FERTILITY TRANSITION IN SOUTH INDIA
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<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AFR</td>
<td>Adult Female Literacy</td>
</tr>
<tr>
<td>CEP</td>
<td>Contraceptive Protection Rate</td>
</tr>
<tr>
<td>CMR</td>
<td>Child Mortality Rate</td>
</tr>
<tr>
<td>FMR</td>
<td>Proportion of Females Married in Age Group 15–19</td>
</tr>
<tr>
<td>FWP</td>
<td>Female Work Participation</td>
</tr>
<tr>
<td>GIE</td>
<td>Gender Inequity in Years of Schooling</td>
</tr>
<tr>
<td>IEH</td>
<td>Index of Ethnic Heterogeneity</td>
</tr>
<tr>
<td>PHY</td>
<td>Physician and Surgeons per lakh population</td>
</tr>
<tr>
<td>NUR</td>
<td>Nurses and Para Medicals per Lakh Population</td>
</tr>
<tr>
<td>HI</td>
<td>Health Index</td>
</tr>
<tr>
<td>GHI</td>
<td>Gender-related Health Index</td>
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<tr>
<td>HDI</td>
<td>Human Development Index</td>
</tr>
<tr>
<td>GDI</td>
<td>Gender-related Development Index</td>
</tr>
<tr>
<td>SDP</td>
<td>State Domestic Product</td>
</tr>
<tr>
<td>DHS</td>
<td>Directorate of Health Services</td>
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<tr>
<td>WPR</td>
<td>Work Participation Rate</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>MPCE</td>
<td>Mean Per Capita Expenditure</td>
</tr>
<tr>
<td>POLI</td>
<td>Physical Quality of Life Index</td>
</tr>
<tr>
<td>FGD</td>
<td>Focus Group Discussion</td>
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<tr>
<td>SR</td>
<td>Sex Ratio</td>
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<td>SRB</td>
<td>Sex Ratio at Birth</td>
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<td>JSR</td>
<td>Juvenile Sex Ratio</td>
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<td>IFEIM</td>
<td>Index of Female Excess Infant Mortality</td>
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<td>ENMR</td>
<td>Early Neonatal Mortality Rates</td>
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<td>LNMR</td>
<td>Late Neonatal Mortality Rates</td>
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<td>SIFP</td>
<td>South Indian Fertility Project (SIFP)</td>
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<tr>
<td>GHS</td>
<td>Geographic Information System</td>
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<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<td>LPED</td>
<td>Laboratoire Population Environnement Developpement</td>
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<td>SRS</td>
<td>Sample Registration System</td>
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<td>NSS</td>
<td>National Sample Survey</td>
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<td>TFR</td>
<td>Total Fertility Rate</td>
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<td>ANC</td>
<td>Antenatal Care</td>
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<td>NFHS</td>
<td>National Family Health Survey</td>
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<td>CBR</td>
<td>Crude Birth Rate</td>
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<tr>
<td>TMFR</td>
<td>Total Marital Fertility Rate</td>
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<tr>
<td>GFR</td>
<td>General Fertility Rate</td>
</tr>
<tr>
<td>ARSC</td>
<td>Annual Report of the Sanitary Commissioner</td>
</tr>
<tr>
<td>CRNI</td>
<td>Crude Rate of Natural Increase</td>
</tr>
<tr>
<td>ARS</td>
<td>Age Ratio Score</td>
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<tr>
<td>CWR</td>
<td>Child-woman Ratio</td>
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<tr>
<td>CDR</td>
<td>Crude Death Rate</td>
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<td>SMAM</td>
<td>Singulate Mean Age at Marriage</td>
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<tr>
<td>CAC</td>
<td>Computer Aided Cartography</td>
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<tr>
<td>NGR</td>
<td>Natural Growth Rate</td>
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<tr>
<td>MAC</td>
<td>Mean Age at Childbearing</td>
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<tr>
<td>ST</td>
<td>Scheduled Tribes</td>
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<tr>
<td>PCA</td>
<td>Primary Census Abstract</td>
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<tr>
<td>SC</td>
<td>Scheduled Castes</td>
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<tr>
<td>UNIP</td>
<td>Universal Immunisation Programme</td>
</tr>
<tr>
<td>IMR</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>VD</td>
<td>Village Directory</td>
</tr>
<tr>
<td>PGA</td>
<td>Primary Census Abstract</td>
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<tr>
<td>ICC</td>
<td>Intra-class Correlation</td>
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<tr>
<td>PDS</td>
<td>Public Distribution System</td>
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<tr>
<td>ICDS</td>
<td>Integrated Child Development Programme</td>
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<tr>
<td>PAP</td>
<td>Poverty Alleviation Programmes</td>
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<tr>
<td>IEC</td>
<td>Information Education and Communication Programme</td>
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<tr>
<td>RCH</td>
<td>Reproductive and Child Health</td>
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<tr>
<td>MCH</td>
<td>Mother and Child Health</td>
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<tr>
<td>MCC</td>
<td>Maternal and Child Care Services</td>
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<tr>
<td>HSC</td>
<td>Health Sub-centre</td>
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<tr>
<td>MAR</td>
<td>Marriage Age</td>
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<td>FDI</td>
<td>Fuel Disparity Index</td>
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<tr>
<td>DDIO</td>
<td>District Development Index</td>
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<tr>
<td>CPR</td>
<td>Couple Protection Rate</td>
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<tr>
<td>ORG</td>
<td>Operations Research Group</td>
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<tr>
<td>PPA</td>
<td>Post-partum Amenorrhoe</td>
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<tr>
<td>IUD</td>
<td>Intra-Uterine Device</td>
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<tr>
<td>CC</td>
<td>Conventional Contraceptives</td>
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<tr>
<td>OBC</td>
<td>Other Backward Castes</td>
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<td>MPS</td>
<td>Mysore Population Study</td>
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<td>BPS</td>
<td>Bangalore Population Study</td>
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<td>KFS</td>
<td>Karnataka Fertility Survey</td>
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<td>PNMR</td>
<td>Post-natal Mortality Rates</td>
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<td>VHN</td>
<td>Village Health Nurse</td>
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As the alleged population problem and its many consequences has featured prominently in debates related to Indian development, the fact that South India, a region of more than 200 million inhabitants, crossed replacement level in the mid-1990s, is not a well-publicized feature of India’s demography. This silent revolution concerns not only the most famous progressive regions where literacy is now almost universal or where the hi-tech export economy is booming, but a larger landmass of 630,000 sq. km. This vast area includes the drought-prone tracts of the Deccan, where dry agriculture has made little progress for decades and the densely-forested areas of the Western and Eastern Ghats, where isolated tribal settlements are the main indications of human presence. This profound and probably irreversible transition in reproductive behaviour occurred merely a few year later than in China, but it was not associated with any spectacular economic growth or sweeping progress in human development on a large scale. The discrepancy with China is even more striking when one considers the absence of any aggressive family planning campaigns that have proved incompatible in the past with India’s democratic institutions.

