

In memory of Muriel Tichit



Other sessions by LFS

- 31 How to address trade-offs and synergies in livestock farming systems? (LFS; P) – *Tuesday afternoon*
- 41 Resilient livestock farming systems in the context of climate and market uncertainties. (LFS; T) – *Wednesday morning*
- 61 Livestock farming systems free communications. (LFS; BU) & LFS Commission Meeting – *Thursday morning*
- 72 Agroecological approaches in livestock farming systems. (LFS; T) – *Thursday afternoon*





Complex realities of work in agriculture

Benoît Dedieu

INRA Sciences for Action and Development , Clermont Fd (France)

IAWA (Int. Asso. on Work in Agriculture) www.workinagriculture.com

EAAP 2019, Gent (Belgium), Livestock Farming Systems

Introduction

- Social aspect of farming : work
- Agriculture = men and women, family and wage-earners, full and part-time
- Decent work (ILO) ; decent rural employment (FAO)

Decent Work (ILO)

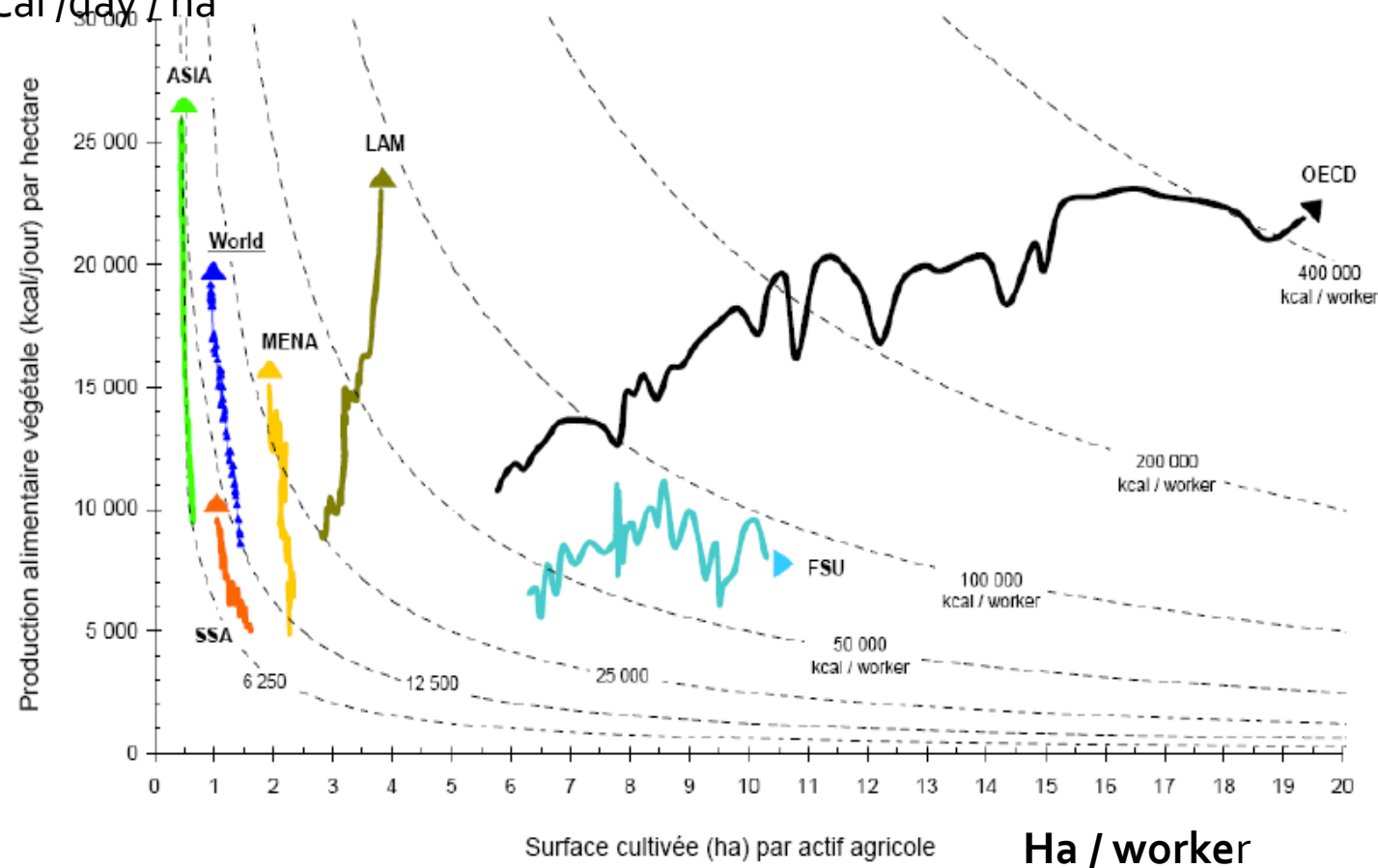
It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

