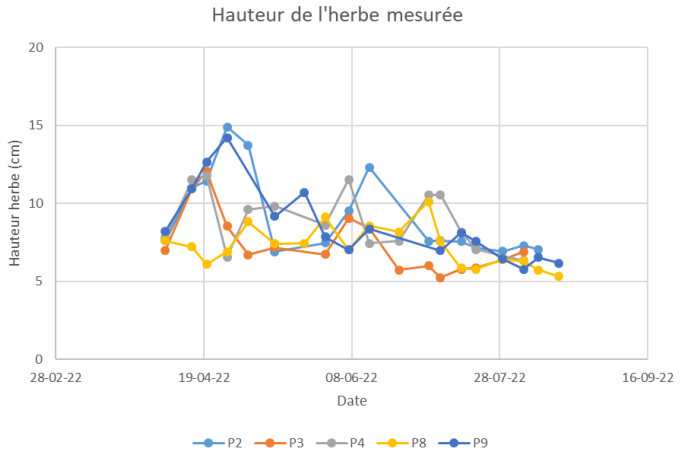
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P2
P3
P4
P8
P9

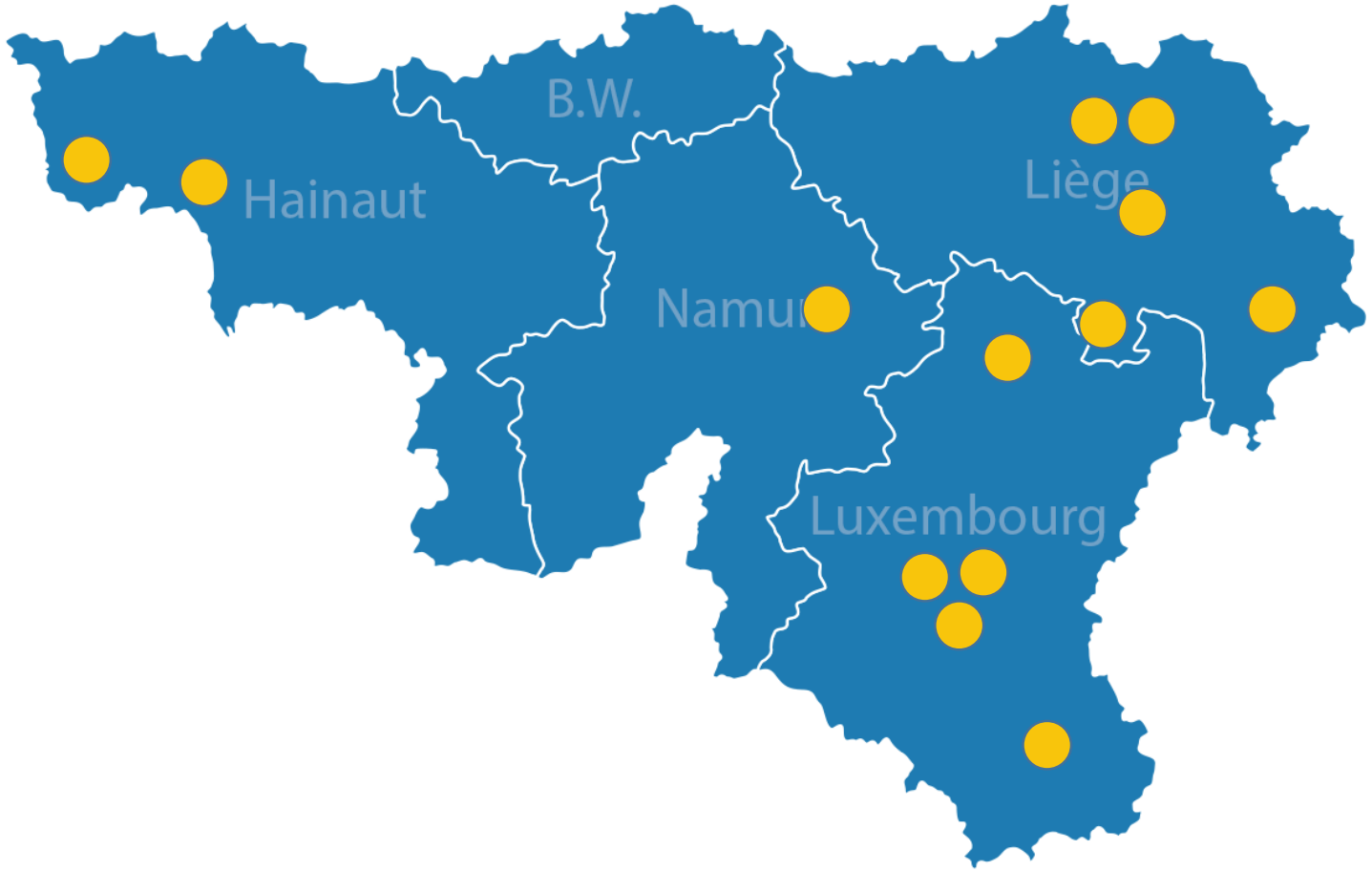
How to translate these technologies into a tool ?

