Work organization in livestock farms: experiences from the use of the work assessment method

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Abstract: *For more than 20 years, French animal scientists studying livestock farming systems have been interested in the question of work organization in livestock farms and they developed the Work Assessment method to characterize and assess it. Widely used since then in France, and in other countries too, this method quantifies work related to the management of herds and land areas, and evaluates the farmer's room for maneuver in terms of time to carry out other activities on the farm and to have free time. The purpose of this paper is to show the interest of the Work Assessment method, illustrating with examples from the application of the method in 6 countries in the North and South (France, Belgium, Vietnam, Morocco, Uruguay and Brazil), how it characterizes and assesses work organization; how it identifies the main determinants of organization, produces references in working times by major types of production system and provides analyses for the advice and guidance of livestock farmers. By identifying forms of work organization, the method shows that the farmers' strategies are not only technical and economic but also integrate parameters relative to work (productivity, working together, freeing up time for other activities, including private activities…). Its use in very different contexts in France where it was developed, underlines its ability to adapt to different livestock farming contexts, and to different contexts of use too, such as research and advice.*

Keywords: work organization, liveability, assessment method, livestock farming systems, labor

Introduction

Work is at the heart of questions concerning changes in livestock farming in the South as well as in the North. In Europe, livestock farming is marked by the increasing size of farms, combined with a reduction in the family workforce and the development of work outside the farm (Dedieu and Servière, 2012). In the countries of the South, the structural evolutions are more contrasted, with the maintenance of small family structures which are becoming diversified and the development of large industrial structures (Purseigle and Chouquer, 2013). More than ever, work organization is a central element to be taken into account when reflecting on the future of livestock farms. Work organization is being modified by questions relating to farm profitability, the quality of life of livestock farmers, or their ability to adapt to the new contexts and challenges of livestock farming (facing up to increasing uncertainties, producing more and better, satisfying the expectations of society and consumers…). About twenty years ago a team of French animal scientists working in livestock systems associating

research (INRA) and extension (Institut de l'Élevage), designed a method for diagnosing work organization called "Work Assessment" (WA) (Dedieu *et al.,* 2000). The objective was to supplement global approach tools for livestock farms by dealing with the work dimension. The work assessment method which proceeds by analytical reconstitution, quantifies work related to the management of herds and land areas, and evaluates the farmer's room for maneuver in terms of time to carry out other activities on the farm and to have free time. More than 4000 surveys have been carried out in France, and for several years the method has been implemented in studies in Belgium (Turlot *et al*., 2013; Turlot 2014), in Morocco (Sraïri *et al*., 2013), in Brazil (Hostiou *et al.,* 2015, Santos Filho *et al*., 2012), in Uruguay (Dieguez *et al.,* 2010, Correa *et al.,* 2011) and in Vietnam (Hostiou *et al.,* 2010; Hostiou *et al.,* 2012).

This paper gives examples of the application of this method in these different countries to illustrate the interest of Work Assessment to produce knowledge about the diversity of on-farm situations, and to support and guide livestock farmers in thinking about work organization in their farm.

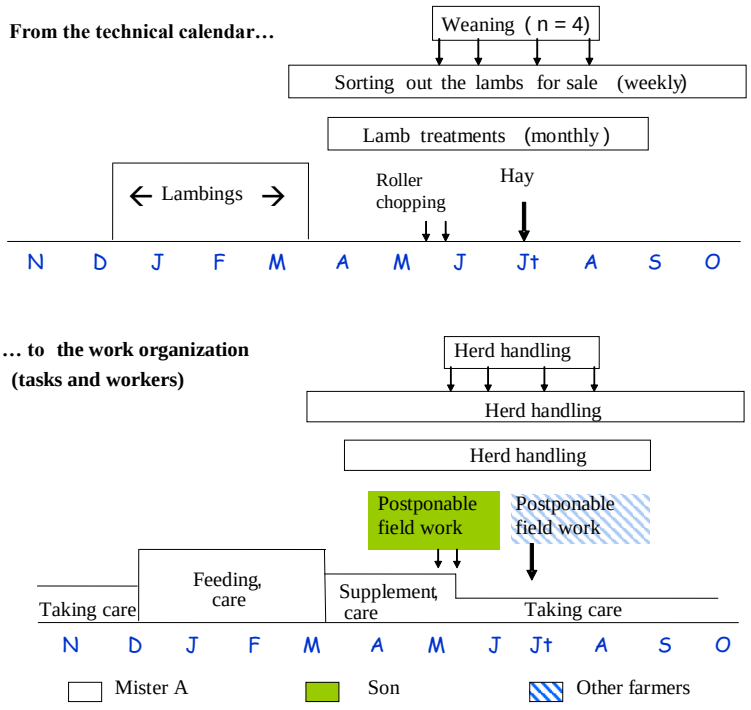
We present the method (concepts, approach, indicators and data produced); we describe the case studies mobilized to illustrate its use then we detail the different parts of the production of knowledge made possible by its application. We discuss its interest and its limitations, then we evoke prospects for the use and evolution of the method.