Agriculture (including livestock) is one of the most important industries in the world

- 1.3 billion people work in agriculture (FAO stat. 2008)
- 45 % 1991 ; 26,5 % (2017) of total employment (World Bank 2018)
- The number of farm workers is relatively stable! The rural population growth is 0.2 % per year (2014)
- Contrasted realities between countries and regions (% / total employment : Uganda 71% ; South Asia 49 %; Europe 8 % - World Bank 2014)
- Difficult to estimate the active population on livestock (60 % rural household, more women)

Contrasted labour productivity dynamics

Yield
KgCal / day / ha



Crop yields (kcal/d/ha) /
labour productivity
(ha/worker)
(1961 - 2003). Source : B.
Dorin

Introduction

- Social aspect of farming : work
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Work : what themes are concerned ?

Contrasted realities on work a quick overview

- A WOS bibliometric analysis (2008 – 2018; « work », « labour » & « agriculture » « livestock ») (Malanski et al. 2019 *Agron. Sust. Dev.*).
- Expertise from 1st IAWA Symposium (Maringa 2016) and related special issues (Dedieu et al. Eds 2019 *Cahiers Agricultures* ; Dedieu & Schiavi *Agron. Sust. Dev.* 2019)
- French Ministry study « *Actif Agri : dynamiques de l'emploi et des activités* » (Forget et al. Coord. 2019. La Documentation Française)
- Multidisciplinary : economics, ergonomics, sociology, management, education, farming systems (LFS being a recognized contributor)

« The workers »

« The work within farming systems »

- **The workers**

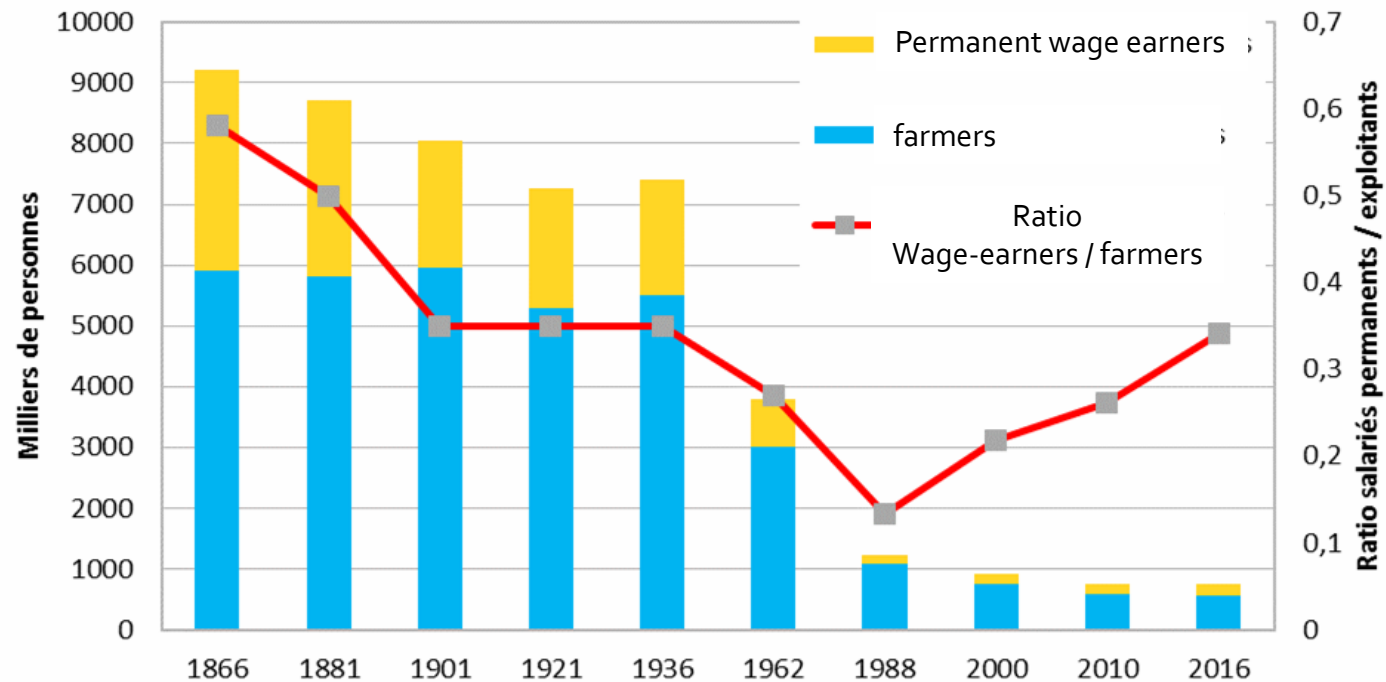
- Employment
- Health
- Skills and professional development

