ADAPTATION STRATEGIES OF SHEEP FARMING SYSTEMS TO AVAILABILITY OF DIFFERENT RESOURCES: CASE STUDIES

I. CASASÚS¹, M. CHEVROLLIER², J.L. RIEDEL³, A. VAN DER ZIJPP⁴, A. BERNUÉS¹
¹CITA-Aragón, Zaragoza (Spain) ²Wageningen University (The Netherlands)

OBJECTIVE
To analyze the relationships between technical, social and land use characteristics at the farm level.

Material and Methods
Technical and economical monitoring of representative sheep farms in Sierra de Guara Natural Park (Huesca, Spain)

Questionnaires Typification of farming Systems (Riedel et al., 2007)* Selection of study cases
2000-01 n=53

G1: intensive farms (n=18) G1-A
G1-B
G1-C
G2: extensive farms, low dynamism and continuity (20)
G2-A
G2-B
G2-C
G3: extensive farms, high dynamism and continuity/9
G3-A
G4: agricultural farms (6)
G4-A

Technical and economical information 2005
Information on a 3-mo basis:
- grazing management
- indoor feeding
- reproduction
- lamb sales
- feed costs
Additional questionnaire:
- social and family context
- recent farm dynamics

SWOT analysis
Strengths, Weaknesses, Opportunities, Threats
Factors of
- farm continuity
- environmental sustainability of the farming activity

Results
Flock management calendars (examples)

Intensive farm G1-C

Extensive farm G2-A

Lack of farm succession
Low continuity in the short run

Weaknesses
Low added value (sometimes)

Direct sale to fixed retailer
Low dynamism and self-sufficiency

Intensive reproductive system G1
Dependence on external inputs or climatic hazard

Lack of shepherds G2, G3
Intensification or disappearance

Flock size limited by forage crop area G4
Dependence on external inputs

Workforce involved in non-farming activities G4
Low use of natural pastures

Strengthes
Dynamism
Technical innovation

Off-farm activity
Economic diversification

Cooperative production or trade
Flexibility (sometimes)

High self-esteem
Continuity in the medium run

Use of fences and forage crops G1
Optimal use of available labour force

Extensive reproduction system G2, G3
Low dependence on external inputs

Extensive pasture use G2, G3
Environmental benefits

CONCLUSIONS
Diversity of strategies to ensure medium-term continuity according to specific constraints:
- adaptation of available labour force to farm and family needs (and viceversa)
- combination of different degrees of reproductive intensification and use or farm conserved forage and grazing resources, which determine farm dependence on external inputs.

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icemari@wageningen.ca