Presentation of the method

A representation of work organization based on three foundations

The Work Assessment method proposed by livestock researchers (Dedieu et al., 2000) makes explicit the links between herd and land management and work by reconstructing at farming year scale the connection between practices, duration of work rhythms and workers (figure 1). It is based on three foundations (Dedieu and Servière 2012).

Figure 1: From a technical calendar to work organization combining tasks and workers (Madelrieux and Dedieu, 200)



Different workers

All the workers are not equivalent according to their function in the work group, their rhythm of involvement and the way they are remunerated for their work. Two categories of workforce are defined. ***The basic group*** comprises workers for whom agricultural work predominates in time and income, such as a farmer, a farming couple or associates.
The workforce outside the basic group is composed of: volunteers (retired people and people giving a hand), hired workers, mutual help and the intervention of subcontracting companies.

Different tasks

The tasks are not equivalent. They must be distinguished according to their rhythms and their ability of being postponed. Two types of tasks are defined.

The routine work has to be done almost every day and can be neither aggregated nor postponed. The routine work can be daily (care of the animals, milking), or not daily (sales on markets which take place on a fixed day of the week).

The seasonal work includes tasks that are easier to postpone and/or aggregate over a given period. It comprises tasks linked to agricultural activities (herd, crops, forage areas, land upkeep) and non-agricultural activities (commercialization, diversification or services).

Different temporal coherences

The work organization at the scale of the year results from the linking up of periods whose organizational characteristics are different (it is due to either the evolution of the tasks to do, to the manpower or to the combination of activities). These periods are intervals of time with the same daily activities. These periods are not defined a priori but they express specific modalities of interaction between technical imperatives, the workers' rhythms of involvement, the pressure of non-agricultural activities and expectations about work organization.

Methodological choices

Surveys with analytical reconstitution with rejections

Developed with research and development cooperation, the Work Assessment method needs to fit in with the objectives of agricultural advisors and their work rhythms. It must be applicable to diverse and large-scale farmer populations, without requiring long data collection phases. For this, the principle of the survey consists of an analytical reconstruction of work over the farming year during a semi-directive interview lasting for 2 to 3 hours. During the interview, the farmer divides the year into periods during which the daily routine work is of a constant duration. Then, for each period, he specifies the hours worked daily for himself and the other workers. Finally the different types of seasonal work are considered by theme (herd, land areas, marketing…) and quantified in days.

The method rejects the exhaustive consideration of all of the tasks, and does not take into account interstitial work such as equipment maintenance or non-material work such as management, training or work associated with decision-making. By preferring to take into account temporal characteristics of work and characterizing the interaction between types of work, the method rejects the univocal expression of tasks and therefore the quantification of times per task.

Calculation choices

Given the method used and the objective of the diagnosis, routine work is measured in hours and seasonal work in days. The basic group is described by the number of people belonging to it (pBG), without making any assumption about the annual duration of agricultural work of each one of them.

The formula used to calculate the time available (in hours per year) of the base group is as follows:

$$CTA = \Sigma_i \, (Jdi \times Hdi)$$

where i represents a period where routine work has a constant duration; Jdi represents the number of days available during period i for performing non-quantified tasks; Jdi = [(number of days in period i - number of Sundays)*(number of workers in the basic group)]-[number of days spent by the basic group on seasonal work during period i]; Hdi represents the number of hours available per 8-h-day once all routine work has been completed (during period i); Hdi=[8-(number of hours of routine work carried out by the basic group/number of workers of the basic group)].

The conventions for the CTA calculation are as follows:

• Sundays belong to private time, except for the routine work: no room for maneuver on that day,
• the days occupied by seasonal work (SW) are full days: no room for maneuver on those days,
• for the other days, the available hours are assessed on the basis of 8 hours/day/person in the basic group, after deduction of the routine work (RW).

