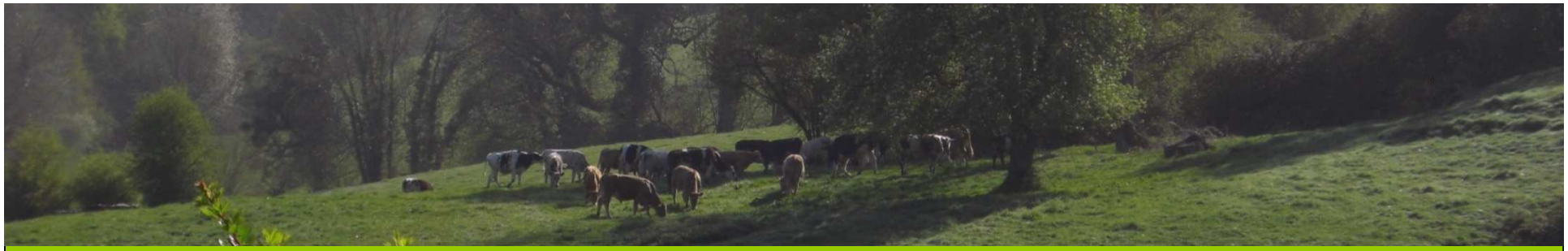


Why are extensive grazing systems disappearing?
Understanding socio economic drivers

Findings from Pays d'Auge (France)

Vilm — 21 Sept. 2010

Soizic JEAN-BAPTISTE -
Blandine RAMAIN, EFNCP

EUROPEAN FORUM ON
NATURE CONSERVATION
AND PASTORALISM

How to advance in knowledge ?

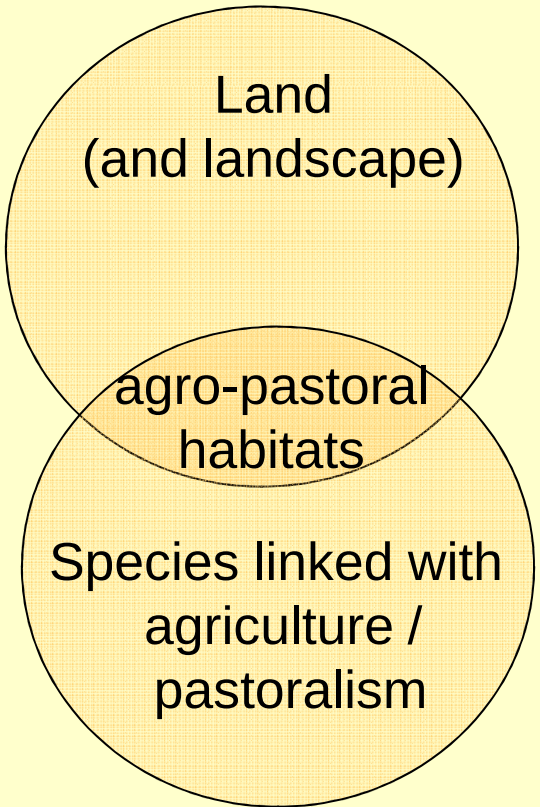
- *Our aim : to show the importance of taking socio economic trends into account when characterising HNV farming*

1. *Brief analysis of usual HNV approaches*
2. *The added value of an « agrarian system » perspective*
3. *A case study : Pays d'Auge in France*

