

# LADSS Briefing for AGRIGRID



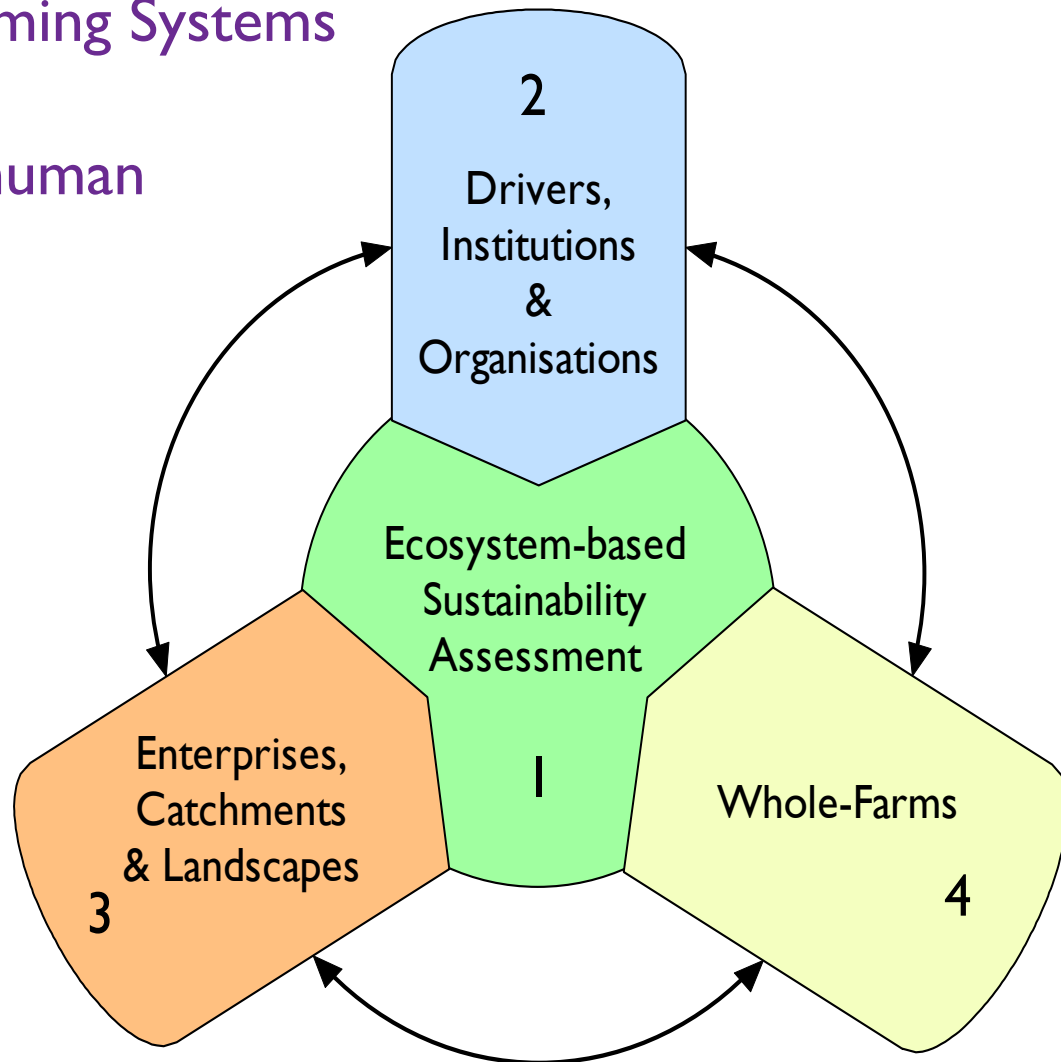
Keith Matthews  
Prague – July 07

## Environment – Land Use and Rural Stewardship