The product indicators

At farm level, the data are analyzed to characterize and quantify the routine work and seasonal work of the different contributors and to specify the proportion of work carried out by labor outside the base group. Efficiency indicators are calculated by ratios (annual durations divided by farm dimensions like livestock units or hectares of utilized agricultural area) as well as flexibility indicators: the Calculated Time Available" (CTA), which corresponds to the time remaining for the base group for non-accounted activities (farming or not) after their share of the routine work load and seasonal work has been carried out.

Use of the method in the different countries

The data from the Work Assessment can be used to understand the organization at farm level, but the interest of the analysis is when it is carried out to compare several groups of farms which differ by the size of the work collective (a livestock farmer working alone or with several associates), by mechanization (with or without a milker pail in Vietnam for example), the technical management of the herd (calvings either grouped or spread out for example), or by the combination of activities (specialization in dairy production or crop-livestock diversification in Brazil or Morocco). The method has been used in various contexts and countries of study, to produce knowledge about work organization in livestock farms. Basing ourselves on study cases concerning family livestock farms in 6 countries: France, Belgium, Morocco, Brazil, Uruguay and Vietnam, we illustrate their various aspects.

The different studies

These studies result primarily from partnerships developed within the framework of research and development projects, or built via networks such as the RMT (Mixed Technological Network) “work in livestock farming”.

For France we mobilized the results of the analysis of 630 Work Assessments carried out in 7 livestock sectors (dairy and suckler cattle, sheep milk and meat, goat, pig and poultry (Cournut and Chauvat, 2012) within the RMT work in livestock farming, as well as the analyses per sector which accompanied this operation The objective was to update the working times in herbivore sector references, and to create references for the monogastric sectors (pigs and poultry). It also involved comparing the results of the 7 sectors, in order to identify i) the importance of farm production orientations, the specific features or points common to the sectors, ii) if there were any particular organizational logics and their links with the sectors and collectives managing the farm. The farms surveyed belonged to livestock networks for advice and future trends, to which 50 pig and poultry farms in the Brittany areas and Loire Regions were added. They covered a wide diversity of forms of livestock farming several regions of France.

For Belgium, the work was carried out by Turlot et al. (2013 and 2014), who explored the work organization of dairy cattle farms in Wallonia. 67 WA were carried out in grassland farms specializing in milk. The project sought to identify sustainable production methods, including the social dimension thanks to the characterization of the work organization. The WA also aimed at producing references in working times on Belgian dairy farms.

For Uruguay we selected two studies. The first concerns work organization in 8 extensive mixed suckler cattle and sheep farms, a traditional form of livestock farming in this country (Dieguez et al., 2010) followed by the Instituto Plan Agropecuario (IPA), a livestock farming extension organization. The second focused on 5 dairy farms in the Salto region representative of the diversity of farmer strategies identified by a global approach on 75 farms (Correa et al., 2011). The objective in both cases was to explore the interest of the work approach enabled by WA to improve understanding of the livestock farmers’ strategies and the functioning of the systems.

For Brazil, the two studies selected were carried out on dairy cattle farms. The first one in the municipality of Unai, focused on 15 farms illustrating three development pathways: specialization, diversification and forage intensification (Hostiou et al., 2015). The second concerned 20 farms in the Parana (Santos Filho et al., 2012). These two studies aimed at identifying the diversity of the organizations and the factors that could explain them.

In Vietnam, 19 family farms spread over 3 districts in the north of the country were surveyed to understand the links between herd size and work organization, in a context of keen encouragement to increase the dairy herd. The farms differed in recourse to paid workforce and mechanization (Hostiou et al., 2010 and 2012).

In Morocco (Sraïri et al. (2013) the objective was i) to understand the place of work in the strategies of 30 dairy farms in the centre-east, which, according to their available land and capital, can diversify into cash crops, and ii) to assess the remuneration for this work.

The adaptations made

The use of the method in the different studies gave rise to a certain number of adaptations.

Concerning the choices of methodology

In two studies, the unit of measurement of the seasonal work (SW) is no longer the day as in the method but the hour (Brazil Unai and Morocco). In both cases, the objective is to have an assessment of the total working time in hours to make an economic calculation of the hourly income. In Uruguay where paid workforce is generalized, the management work was included in the routine work (RW).