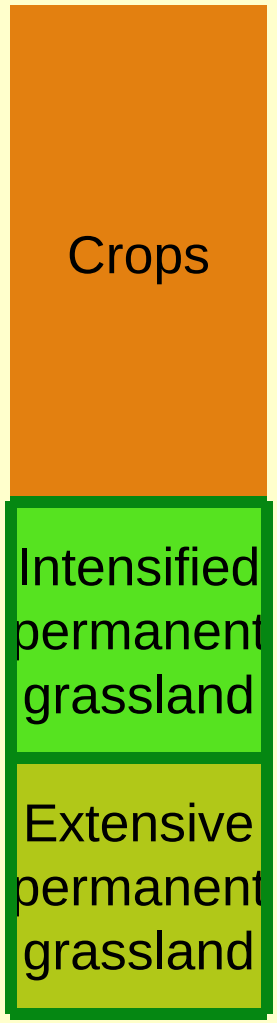
Usual approaches : mapping in Europe

HVN farmland

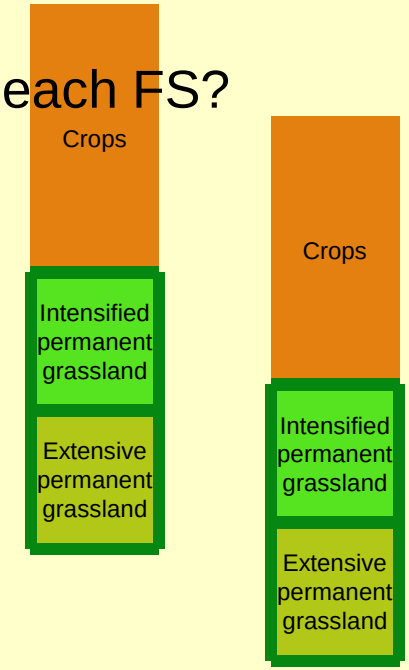
Biodiversity
(species richness
and/or of conservation interest)



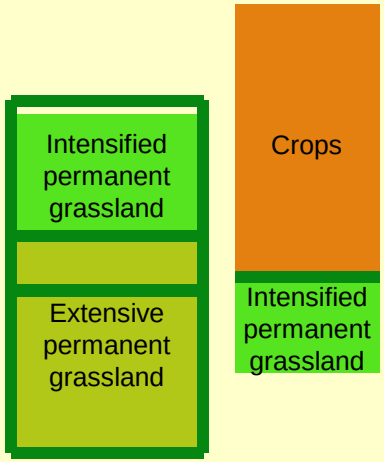
At landuse and landscape level



A bit of everything in each FS?

