FOREWORD

Climate change has always been an integral part of human existence. With rapid industrialisation and urbanisation since the 19th century, climate change has acquired a new dimension, threatening the sustainability of life, livelihood and the surrounding ecosystem. The rising incidence of extreme climate events in recent decades has raised greater public awareness about its adverse effects. Growing scientific evidence that climate change is also caused by human activities – a result of excessive burning of fossil fuels; deforestation; inappropriate agricultural practices, *etc.* – has led to a global consensus on the need for coordinated policy actions, encompassing both adaptation and mitigation strategies. Since the historic Paris Agreement of 2016, climate agenda has increasingly become target-oriented.

India has embarked on an ambitious and targeted climate action plan while balancing its growth and environmental objectives. In line with the target of Net Zero emissions by 2070, India has updated its nationally determined contributions (NDCs), which aim at raising the share of renewable energy and reducing the carbon emissions intensity of GDP by 2030. India presented its Long-Term Low Emission Development Strategy at the COP27, covering plans for expansion of green hydrogen production, electrolyser manufacturing capacity and increased use of biofuels. To strengthen solutions-based international cooperation, India has also launched and nurtured the International Solar Alliance, the Coalition for Disaster Resilient Infrastructure, and the Mission LiFE (Lifestyle for Environment).

India ranked high (seventh) in the list of most affected countries in terms of exposure and vulnerability to climate risk events as per the Global Climate Risk Index 2021, but it is also the highest ranked G-20 country in its climate protection performance as per the Climate Change Performance Index 2023. This reflects the progress made on four parameters – greenhouse gas (GHG) emissions; renewable energy; energy use; and climate policy. India will soon become the most populous country in the world. Preserving food and energy security amidst extreme climatic events while obtaining access to technology and critical raw materials required for successful green transition will, therefore, remain a key policy challenge for India.

Climate change induced risks to macro-financial prospects of the country and the range of policy options available to mitigate climate risks require dedicated research. Such research becomes even more critical in the context of the complexity and non-linearity of the ways in which climate, economy, financial systems and related policies operate. Hence, this year's Report on Currency and Finance has "Towards a Greener Cleaner India" as its theme. Structured in four chapters, this Report highlights the importance of climate goals as a policy priority and examines the macro-financial implications of climate change for India in the medium to long term. The focus is on growth, inflation and financial stability. It explores the range of available policy options – fiscal policy; technology; trade policy; regulatory policy; and monetary policy – for mitigating climate risks. I commend the team from the Department of Economic and Policy Research (DEPR) of the Reserve Bank for examining some of the key aspects of the climate change challenge for India in this Report, with a forward looking perspective. I hope this Report will enrich public policy discourse on the subject.

Shaktikanta Das Governor May 3, 2023