### WP3.1 Sustainable Farming Systems

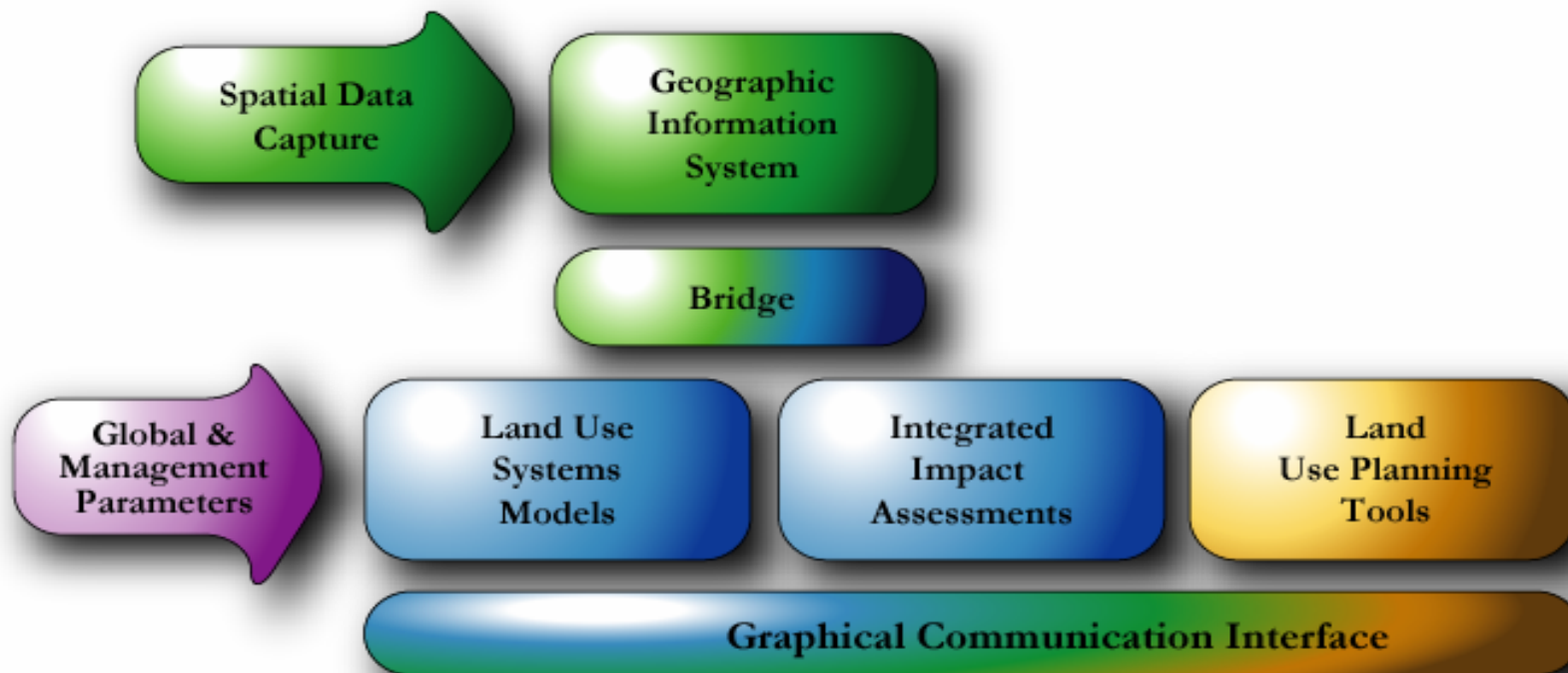
Systems – natural and human  
Integrative  
Interdisciplinary  
KTE - deliberation

