Index

accountability, responsibility, 
transparency and sustainability (ARTS) 219
acidification of seas/oceans 132
Adaptation Fund 8
adaptation issues 11–12, 162–5, 228
adaptive management 256
aerosol boundaries 198
agriculture and climate change 152,
159
aid donor fatigue 133
Alexander, Douglas 93
amplification stations 247
Antarctic ice melt 241
anthropogenic climate change 62, 208,
238, 243
anticipatory investment policies 117
archetypes theory 206
Asia–Pacific region 214–29
Asian Development Bank (ADB), 
climate change projects 3–4
atmospheric concentrations 148
Australia
emissions targets 225, 246
Ensemble Leadership Repertoire 199, 210
Youth Climate Coalition 250, 251
Bali conference/Action Plan 106–107,
109, 115, 124
Bali Roadmap 142
Ban Ki-Moon 143, 195
Bangladesh
adaptation strategies 140
climate justice 253–5
coastal defence infrastructure 254
cyclonic storms 84–6
drought 129, 132
elevated building foundations 254
fish production 88–9
flooding vulnerability 158, 239
food grain production 86–8, 129
freshwater resources 62–76
general effects of climate change
132–3
impact of climate change 64–5, 78,
140
livelihoods 78–94
natural coastal buffers 254–5
natural disaster frequency 130–31
population displacement/migration
166, 240, 244, 255
precipitation 129–30
raising land levels by river silt 255
resettlement 255
river system (GMB) 68, 69, 73–6, 78,
79
sea level rise 84–6, 89–90, 130, 131,
132, 134–9, 158–62, 239–40
security issues 90–93
strategy/action plan 139–42
target policy enhancements 144–5
temperature 129–30
water governance 70–6
see also Bay of Bengal
Bangladesh Climate Change Strategy
and Action Plan (BCCSAP) 72,
139, 140–42
Bangladesh Coastal Zone Policy 72
Bangladesh Coastal Zone Strategy 72
Bangladesh National Action Plan for
Adaptation (NAPA) 139–40
Bangladesh National Water
Management Plan 72
Bangladesh National Water Policy 71
Bay of Bengal
climate refugees 94
cyclonic storms 84–6
global warming 78, 86, 93
population displacement/migration
89–90, 131, 244, 255
rainfall 81–2
Climate change and growth in Asia

sea level 84–6, 89–90, 130, 131, 132, 134–9
security issues 90–93
temperature 82–4
see also Bangladesh
Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) 91, 92, 167
biodiversity 65
boundaries 198
loss 132, 198
Biodiversity and Climate Change Adaptation Seminar 254
biofuels 38–59
alternatives to 59
and deforestation 243
economic arguments for 43–7
and economic welfare losses 54–7
ethanol and food 52–3
exports 51–2
feedstock supply 40, 41, 44, 45, 48–51
first generation 40, 47
and food prices 53–4, 57
foreign investment in 51–2
and GHG emissions 38–9, 41–2, 45, 46, 54, 58–9
global production 42–7
imports 51–2
Indonesian conversions to 103
national policies 46
and opportunity cost 39
production distribution 42–3, 44, 45
production increase consequences 52–8
production possibilities 50–51, 58
production support 43–7, 48
reasons for production 38
second generation 40–41
and trade-off 39
water usage 51
biomimicry 203–204
biosequestration projects 246
birds and climate change 152
Borlaug, Norman 201
BRIC countries 222–3, 229
Brundtland report (Report of the World Commission on
Environment and Development: Our Future) 199, 200
business leadership
approaches 205
and climate change 195–211
emerging practice 210
Ensemble Leadership Repertoire 199, 208, 209, 210
and myths 204–208
process 205
response 205
strategy 205
Zeitgeist practice 208, 210
business and sustainable development 195–211, see also sustainable development
business as usual (BAU) levels 112–13, 125, 131–4, 137, 162
Cancun Summit (COP16) 9, 63–4
cap-and-trade systems 46–7, 106
Capitalism and Freedom 207
carbon
chlorofluorocarbons (CFCs) 238
management 245
markets 2
pricing 228
tax 106
carbon dioxide (CO2) emissions 29–35, 99–128, 237
Asian trends 100–103
BAU levels 112–13, 125
BRIC levels 222
brown coal burning 243
caps setting 112–13
costs in reduction 112
cuts required 126–8
developing countries’ policies 114–15
early action benefits 114–15
global trends 99–100
and land usage 100
reduction benefits 112–13
stabilisation problems 114–15, 124
world emission levels 127
see also greenhouse gas
carbon science projects 245–6
chemical pollution boundaries 198
child mortality rates 24–5

