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Axes of Sustainable Development and Growth in India

Essays in Honour of Professor Jyoti K. Parikh

Edited by Piyush Tiwari · Kirit Parikh



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Piyush Tiwari · Kirit Parikh Editors

Axes of Sustainable Development and Growth in India

Essays in Honour of Professor Jyoti K. Parikh

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About This Book

This is a collection of essays in honour of Professor Jyoti K. Parikh. Chapters in this book are written by her students and colleagues, prominent academics and practitioners who have had a professional connection with Professor Parikh during her long and distinguished career. The overarching themes running throughout the book are energy access and policy, climate change and sustainable development. All the essays are shaped by the role that Professor Parikh has played over the last 60 years in the academic and policy arena nationally and internationally.

Contents

1	Introduction Piyush Tiwari and Kirit Parikh	1
Part	I Energy Transition and Security	
2	Indian Energy Transition: Need for a More Balanced and Market-Oriented Approach Saumen Majumdar and Debabrata Chattopadhyay	11
3	Projection of Water Demand in India in a Macroeconomic Consistency Framework Incorporating the Food, Water and Energy Nexus Probal Pratap Ghosh	35
4	Greener Future Through Regional Cooperation Pankaj Batra	73
5	Regional Energy Trade in BIMSTEC Region: Facilitating Clean Energy Transition and Fostering Sustainability Rajiv Ratna Panda	83
6	India's Energy Security: The Case of Oil Barnali Nag	101

Part	t II Climate Change-Some Mitigation Measures	
7	Importance of Pumped Hydro Energy Storage (PHES) System Toward Renewable Energy (RE) Integration and as an Enabler Toward Zero-Emission Concept Vinod Kumar Agarwal and Mohnish Makwana	121
Part	t III Energy Access and Women Empowerment	
8	Women's Land Ownership and Household Decisions: Implications for Child Health in Rural India Koustuv Saha, Vijay Laxmi Pandey, and S. Mahendra Dev	137
9	Gender Aspects of Transition to Clean Cooking Energy: Evidence from Two States of India Ashutosh Sharma, Chandrashekhar Singh, and Saumya Vaish	171
Part	t IV Efficiency of firms	
10	Structural Efficiency of the Indian Petroleum Industry: Restructuring Options for Indian National Oil Companies Deepak Sharma and Haripriya Gundimeda	199
Part	t V Sustainable Urban Development	
11	Benchmarking Urban Sustainability: An Indicator-Based Assessment of Selected Indian and Global Megacities B. Sudhakara Reddy and P. Balachandra	223
12	Are PPP Arrangements Different in Green Infrastructure Sectors? an Exploratory Analysis of Indian PPP Projects Raghu Dharmapuri Tirumala and Piyush Tiwari	259

Part	VI Quality of Growth, Human Development and Raising Resources	
13	What Drives the Quality of Growth? An Empirical Analysis Shikha Jha and P. V. Srinivasan	275
14	Human Development of India: Why Does It Always Look Challenged? Bibhas Saha	295
15	Auctions in Kautilya's Arthasastra P. G. Babu and Vikas Kumar	311
16	Professor (Dr.) Jyoti K. Parikh Kirit Parikh	333
Inde	x	383

A MANY FACETED HISTORY—STORY OF PROFESSOR JYOTI PARIKH'S LIFE

Kirit Parikh



Dr. Jyoti Parikh, a multi-faceted personality, completed 80 years on March 20, 2021.

Professor Jyoti K. Parikh is the Executive Director of Integrated Research and Action for Development (IRADe), New Delhi. She was a **Member of the Prime Minister's Council on Climate Change**— **India and is a recipient of Nobel Peace Prize awarded to IPCC authors in 2007**. She was a Senior Professor at the Indira Gandhi Institute of Development Research (IGIDR), Mumbai. She also worked at the International Institute for Applied Systems Analysis (IIASA), Austria and served as a senior energy consultant at the Planning Commission, New Delhi (1978–1980). She was a Visiting Professor at the Institute of Advanced Studies (IAS) of UNU, Tokyo 1995–1996. She was the Acting Director of IGIDR from 1997 to 1998.

She founded IRADe as a non-profit non-governmental think tank in 2002 and as has nurtured it over the last 20 years. IRADe is regarded as a premier think tank in the country today with several high-profile projects and has 45 staff members and has a building of its own.

The wide diversity of her interests and talents was visible early.