Modelling  
Empirical  
Scenario  
Inclusive



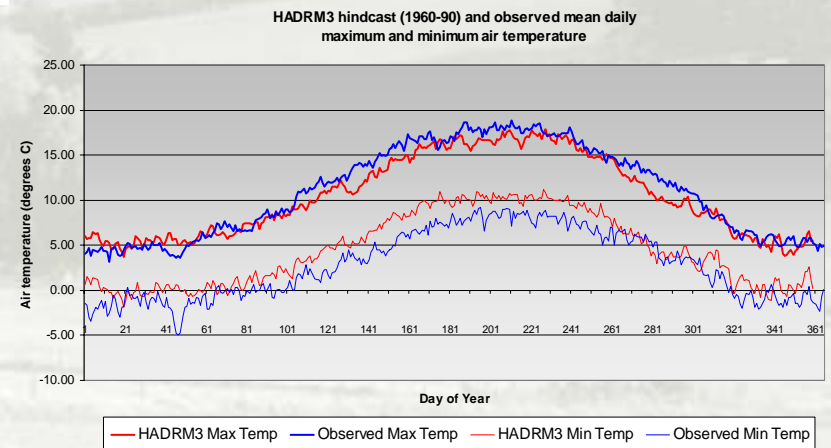
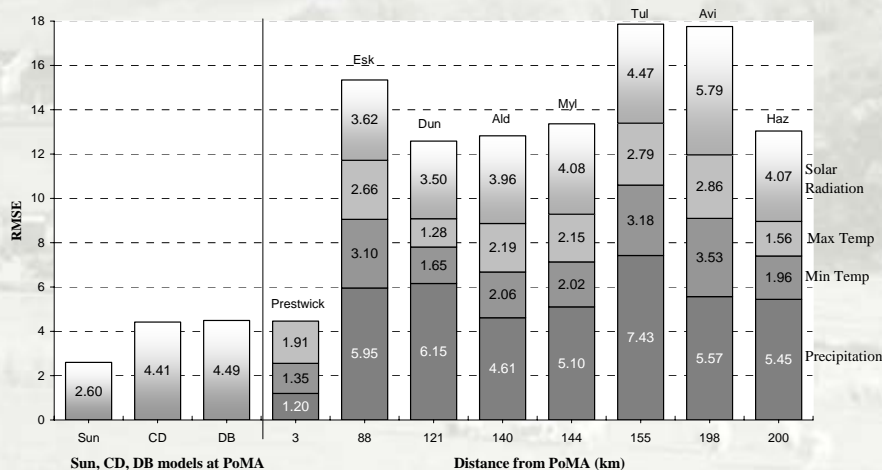
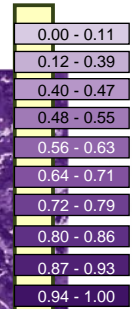
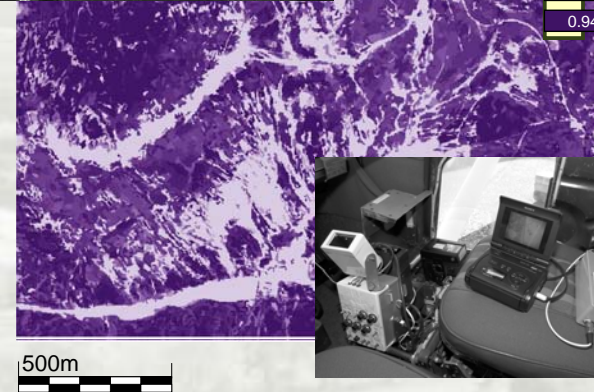
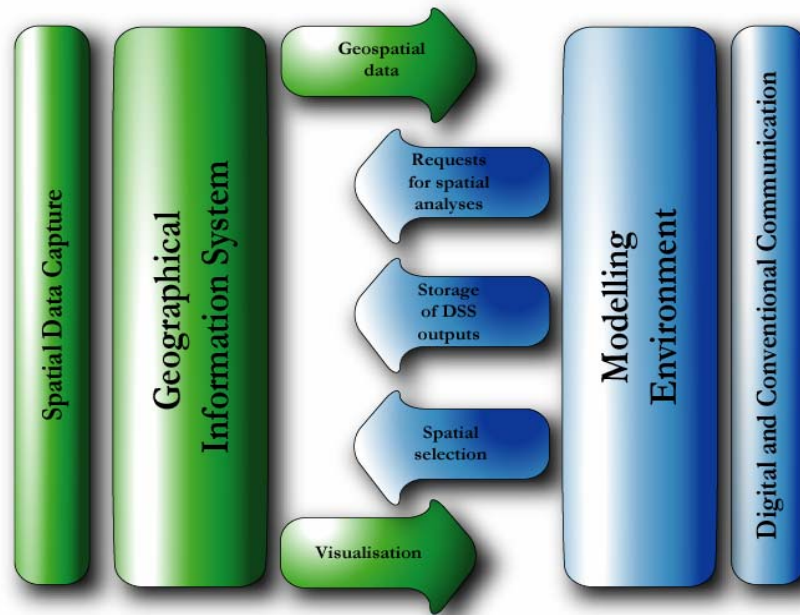
## Overview