Moazzem Hossain and Eliyathamby Selvanthan - 9781849809665
Downloaded from Elgar Online at 01/03/2019 07:45:58AM via free access
Index

China  
civil society development 185–6  
climate change policy 177–90, 246 
climate predictions 182–3  
democracy 185–6, 189  
emission levels 101–102, 104, 111, 185, 220, 222  
emission targets 110, 111, 114–15, 197, 226  
environmental groups 186–7  
five balances 182, 190  
five-year plans 118  
as global player 229  
GONGOs 187  
growth predictions 202  
harmonious society policy 178, 185, 189, 190  
income levels 223  
intergenerational differences 188–9  
investment difficulties 221  
mitigation 109–110  
NGOs 187  
per capita emissions 107, 185  
postmaterialism 187–8  
Scarcity Hypothesis 187  
Socialization Hypothesis 187  
Three Represents 179, 180  
China Council for International Cooperation on Environment and Development conference 184  
China’s National Climate Change Programme 182  
China’s Policies and Actions for Addressing Climate Change 183  
chlorofluorocarbons (CFCs) 238  
Clean Development Mechanism (CDM) 113  
clean technology investment 221, 226 
Climate Action Network–South Asia (CANS)A 167  
climatic change  
boundaries 198  
concept 147–9  
local contexts 177  
media/public discussion 232–56  
negotiations 177  
policy, China 177–90  
reports analysis 235  
vulnerabilities 149–54  
climate justice 250–55  
climate models 134  
climate predictions (China) 182–3  
climate refugees 94, 251  
coal-fired plants 101  
coastal defence infrastructure 254  
common strategic environment, by era 205  
consumerism and climate change 154, 173  
COP13 see Bali conference  
COP15 see Copenhagen Summit  
COP16 see Cancun Summit  
Copenhagen Accord (2009) 6–9, 80, 107, 110–11, 115  
Copenhagen Green Climate Fund 8, 144  
Copenhagen Summit (COP15) 5–9, 63, 112, 142–4, 162, 168, 169, 172, 184, 196, 197, 225, 228–9, 246, 252, 253, 256  
corporate philanthropy 204  
credit crunch see global financial crisis  
cyclonic storms 84–6  
Davis, Ian 206  
deforestation 99, 115–16, 123, 243  
demand side perspective to emission cuts 169–72  

demographic conditions 18  
Deng Xiaoping (Shao Ping) 179, 223  
dependency ratio 20–21  
disease levels 103, 132, 158  
domain of leaders 204  
donor fatigue 133  
drought 129, 132, 138  
earth tremors 243  
ecomigrants 251  
economic growth xii, 9, 34  
elevated building foundations 254  
Elkington, John 226  
emissions see greenhouse gas (GHG) emissions  
energy conservation investment 228  
energy consumption per capita 170  
Ensemble Leadership Repertoire 199, 208, 209, 210  
environment–income relationship 29–30  
Environmental Movements and Social Organizations in Shanghai 186–7
Climate change and growth in Asia

environmental neglect 224
environmental, social and governance (ESG) issues 226
European Union (EU) aid 93
extreme poverty goals 23

Fannie Mae 207
fisheries and climate change 152
five balances 182
five capitals model 218
flooding 157, see also sea level; water
Four Freedoms 215
Four Horsemen of the Apocalypse analogy 219
freshwater see water
Friedman, M. 207