- She stood first among 45,000 students in the SSCE examination of the Gujarat State and won 6 different prizes.
- Sangeet Visharad in Hindustani classical vocal music from the Gandharva Mahavidyalaya,
- Kovid in Hindi from the Rastrabhasha Prachaar Samiti,
- Bhushan in Sanskrit from Gujarat Sanskrit Parishad standing first in the state and
- She also learnt Bharat Natyam.

After getting her M.A. in physics from Berkeley, she followed her supervisor and obtained her Ph.D. in theoretical Nuclear Physics from the University of Maryland. She worked as a physicist for a number of years at TIFR and BARC and published several papers in prestigious international journals such as *Physical Review* and *Physics letters*. In 1976 she moved to IIASA and started her career in energy-related research. Over the last 45 years, she has covered practically every facet of energy and has published over 200 research publications and 25 books. Among these are energy economics, climate change and modelling, energy technology assessment, rural energy, power sector, environment economics, natural resource management, gender in energy and climate change policy. She was one of the first to emphasise the importance of energy access through a large integrated survey of 80,000 persons that quantified the health costs of indoor air pollution.

The significance of her achievements is reflected in the many honours she has received.

HONOURS, AWARDS AND RECOGNITION

- **Boutros Ghali Award** for 1995 instituted by the Japan Foundation for United Nations given at the United Nations University (UNU).
- Recipient of **Zayed Prize** convening lead author of Millennium Ecosystem Assessment Report 2006.
- Special energy award by IBPL Urja Research Foundation on the occasion of 50 years of independence of India (1998).
- Golden Jubilee for India's independence award for energy efficiency—1997.
- Second prize IFORS in "Operations Research for development" (1996).
- Bhasin Award for Energy and Environment—1995.
- Gold Medal from the Systems Society of India for energy and environment—1988.
- Fellow, National Academy of Sciences.
- Member of the Scientific and Technical Advisory Panel (STAP) a small group of experts to advise World Bank, UNDP and UNEP to develop technical programmes for Global Environment Facility (GEF), 1996–1999.
- Member of **Global Agenda Council** for decarbonising energy system, World Economic Forum.
- Member Research Advisory Committee of the Institute for Global Environmental Strategies (IGES) Japan, 2002–2005, Tyndall Center for Climate Change, University of East Angela, UK, 2001– 2004, Governing Board North–South Institute Ottawa, Canada.
- Convening Lead Author for the chapter on "Carbon Regulation for Millennium Ecosystem Assessment"—2002–2005.
- Technical Advisory Committee (TAG) for Energy Trust Funds Programmes of the World Bank, 2002–2004.
- International Steering Committee of **ENERGIA**, Network on Gender and Environment, Nederland, 2002–2004.
- Member of the Advisory Panel on Biodiversity for Executive Director, UNEP.

MANY INTERNATIONAL RECOGNITIONS

• Review panels of World Bank of its ESMAP, ASTAE and AFREN programmes.

- Scientific and Technical Advisory Panel (STAP) of global environment facility (GEF).
- Member of the Review committee of National Environmental Research Council (NERC) of the UK.
- Research advisory committee of IGES, Japan.
- Board Member Tyndall Centre, UK and North-South Institute, Canada.
- Convening lead author for the Second Assessment of IPCC with Kenneth Arrow (1993–1995).
- Editorial boards of multiple energy journals.

MANY NATIONAL RECOGNITIONS

- Member of Prime Minister's Council on Climate Change.
- Fellow of the National Academy of Sciences.
- Member of many government committees.
- Board of Directors of National Institute of Urban Affairs (NIUA).
- Research advisory panel of NEERI.

Created Capacity for Multi-disciplinary Research and Analysis Integrating Energy, Environment and Economics Through

- Setting up and leading IGIDR's energy and environment group.
- Guiding 14 Ph.D. students.
- As Chairperson of EERC (Environmental Economics Research Committee) of EMCaB Project of the World Bank, 1997–2003 distributing US\$ 1.5 million for 56 projects across India in Universities, NGO and Research Institutes and ensuring quality output.

Notes on Contributors

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Pankaj Batra did his B. Tech in Electrical Engineering, Diploma in Systems Management, Diploma in Financial Management and Diploma in Public Speaking. He is currently the Project Director, USAID's SARI/EI

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Dr. Debabrata Chattopadhyay leads the power systems planning group at the World Bank in Washington D.C. He is a power system engineer and an economist. He had held a tenure-track position at the University of Canterbury until late 2000, and is currently an Adjunct Professor of Electrical Engineering (Power Systems) at the University of Queensland and the University of Melbourne (Australia). Debabrata has been in a full-time consulting role from 2001 to 2012 as a Director with Charles River Associates (2001–2009) and Deloitte Australia (2009–2012). His research interests include power system economics and policy issues.