While modesty suggests that this book may not offer the ultimate explanations about the circumstances that brought South India on par with developed countries, where fertility rates have already slipped under the replacement levels, this collection of articles aims at providing a rich and diverse information base on the various demographic trajectories of south Indian states. As chapters will illustrate, fertility transition is mainly a process of progressive reproductive change akin to social change and can be best understood as a continuous evolution that tends to sustain itself in ways that make additional change gradually more likely. Causation may be regarded here as cumulative, since each facet of behavioural changes affecting the reproductive setup, such as the decision among some to delay one’s marriage or to adopt contraception, alters the social perception of fertility, which in turn facilitates further local changes within or across social formations. As a result, fertility levels observed in South India tend now to be always lower than what any other socioeconomic features like literacy, economic development or urbanization would imply. The southern states tend to be often regarded as exceptions or special cases that cannot be directly compared to the rest of India. Nor can we assume the family planning administration to have been much more efficient in this part of the country and to represent the decisive ingredient in this rapid change. The fact is that the clusters of low fertility that can be observed in south India imperfectly coincide with administrative boundaries within which bureaucracy operates. This suggests that local, endogenous factors have played a significant role in shaping the progress of fertility decline beyond the better known impact of structural economic or educational change, or of the regional implementation of population policies.

South India’s singular experience is no statistical or sociological anomaly, but the results of cumulative processes that started very early in parts of South India and probably spread more extensively through the region than anywhere else in India. The present volume documents the various phases of this rapid evolution, by offering a detailed review of most of the social and demographic information related to this decline and by testing some of the main explanatory frameworks. What emerges is chiefly the importance to describe regional contexts in greater detail to understand the social mechanisms that sustain the diffusion of the new, Malthusian family norms. It may be fair to say that the formal tools of demography may prove less able than a qualitative approach to fathom the driving force of local changes.