G2 (Group of 2) 223, 224, 229
G8 (Group of 8) 107
G20 (Group of 20) 219, 224, 229
G77 (Group of 77) 224, 229
Galbraith, J.K. 224
Ganges, Brahmaputra, Meghna (GMB) river system 68–76, 80, 135, 239, 255
Ganges Treaty 75
Garnaut Report 202–203
GDP per capita 108
gender gaps 157
gender ratios in schools 24
general effects of climate change 132–3
geo-engineering 256
geo-sequestration projects 245
glacier melting 239
acceleration 247
Global Climate Change Alliance (GCCA) 93
global commitments and South Asia 167–72
global warming in Bay of Bengal 78, 86, 93
climate change links 148
and climate injustice 250–55
emission reductions 246–7
feedback uncertainty 242–3
Garnaut Report 202–203
geo-engineering 240, 245–6
management implications 255–6
media amplification of 241, 248–50
mitigation 240, 245
opinion of leaders 248
physical impacts 240, 243
predicted temperature rise 248
public concern 148
research 233–6
science 240–42, 247–8
social amplification of 247
socioeconomic impacts 240, 244
Stern Report on Economics and Climate Change 78, 203
Gore, Al 232
governance standards 157
government emissions investment 225–6
greenhouse effect causes 237–9
greenhouse gas (GHG) emissions 29–35, 38–9, 41–2, 45, 46, 54, 58–9, 62–3, 64, 99–128
Asian trends 100–103
Chinese electricity demands 101
Chinese emission levels 220, 222
chlorofluorocarbons (CFCs) 238
climate change links 148
cuts required 126–8
developing countries and preferential treatment 107
emission intensity 104–105, 108
emissions per capita 107–108, 165
equity principles and agreements 106–108
gas types 174
GDP ratio to 104
global targets 246
global trends 99–100, 242
and Kyoto Protocol 111
lifestyle issues 154, 169–72
limiting of 169
media/public discussion 232–56
methane 237–8
stabilisation requirements 125–7
water vapour 237
see also carbon dioxide
harmonious society policy 178, 185, 189, 190
Hazra, Sugata 13
health and climate change 152, 158–60
High Level Panel (COP) 8, 144
Himalayan ice cover 78, 93, 103, 133
HSBC bank 225
Hu Jintao 177, 179, 180, 181, 182, 189
human security 215–17
income distribution 222–3
income per capita 10
income–environment relationship 29–30
India
emission levels 101–102, 246
emission targets 111, 197
mitigation 109–10
per capita emissions 107
Indian Institute of Tropical Meteorology (IITM) 167
Indonesia
emission levels 111
emission targets 111, 115–16
mitigation 109–10
Indonesia–Australia Forest Carbon Partnership 109–10
innocent fraud 224
intergenerational differences 188–9
Intergovernmental Panel on Climate Change (IPCC)
and climate change impact 103
climate change prediction 1, 85, 89–90, 241
First Assessment Report 148
Third Assessment Report 130, 241
Fourth Assessment Report 124, 147, 174, 241, 247
freshwater report 2–3
Nobel Peace Prize winner 232
polar cooling proposals 245
sea level estimates 131, 239
iron fertilization 246
isostatic rebound 239
jatropha 40
Jiang Zemin 179–80
key challenges in climate change 173
Kyoto Protocol 6, 106, 109, 111, 113, 142, 143, 246
land use 19, 117, 123
change boundaries 198
leadership see business leadership
lifestyle changes 228
lifestyle issues and climate change 154, 169–72
The Limits to Growth; A Report for the Club of Rome’s Project on the Predicament of Mankind 199
livelihoods, Bay of Bengal 78–94
Low Elevation Coastal Zone (LECZ) 90, 134–5, 137, 157, 161, 162, 166, 169
Malthusian collapse 201
management
of climate change 63–4
Ensemble Leadership Repertoire 199, 208, 209
Mao Zedong 179
marine ecosystems 132
maternal mortality rates 25
media coverage of climate change 232–56
media sensationalism 249–50
methane gas 237–8
migration 89–90, 131, 136–9, 153, 161, 162, 166, 214, 240, 244, 251
Milankovitch Cycle 241
Millennium Declaration 149
Millennium Development Goals (MDGs) 22–4, 25, 26, 35, 149, 168, 174
Milliband, Ed 93
mitigating climate change 63–4, 117
Asian perspectives on 109–10
costs and benefits 103–106
GHG emissions 164
global warming 245
imperatives/realities 124–8
PAM strategy 162–5
strategies 234
symbol for success 252
monsoon 80, 82, 129–30, 131, 133
Montreal Protocol 238
multilateral studies 1–9
natural capitalism 203–204
Natural Capitalism: Creating the Next Industrial Revolution 203
natural coastal buffers 254–5
natural disaster frequency 130–31
Climate change and growth in Asia

New Moore/South Talpatti Island xii, 10, 13
nitrogen cycle boundaries 198
Nitrous Oxide 238