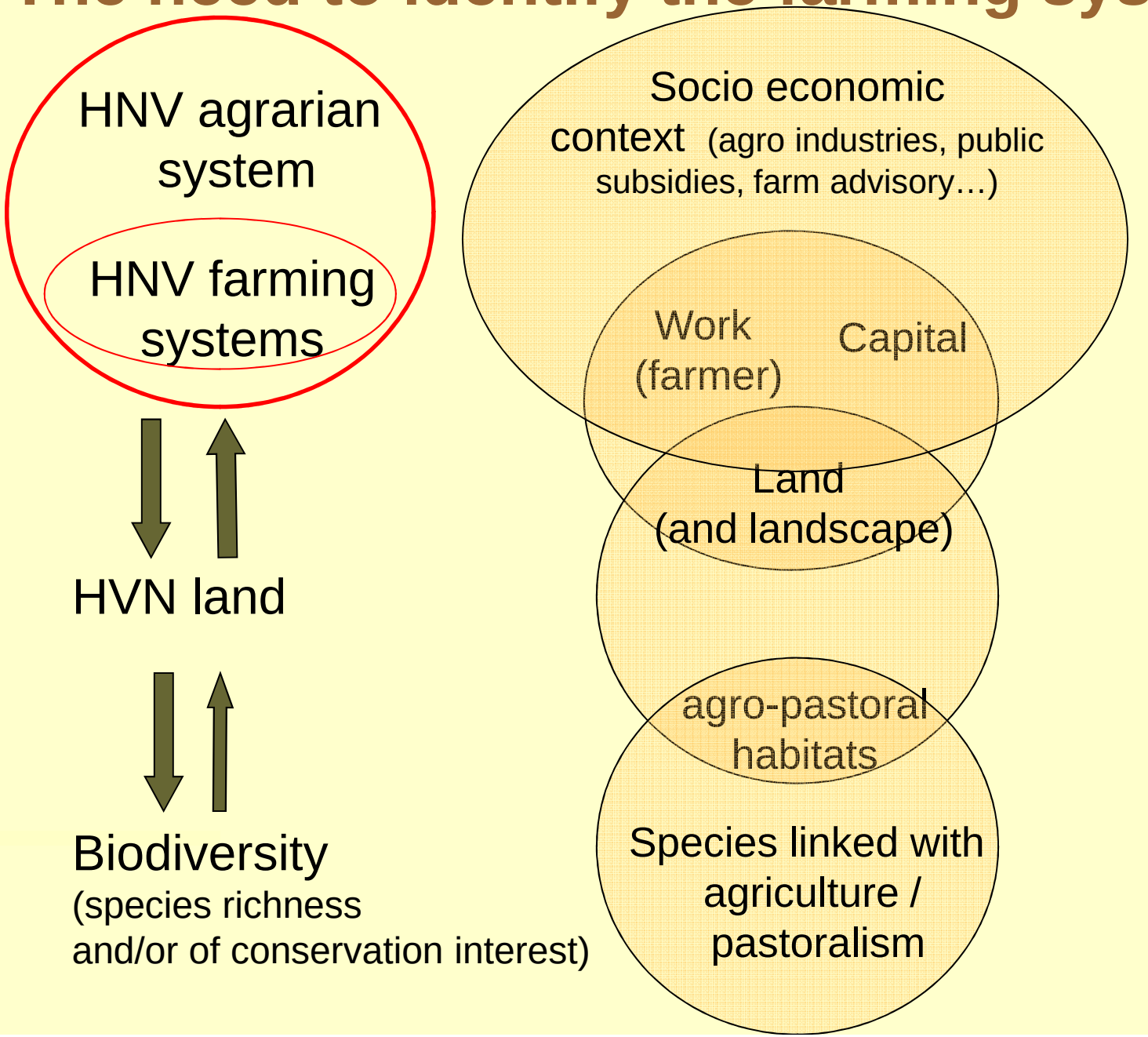


HNV and LNV farming systems?



⇒ What we need to know : which are the farms crucial to biodiversity, and how to maintain them?

The need to identify the farming systems



Approach by « agrarian system »

- *Agrarian system : a conceptual tool to describe and analyse the situation of a little agricultural region*

CONCEPT	AGRARIAN SYSTEM		
	FARMING SYSTEM		
	CULTURAL AND BREEDING SYSTEM		
Scale of analysis	Plot / Herd	Farm	Landscape
Type of analysis	Agronomical / Ecological	Agro economic	Agro ecologic and Socio economic

Dynamics

Pays d'Auge - some HNV features

- *Traditionally, an area specialised in extensive dairy production with a large part of :*
  - Permanent grasslands
  - Hedges
  - Orchards (apple and cider)

} Probably a HNV area ?

Practices contributing to biodiversity

At field level	**HNV**
Permanent Grasslands	**EXTENSIVE MANAGEMENT** • No chemical inputs • Late mowing (july) • Low livestock density
Grazed orchards	• Maintenance
Arable land	• No chemical inputs
At lanscape level	**HNV**
Ponds	• Maintenance
Hedges	• Maintenance • Winter wood cut
Landscape pattern	• Combination of diverse land use

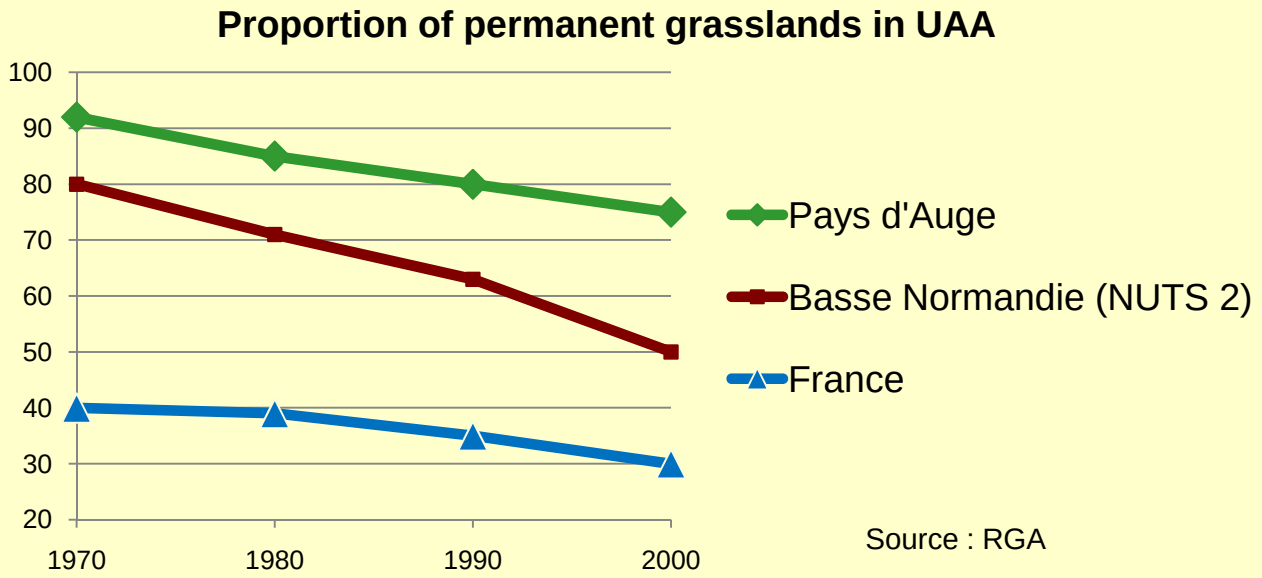
© DIREN Basse Normandie

Euphydryas aurinia

© DIREN Basse Normandie

Recent changes in landscape

  - Development of crops (maize, cereals),
- *Regression of hedges and permanent grasslands*
- *Intensification on permanent grasslands : higher stocking rates, higher fertilization level.*



Source : RGA

Changes in practices and landscapes

Still HNV grasslands ?

