



**Illustration 1:** Coordination meeting in Cologne.

## Background

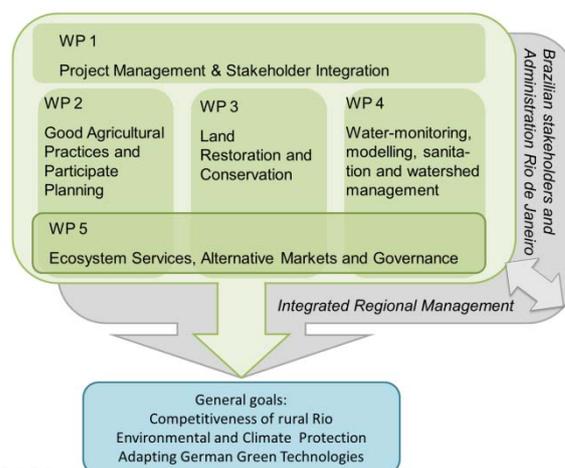
INTECRAL project is a jointly developed scientific cooperation supported by the German Federal Ministry of Education and Research (BMBF) and the State Secretariat of Agriculture and Livestock Project Rio Rural (SEAPEC-PRR). With the aim to support small-scale farmers developing measures embedding a landscape/watershed framework to prevent and mitigate environmental risks and to protect and enhance

forest ecosystems. The eco-technologies and services address:

- Monitoring for decision support in integrated planning and risk management.
- Governance issues of green markets for land use, land & biodiversity conservation, and water conservation.
- Technological adaptation in the agricultural, restoration and sanitation sectors.

## Summary

The INTECRAL project is based on a number of tasks for research and development, which were defined by the coordinating team of the Rio Rural Project (PRR), a large-scale project to advance sustainable development in the Brazilian state of Rio de Janeiro. The project PRR is carried out by a consortium, directed by the State Secretariat of Agriculture and Livestock (SEAPEC) and supported by the World Bank. INTECRAL aims at driving research forward, at integrating technological knowledge into local agricultural production



**Illustration 2:** INTECRAL structure.

identified “bottlenecks”, which hinder the regional sustainable rural development. The specifically needed methods and technologies often are not available in Brazil, such as modern technologies for the sugarcane harvest for small-scale

project INTECRAL was jointly developed by the Brazilian Rio Rural coordinating team with a proven research consortium of the Cologne University of Applied Sciences, the University of Leipzig and the Friedrich-Schiller-University of Jena. The action plan was elaborated in

collaboration with additional nine German institutions and enterprises. The PRR provided 2.98 billion Euro funds for specified and common actions.

The first complex includes the analysis, planning and monitoring of the PRR activities at different temporal, spatial and administrative scales. The participative planning processes, from the analysis to the definition of development goals and strategies at the micro-

environmental system components and the inclusion of foresighted scenarios (environmental

the PRR to improve ecological quality and economic performance of rural RJ. In some cases, the local institutions are confronted with a limited availability of expertise and adequate adapted processes and technologies (e.g. restoration of degraded areas, community sanitation, and agricultural techniques). The third big complex of bottlenecks comprises the provision of alternative income sources for farmers, including their access to green markets.

### Research Area

The research activities are concentrated in municipalities of the Serrana Region and Northwest region of Rio de Janeiro state.

### Objectives

The project aims to provide integrated solutions of services and technologies to allow an environmentally sound and economically sustained development of the watersheds in rural Rio de Janeiro within the environment of emerging green markets.

### Main goals

- To increase the competitiveness of rural Rio: through sustainable management of natural resources on the farm and landscape levels and through benefiting specifically from green market opportunities.
- To enhance environmental and climate protection: Through the introduction of environmental friendly technologies.
- To adapt German green technologies: Through the design, equipment, data transfer & integration of systems that will be adapted to the needs of rural Brazilian markets.

### Contact

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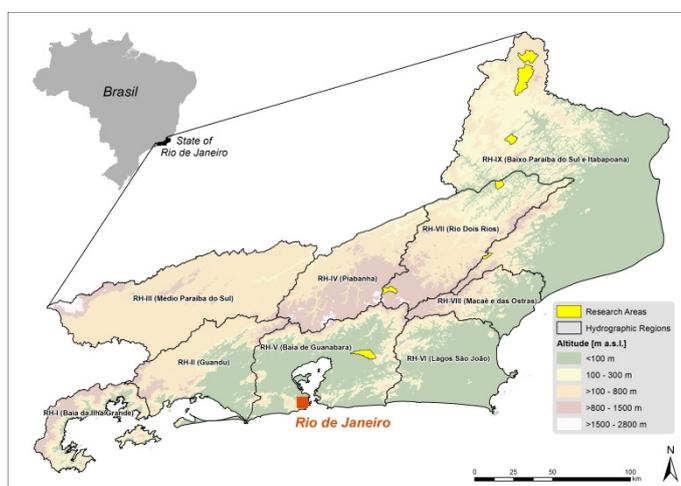
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**Illustration 3:** Research Area. Barracão dos Mendes, Varre-Saí (Bacia do rio Itabapoana) and Campos dos Goytacazes.