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Forms of work organisation in farms

Benchmarks on work organization and key practices in grazing systems

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Abstract: *Facing society's expectations towards more environment friendly agricultural production, farmers modify their systems and practices. These transformations lead to changes in working conditions, organization and in the deep meaning of the profession according to livestock farmers themselves. In ruminant farms, autonomous grazing systems are identified as an interesting alternative towards agro-ecology. The Transae project (Work transformations and transitions to agro-ecology in ruminant farms), is based on a community of practices supporting the transformations of the livestock farmers' work which are not very well documented. The project produced common knowledge and resources for farmers, advisors and trainers. In this context, archetypes were built describing modeled systems linking elements of work organization, livestock farmers' practices, technical and economic data. Three methods, the Work Assessment Method (WAM), the comprehensive practices interviews and technical-economic monitoring, were combined in order to collect information on farms. These archetypes were then produced by modeling the functioning of 24 real farms to account for consistency between structural characteristics, technical practices, work organization and the technical-economic and work objectives of farmers. Useful for counsellors, teachers and herders, they show that working in these systems requires a great deal of observation and adaptability.*

Keywords: *benchmarks, work organization, working hours, practices*

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Introduction

Even if they generate approved economic results and environmental benefits (Garambois, 2012), agro-ecological systems do not develop as much as expected. Orienting a farm towards a more environment friendly system is a real change for the profession (Coquil, 2018) that could prevent such systems from expanding. The aim of the Transaé project was therefore to produce knowledge on different work dimensions of agro-ecological livestock farms and on the tools and resources to support their transition. It is in this context that archetypes were built to characterize the work of 8 autonomous and low-input systems.

Method

The design of the archetypes was based on modelling the functioning of livestock farms. They take into account the consistency between technical practices, work in all its dimensions (Dedieu and Servière, 2012) and economics. Based on the field knowledge of the 24 farms surveyed – particular elements specific to each one excepted - coherent and reproducible organizations were developed (Cochet and Devienne, 2006).
The 24 farms studied were selected to illustrate 8 different types of grazing systems, with 3 farms per system. Each grazing system corresponds to an archetype. They deal with beef, dairy and sheep cattle, in western and southern France.

Three methods were used to collect data from the 24 farms: i) The Work Assessment Method (WAM) (Dedieu *et al.*, 2000) evaluates, on a yearly scale, the labor required for the farm management by distinguishing two categories of work: the routine work corresponding to the daily tasks to be carried out with the animals (milking, feeding, monitoring, etc.); the seasonal work concerning periodic interventions on the surfaces (implantation, harvesting, etc.) or the herd (animal handling, scraping, etc.); ii) the comprehensive interview (Kaufmann, 2007), aimed to characterize farmers' practices in their context and at describing the way to build and acquire those practises. Information gathered provides indications on work patterns; iii) in addition, technical and economic peaces of information were collected in order to characterize the system according to its structural and technical functioning.

Results

Benchmarks for farmers, advisors and teachers

The 8 archetypes produced propose comparative indicators and alternative forms of work organization, useful to advisors, teachers and herders, whether they are already involved in the agro-ecological transition or wish to move closer to it.
There are different types of benchmarks produced in these archetypes: quantitative, factual to describe technical itineraries but also qualitative. They provide information about i) the annual distribution of work, farmers' workloads and indicators of efficiency (working time per animal or per ha) and of farmers' time room of maneuver; ii) the practices implemented by livestock farmers to reach their technical and economic objectives and their work-life balance; iii) the deep meaning of the profession according to livestock farmers themselves.

Characteristics common to the different systems studied

Compared to larger systems, the farms surveyed in the project show relatively high ratios of work time per ha or per LU (Livestock Unit) and per year. For example, labour efficiency for the "sheep grazing" archetype (250 ewes) is 60 hours of routine work per LU, compared to 32 for more conventional systems, with an average of 560 ewes (national benchmark, Chauvat, 2009).
On the one hand, farmers consider that grazing simplifies work *because "now it's the cows that clean paddocks and weed."* Some tasks no longer need to be carried out, such as mowing refusals or even distributing concentrates.
On the other hand, the work evolves towards more observation of the herd, animals' behavior, soil and plants. *"The grassland system is another way of working, with less tractors. It's more observation and less show."* Very often this know-how is acquired through experience, not being always easy to explain and forward and is rarely taught in agricultural educational structures.
Livestock farmers consider grazing systems as closer to nature. These systems add value to the work done and provide farmers with pleasure at work. However, greater harmony with nature requires them *"to do with"* what they have and therefore they must constantly adapt, accept uncertainty and forget the comfort of ready-made recipes. *"Grass is something managed on a day-to-day basis. You have to think about it every day, question yourself."*

Conclusion

The originality of these archetypes deals with the connection of farmers' practices to the technical, economic and structural characteristics of farms and work organization. They combine quantitative "standardized" benchmarks and description of singular practices. Tested with students, farmers, and

players involved in livestock farming, they provide concrete information on what is at stake in work issues in grazing systems.

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