### LADSS components

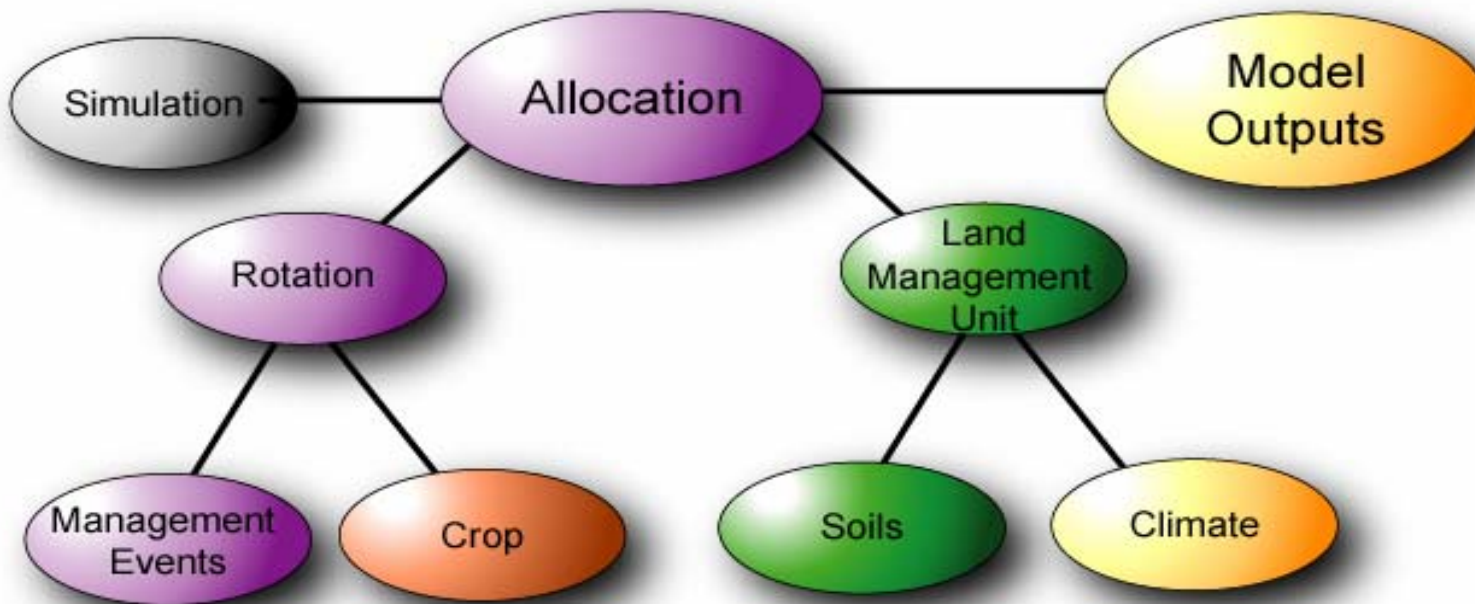
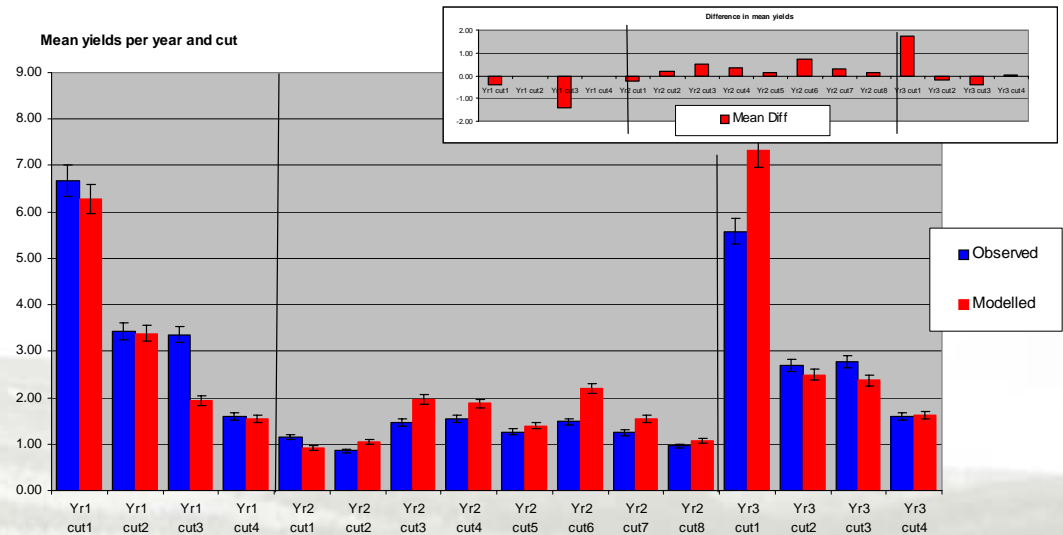
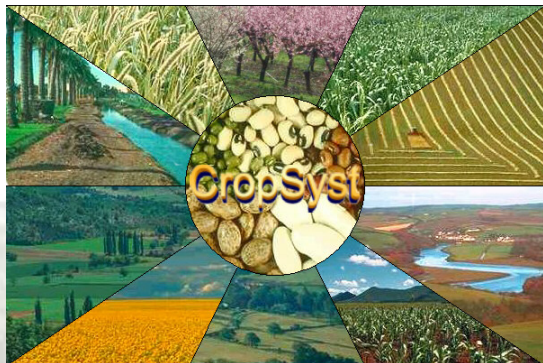