At field level	**HNV**	**LNV : trends …**
Permanent Grasslands	**EXTENSIVE MANAGEMENT** •No chemical inputs •Late mowing (july) •Low livestock density	**INTENSIFICATION** • Fertilisation • Early mowing (may) • Conversion into arable land **ABANDONMENT** • Wood plantation / Scrub
Grazed orchards	• Maintenance	• Replacement by intensive orchards
Arable land	• No chemical inputs	
At lanscape level	**HNV**	**LNV : trends …**
Ponds	• Maintenance	• Filling
Hedges	• Maintenance • Winter wood cut	• Removal
Landscape pattern	• Combination of diverse land use	• Decrease in the semi natural vegetation

Recent trends – landscape changes

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We need to link these practices and the farms

- *If we want to maintain HNV features…*

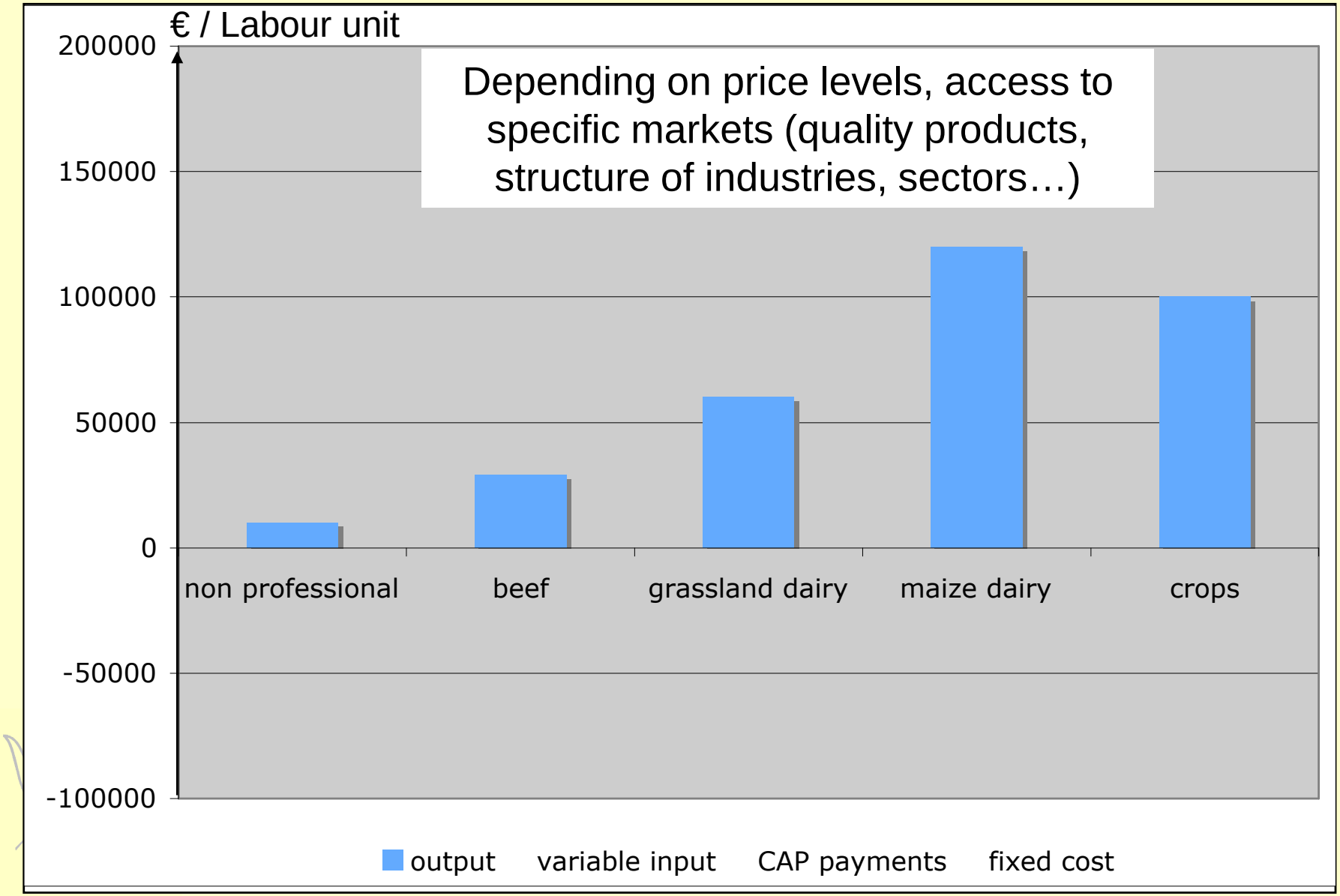
- *What are the farms managing these lands ? Through what kind of farming practices ?*
- *What are the dynamics of each type of farm ? Under which socio economic drivers ?*