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Dr. Probal Pratap Ghosh is presently the Assistant Director at IRADe, New Delhi. He has done his Ph.D. in Macro Economics from Mumbai University and MS in Quantitative Economics from Indian Statistical Institute, Kolkata. He has trained Indian statistical service officers on time series and forecasting techniques at Indian Statistical Institute, Bangalore from 2001 to 2006. Prior to joining IRADe, he worked in the Planning commission as a consultant. His research work covers applications of econometrics and optimisations-based techniques in macroeconomics, energy, agriculture, Trade, GHG emissions, energy demand and supply. His current interests include Developing a CGE-based macroeconomic model for analysing mitigation scenarios. He is also working on national and city transport models and Industry for low carbon policymaking.

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Dr. Shikha Jha has published extensively in the fields of public sector and development economics. Most recently she was a principal economist at the Asian Development Bank in Manila where she managed and led economic research for the annual flagship publication Asian Development Outlook. Before that she led country teams in the Central and West Asia Departments to design country-partnership strategies for ADB in close coordination with the governments and development partners. Prior to this she was a professor at the Indira Gandhi Institute of Development Research in Mumbai, a long-term consultant to the World Bank in Washington D.C. and an economist at the National Institute of Public Finance and Policy in Delhi.

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Dr. Piyush Tiwari is a Professor of Property at the University of Melbourne, Australia. Prior to his current position he was Director of

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LIST OF FIGURES

Fig. 2.1	Cumulative coal capacity in India (2020) vs. Short-Run	
	Marginal Cost of coal generation (<i>Source</i> World Bank [2021])	16
Fig. 2.2	Indian Energy Exchange historical spot prices: monthly	10
	average prices (Rs/kWh) (<i>Source</i> IEX, https://www.iex india.com/Uploads/Presentation/18_11_2019Presenta	
	tion_Nov_2019.pdf)	25
Fig. 2.3	Price duration curve for 1 April 2012 to 31 March 2020	
	(8 years of 15-min price data)	25
Fig. 3.1	Crop-wise irrigated area in thousand hectares in reference	
	medium growth scenario	51
Fig. 3.2	Power generation in low GDP growth scenario	52
Fig. 3.3	Power generation in medium GDP growth scenario	52
Fig. 3.4	Power generation in high GDP growth scenario	53
Fig. 3.5	Power generation and capacity in reference medium	
	scenario	57
Fig. 3.6	Power generation and capacity in INDC scenario	58
Fig. 3.7	Power generation and capacity in AMBLC scenario	59
Fig. 3.8	Impact of water conservation policies failure in power	
	sector in the medium scenario	62
Fig. 4.1	Damage to the main steam valve	78
Fig. 4.2	Generation curve of Charanka solar park in Gujarat	79
Fig. 4.3	Wind Generation Scenario during monsoon in Gujarat	80
Fig. 4.4	Anticipated load curve for India	81

Fig. 5.1	Sector-wise CO ₂ emission (Mt CO ₂ /year 2018) and %	
	increase from 2010 level	84
Fig. 5.2	BIMSTEC-Fossil CO ₂ emission and % increase	
	from 1990 to 2010 level vis-a-vis 2018 level	85
Fig. 5.3	BIMSTEC-Fossil CO ₂ per capita comparison 2018	
-	and per capita electricity consumption	87
Fig. 5.4	Sustainability ranking of BIMSTEC countries-sustainable	
	development report 2019	88
Fig. 5.5	Energy resource potential-sustainable resources	
	in the BIMSTEC region	89
Fig. 5.6	India-power installed capacity fuel MIX GW (%) 2020	
	versus 2030	91
Fig. 5.7	Motahari (Bihar, India)–Amlekhgunj, Narayani zone,	
	Nepal pipeline	94
Fig. 5.8	Myanmar—Bangladesh—India pipeline connection	96
Fig. 7.1	India-power installed capacity fuel mix (MW)	123
Fig. 8.1	Possible routes for women's land ownership to influence	
	child health outcomes	143
Fig. 9.1	LPG/PNG as a primary source of cooking fuel in India	
	and its significant states (in %) (Data Source Census, 2011)	173
Fig. 9.2	Income class and source-wise average monthly useful	
	energy consumed per household in Ranchi and Raipur	179
Fig. 9.3	Self-collected useful monthly cooking energy in Ranchi	
	and Raipur	183
Fig. 9.4	Expenditure on monthly cooking energy in Ranchi	
	and Raipur in Indian Rupees (₹)	183
Fig. 9.5	Cooking energy expenditure as a percentage of household	
	income	184
Fig. 9.6	Cumulative number of households with formal LPG	
	connections	190
Fig. 9.7	Useful cooking energy share by energy sources in PMUY	
	and non-PMUY households (in %)	191
Fig. 9.8	Households response to a hypothetical question	
	if the price of LPG is increased or LPG subsidy is removed	192
Fig. 10.1	Shareholding of Government of India (GOI), National	
	oil companies, and Life Insurance Corporation (LIC)	
	in major NOCs (Source Authors Depiction based	
	on shareholding pattern data from Public Enterprises	
	Survey (various issues) and Bombay Stock Exchange	
	Website. Note Gas Authority of India Limited (GAIL),	
	Oil India Limited (OIL))	203