Decision makers, consultants,  
or policy analysts

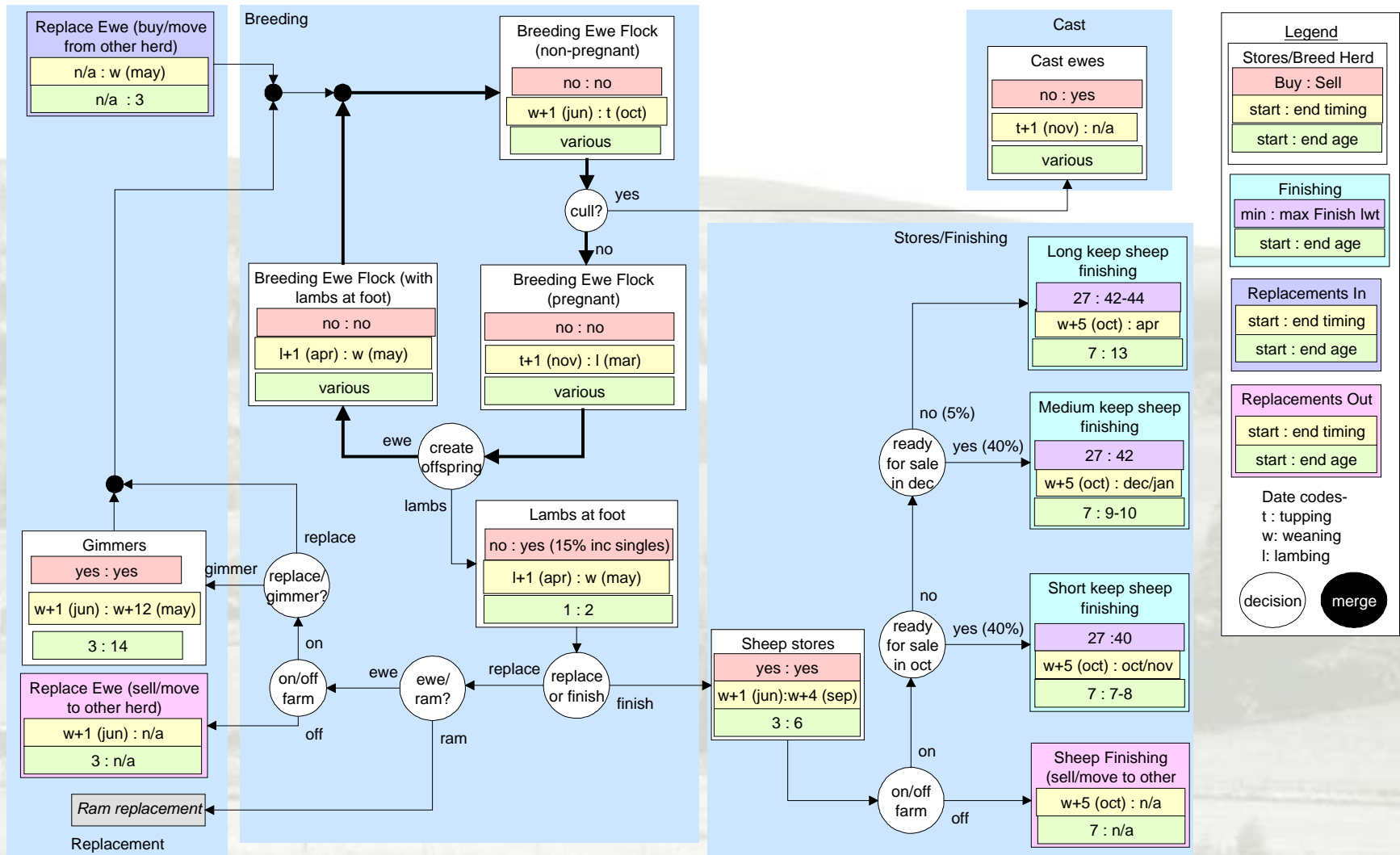
# Spatial analysis



# Cropping Systems

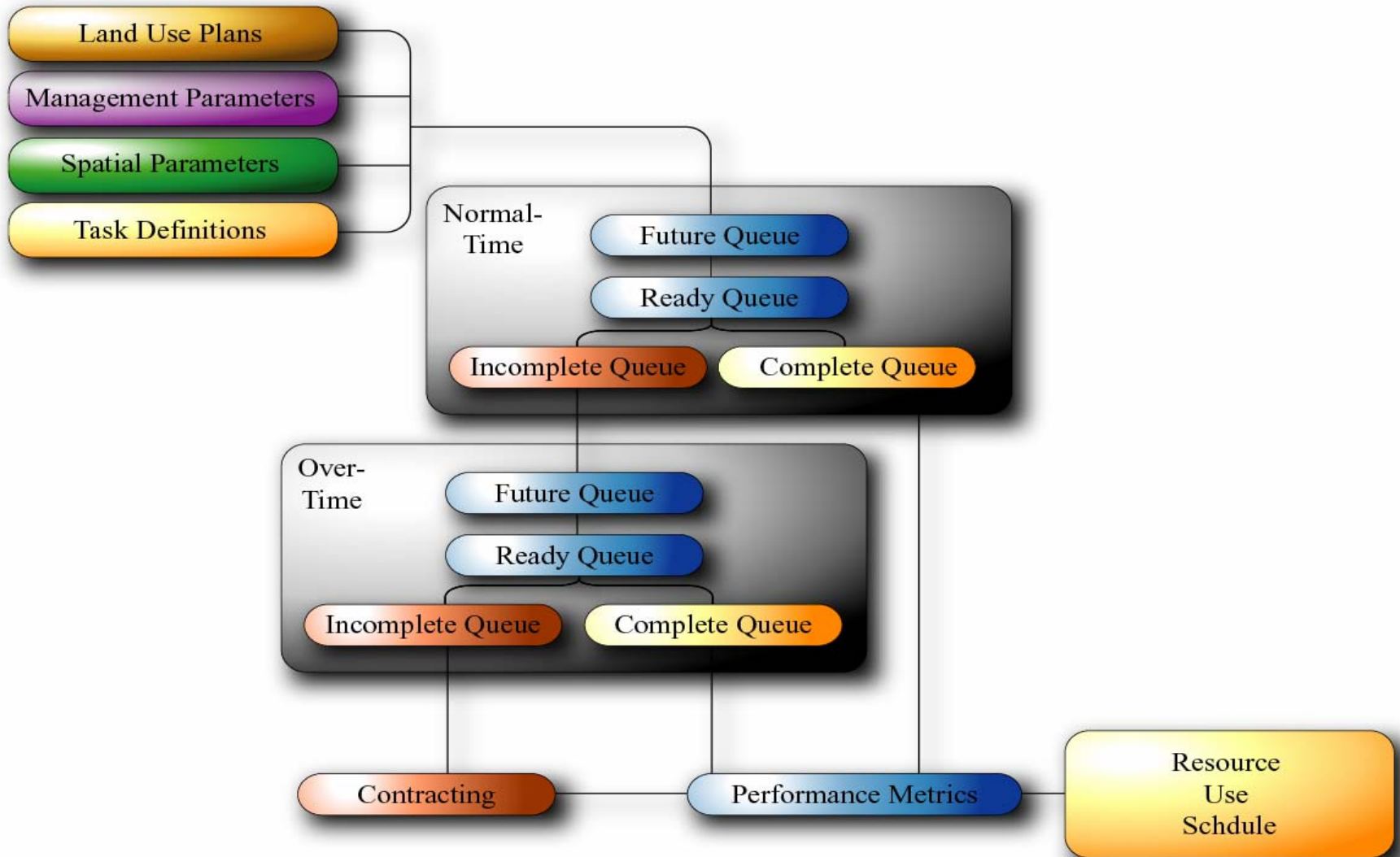


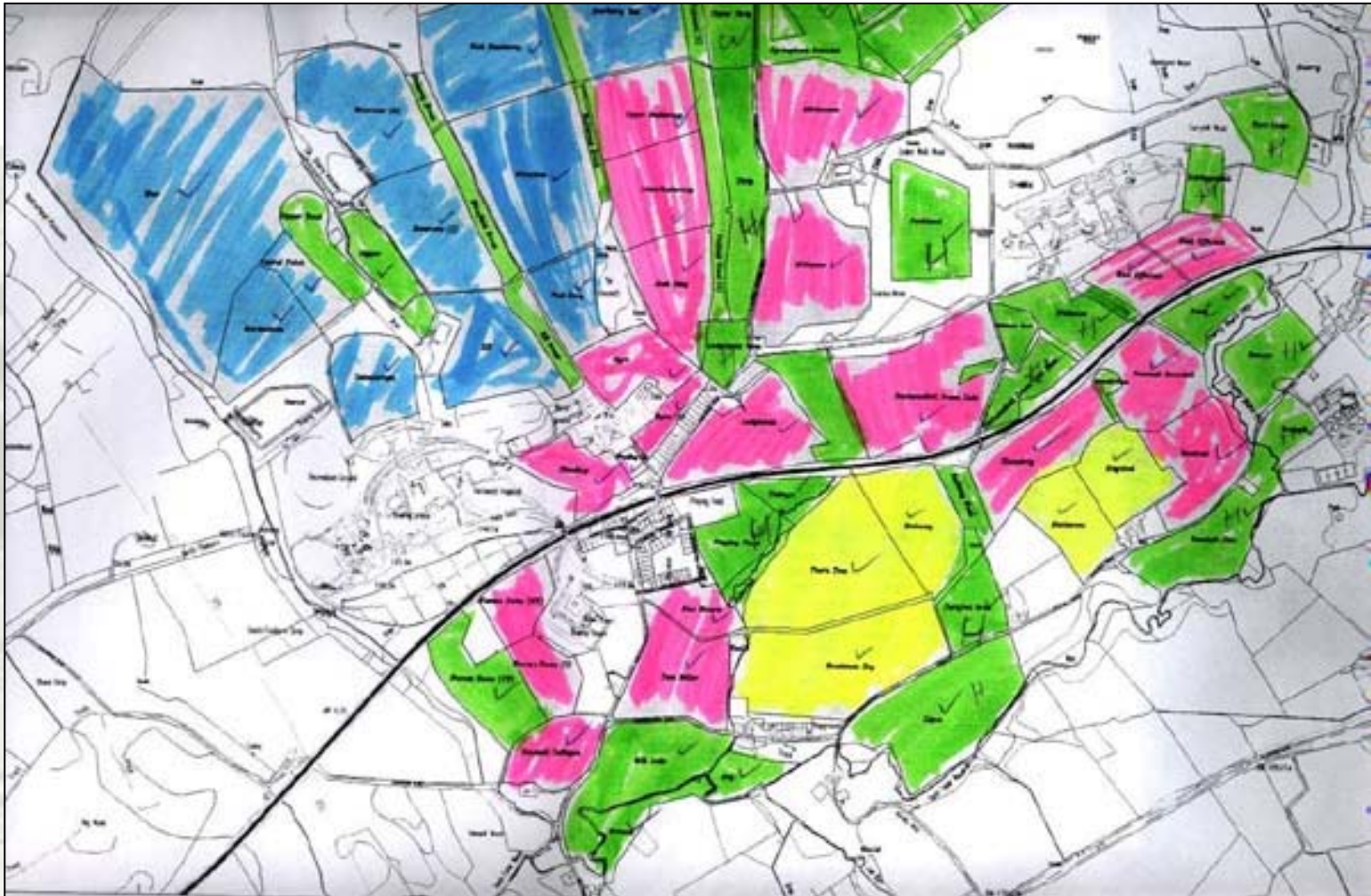
# Livestock Systems



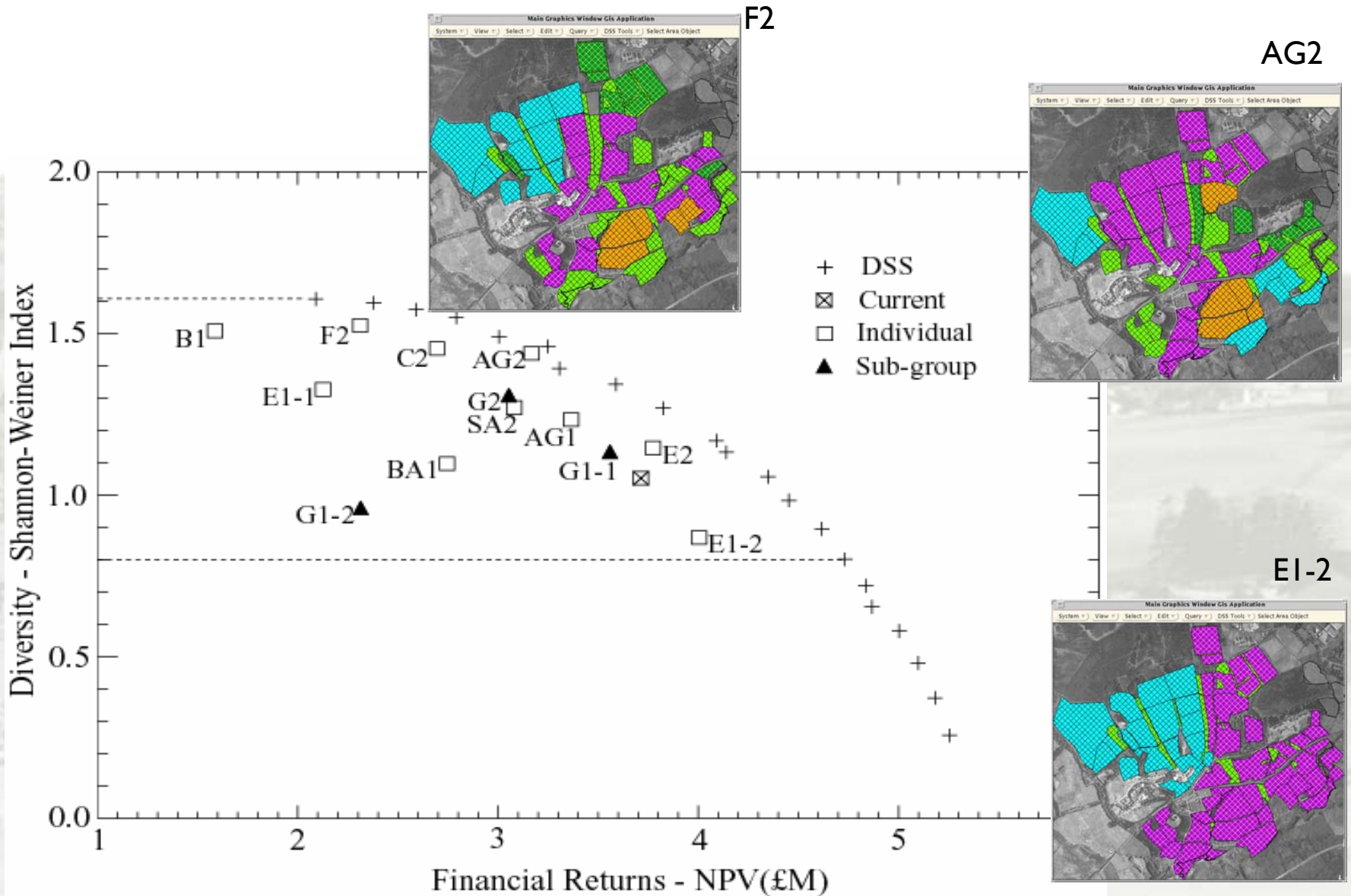
## Sheep Management Stages

# Resources Scheduling Tool



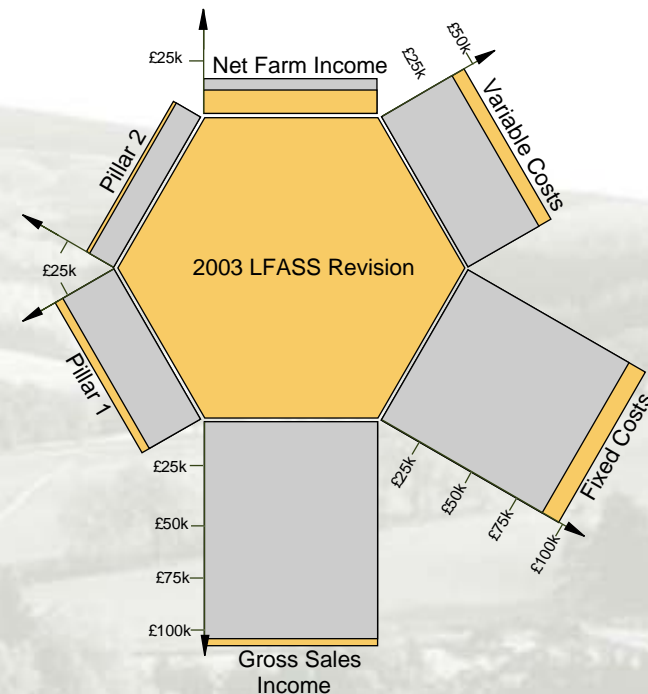
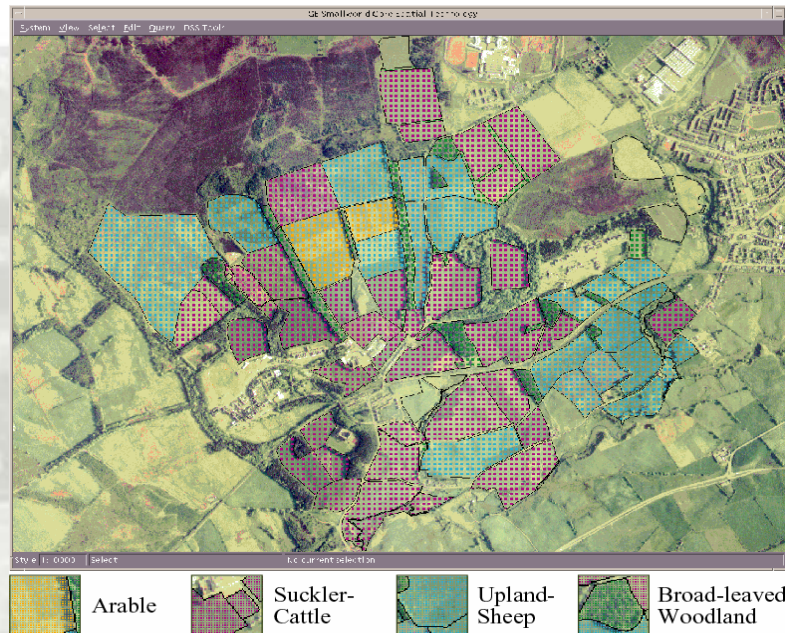


# Land Use Planning Tools



# Case-study analysis of 2002 LFASS reforms

with G. Schwarz and A. Gelan



## The Outcomes

Small and decreasing margins for livestock systems

Gains from extensification payments - 2002 wiped out by increasing fixed and variable costs