- **Work**

- Work as a descriptor of « professional worlds »
- Work organization connected to the operation of farming systems

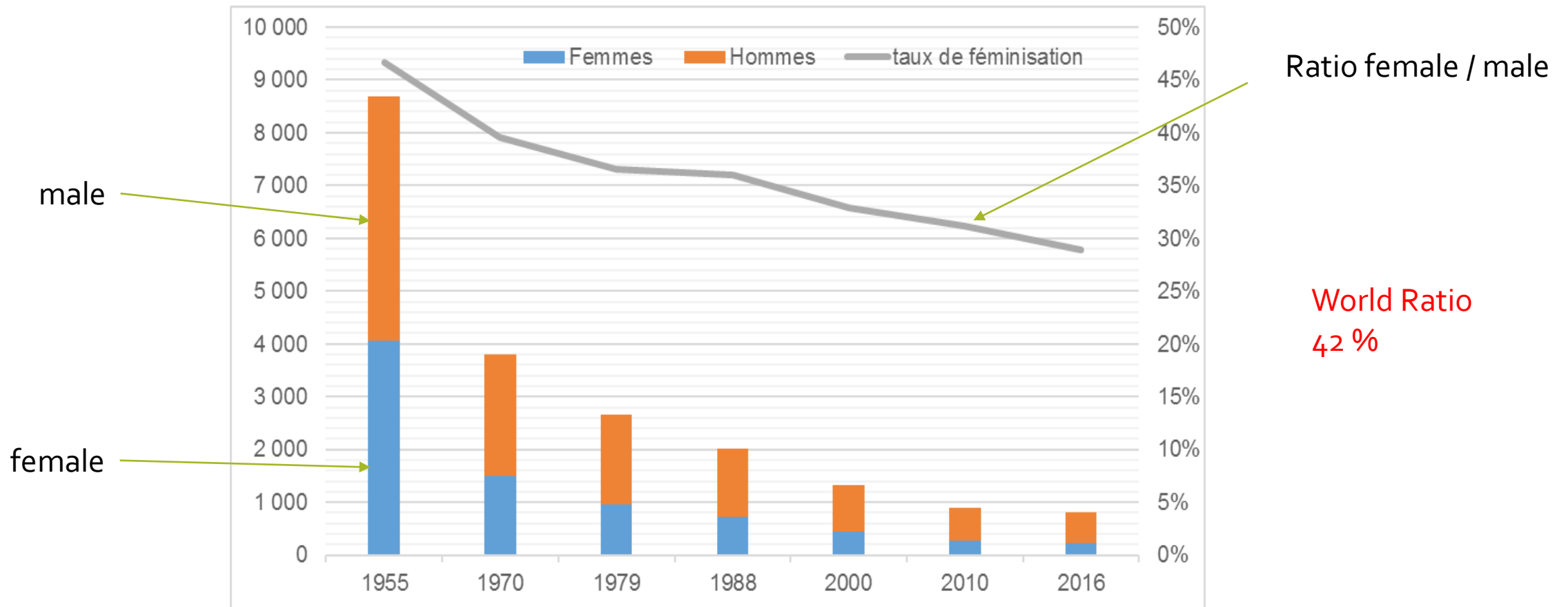
Employment Dynamics : France as an OECD Country

