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Expertise of the scientific community in the Languedoc-Roussillon region (France)

Family farming

Number 19

Supporting mixed crop-livestock family farms in their change dynamics

Family farms often combine mixed crops and livestock for income security and autonomy. These complex production systems require specific tools to support their change dynamics. To this end and in collaboration with partners, several UMR Innovation researchers designed and tested an individual support approach in various settings: predominantly dairy farms in Brazil, Morocco and Peru; diversified farms with suckling cows in southwestern France; and diversified farms with livestock production units of different sizes in Burkina Faso and Madagascar.

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This approach is based on a spreadsheet simulation tool (Crop Livestock Farm Simulator, CLIFS) which can be used in combination with other tools (e.g. Olympe in Madagascar). CLIFS integrates crop and livestock farm components and their interactions while retaining a general structure, calculation procedures and output variables that can be readily understood by farmers. Farm change scenarios are designed with farmers and assessed on the basis of several resource supply and demand balances (food products, fodder, organic manure) and related economic results.

The support approach is structured in three phases based on the design and simulation of an initial scenario representing the current farm situation, a 'project' scenario based on the farmer's future intentions, and alternative scenarios that open a range of possibilities. The issues addressed concern the choice and sizing of livestock production units to increase milk production, the choice of fodder system with a view to autonomy, the introduction of innovations such as relay crops or partial use of cover crop biomass, and the analysis of farm sensitivity to climate and economic shocks. This approach, which is well rated by farmers since it specifically addresses their situations and questions, should now be transferred to advisory providers to assess its relevance in a professional environment.

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▲ *Working session with a farmer in the Lake Alaotra region, Madagascar.*

Supporting pluriactive farmers in Languedoc-Roussillon region

The geographical and economic, and to some extent historical and cultural, features of Languedoc-Roussillon region (France) are amenable to pluriactivities. This includes seasonal tourism activities in coastal and inland areas, the wine growing crisis, historically pluriactive settings in the Mediterranean highlands and high-growth periurban areas. Pluriactivity is, however, nowadays as much conducive to the creation and development of activities as it is representative of precarious employment and work. It is a widespread social and technical model that is often misunderstood.

The *Insertion territoriale des systèmes d'activités des ménages agricoles* (INTERSAMA) project, which combined 10 researchers (UMR Innovation, TETIS and METAFORT*) and six regional development structures, aimed to analyse the functioning and dynamics of farming household activity systems in Languedoc-Roussillon, while also studying their territorial integration and support mechanisms devoted to them. This partnership research involved activities and training in which researchers and stakeholders were joint instigators in the process and outcomes. Everyone participated in defining the issues, drawing up responses and assessing the process, with the threefold aim of generating knowledge, supporting social transformation and enhancing individual and collective skills and expertise.

The INTERSAMA collective contributed to various theoretical frameworks, especially on the activity system concept, the support relationship, as well as the analysis of work conditions and organization. Pluriactivity projects give rise to fundamental support issues due to their precarious nature, incompatibility with the standard enterprise model and the Fordist labour system. In addition to its scientific output, INTERSAMA designed and tested three complementary tools to support the creation of activities in rural areas (accessible online), while contributing to the debate and formulation of a regional rural pluriactivity support policy.

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For further information: www.intersama.fr

* UMR Transformations in Activities, Areas and Forms of Organisation in Rural Territories (AgroParisTech/INRA/IRSTEA/VetAgroSup)