

les dossiers d'**AGROPOLIS** INTERNATIONAL

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



Family farming

Supporting territorial development stakeholders

The joint research unit *Spatial Information and Analysis for Territories and Ecosystems* (UMR TETIS, AgroParisTech/CIRAD/IRSTEA) produces methods and knowledge to enhance spatial information management in order to gain insight into environment-society interaction dynamics and support stakeholders in sustainable land management.

The development and transmission of useful, usable and used spatial information underlies all of the unit's research. It is structured in four teams spanning the entire 'spatial information chain': acquisition of spatial (especially satellite) data and processing; analysis and spatiotemporal modelling of agroenvironmental and territorial systems; information system management; and conditions for the use of spatial information by territorial stakeholders.

This latter team, in particular, conducts research focused on farming: analysis of the effects of the development of agrobusinesses or mining companies on territories and family farms; and the use of spatial information to support small-scale farmers.

The unit's activities—besides producing knowledge and methods on the spatial information chain—are also focused on training (initial training, research-based training and ongoing training) and on transfer, especially through public policy support, partnerships in developing countries and expertise or partnerships with private operators.

UMR TETIS operates in various thematic areas—agriculture, environment, territories, resources, health and natural risks—associated with territorial development and sustainable agroenvironmental management. It works closely with territorial managers and stakeholders and develops partnerships with other thematic teams.

A crosscutting and unifying component of the unit's scientific project focuses on 'observatories'—a unique type of information system—which are taken to be 'sociotechnical information and communication mechanisms'. These downstream mechanisms mobilize and integrate complementary functions (data acquisition and production; analysis and synthesis; management, editing and dissemination), thus enabling unit members to span the spatial information chain and work on common ground.

The unit is also involved, through the EQUIPEX GEOSUD project*, in a strategy geared towards the sharing of satellite information between the scientific community and territorial and public policy management stakeholders. ■

* <http://geosud.teledetection.fr/projet-equipex-geosud.html>

Capacity of family farmers to manage the impacts of globalization in the eastern Amazon region

In the eastern Amazon region, in Baixo Tocantins (State of Pará), and in cooperation with the Federal University of Pará (UFPA) and IRD, UMR TETIS is analysing the impact of globalization (models, capital, infrastructures, information, etc.) on local societies, and especially on small-scale farming in a so-called peripheral area. The PERIMARGE project (ANR project 'Peripheral and marginal spaces: interpreting relationships to centres in a global world'), coordinated by IRD, conducts a comparative analysis of data from six countries in Latin America and Africa. The aim is to understand the contemporary sociospatial dynamics, particularly those that affect small-scale farming patterns in areas 'on the margins of development'. The analysed territory—the Mocajuba municipality—is marginal because it is relatively isolated, but also due to the construction of an upstream dam (which has made small-scale fishing almost impossible) and pest and disease problems that have almost annihilated pepper cash crops in this region.

A model was developed to characterize the impacts of globalization influences on the conditions and nature of production systems, on the distribution of value (income) and on governance. This model links the multiplication of centres and the diversification of material and immaterial flows. A trajectory analysis will be conducted to assess the capacities of small-scale farmers and other territorial stakeholders to manage these influences, thus reflecting a differentiated capacity for the activation of current resources (including cocoa and natural rubber, whose qualities are acknowledged) and for organization. A certain degree of autonomy regarding centres is foreseen.

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▲ The introduction of oil palm on family farms in Amazonia—an example of agricultural globalization.

This work is part of a project that the research unit is developing with UFPA, which aims to question the current territorial development model and assess possible future patterns at different organizational levels in collaboration with rural development stakeholders.

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