

# Work efficiency and work flexibility in organic sheep farms differentiated by reproduction rhythm

Hostiou Nathalie, UMR Métafort , INRA, France



*S.04 Labour issues in livestock farming systems (workload, gender, lifestyle, satisfaction, part-time agriculture, immigration) - 27/08/2012*

# 1. Introduction



Organic suckler sheep farming, one way to meet the societal demand for the development of more environment friendly practices in France

Labour, a brake on the setting-up and maintenance of organic sheep farms

2 challenges to improve work conditions on organic sheep farms:

- to increase labour productivity
- to improve work flexibility (room for manoeuvre in time)

## Hypothesis:

In organic suckler sheep farms, the room for manoeuvre in time differs according to the farms, and depends to others factors than the size of the farms and the availability of the workforce

## Objectives:

- (a) to estimate the room for manoeuvre in time of farmers
- (b) to identify the factors to explain the differences observed
- (c) to identify solutions to improve work flexibility

## 2. Material and method

The Massif central, a central region in France



Survey of 14 organic suckler sheep farms:

- reproduction management (1 to 3 periods of lambings/year),
- workforce composition (farmers working alone, couples or associations)
- production structures

N° of ewes : 289 (95–603)

Utilized agricultural area (ha) : 84 (48–120)

Quaework method to :

- quantify work durations (routine work in h/d; seasonal work in d/y),
- Quantify the work performed by the basic group and the other categories of workers
- assess the room for manoeuvre in time (in h/y) = time left for the basic group to perform unrecorded tasks or to have free time

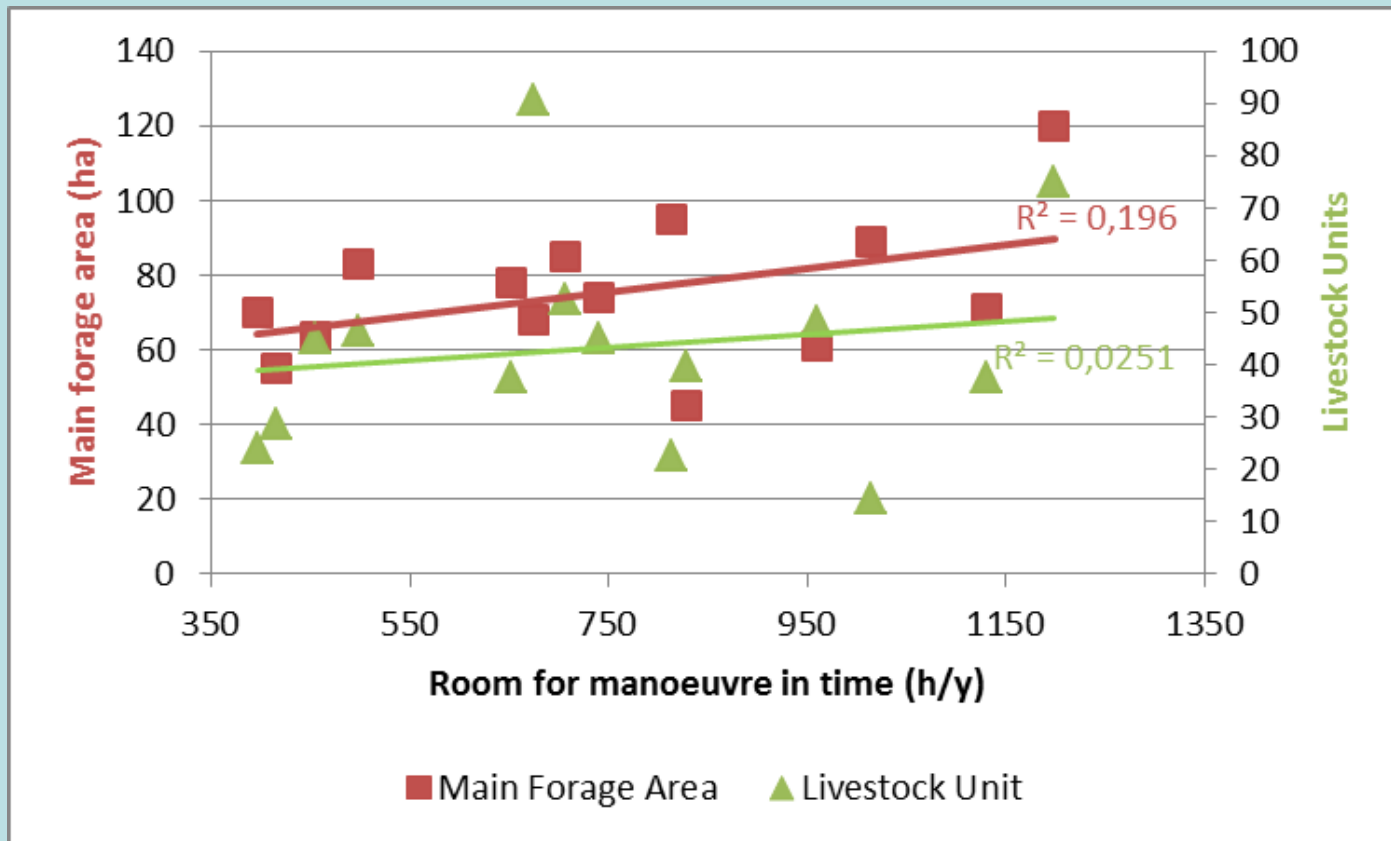
Descriptive statistics and a multivariate statistical analysis (PCA) to classify the 14 farms according to the distribution of the room for manoeuvre in time over the year

