Preface

In July 2008, I was informed that I had been selected as the Founding Director of Indraprastha Institute of Information Technology, Delhi (IIIT Delhi), an institute for which the state of Delhi had passed a legislative act but which did not exist as yet. As I thought about the possibilities, it soon became clear that despite many challenges, this was a unique opportunity to develop a fine institution from scratch—an opportunity that very few get. So, I took it up with enthusiasm.

Very early on, we established that the institute would focus strongly on research, besides fulfilling its role in education, that is, it would be what we call a research university in this book. We convinced the government and other stakeholders that the need of the time in the country was to establish a university that could conduct research at an international level while providing education of the highest quality. We set the vision of the institute as follows: be a world-class research and development (R&D)–led institute that is globally respected for research and education, has thriving undergraduate and postgraduate programmes, and is socially relevant, industry facing and globally connected.

We were also clear that the institute would not be a replica of any existing institute and would innovate and emerge as a model system. Many innovative policies and systems were put in place in the first few years for achieving the vision. As a result, within a decade, the institute was ranked in the BRICS top 200 universities by QS (out of the 9,000+ they assessed) and is widely respected in academic circles in India for the standards it has set in research, education and governance. (Recently it was also ranked in World University Rankings of THE.)

Given that I was the first and only employee in the beginning and there was no other senior faculty for many years, I gained hands-on experience in all aspects of a research university—education and curriculum design, research management, PhD programme, faculty recruitment and management, finance, governance and administration, and so on. When my term as Founding Director ended after I had served for a decade, I decided to use this unique experience of successfully building a research university from scratch to write a book on research universities in India. I felt that covering all the major aspects in one book and providing an overall view of a research university would be very useful to administrators, academics, policymakers, and so on, who are involved in higher education but often are not scholars of higher education and would like to get a view of the different aspects in one volume.

The aim of this book is to provide an overall view of a research university, with different chapters covering key aspects of a research university. The rationale of the topics covered in different chapters in the book emerges naturally from the aim of the book. The first two chapters set the context: Chapter 1 discusses the Indian higher education system briefly, with special emphasis on research universities. Chapter 2 discusses research, research universities and their relevance and importance. Chapters 3–5 discuss the three missions of a research university: education, research and contribution to society. A strong PhD programme distinguishes research universities from others, and faculty is at the heart of a research university—Chapters 6 and 7 discuss these aspects. A research university needs strong governance that understands the needs of such a university and good finances—Chapters 8 and 9 discuss these topics. Finally, Chapter 10 discusses the road ahead from an Indian perspective—what research universities may do and what is needed in the higher education ecosystem to support these universities.

To provide a broad perspective covering the major aspects of a research university in one book, I have discussed each aspect briefly, covering only the key issues involved. Where appropriate,

the relationship with the recommendations of the new National Education Policy of India (2019) is also mentioned. The discussions are based largely on my experience and understanding but also contain ideas and concepts from the rich literature that exists. It is not the aim of the book to provide an in-depth study of any of the topics—indeed, it cannot be done, as each topic is in itself complex and comes with considerable literature. It is hoped that this approach will provide a decent understanding of the different aspects of a research university, and a reader can delve into the rich literature available for any topic for a deeper understanding.

No book is currently available on Indian higher education that discusses research universities—an area of growing interest in India. This book fills this gap in the higher education literature on India. I believe the book also contributes to the global higher education literature by providing an overall view of a research university, with a chapter on the key aspects—most existing books tend to focus on some specific aspects.

The book should be of value to all those interested in higher education in India, as all aspects of a research university are also present in any higher education institution with perhaps a different emphasis. The book should be of interest to academicians in India, academic leaders, policymakers and education thinkers, and those who are involved in developing a university.

Many other developing countries have evolving higher education systems; these countries aspire to strengthen or build research universities. The book should also be of interest to academicians and policymakers in such countries. Globally, the book can be useful to those interested in the Indian higher education system, and to any academician or thinker who might not be a scholar of higher education but is interested in getting an overall understanding of research universities.

In some ways, for me, the book is like taking a path taken earlier—a sense of *déjà vu*. In 1996, I went on a 2-year sabbatical to Infosys as Vice President of Quality, during which I successfully led the transition of the quality system to high levels of maturity

of the Capability Maturity Model framework. On returning back to academics, I wrote two books to share the experience: *CMM in Practice* and *Project Management in Practice* (both published by Addison Wesley). These books had a substantial influence on the software industry across the world and were translated in many languages such as Chinese, Japanese, French and so on. This journey followed the same paradigm—do first and then write about it. The only difference was that for this book, the doing was a 10-year journey and just laid the foundations from an institutional perspective. I hope that, like my previous endeavour, this sharing of my experience and understanding will be useful to others who might be interested in either creating or nurturing universities.

I would like to thank a number of people who provided invaluable help during this project. During the course of this work, I visited some universities and higher education research centres— in particular Queensland University of Technology (QUT) in Brisbane, Centre for the Study of Higher Education (CSHE) in University of Melbourne and the Department of Education Leadership in University at Buffalo. My heartful thanks to my hosts in these universities—Professors Arun Sharma at QUT, Fazal Rizvi at Melbourne and Satish Tripathi at Buffalo—and the various administrators and scholars who took time out to meet with me and give their inputs.

I would like to thank Professor Philip G. Altbach, one of the most respected researchers in the field of higher education and research universities and an author of many books, who not only consistently encouraged me for this project but also kindly agreed to write the introduction for the book. A special thanks to Mr Kiran Karnik, who kindly agreed to write the foreword of the book. Mr Karnik is a well-known intellectual in India and was the Chairman, Board of Governors of IIIT Delhi—his support and guidance greatly helped in conceptualizing and implementing various initiatives.

I would also like to thank IIIT Delhi for the experience it provided me, which formed the basis of this book, and also for granting me the sabbatical for writing. I would like to thank all my faculty and staff colleagues, who helped create a world-class institution in a short time under rather challenging circumstances. (As a token of my appreciation, the royalties from the book will be donated to IIIT Delhi.) Finally, I would like to thank my wife, Shikha, for supporting me in the years while I was the Director, despite the cost it incurred on family time, and my daughters Sumedha and Sunanda for their understanding and support.