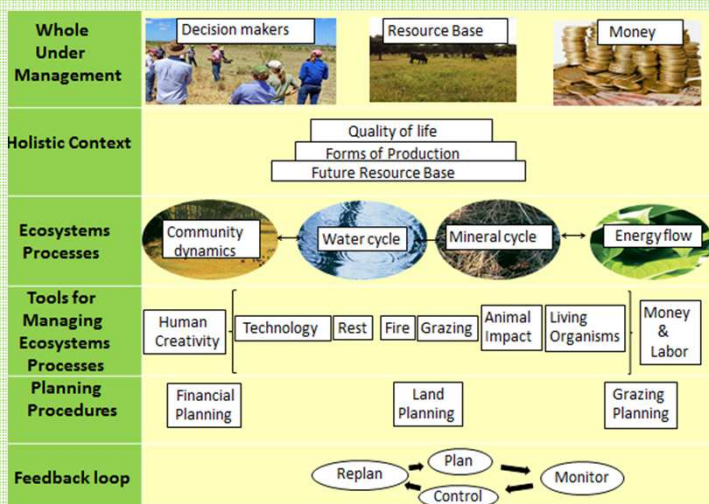




## 1. Introduction

### Holistic Management: a decision-making framework



In “brittle” environments, like *dehesa/montado* ecosystems, HM advocates managing **high densities of large herding animals** to produce heavy grazing and trampling impact for **brief periods at appropriate intervals**.

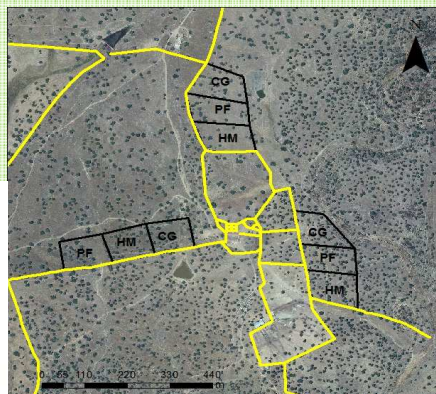


The **main goal** of the experimental project is **evaluate the effect** of HM approach on *dehesa/montado* ecosystems.

## 2. Materials and Methods

**Figure 1.** Location experimental plots in Chaparral Bajo Farm (Cabeza del Buey, Badajoz).

**Legend**  
 Existing fences  
 Experimental plots  
 HM: Holistic Management  
 CG: Conventional Grazing  
 PF: Phosphate fertilization



**Table 1:** Indicators to evaluate HM approach, sample sizes (N), and method

	Indicators	N	Material /Method
SOIL PROPERTIES	Compaction	90	Soil penetrometer
	Water infiltration rate	27	Infiltrimeter
	Mineral N and available P	54	Ion-exchange resin membrane
	Soil organic matter	54	Wet combustion
	Bulk density	54	Soil cores of 192,42 cm <sup>3</sup>
	Soil respiration	54	Portable soil respiration system
VEGETATION	Productivity	27	Cage exclusion, cut and weigh
	Functional diversity	27	30 m transects
	Vegetation cover	27	30 m transects

## 3. Expected Results

Improvement in Ecosystems Process



Enhancement of Economic Profitability.

## 4. Conclusion

Holistic Management approach implies **integration between ecosystem process and management grazing systems**



Increase the sustainability of *dehesa/montado* ecosystems