# 3. Results

## 3.1. Room for manoeuvre in time

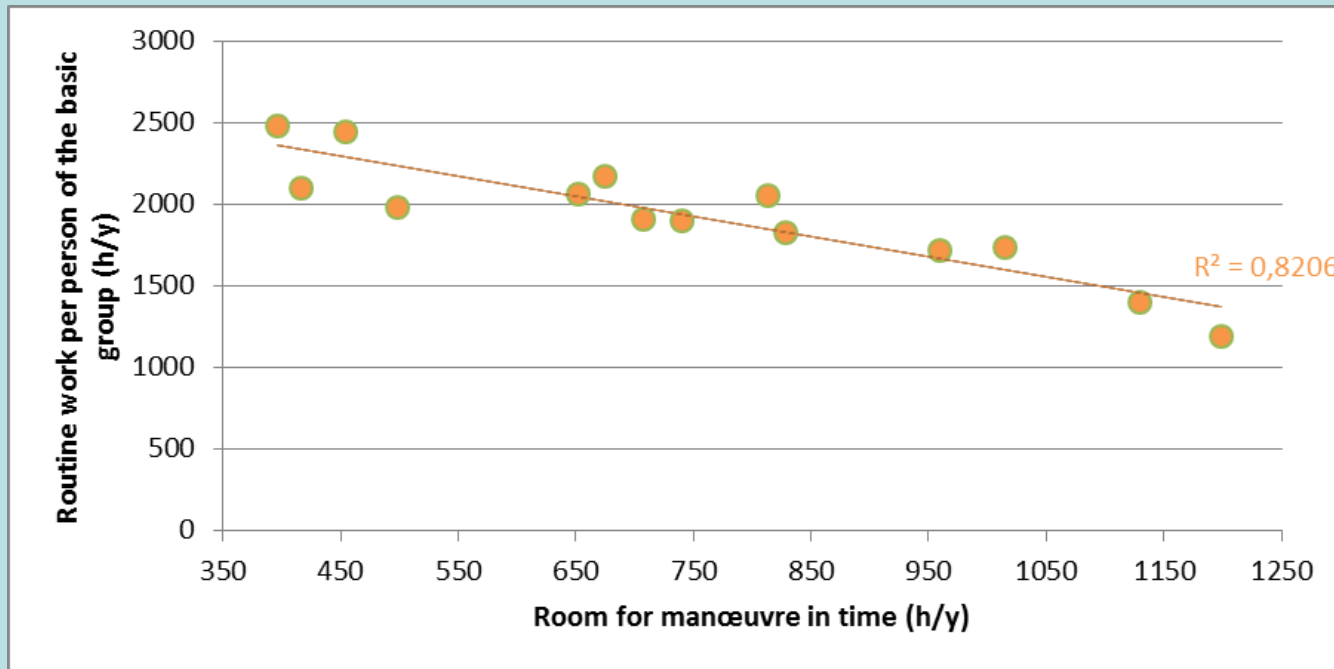
749h/y (396 to 1199 h/y)

No relation to the flock size or to the main forage area

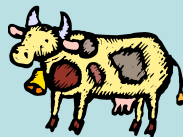


### 3.1. Room for manoeuvre in time

Relation with the total routine work carried out per person in the basic group



Total routine work per person of the basic group (1133 to 2476 h/y)



## 3.2. Routine work

Carried out self-sufficiency by the basic group (96%)

Efficiency:

- 31.80 to 57.86 h/Livestock Unit/y
- more efficient in the largest flocks => economies of scale made as the flock size increased



### 3.3. Seasonal work

No relation with the room for manoeuvre in time

68 d/y (20 to 126 d/y) (haymaking, silage,.....)

11% delegated to services companies or voluntary workforce

### 3.4. Annual distribution of the room for manoeuvre in time

*Group 1 (43% of farms) : Low room for manoeuvre in time in winter*  
685 h/y => high routine workload (3155 h/y) carried out in autonomy  
by the basic group

2 periods of room for manoeuvre in time =>

Winter (216h) => sheepfold + lambings

Summer (463h) => pasture + no lambing

Largest flocks (339 ewes)

*Group 2 (21% of farms) : High room for manoeuvre in time all year*  
1115 h/y => low total routine workload (2419 h/y) and per person of  
the basic group (1287 h/y) (delegation)

Regularity over the year => simplification of flock management (no  
supplementation for female lambs) and lambing distributed over 2 or  
3 periods

Largest UAA (97 ha)

*Group 3 (36% of farms) : Low room for manoeuvre all year*

607 h/y => high routine workload (3739 h/y) carried out by the basic group

Lambings all year + farmers' dual jobholding or diversification of activities (direct selling)

Smallest farms (233 ewes, 75 ha of UAA)

## 4. Discussion - Conclusion

Diversity of room for manoeuvre in time => routine workload, one of the main factors of variation

Room for manoeuvre in time of organic sheep farmers (760 h/y)

- < 970 h/y in conventional sheep farmers
- < 900 h/y threshold of liveability (79% of the sample = groups 1 and 3)
- Sustainability of organic sheep farms?

Solutions to improve work flexibility

- Simplification of flock management (spreading lambing over the year)
- Delegation but less involvement of the family or economic constraint to employ wage earners

**Thank you**