The seeds of this volume were sown in April 1998, when the editors organized a three-day conference at the Centre for Development Studies in Thiruvananthapuram, on ‘South Indian fertility transition in a comparative perspective’. This meeting brought together many colleagues from India and France and gave us the opportunity to consider the many different angles to approach fertility change in India. We realized that the diversity of demographic experiences of each region in India was indeed difficult to cover with a unique set of tools, whether they were sophisticated modelling techniques or specific disciplinary approaches. The idea of a collective book entirely devoted to the history of fertility change in the south Indian states, was born at this occasion. We take this opportunity to thank P.N. Mari Bhat, Ashish Bose, Jean-Pierre Bocquet-Appel, Yves Charbit, N. Krishnaji, K.S. James, P.S. Nair, P.K. Panda, K.N. Raj, N. Ravichandran, K. Srinivasan, Jacques Véron and K.C. Zachariah, who participated in this original seminar and Jean-Luc Racine for his distant, but efficient support for this occasion. Though the chapters in this volume have been written long after the conference with other contributors who
joined us, the initial event helped to exchange seminal ideas about the ways to approach the regional diversity of India’s demographic transformations.

In attempting to develop an integrated understanding of the rapid demographic changes whose impact on South India was clearly demonstrated by the 2001 census results, we opted for a more systematic approach of every state and decided to devote one or more chapters on each region. This was complemented by additional contributions shedding light on the broader historical and geographic perspectives of changes in the reproductive behaviour in India. Thus, we have a chapter providing a geographic approach to the analysis of demographic data in South India. Another chapter was also commissioned to reconstitute the history of fertility during the colonial period. In spite of the interest generated by the rapid developments over the two last decades, it is crucial to link up the final phase of the demographic transition in South India to the evolution in the Madras Presidency, where the fertility landscape was far from flat and monotonous. Similarly, several chapters compare South India with the rest of India, using original cartography or statistical analysis, and thereby stress the original character of the South Indian demographic narrative.

The first meeting in Thiruvananthapuram also gave us the opportunity to formally launch the ‘South India Fertility Project’ (SIFP), a joint programme that was supported from its inception by the Wellcome Trust and the French Institute of Pondicherry. This programme started effectively only in 1999 and brought together colleagues from five main institutions: the Centre for Development Studies in Thiruvananthapuram; the Institute for Social and Economic change in Bangalore; the departments of Population Studies at Bharathiar University in Coimbatore and Sri Venkateshwara in Tirupati; and the French Institut de Recherche pour le Développement. Over the course of the last four years, the members of the SIFP included the editors, N. Audinarayana, S. Gunasekaran, S. Krishnamoorthy, P.M. Kulkarni, K.N.M. Raju, T.V. Sekher and P. Ramachandran. Several dynamic doctoral students and post-doc scholars, such as S. Aliyar, M. Chakrabarty, S. Oliverau, P.N. Rajna, P. Ramesh, M.N. Sivakumar, T. Thenmozhi and S. Vella have also helped us at various stages of the project. Travelling across South India to Bangalore, Coimbatore, Pondicherry, Tirupati and Thiruvananthapuram, we met regularly to devise a common approach to study fertility decline in regions as diverse as Kottayam or Gulbarga, whose fertility differentials are hardly narrower than those that characterize Kerala and Bihar. This book partly represents the fruits of this long collaborative work by members of the SIFP and several chapters derive from the first phase of our joint projects. Initial drafts of the regional analyses of fertility decline in Andhra Pradesh, Karnataka, Kerala and Tamil Nadu were prepared by each team and discussed. Preliminary versions of two regional studies were published in Economic and Political Weekly before the publication of this book and other chapters were also presented at various scientific forums to solicit comments and reactions from our colleagues.

The backbone of this comparative venture was the development of an original geographical information system (GIS) at the French Institute of Pondicherry, based on the disaggregated census data at the micro level. This spatial database helped us to assess the extent of fertility differentials as obtained in rural South India and to later redirect our research towards specific regions that were recently investigated by the SIFP (these studies are, therefore, not incorporated in this volume). Our GIS led to a detailed estimation of regional variations across regions within South India, as well as within each state. As several chapters in this book will stress, this is probably the most salient feature of fertility decline as revealed by our investigations. What these spatial differentials entail goes much beyond the apparent peculiarity of the local variations in fertility levels, as it points to the nature of social change itself. The distinctively spatial character of our research interest is yet another illustration of the geographic turn given to this volume. Except for Oliveau’s chapter, all the maps prepared for this volume were drawn by Christophe Z. Guilmoto, with the assistance of the staff of the Population and Space programme at the French Institute, who helped us to overcome out initial difficulties with cartography and spatial modelling.

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