Foreword

This book presents the results of the research project on ‘Local productive clusters and innovation systems in Brazil: new industrial and technological policies for their development’. This project is part of an ongoing research effort carried out by a network of academic researchers on local productive and innovative systems – RedeSist. The network was established in 1997 and comprises more than 50 researchers in seven Brazilian universities. It has received financial support from the Organization of the American States, the Brazilian National Research Council (CNPq), the Studies and Projects Financing Agency (Finep), the National Bank for Economic and Social Development (BNDES) and the Brazilian Service for the Support of SME (Sebrae). Previous work was published in Cassiolato and Lastres (1999a) and at the home page of the project (www.ie.ufrj.br/redesist), where 120 papers produced from 1997 to 2002 may be found.

The project started out from the recognition that (i) since the early 1980s, the world environment has gone through significant transformations encompassing political, productive, technological, organizational, informational, commercial, financial, institutional and cultural dimensions that are dynamically related; (ii) among the most visible manifestations of these transformations at the level of the world economy are the speeding up of the processes of economic and financial liberalization, technological (r)evolution, growing competition and globalization.

The increasing competition, the emergence of the ICT paradigm and the acceleration of the globalization process are significantly influencing industrial and technological development with important consequences for economic development. Our specific interest was to characterize and analyse how these transformations affect local and national capabilities (both productive and innovative) in developing countries, in Latin America and Brazil in particular.

One important assumption of our research is that policies would be more efficient if they were based on a detailed evaluation of local production and innovation systems and the participation of local actors. The main focus is, therefore, on the tacit and localized nature of processes of learning, generating, using and diffusing new knowledge and on the forms of interaction among local and other agents.

The results of our research, carried out from 1999 to early 2001, were

organized into two main parts. Thus Part 1 discusses the nature and trends of the transformations mentioned earlier, their consequences for development, the opportunities and challenges they bring to developing countries and policy requirements. In addition to the analysis of these trends and their impacts, the second part of the project – presented in Part 2 of this volume – examined experiences of local productive and innovative systems in Brazil through the analysis of results obtained in empirical research.

These empirical studies reflect the broad regional, cultural, political, institutional and economic diversity of the country. Their results also indicate the differentiated requirements for appropriate strategies and policies, according to the role they play in local productive and innovative capabilities.

These capabilities were appraised with a focus on:

- the competence structure, institutions, relations and incentives that are more appropriate for mobilizing specific local innovative potentialities;
- how transformations of the 1990s have affected the trajectory of local productive and innovative systems, particularly in what refers to their capacity to generate, absorb and diffuse innovations; and
- the new role and objectives of policies of industrial and technological development, aiming at designing policy recommendations for strengthening local systems in developing countries, such as Brazil.

Our hope is that these contributions will stimulate a broader debate and further research on the new challenges and opportunities for development.