les dossiers
d'AGROPOLIS
INTERNATIONAL
Expertise of the scientific community

Societies and sustainable development

Contribution of the social sciences

Number 7

Forquilha Valley in Ceara state, Brazil
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Environment and natural resource management

On a global scale, pressure on natural renewable resources and environmental damage are reaching critical levels, suggesting that economic development based on current types of consumption and development patterned on the Western model is not sustainable. Emerging countries (Brazil, India, China) are making their entrance on the economic scene, while OECD (Organisation for Economic Co-operation and Development) countries are continuing to implement a growth model that is not conducive to sustainability (and alternatives are still in the preliminary development stage). This is triggering market tensions, promoting heavy natural resource use and causing major environmental damage, with global warming being the most symbolic evidence of this trend.

Research teams focus especially on issues arising with respect to long-term management of renewable resources and the environment. Studies are also now being conducted on the socioeconomic and environmental impacts of renewable resource management and of mining resource development.

It is essential to deal with issues concerning the complexity and diversity of interactions between societies, their resources and environment in order to be able to manage natural resources and the environment in a sustainable development framework. The scientific accent should be jointly placed on gaining insight into resource allocation strategies and decision-making processes so as to determine the dynamics involved on the basis of socioeconomic, environmental and political factors.

The diverse range of research and expertise situations covered by the concerned teams enables the development, under specific conditions, of international comparisons of global studies and assessments, thus enhancing the overall understanding of interactions on local to global levels. Research teams are fully prepared to contribute to international discussions on sustainable management of renewable natural resources in appropriation conditions ranging from private property, global public goods and common property resources.

Here a broad range of renewable resources are assessed, especially water, biodiversity, forest and pasture resources. A specific case concerning livestock production systems, especially pastoral systems in dry areas, is also covered as it illustrates challenges associated with controlling sanitary risks and emerging diseases. Due to current issues associated with the development of competitive uses or renewable resource appropriation, negotiation tools and role-playing games are required for the analysis, in addition to comprehensive approaches to gain insight into social changes and stakeholder strategies.

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