The other methodological adaptations relate to the calculation of the CTA *(CTA in English*). In the study by Correa *et al.,* (2011) on Uruguayan dairy farms, the CTA is calculated without taking the SW into account. In the work by Hostiou *et al.,* (2015) on Brazilian dairy farms, all the CTA calculation principles described previously are called into question. The idea is to keep more closely to the reality of the farmers for whom Sunday is a day like any other; to devise (i) some room for maneuver in time calculated on the basis of the length they want to give to their working days (which varies according to the farmers and periods of the year) and (ii) the working time they say they spend by adding together the hours of routine and seasonal work. The CTA calculated therefore involves giving up comparisons between livestock farmers.

Additions

In the Brazilian and Vietnamese studies, the method used is the QuaeWork method (Hostiou and Dedieu, 2012) which includes the Work Assessment method in the characterization of working times and calculation of the indicators of efficiency and CTA, but explicitly takes into account the structuring between the different tasks whether they are routine or seasonal or related to off-farm activities. In addition to the quantification of working times, the method also makes it possible to qualify the work organization using additional indicators, taking account of the sequence of periods and typical days at the scale of the farming year (adjustments of periods, rhythms of standard days, origin of the periods).

Some studies have sought to quantify the RW by main task category (milking, feeding…); others have tried to be specific, quantifying the place of women in the work carried out by the basic group (Brazil, Uruguay and Morocco).

Analysis of work organization

The review of organization

Clarifying the work carried out by the various workers makes it possible to describe what is covered by routine work and seasonal work, and thus to understand how tasks interact, and the structures that work at the scale of the day, the week, the season or the year. This analysis also makes it possible to see how work is allocated within the collective.

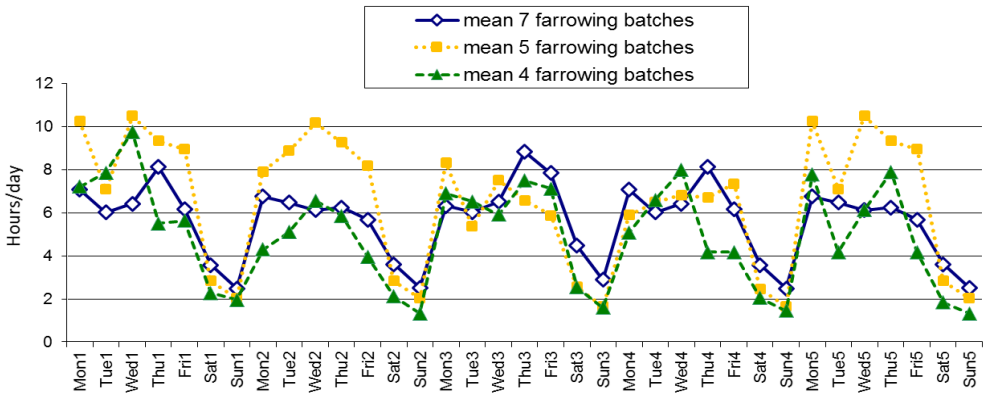
Different tasks

Our case studies which focused on work in dairy farms show for example that milking is the most structuring and dominant feature of routine work (approximately 50% of RW), except in the case of Moroccan farms where it only comes in 4th position (16% of RW) after feeding, grazing and mowing

grass, which often require long journeys (Sraï *et al.,* 2012). But depending on situations, the characterization of times related to milking can include more or less associated tasks, highlighting different practices between farmers in the countries concerned. Whereas in the majority of situations in Europe, the milking time covers herding the animals together, distributing the concentrates, milking and cleaning the equipment, in Brazilian dairy farms (Hostiou *et al.,* 2015), the farmers have to add the preliminary suckling by the calves to start the flow of milk, as well as taking the milk to the refrigerated tank.

The study of work organization in extensive mixed suckler cattle farms in Uruguay, showed the importance of the "reccorrida", (the round-up carried out on horseback twice a day), not only in the technical operation of the system but also in the perception of the work of the « gaucho » farmer (Dieguez *et al.,* 2010). The recorrida forms the major part of the routine work, and covers the monitoring and care of the animals, grassland management (changing the animal enclosure), providing the animals with complementation and even checking and maintaining the fences, a task which is traditionally listed under seasonal work in French livestock farms. The analysis of French pig farms or farms making goat's cheese (Cournut and Chauvat, 2012) highlighted non-daily routine work with a weekly cycle, such as selling cheeses on the markets, or work which depends on group management of the animals, as in the case of pig farms (Figure 2).