Thousands of people



World ratio 0,9 (2007)

Gender ratio (France)

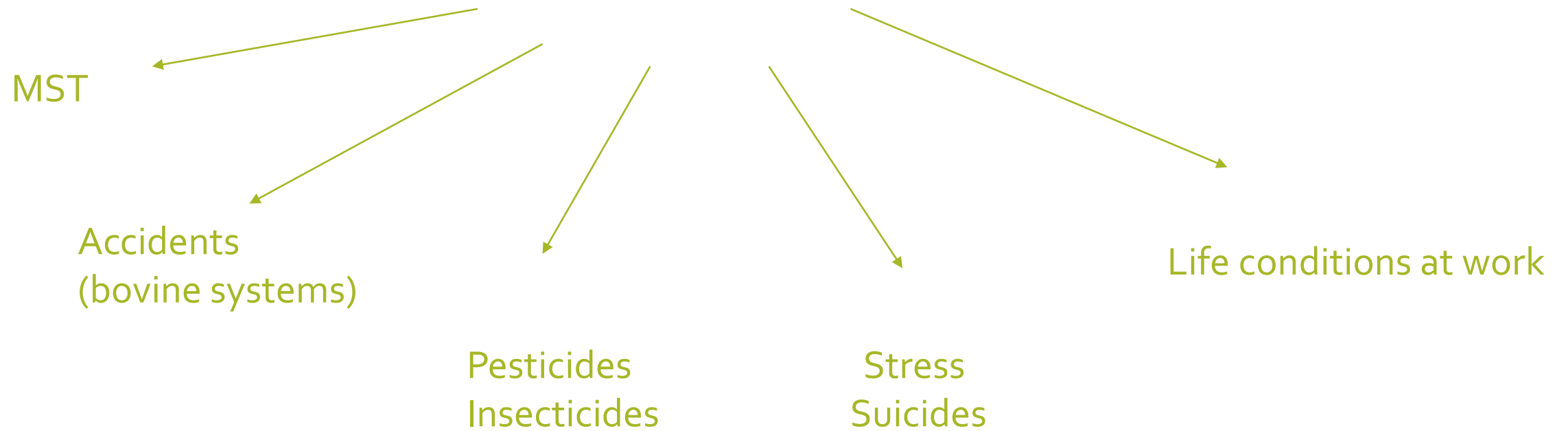


(Forget et al. 2019)

Hot topics

- The development of the « contractors » ($\frac{1}{4}$ of the total work in SW England - Nye 2018)
- Wage earners diversity and professional trajectories (Nettle et al. 2018, Malanski et al. 2019)
- Migration (Preibisch 2010)
- Off-farm (Owuzu et al. 2011)
- Precarity (child, temporary work) (Magnan & Laurent 2019)
- Gender issues (inequalities; contribution to development projects ; empowerment ; professional status) (Doss 2017)
- Early cessation of activities / attractiveness (Mahe et al. 2019)

Health at work



Health

- A abundant littérature on MT S (ex mexicain dairy workers in the US)
- Pesticides exposure of farm workers : « *it seems that there is a positive association of professional exposure to pesticides and adults illness : parkinson ; prostate cancers, lymphoma (hematopoeitiques) cancers* » (Inserm Expertise, 2013). « *there is a lack of data on pesticides exposure*» (ANSES, 2016).