2003 LFASS scheme results in minor gains (c. £3000)

Ratio of Pillar-1 to Pillar-2 declines from 2.26:1 to 2.15:1.

## ■ Montepulchiano – collaboration with ARC – ex-ISCI, Bologna



- Crop model parameterisation
- Climate change scenario generation
- Livestock systems modelling
- Model validation methodologies





## A role for a farm-level tool in **AGRIGRID?**

- ☐ To explore some of the key assumptions in the payment calculations and to see in which circumstances they are valid.
- ☐ The tools can thus be used in back-casting mode to see what the system would have to look like for the payment to be proportionate.
- ☐ The acceptability to the calculation methods to farmers/land managers seems essential if the measures are to be both effective and efficient.
- ☐ The efficiency of the measures can be addressed by higher levels assessments but effectiveness – both on uptake and implementation of measures runs into a range of technical and socio-cultural factors that are, we would argue, worth exploring through dialogue with practitioners.



## Using farm-level tools as part of deliberative processes

- ❑ The LADSS team at Macaulay has spent much of the last few years looking at the way in which software tools can be used with stakeholders.
- ❑ These approaches can be generically referred to as *deliberative inclusive processes* and have proved to be successful in eliciting adaptive responses from land managers using the outputs from LADSS as a basis for debate (CAP reform, multi-objective planning and climate change).
- ❑ The tools are in this case being used in counterfactual mode (what-if) – assessing the consequences of drivers of change, without adaptation before the workshop and after the workshop incorporating the adaptive responses identified as most likely by the practitioners.

## Deliberation

*"... process involving reasoned debate between individuals whereby understanding is advanced and mutual agreement is reached (or not) via the quality and persuasiveness of argument rather than by coercion, manipulation or deception". Dryzek, 2000*



Assessing the adaptation of upland livestock systems to CAP reform – G. Schwarz