(a) Production of crude oil by NOCs and their	
subsidiaries and joint ventures and (b) domestic	
Petroleum product sales by companies in India	
(Source Authors depiction based on company data	
from the Ministry of Petroleum and Natural Gas [2020])	205
Learning, scale, and harmony decomposition of merger	
(Source Author depiction adapted from Bogetoft	
and Wang [2005])	207
Urban sustainability framework	227
Categories and indicators of economic sustainability	228
Categories and indicators of social sustainability	229
Categories and indicators of environmental sustainability	229
Benchmarking economic sustainability	248
Benchmarking social sustainability	249
Benchmarking environmental sustainability	250
	251
Inclusive Green Growth Index, performance by region,	
2015 (Source Authors)	280
Pillars of the Inclusive Green Growth Index, performance	
by region, 2015 (Source Authors)	281
Trends in Inclusive Green Growth Index and its pillars,	
1990–2015—Developing Asia (Source Authors)	282
Trends in Inclusive Green Growth Index and its pillars,	
1990–2015—OECD (Source Authors)	283
Alternative phases of growth (Source Authors)	287
Study location in India: Chhattisgarh and Jharkhand	174
	subsidiaries and joint ventures and (b) domestic Petroleum product sales by companies in India (<i>Source</i> Authors depiction based on company data from the Ministry of Petroleum and Natural Gas [2020]) Learning, scale, and harmony decomposition of merger (<i>Source</i> Author depiction adapted from Bogetoft and Wang [2005]) Urban sustainability framework Categories and indicators of economic sustainability Categories and indicators of social sustainability Categories and indicators of environmental sustainability Benchmarking economic sustainability Benchmarking social sustainability Benchmarking social sustainability Benchmarking urban sustainability Inclusive Green Growth Index, performance by region, 2015 (<i>Source</i> Authors) Pillars of the Inclusive Green Growth Index, and its pillars, 1990–2015—Developing Asia (<i>Source</i> Authors) Trends in Inclusive Green Growth Index and its pillars, 1990–2015—OECD (<i>Source</i> Authors) Alternative phases of growth (<i>Source</i> Authors)

LIST OF TABLES

Table 3.1	Total, rural and urban population projection	- 39
Table 3.2	Resource growth assumptions	39
Table 3.3	Macroeconomic assumptions	40
Table 3.4	Trade, exports and imports bound (%) assumptions	40
Table 3.5	Assumptions of exogenous parameters for DAU scenario	42
Table 3.6	Power sector policies scenario	43
Table 3.7	Transport sector policies in DAU scenario	43
Table 3.8	Crop-wise area under cultivation and irrigation (000	
	Hectares) for the year 2007–2008	44
Table 3.9	Crop-wise water needs for irrigation	45
Table 3.10	Crop-wise irrigation water demand (BCM) in 2007–2008	46
Table 3.11	Area-wise consumption of water per capita per day	
	(in litres)	46
Table 3.12	Wastewater generation and water use by different	
	industries in India, 2004	47
Table 3.13	Technology-wise water withdrawal per unit generation	48
Table 3.14	Drivers of water demand under various economic	
	growth scenario	50
Table 3.15	Impact of economic growth on water demand (billion	
	cubic metres)	54
Table 3.16	Impact of low carbon policies on drivers of water demand	56
Table 3.17	Impact of low carbon pathway on water demand	
	(billion cubic metres)	60
Table 3.18	Government of India agency's projection of water	
	demand	63