A wide range of farming systems

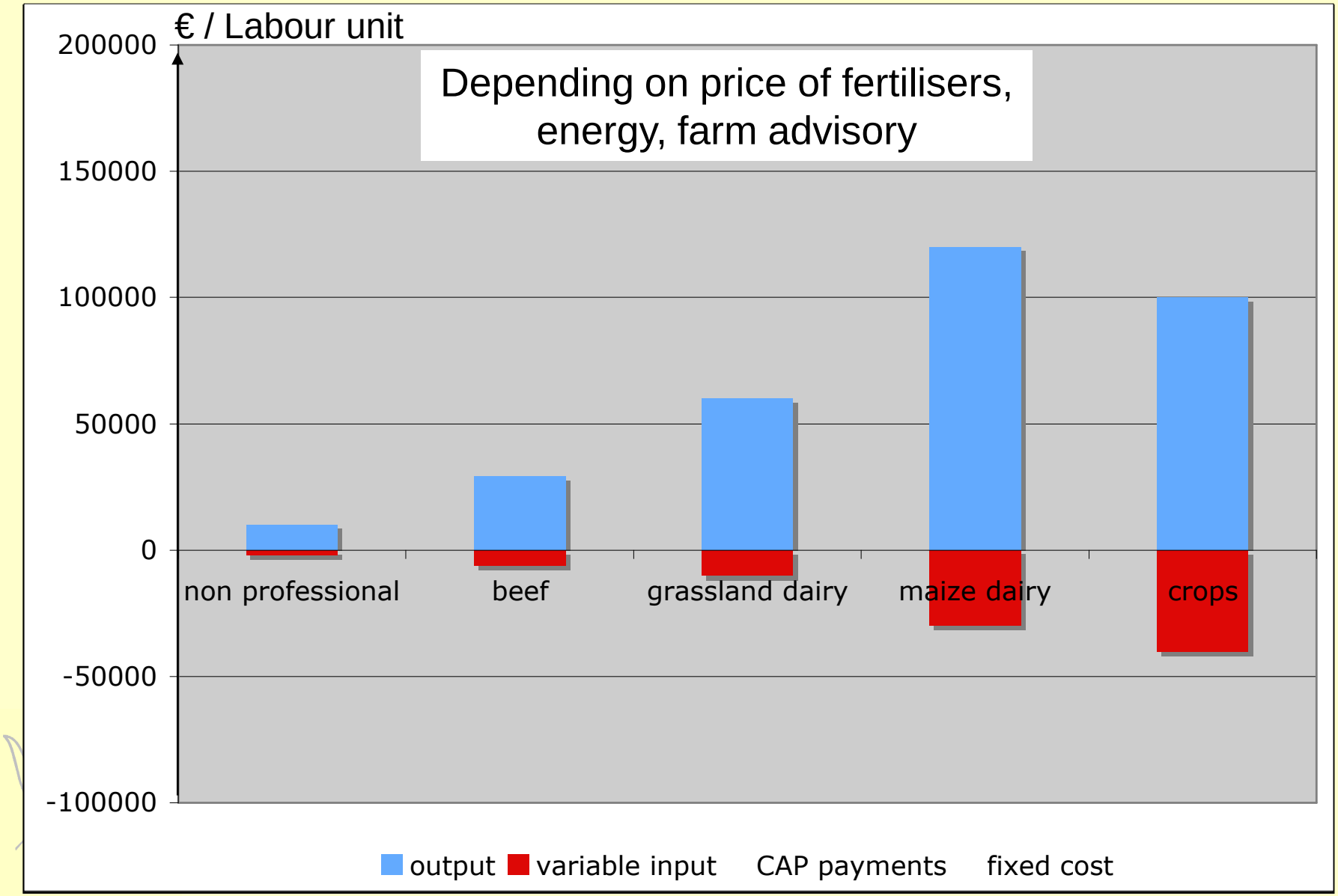
- *HNV non professional farms*
  - 10 ha (+ annual loan of land from third person), 0.5 awu, 0.7 LU/ha
  - Mixed farming: cattle, sheep, horses, apple trees, hedges
  - 56 % of the farms, 15 % of the UAA
- *Beef / suckler cows systems*
  - 54 ha, 1.15 LU/ha — traditional orchard, hedges — 1.3 awu
  - 10% of the fams, 13 % of the UAA
- *Grassland dairy*
  - 40 ha, 1.2 LU/ha — traditional orchard, hedges — 1.5 awu
  - 14% of the farms, 25 % of the UAA
- *Maize dairy*
  - 70 ha, 1.6 LU/ha — (hedges, some extensive pastures for heifers), 2 awu
  - 9% of the farms, 20 % of the UAA
- *LNV crops professional farms*
  - 100 ha, 2 awu
  - Specialised in crops
  - 2% of the farms, 5 % of the UAA