It concerns livestock (disinfection of buildings, insecticides)

- Suicides (industrial countries). In France : 20 -26 % more than the general population

Improving life conditions at work

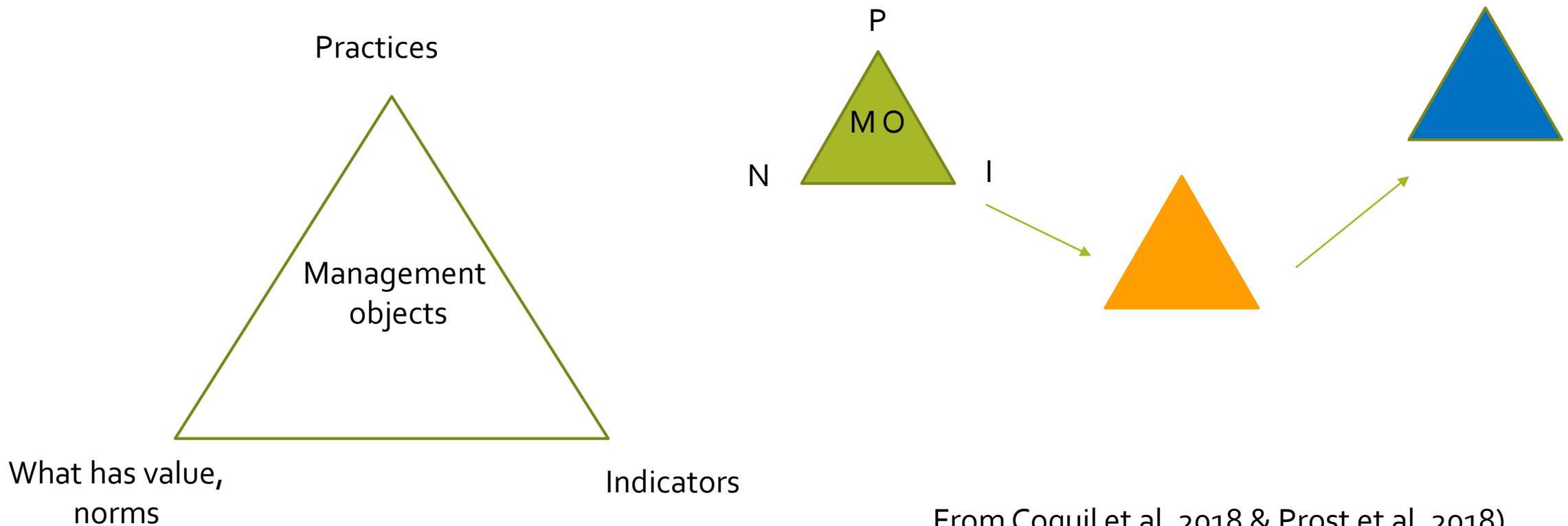
- **ACCEPTABLE - LIVEABLE working conditions** : Working less, having more free time, taking holidays, reducing penibility?
- **Working conditions preserving mental health and promising SELF-FULFILMENT** : Building identity, living together, allowing sensitivity, intelligence to grow = *subjectivity growth*

*Good working conditions are meeting production and time requirements
and promising subjectivity growth*

(Fiorelli et al. 2010)

Skills and professional development

- Radical changes requires more than new knowledge, a step by step redefinition of work



From Coquil et al. 2018 & Prost et al. 2018)

« The workers »

« The work within farming systems »

- **The workers**

- Employment
- Health
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- **Work**

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Diversity and dynamics of professional worlds