Figure 2: Evolution of Routine Work for 100 sows according to the batch farrowing system (Grannec 2010)



Thus, each country-system generates a specific composition of tasks which carries out the routine work associated with a livestock production, with technical characteristics of management (daily green fodder for example) and its material conditions for being carried out (transfer of milk churns to a refrigerated tank; manual or robot milking). This combination generates not only different times but also differentiated patterns of evolution of the daily routine work in terms of time.

The nature of seasonal work depends on productions. Dedicated to fodder surfaces (planting and upkeep of grasslands and fodder crops, harvests) in farms for ruminants, it primarily concerns the removal of the animals and the cleaning of the buildings in poultry farming (Cournut and Chauvat, 2012).

Different workers

The composition of the basic group which depends on dimensioning choices and a combination of farmer activities also informs on the links between farm and family. Two major types of basic group characterize the family farms in our case studies: one person alone or a family association for the most part made up of two people. In Uruguay, we find the case of farms with nobody in the basic group, as the farmer has delegated the management of his farm to a "capataz" (foreman) managing a team of workers. In France, farms managed by only one person are in the majority in the meat sectors but represent less than a third of livestock farms in the dairy sectors.

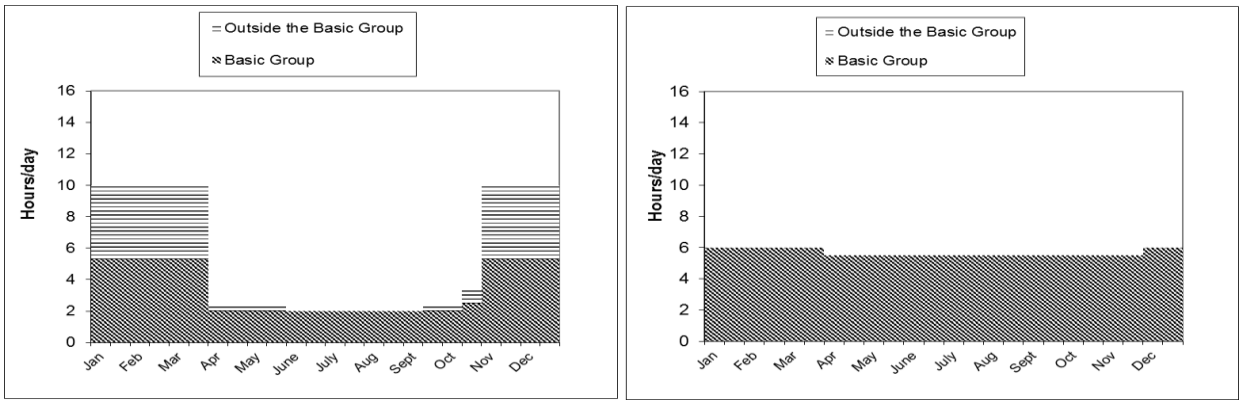
The recourse to external labor is very variable according to countries, production orientations and farmer strategies. Paid labor is current in Uruguay and in Vietnam and concerns all kinds of tasks, whereas the farm structures are very dissimilar (7 vs 1700 ha), (Cournut *et al.,* 2010). In Brazil and Morocco it is used above all for seasonal work on the grasslands and crops. In France and Belgium, it is not very common in dairy cattle farms, but pig farms or farms producing goat's cheese are resorting more widely to an external workforce. Voluntary work is widely used in the family farms studied; it is a workforce reserve that gives the system flexibility at peak times (calvings, collecting the animals together, harvests), when there is competition between activities, or when the economic situation does

not make it possible to remunerate labor. The operation of the system can sometimes depend on when certain voluntary workers can be called upon (schoolchildren in Brazil, Uruguay and Vietnam), or it can be weakened when a large part of the daily work (milking, guarding) is carried out by someone who is retired. Mutual assistance is another form of recourse to labor receiving no payment, found mainly in Vietnam and in France for harvesting fodder, but in decline because of the reduced number of farms, mechanization and the developing delegation to contractors (Anzalone and Purseigle, 2015).

A temporal construction of working times

Analyzing the progress of working times during a farming year highlights links between periodic breaks in the working time and livestock management choices in interaction with the workforce available (Figure 3).

