



Food and Agriculture
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FAO-CIHEAM Network on Sheep and Goats

Joint Seminar of the
Sub-Network on Production Systems
& Sub-Network on Nutrition



The commitment of sheep and goat production systems in the agro – ecological transition: a collective participative approach in Corsica



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Introduction

What integration of sheep and goat systems including pastoral systems in agro – ecology

At least, two visions of agro – ecology

Ecological intensification based on the comprehension, the utilization and imitation of ecological processes rather than on artificialization and utilization of chemical inputs...

-Bio diversity based agro ecology or ecologically intensive agriculture
require a changing regime to organize the transition, to face problems and find solutions

“Enseigner à produire autrement”

(Teach to produce differently program of the French ministry of Agriculture)

A regional training program based on 5 principles

(Dumont et al., 2013)

P1 - Integrated management of Animal Health

P2 – Lower inputs

P3 – Lower pollutions

P4 – Strengthen diversity to increase resilience

P5 – Preserve bio diversity by adapting practices

“Enseigner à produire autrement”

(Teach to produce differently program of the French ministry of Agriculture)

A Participatory Approach

(Duru et al., 2015)

- (i) analyze the current functioning of local agriculture,**
- (ii) identify future exogenous changes that may determine its future (drivers)
- (iii) design local organization of the expected territorial biodiversity-based agriculture (forecasting)
- (iv) design the major steps of the transition from the current situation to this new form of local agriculture (back casting)
- (v) design governance structures and management strategies adapted to guide the transition.

The hypothesis formulated by the participants

Pastoralism could be a lever for agro – ecological transition in Corsica

The pastoral components of sheep and goat farming must be discussed for implementing the agro – ecological future of Corsica

A method based on the discussed choice of Indicators and criteria

(from Mena et al., 2012)

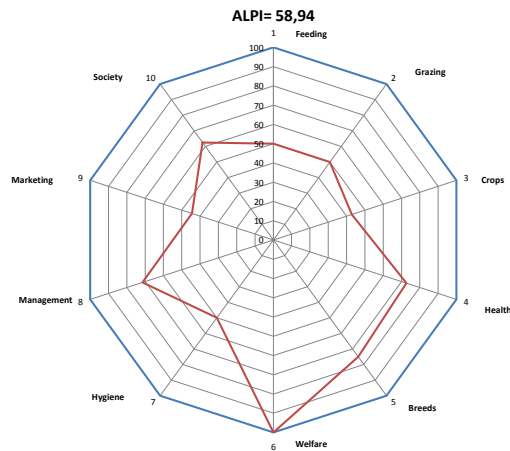
Pastoralism could be a lever for agro – ecological transition in Corsica

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Principles of the method

(from Mena et al., 2012)

Examples of Agro – ecological profiles: A Pastoral farm



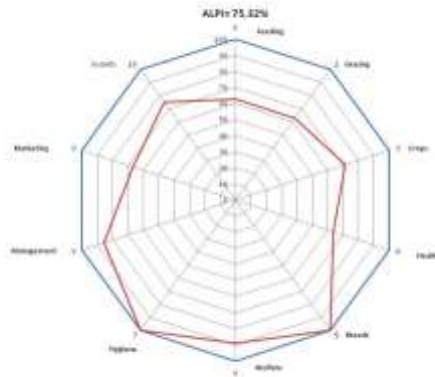
Score (%)	Indicator	Weighing factor
50	Feeding	0,16
50	Grazing	0,14
42,86	Crops	0,08
72,73	Health	0,08
75	Breeds	0,08
100	Welfare	0,06
50	Hygiene	0,09
71,43	Management	0,11
44,44	Marketing	0,12
62,5	Society	0,08

ALPI = 59%

Principles of the method

(from Mena et al., 2012)

Examples of Agro – ecological profiles: An organic dairy sheep farm



Score (%)	Indicator	Weighing factor
62,50	Feeding	0,16
62,50	Grazing	0,14
71,43	Crops	0,08
63,64	Health	0,08
100,00	Breeds	0,08
88,89	Welfare	0,06
100,00	Hygiene	0,09
85,71	Management	0,11
66,67	Marketing	0,12
75,00	Society	0,08

ALPI = 75,32%

Principles of the method

(from Mena et al., 2012)

Example of implication on management of feeding

1. Grazing on pasture during more than 6 hours a day	1
2. More than 50% of the diet is composed by fibers	1
3. The farm has lands to produce forage	0
4. The farm produces grain for goats	0
5. 80 % of the feed for animals have been produced on the farm or near the farm (in the island)	1
6. The farm has used only forage produced in the Island	0
7 .The goats receive less than 500 g/head/day concentrate	1
8. The farm distributes shrub woody resources (“a frasca”)	0
TOTAL	4/8 (50%)

Conclusion

This participative way of discussing agro – ecological transition could help to define sustainable development strategies