- Latest research suggests including end-users in the development

- Two ways of doing :
    - 1 to 1 interviews (! Lack of « participatory »)
    - Working group (! Time consuming)

=> We chose to balance of both methods

Semi-direct interview with farmers

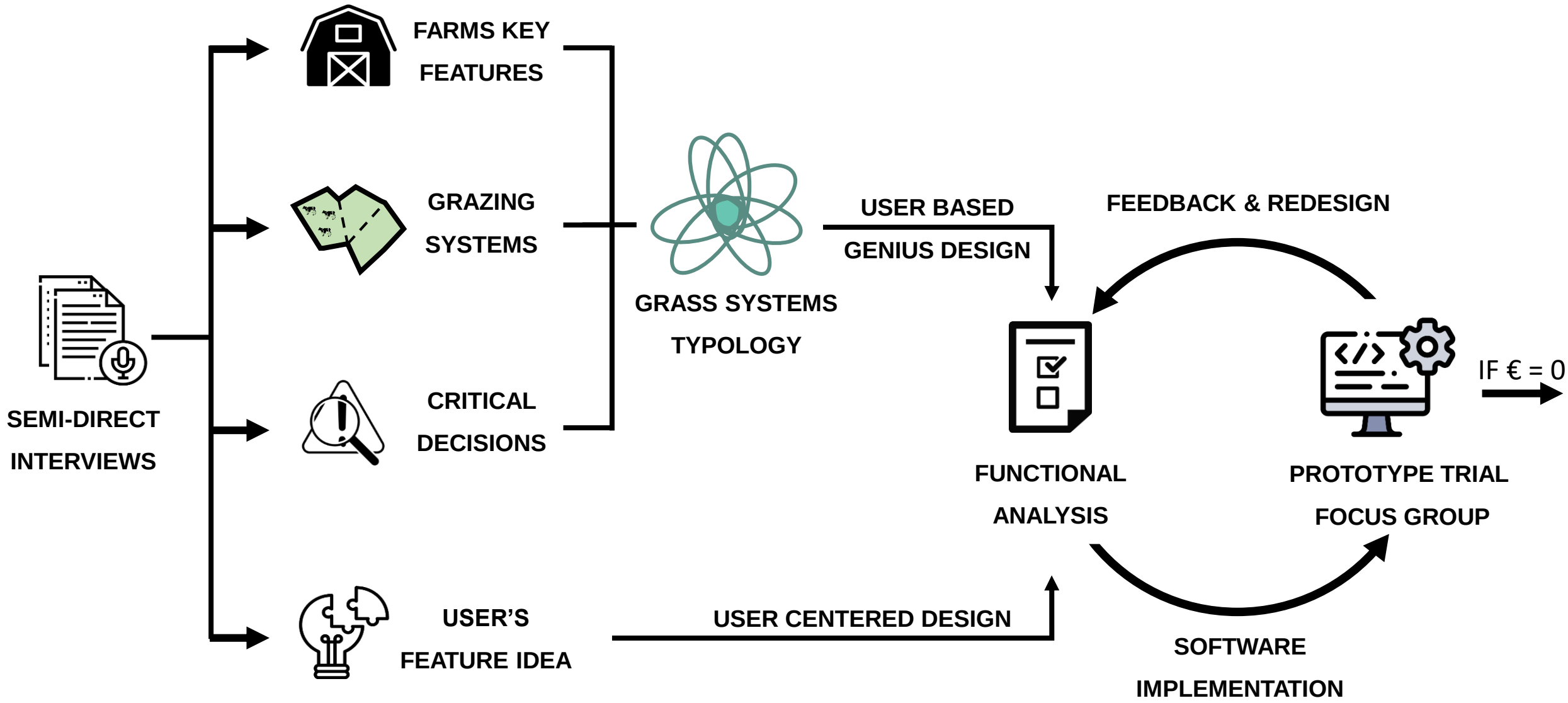


12 farmers et 3 technicians

5 organic

7 conventional

3 beef, 8 dairy et 1 doing both


FARMS KEY FEATURES
GRAZING SYSTEMS
CRITICAL DECISIONS
SEMI-DIRECT INTERVIEWS
GRASS SYSTEMS TYPOLOGY
USER BASED GENIUS DESIGN
FEEDBACK & REDESIGN
FUNCTIONAL ANALYSIS
PROTOTYPE TRIAL FOCUS GROUP
IF € = 0
USER'S FEATURE IDEA
USER CENTERED DESIGN
SOFTWARE IMPLEMENTATION