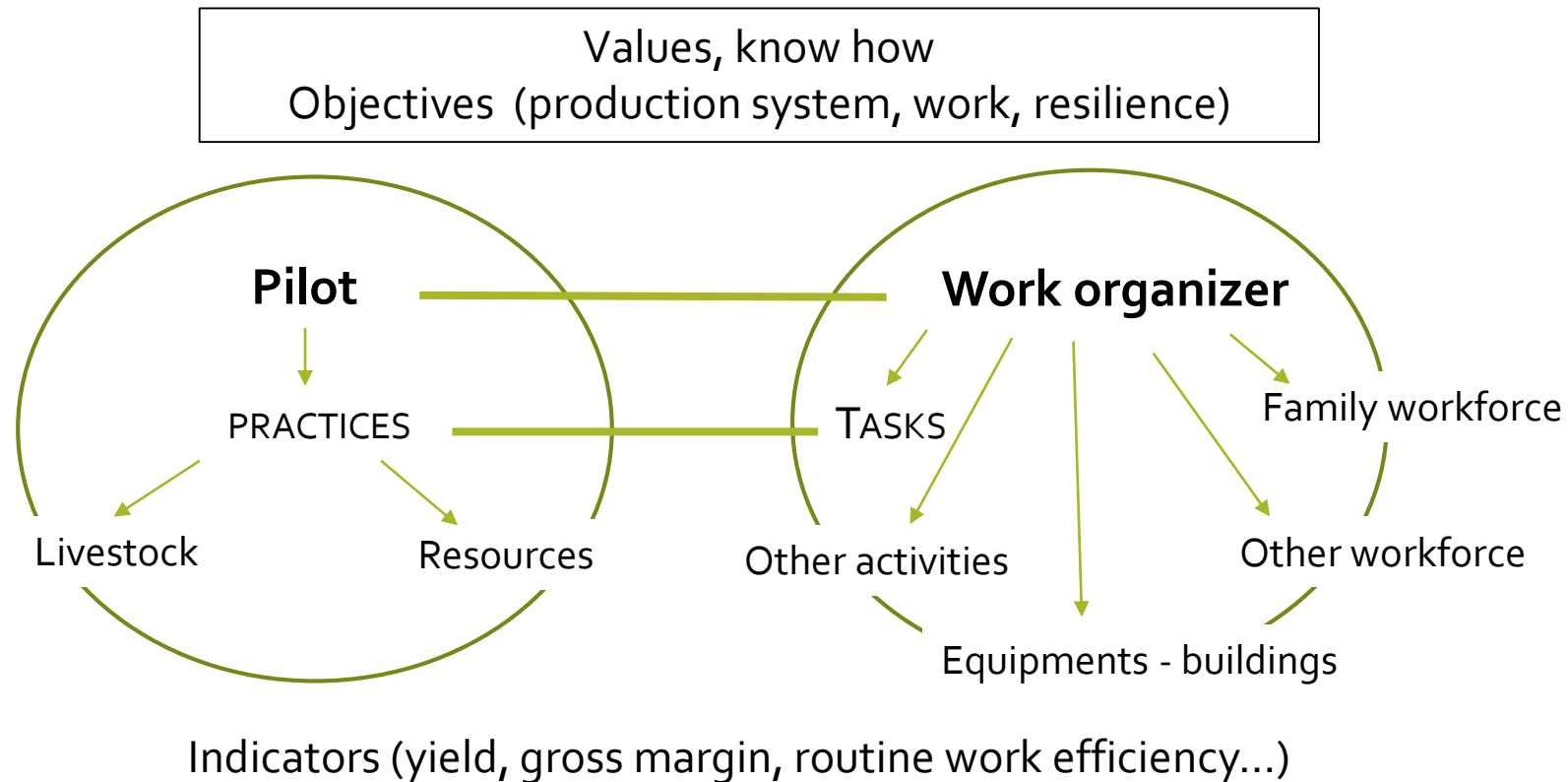
- Land – workforce (composition ; organization) – capital
- « Firm agriculture » ; « familiar agriculture » ; « subsistence agriculture »

agribusiness models on a very large scale,
- combining employees, taylorism, mechanization and externalization
- delegating the planning of rotations and technical operations to agricultural work enterprises and agronomic engineers (also in livestock)

Family – based with paid workers and/or mutual aid, partly turned towards local food circuits