Figure 3: Two profiles of the development of routine work in a suckler cattle farm associated with the distribution of calvings throughout the year and the associated workforce (Cournut et al. 2009)



U-shaped profile

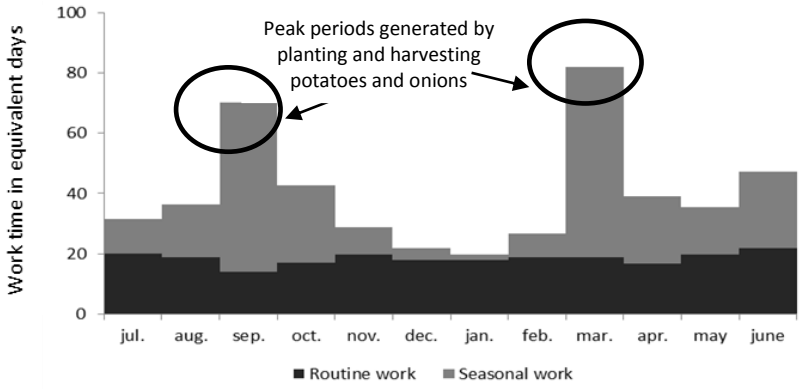
Very marked break in the duration of the routine work carried out in winter by the farmer and his unpaid father. Calvings grouped in autumn / early winter.

Flat profile

No notable modification to the routine work carried out by the farmer on his own. Calvings spread over the year.

This analysis can also highlight peaks in the work associated with the competition between activities as in the case of diversified dairy farms in Morocco (figure 4).

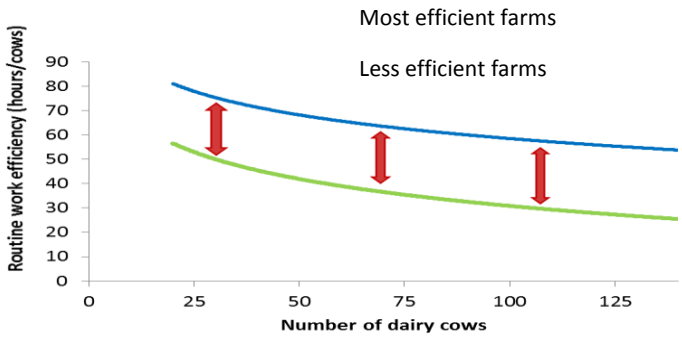
Figure 4: Monthly breakdown of total work time in a Moroccan dairy farm with market gardening (Sraï et al., 2012)



Assessment of work organization

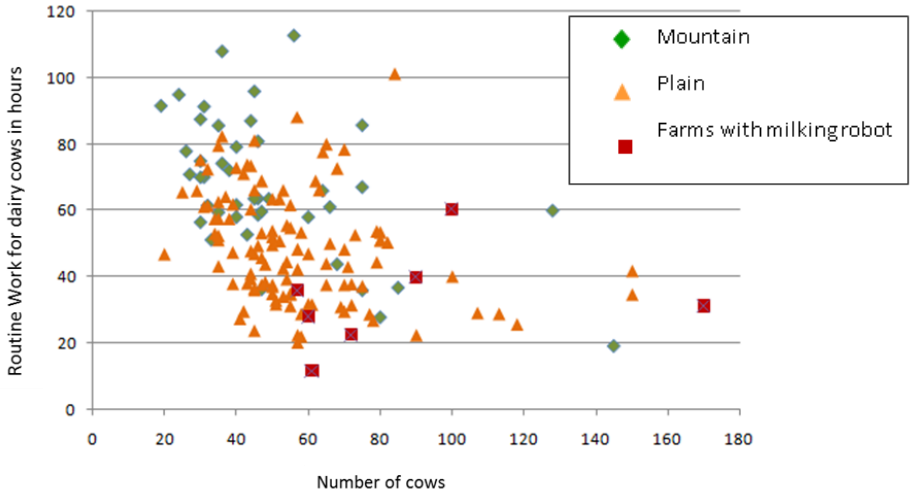
The first dimension of work organization assessed by the WA method concerns ***work efficiency***. The calculation of indicators bringing the working times to productive units (cows, LU, m² of poultry house, ha of crops) or produced units (liters of milk) enables the productivity of the system to be taken into account, and for it to be positioned in relation to others, identifying its progress margins (Figure 5).

