

les dossiers d'**AGROPOLIS** INTERNATIONAL

Expertise of the scientific community



Societies and sustainable development

Contribution of the social sciences

Number 7

- Impact assessment on the implementation of flood risk prevention regulations
- Developing outskirt cities. Territories and territorialities in large North African cities
- Inondhis: regional analysis of historical floods in Languedoc-Roussillon (France)
- A small-scale local factory in a sustainable urban development framework. From planned construction to the implementation of quality-assured projects, a North-South comparison of issues involved in four large cities
- Participation in the international TSUNARISQUE project
- Urban and rural territories in the Constantine region: changes and governance.

GESTER is active in France, the Mediterranean region, North Africa, the Middle East, sub-Saharan Africa, in coastal regions, on islands and island states, in Southeast Asia and the Lesser Antilles.

Agricultural and agrifood innovations—individual and collective action processes

The joint research unit (UMR) Innovation and Development in the Agriculture and the Agrifood Sector (Montpellier SupAgro, INRA, CIRAD) conducts research in France and abroad on innovation processes, which are considered as individual and collective action processes on technical and organizational scales. It focuses on all processes, from stakeholders' innovation objectives to development impacts induced by these innovations. The research team has expertise in biotechnical (agronomy) and social sciences (economy, sociology, anthropology, geography, management science and law). It is jointly involved in a multidisciplinary research programme to investigate innovations through studies of processes actually under way.

These processes are analysed with respect to the conditions of stakeholders' involvement, focuses of action and their patterns. The researchers participate in changing the target of these actions and the configuration of stakeholders involved in the process.

This UMR focuses on the discrepancy between individual decisions and collective innovations, which involves investigating decision-making, coordination, collective action, activity system, subsector, territorial and knowledge concepts. The unit's research project is at the interface of these four dimensions, i.e. individual, collective, horizontal (activity systems, territory construction) and vertical (product quality and market construction).

The UMR consists of three teams:

- Technical and organizational changes in agricultural production systems: analysis of change dynamics on farms ...

Changes in practices on mixed cropping-livestock herding farms in African savanna regions and farm advisory support systems



A Kapsiki farming family in the village of Kila, in the Mandara Mountain region, northern Cameroon

Farming practices have changed on mixed cropping-livestock herding farms in sub-Saharan Africa due to the increase in the rural population and thus to the reduced access to productive natural resources. Moreover, there is little collective organization of these family farms to enable them to fulfil market expectations and cope with the commercial practices of stakeholders upstream and downstream of the production chain. Head farmers should thus adapt quickly by changing their production systems and tailoring their practices, whereas standard technical innovation design and transfer approaches in rural areas or in relation to commodity chains have shown their limitations.

In addition, farmers should be supported with respect to managing their farms and to their decision making in order to make optimum use of the resources at hand.

Research projects are carried out in collaboration with these farmers and their partners with the aim of developing tools and methods to provide technical, economic and organizational support for family farms and meeting the expectations of these operators. The scientific target of this research is to highlight factors that determine changes in practices and the genericity of the tool and method design process. This involves three research strategies:

- detecting and gaining insight into changes in practices by including endogenous innovation processes
- designing management tools that can be used by farmers to boost their operational and decision-making capacities for their farms
- developing a farming advisory system based on research geared towards finding alternatives to conventional extension schemes ('salesman extension agent'/farmer) by developing training and group counselling strategies, promoting agricultural socioprofessional networking, with the emergence of a coordinator/trainer function held by a farmer in basic groups.

Contacts: Patrick Dugué, patrick.dugue@cirad.fr
Guy Faure, guy.faure@cirad.fr
Michel Havard, michel.havard@cirad.fr