Session 04b Theatre 1

Changes in work in livestock farms: from general trends to the implications on LFS approaches Dedieu, B.¹, Cournut, S.², Fiorelli, C.¹, Hostiou, N.¹ and Madelrieux, S.³, ¹INRA, SAD, Metafort Theix, 63122 Saint Genes Champanelle, France, ²Vetagro Sup, Metafort Marmilhat, 63370 Lempdes, France, ³Irstea, DTM, BP 76, 38402 Saint Martin D'hères, France; dedieu@clermont.inra.fr

Changes in work in livestock farms are firstly demographic, with the high decrease of farms' number and agricultural workers' most of the European countries have faced, and the related huge labor productivity gains. Whereas the couple form of farming is still dominant, associative forms (in France for example) and entrepreneurial units with wage earners are now on the scope and rapidly increasing. Changes are also technical in relation with the different long term pathways farms are engaged in ('get big, special or diversified'), and with the European regulations pressures. Changes are at least social, because farmers aim to have better-working conditions, as the other socio-professional categories and express a desire to separate their private and working lives. In France, a research, education and extension networking has been developed in order to include work prospects into scenarios for the future of livestock farming and to initiate a common understanding about the interactions between farmers as work organizer, the whole workforce and animal production management. Several work models, which underlie research and operational tools for 'work advice in livestock farms', coexist in approaches to analyze how livestock farming systems (LFS) operate. We describe three models: 'resource work', 'organized work', 'work and subjectivity' and the operational indicators they built. We specify the way in which LFS research has mobilized social science disciplines (ergonomy, economics, sociology) to construct them. We illustrate how they complement each other to examine the changes in livestock farming systems, the ways in which the farming activity is carried out and the different levers farmers can use to improve their situations, in different countries including Southern. Consequences on extensionists skills and mode of actions will be presented.

Session 04b Theatre 2

Implications of two dynamics of changes (specialization and diversification) on work organization Hostiou, N.<sup>1</sup>, Cialdella, N.<sup>2,3</sup>, Le Gal, P.Y.<sup>3</sup>, Vazquez, V.<sup>3,4</sup> and Muller, A.G.<sup>2</sup>, <sup>1</sup>Umr Métafort, INRA, 63122 Saint Genès Champanelle, France, <sup>2</sup>Embrapa Cerrados, BR 020 Km 18, CEP 73310-970 Planaltina, Brazil, <sup>3</sup>Cirad, UMR Innovation, 73 Avenue Jean-François Breton, 34398 Montpellier, France, <sup>4</sup>Montpellier SupAgro, 2, place Pierre Viala 34060 Montpellier Cedex 2, 34060 Montpellier Cedex 2, France; nhostiou@clermont.inra.fr

Development's opportunities for family farms often present the intensification of a specialized production and diversification of livestock and crop systems as two opposed pathways to enhance agricultural viability. In the Brazilian Cerrados, family agriculture is an exemplar case of these two dynamics. On the one hand, a structured and growing milk chain supply offers a real opportunity for smallholder farms. More and more farms, from agrarian reform settlements, specialize and intensify in dairy production. On the other hand, opportunities for diversification exist too, thanks to the support policy of family farms of the Brazilian government. We studied work organization of 15 dairy farmers, in an agrarian reform settlement in the municipality of Unaí, using a work method assessment developed in France (QuaeWork). We supposed that the dynamics of changes tending to specialization or diversification have different implications on work organization during the year. Our results show that the dynamics of development have direct implications on the work organization, as work durations, work distribution over the year and the calculated time available for the farmers (room for manoeuvre in time). For a given family, depending on workforce availability and equipment, one or another dynamic of change could be possible. Work organization induces possible evolution of family farms. These results could help research and development organizations to support family farms dynamics.