Source : RGA 2000 ; Merlot et al, 2004.

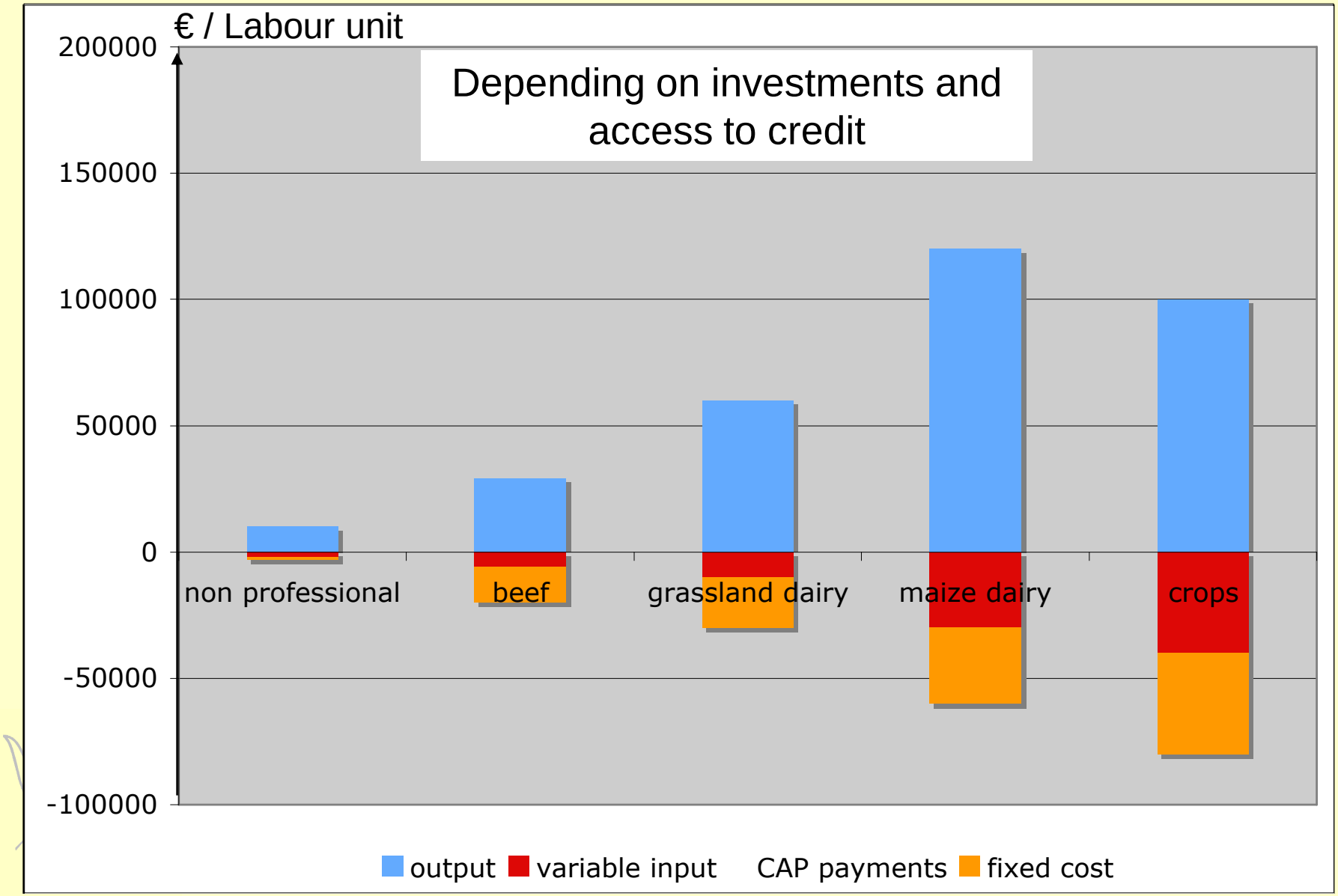
Estimated structure of farms economy



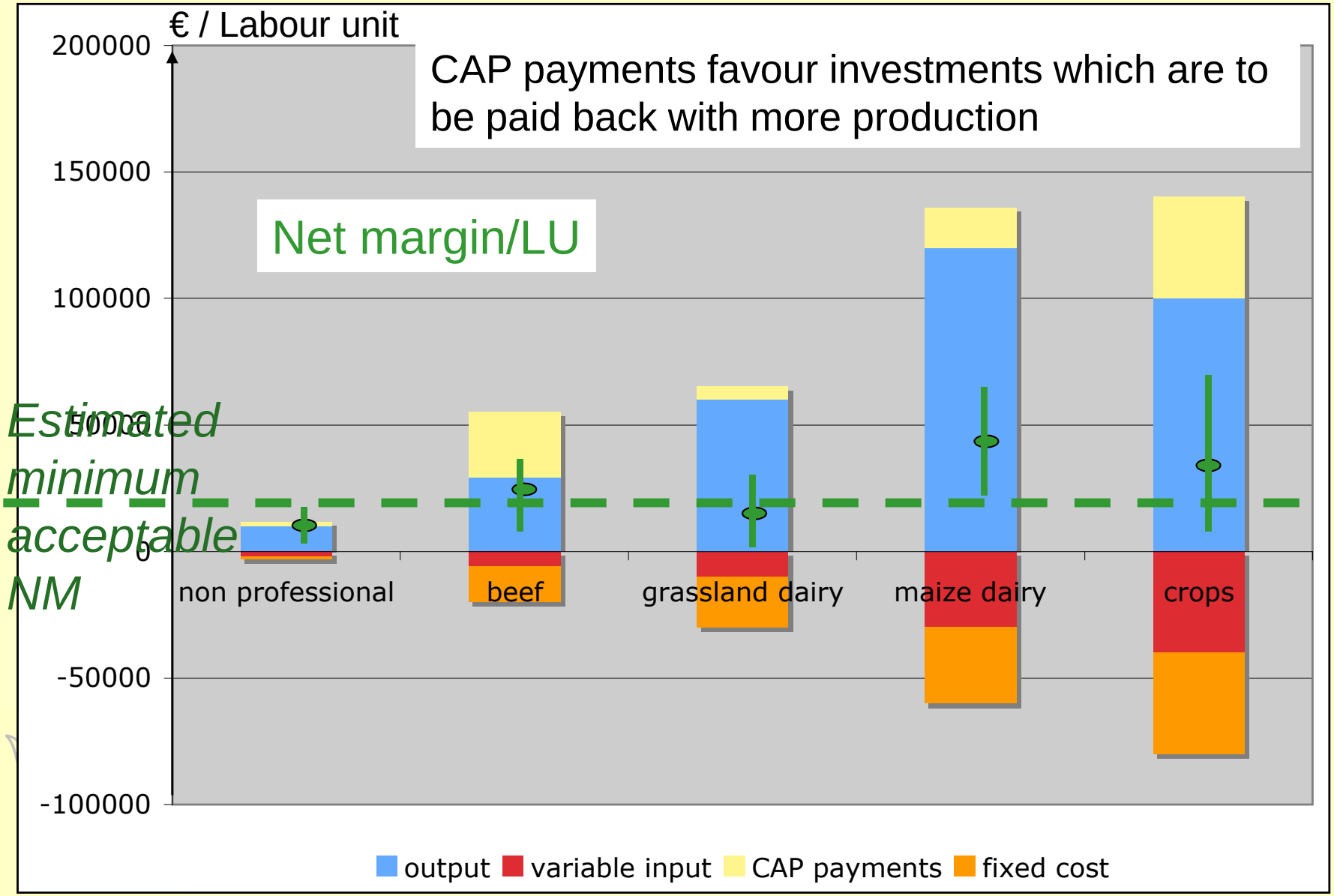
Estimated structure of farms economy

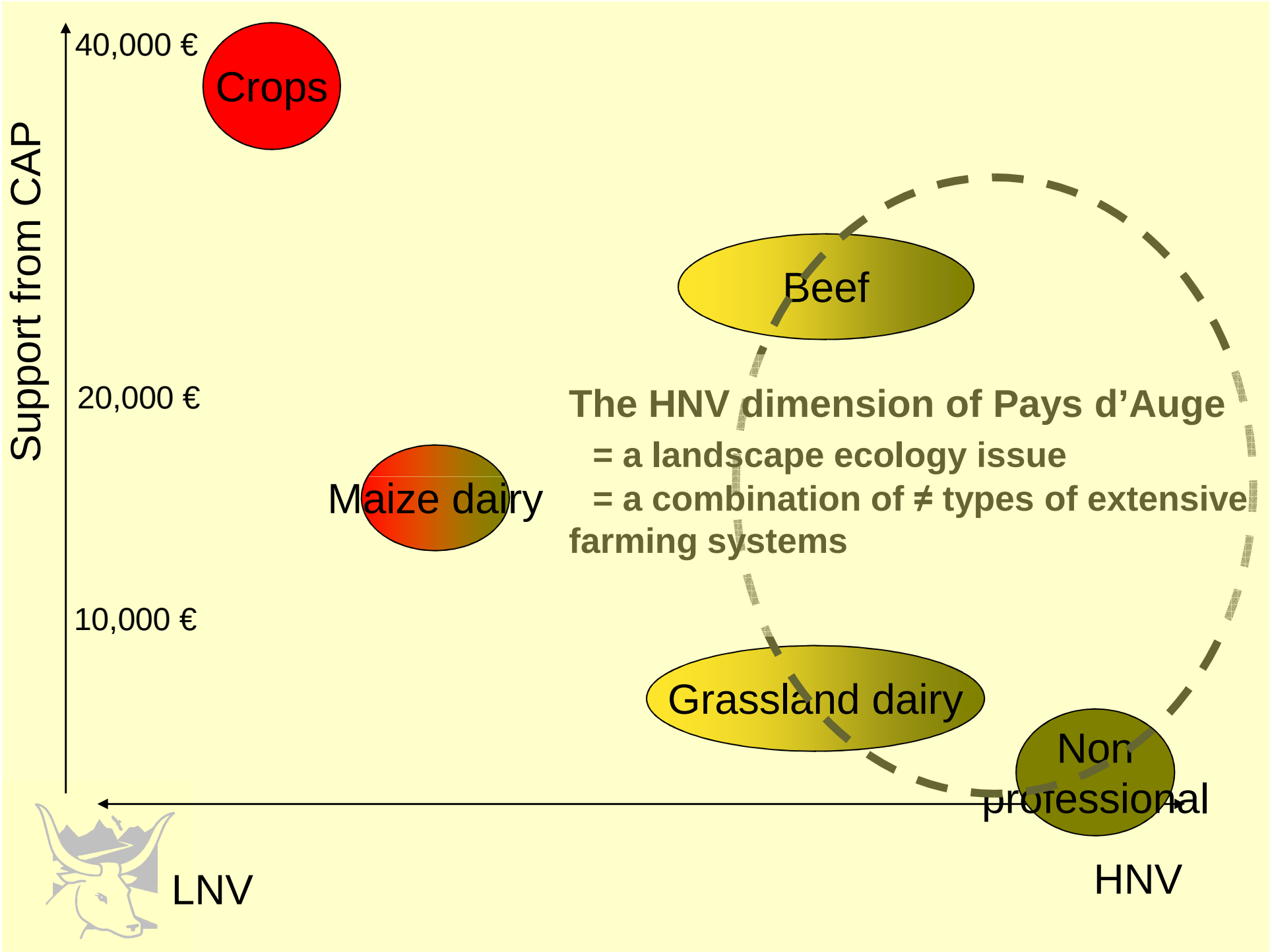


Estimated structure of farms economy



Estimated structure of farms economy




40,000 €
20,000 €
10,000 €
Support from CAP
Crops
Beef
Maize dairy
The HNV dimension of Pays d'Auge
= a landscape ecology issue
= a combination of ≠ types of extensive farming systems
Grassland dairy
Non professional
LNV
HNV

Findings from Pays d'Auge

The approach allows to advance in :

- Characterising the high nature value of the area
  - Type 2 rather than type 1
  - A landscape ecology issue
- Understanding which farms maintain semi natural vegetation
  - The importance of non professional farms for semi natural vegetation, whom socio economic rationales are very specific
- Analysing the trends and the threats on the HNV farms
  - Evolution of the proportion between farm types

As a conclusion

- The present agricultural dynamics suggest a potential loss of HNV “label” for the area in the future, even if all the impacts of changes in practices are not perceptible yet

- It seems crucial to take socio-economic dynamics into account in HNV identification, through an agrarian system perspective

Thank you for your attention !