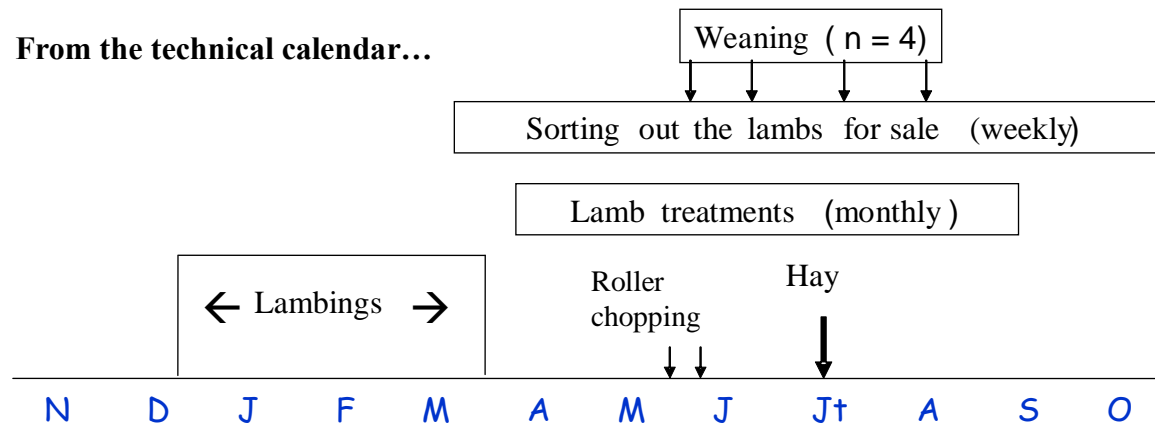
Subsistence community farming models with sales of surplus

Livestock farming system operation is linked to work organization

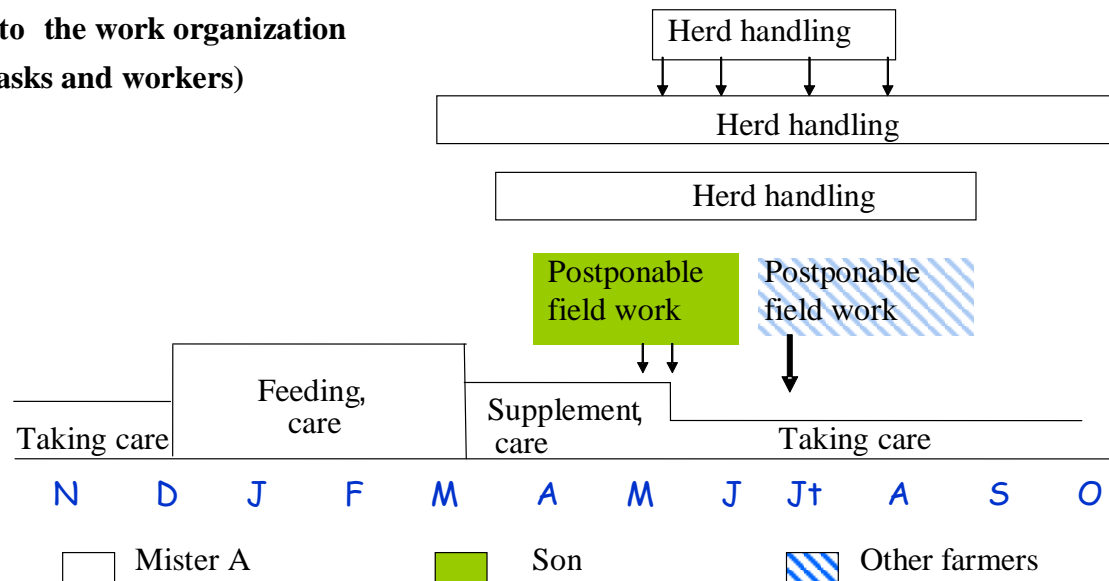


(Dedieu et Servièrè 2012, Cournut et al. 2018)

From a technical calendar to work organisation



**... to the work organization
(tasks and workers)**



Some tools to characterise and evaluate...