Figure 5 Routine work efficiency according to the number of dairy cows (Turlot 2014)



Most studies highlight an economy of scale effect on the routine work (improvement of efficiency with the herd size), not so effective on seasonal work and even non-existent when this is manual and is carried out with mutual assistance as in Brazil or Vietnam. The size effect interacts with management (type of production, distribution of calvings, feeding method, and forage system.) the buildings and equipment, or labor and the way it is mobilized. These work times and therefore the efficiency indicators must be analyzed, taking care to compare comparable things. The figure 6 shows for example the efficiency variation between French mountain or plain dairy systems and the "milking robot" effect (Fagon and Sabatté, 2010).

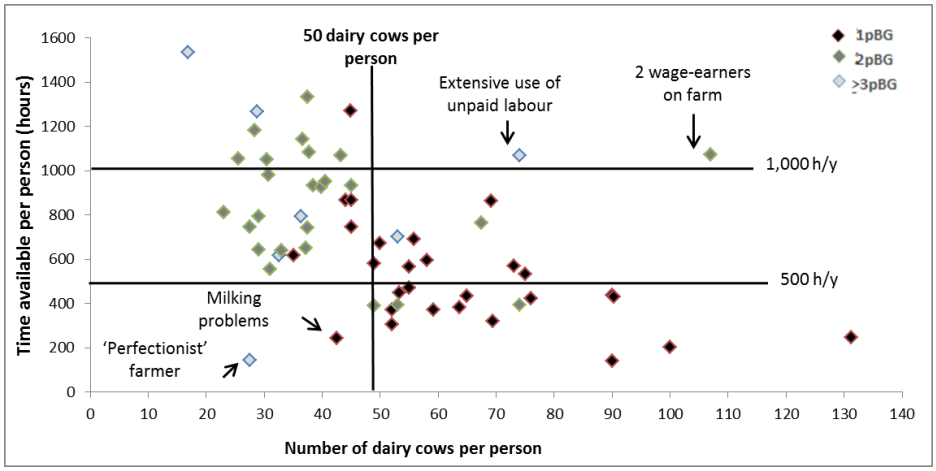
Figure 6 : Routine work efficiency for French dairy farms according to number of dairy cows and type of farms (Fagon and Sabatté, 2010).



Flexibility. Work organization is the second dimension assessed by the WA method. It is measured with the CTA which is traditionally analyzed by bringing it to the number of people in the basic group. This indicator must be analyzed, taking account of the dimension of this basic group and in particular distinguishing the single person base from the others. The values do indeed differ between these two types of farms as shown by the studies on all the study areas, and illustrated in figure 7 in the case of Belgian dairy farms. This figure also shows the influence of recourse to people outside the basic group, and suggests the influence of the relationship farmers have with their work, some of them being "perfectionists" not counting the time they take to do their work. The room for maneuver is of course

assessed by comparing farms with similar configurations, but also in reference to thresholds established empirically in the French studies (Cournut and Chauvat, 2012), where it is considered that TCDs of less than 500 hours per pCB correspond to difficult situations, whereas from 900 or 1000 hours they are regarded as more comfortable.

Figure 7: Time available per person according to the number of dairy cows per person and the composition of the working group (Turlot 2014)



Identification of work organization forms

By analyzing factors exploiting the efficiency and flexibility of the work organization, most studies seek to understand and characterize the forms of work organization. The French analysis, confirmed by those in the other countries, recalls that forms of organization are influenced by sectors and regions. This is explained by the influence of the associated technical model (the work to be done) as well as by the sociocultural model (e.g.: "the milking is not a task to be delegated") and the socio-economic characteristics of the territory (employment, density of farms…). However, regarding work organization as the contextualized expression of a particular combination of choices related to i) the dimensioning and combination of activities, ii) the technical management iii) the equipment and buildings and iv) the configuration of the workforce (family and external) (Madelrieux and Dedieu, 2008; Cournut *et al.,* 2010; Cournut and Chauvat, 2012), we can extract from these works what comes from trends or logics that are common to all the study areas.

A) A first trend concerns the association between ***large herd size, mechanization and recourse to paid labor.*** This is always expressed by high work efficiency, but not systematically by great room for manoeuver in terms of time,

- We find this especially in Brazil, Uruguay and Vietnam, where it is accompanied by a disengagement of the basic group from the work of the farm which can go as far as absenteeism from the farm and thus total delegation as in Uruguay. Generally the livestock farmer keeps certain strategic tasks for himself (marketing, monitoring the animals, milking).
- This configuration is also to be found in the case of farmers more or less closely involved in other activities.
- In France, this configuration corresponds to farmers working alone with large herds, often suckler cows, and therefore not very affected by routine work, who resort to external voluntary and paid labor and obtain high efficiency thanks to mechanization and/or the simplification of practices.