XXX LIST OF TABLES

Table 3.19	Summary projection of water demand from various	
	scenarios analysed	64
Table 3.20	Sectoral classifications	69
Table 7.1	India—Renewable Energy Capacity—86.76 GW	124
Table 7.2	Total hydro potential in India (including PHES)	127
Table 7.3	Region-wise break-up of the PHES potential in India	
	(CEA, https://cea.nic.in/wp-content/uploads/2020/	
	03/mom-psp.pdf)	128
Table 7.4	Break-up of the PHES capacity in operation (CEA,	
	https://cea.nic.in/wp-content/uploads/2020/03/	
	mom-psp.pdf)	128
Table 7.5	Break-up of the PHES capacity not in operation (CEA,	
	https://cea.nic.in/wp-content/uploads/2020/03/	
	mom-psp.pdf)	128
Table 7.6	Financial impact in the case of Tamilnadu (CEA,	
	https://cea.nic.in/wp-content/uploads/2020/03/rep	
	ort.pdf)	130
Table 7.7	Financial impact in the case of Gujarat (CEA, https://	
	cea.nic.in/wp-content/uploads/2020/03/report.pdf)	131
Table 8.1	Variables included in the regression equations	145
Table 8.2	Descriptive statistics of the variables included	
	in the regression analyses	150
Table 8.3	WEI distribution	151
Table 8.4	Share of women with decision-making power	
	and Freedom of Movement	151
Table 8.5	Mean WEI of women with respect to land ownership	152
Table 8.6	Factors affecting women's empowerment	153
Table 8.7	Women empowerment (WEI) and women body mass	
	index	158
Table 8.8	Factors affecting child malnutrition (odds ratios)	162
Table 9.1	Rural and urban household's income classification in Jh	
	and Chh	177
Table 9.2	Source-wise per household cooking fuel consumption	
	in surveyed locations	178
Table 9.3	Average family size in Ranchi and Raipur by income	
	group	180
Table 9.4	Distribution of households cooking energy (dung cake,	
	fuelwood, and coal) sources	181
Table 9.5	Distribution of households cooking energy (Kerosene	
	and LPG) sources	182
Table 9.6	Average number of meals cooked by men in the past	
	30 days (all surveyed households)	185

ллл

Table 9.7	Average number of meals cooked by women in the past 30 days	185
Table 9.8	Session-wise cooking and cleaning time for households	
	cooking two meals	186
Table 9.9	Session-wise cooking and cleaning time for households	107
T 11 0 10	cooking three meals	187
Table 9.10	Collection and preparation responsibility of biomass	188
Table 9.11	Average distance from biomass source and frequency of collection	189
Table 9.12	LPG connections by the year	190
Table 10.1	Types of Indian national oil companies in different phases	204
Table 10.2	Summary statistics for upstream, downstream,	
	and integrated companies	210
Table 10.3	Hypothetical combinations of Indian NOCs	211
Table 10.4	Output and input efficiency (bias corrected) of upstream	
	companies for the year 2018	211
Table 10.5	Output and input efficiency (bias corrected)	
	of downstream companies for the year 2018	212
Table 10.6	Output and input efficiency (bias corrected)	
	of integrated companies for the year 2018	213
Table 10.7	Potential gains from mergers in bias-corrected	
	output-oriented DEA-VRS model	214
Table 10.8	Potential gains in bias-corrected input-oriented	
	DEA-VRS model	215
Table 11.1	Demographic data for the cities of Bangalore	
	and Mumbai (2011)	233
Table 11.2	Indicators of urban sustainability for five	
	megacities—economic dimension	234
Table 11.3	Indicators of urban sustainability for five	
	megacities—social dimension	239
Table 11.4	Indicators of urban sustainability for five	
	megacities—environmental dimension	242
Table 11.5	Composite indicators of urban sustainability for five	
	megacities	245
Table 12.1	Features of comparison	264
Table 12.2	Sectoral distribution of infrastructure PPP projects	266
Table 12.3	Regional distribution of infrastructure PPP projects	266
Table 12.4	Projects at various stages of the lifecycle	267
Table 12.5	Typology of PPP arrangements	268
Table 12.6	Distribution by type of agency	268
Table 12.7	Distribution by bid parameter	269
Table 12.8	Distribution by project cost	269

xxxii LIST OF TABLES

Distribution by time elapsed from project date	270
Measuring the quality of growth: Inclusive Green	
Growth Index—Indicators of its three pillars	278
Results from the regression analysis	285
Percentage distribution of learning-deficient children	
in rural India	301
Trends in reading ability	301
	Measuring the quality of growth: Inclusive Green Growth Index—Indicators of its three pillars Results from the regression analysis Percentage distribution of learning-deficient children in rural India