- **Work Assessment method** (Dedieu et Servièrè 2000, Cournut et al. 2018)

Seasonal and annual approach

Duration, with tasks and workers typology

Efficiency, room for manoeuvre

- **Quaework** (Hostiou et Dedieu 2010)

id + considerations to the changes of daily forms of organization

.. And test the adaptation to i) LFS management changes
ii) Workforce changes

Three forms of organization in livestock farms

(5 countries)

- **The simplifiers.** Simplified management of the herd and/or land areas. Recourse to mutual aid for seasonal work on the land. Autonomy for animal care
- **The entrepreneurs** Sophisticated technical managements are demanding in routine work and/or seasonal work. With mechanization and permanent employee.
- **Autonomous in work** with no resort to other forms of workforce

The drivers of changes in work

- market pressures / opportunities (local, commodities)
- public policies (structural, environment, food)
- Technologies, precision, captors : a new horizon to the look out of the animals
- Need for FS improvement (efficiency ; labour productivity by enlargement, by added value)

- Local labour market (household pluriactivity ; diversity of wage-earners)
- Sociological changes : the way you work (time duration, holidays, gender, subjective job satisfaction)
- Sociological changes : the way you farm (from family to cooperation or entrepreneurship with wage-earners and / or contractors)
- Societal changes : the way the profession is recognized
- Workers' health

Toward an inclusive approach of work when thinking of the future of farming

- **Industrialisation** (commodities, efficiency, labour productivity)
 - employees, contractors, machines and robots
 - Standardisation of procedures, foreseeable peaks of work
 - Health and chemicals ?
 - New skills (workforce management ; precision data - for the farmers ; for wage- earners depending on their level of responsibilities)
- **Agroecologisation** (nature based, autonomy, short chain)
 - Family based; mutual help or temporary employees
 - Direct sales to consumers included in the working day or week
 - Skills on adaptative capacities, look out of nature
 - Manual work, penibility, long hours

(From HLPE, 2017)

Conclusion

- Thinking the work in agriculture / in livestock helps to take into account the people, farmers and wage-earners, the human dimension of LFS
- Work is included in the farm models we are building for the future
- Work needs to be *decent* for all (ILO and FAO) (productive, paid, secure, healthy, and giving self-fulfilment)
- A broader understanding of the relations between the various dimensions of work

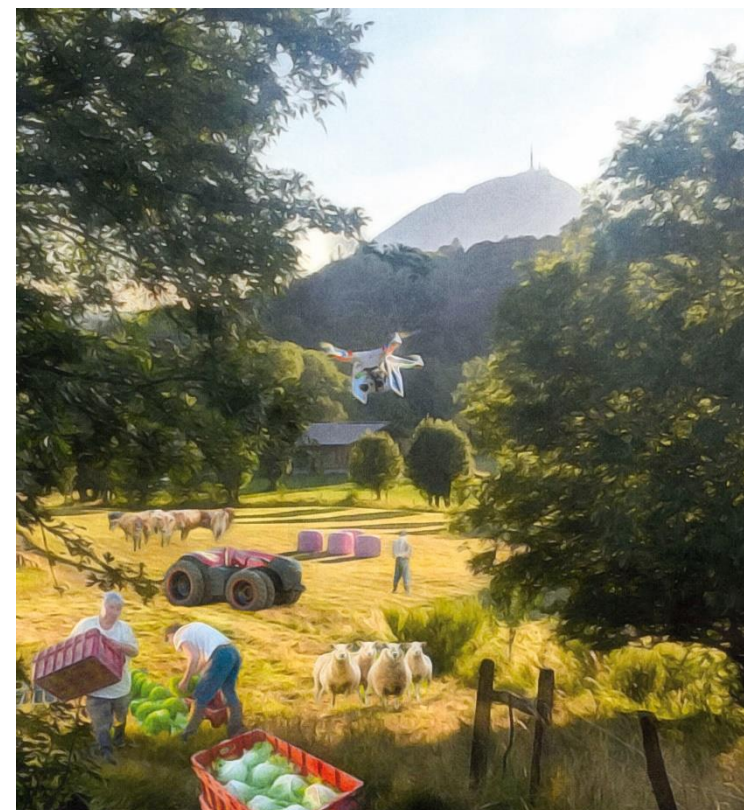


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www.workinagriculture.com

ISWAClermont2020@inra.fr





Thank you

benoit.dedieu@inra.fr