B) The opposite configuration corresponds to the case of ***small farms with a small herd, with no capital, no equipment, and with few resources***, even with no land (Morocco). These farmers aim at ***heavy investment by the family*** ***in the work*** of the farm or even in off-farm activities to meet the needs of the farm, often with great difficulty.

- This configuration is essentially to be found in Morocco, Brazil, Uruguay and Vietnam.

- In France, this configuration characterizes small farms managed by livestock farmers on their own who have considerable recourse to unpaid help from the family for productions that rely on a lot of routine work (dairy sheep, goat's cheese) and with low efficiency and CTA.

Other forms of organization are more specific to basic groups composed of at least two people.

C) One concerns ***average to large farms*** managed by ***enlarged family collectives*** with ***several units***, which prefer the possibility of ***giving work to everybody***, and « ***working together*** » to the productivity of the system. ***The autonomy of the basic group*** is important both for the routine work and for the seasonal work; the efficiency and the TdC are average. Highlighted in France in family structures that are often multigenerational, this form is to be found in Uruguay or Brazil in family farms which have recourse to some paid labor, as is traditional in these countries.

D) Another form concerns ***small to medium-sized farms*** where the system is reasoned above all on ***matching the work to the available workforce***, adjusting it to the ***basic group often composed of a couple*** and possibly taking into account the temporary needs of certain work peaks associated with other units such as crops via delegation to a workforce outside the basic group. This form has been identified in France for specialized dairy cattle systems, but is also to be found in Uruguay, Brazil and Morocco in systems that are sometimes diversified.

Conclusion

So the WA method proves to be a method with a wealth of possibilities, which can be adapted to a variety of livestock farming contexts throughout the world. It makes it possible to characterize and assess work organization, to identify the principal determinants of organization, to produce working time references by major types of production system and to make analyses available to give advice, support and guidance to livestock farmers. The forms of work organization that have been identified show that farmers' strategies are not only technical and economic; they also integrate parameters relating to work (productivity, working together, freeing up time for other activities, including private activities…).
Its use in contexts that are very different from France, where it was developed, underlines its ability to adapt not only to different livestock farming contexts, but also to different uses (research, advice). Nevertheless several conceptual or methodological choices have been discussed. These are first of all conventions for calculating the CTA, with the choice of a reference duration of 8 hours of time available every day, which seems too far away from the reality lived by livestock farmers in some countries. These conventions if they sometimes come up against a rejection of the method, make it possible to obtain the same basis for comparison (Aubron *et al.,* 2016) and highlight great variability in flexibility (from 0 to 1800 hours of CTA per person and per year). What is more, the figures produced do not have much meaning in themselves for farmers because they are not "tangible". They only come within a comparative framework insofar as they enable the different methods of constructing the CTA to be analyzed and the work organization to be chosen at year level. Another debating point relates to the difficulty of knowing from a discussion with only one person the work carried out by others (partner, associate) all the more so when, as with the paid workforce, there is a subordination link, when employees are numerous and the farmer rarely participates in the work.

The Work Assessment method is also used in individual or collective support and guidance to livestock farmers, and within the framework of training courses for different audiences (high-school pupils, farmers in training, engineers, advisors). It is in France that structures and tools created for support or education are the most numerous and varied (Bishoff *et al.,* 2008), but each country has been able to adapt the method to its own needs and specificities, giving rise to new forms like those developed in Uruguay with distance learning of the MOOC type (Dieguez, 2008).

All of the rich scope of this method has not yet been used, in particular because the analysis of seasonal developments in working time and room for maneuver is difficult and laborious to put into practice. Work questions are increasingly important to devise new livestock systems and accompany the transition of existing systems to more sustainable forms; hence there is a strong demand for methods of approaching work organization that take into account recent developments in work, forms of livestock farming and farmer expectations. Adaptations have to be imagined to propose a lighter, modular approach. One pathway for example concerns the development of an application that can be downloaded, enabling livestock farmers to make a rapid assessment of the routine work on their farm.

The question remains as to the taking of non-material work into account such as the management of paid staff in Uruguay or the information management which is developing with precision livestock farming. Other more subjective registers of work organization associated with the perception of work and how it is lived can enrich the approach, which requires thought at multi-disciplinary level (Dufour and Dedieu 2011, Chauvat *et al.,* 2016).

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