Obama, President Barack 5, 8
ocean acidification boundaries 198
O’Connor, Ian xiii
Ogata, Sadako 217
oil
  biodiesel 40
demand 38
opportunity cost 39
organisations, emergence of new
normal 206
ozone as greenhouse gas 238
ozone layer boundaries 198

Pachauri, Rajendra 227–8
Pachauri’s six point plan of action 228
The People’s Livelihood 183
phosphorous cycle boundaries 198
planetary boundaries 198
polar cooling 245
political commitment to climate change 173
political instability 22, 90–93
political leadership, and Pachauri’s
six point plan of action 228
population
  displacement 89–90, 131, 136–9,
  153, 161, 162, 166, 214, 240,
  244, 251
distribution 20
econometric analysis 27–9
and emissions per capita 165
estimates 19
growth 17–22, 21, 22, 25–9, 35, 84,
  214
and poverty 25–9, 156
and water availability 66
postmaterialism 187–8
poverty 5, 22–5, 35
alleviation 27
econometric analysis 27–9
line 26, 27
and population 25–9, 156
Powell, Michael xiii
power balance, East-West 223
preparedness, adaptation and
mitigation (PAM)
funding of 167–9
strategy 162–7, 172
primary education achievement 24
public discussion of climate change 232–56

Reducing Emissions from
Deforestation and Forest Degradation (REDD) 7, 115–16,
143, see also deforestation
regional cooperation 166–7
Report of the World Commission on Environment and Development:
Our Future (Brundtland Report) 199, 200
responsibility for climate change 63
Robins, Nick 225
Roosevelt, Eleanor 215
Roosevelt, Franklin D. 215

Sachs, Jeffrey 196
SAPTA trading agreement 91–2
Sarkozy, Nicolas 227
Scarcity Hypothesis 187
sea level xii, 10, 13, 65–6, 79, 80, 81,
  84–6, 89–90, 130, 131, 132, 134–9,
  158–62, 239–40, 241
emission reductions 246–7
factors in 239
feedback uncertainty 242–3
geo-engineering 240, 245–6
glacier melting 239
and global warming science 247–8
isostatic rebound 239
media amplification of global warming 248–50
media/public discussion 232–56
mitigation 240, 245
opinion of leaders 248
physical impacts 240, 243
reports analysis 236
research 233–6
scientific elements 240–42
sedimentation-related subsidence 239
and social amplification of global warming 247
socioeconomic impacts 240, 244
thermal expansion 239
seasonal climate change 149
sedimentation-related subsidence 239
Sen, Amartya 217, 227
settlement and climate change 153
Shundorbon mangrove forest 80
SMRC (SAARC Meteorological Research Centre) studies 80
Socialization Hypothesis 187
solar radiation interception 245
South Asia
by country 159–60
gender gaps 157
vulnerability to climate change 155–62
South Asian Association for Regional Cooperation (SAARC) 85, 90–91, 92, 167
South Asian Cooperative Environment Programme (SACEP) 167
South Asian Free Trade Area (SAFTA) 92
Stern, N.H. 78
Stern Report on Economics and Climate Change 78, 203, 221
Sun Yatsen 183
sunspot activity 238
supply side solutions to climate change 154
surveillance technology 219
sustainable development
business abundance lens 202–204
business and 199–200
business limits lens 201–202
challenge of 199–200
factors 200
importance of 196–9
trade-offs strategy 201–202, 209
sustainable enterprise economies/economics (SEE) 218–20, 225, 227–8
and Pachauri’s six point plan of action 228
technology investment 221, 226
Technology Mechanism 8, 144
temperature management 245
temperature rise 82–4, 105, 162, 248
effect on crops 243
see also global warming
The Three Principles of the People 183, 190
Three Represents 179, 180
toxic waste export 220–21
trade and climate change 153
trade-offs strategy 201–202, 209
transportation and climate change 153
triple bottom line 226
UK Department for International Development (DFID) 9
UK National Health Service 215
UN Commission on Human Security 217
UN Declaration of Human Rights 215
UN Development Programme (UNDP), Human Development Report (HDR) 1–2, 217
UN Framework Convention on Climate Change (UNFCCC) 106, 109–10, 142, 143
UN Security Council and climate change 215
UN Universal Declaration of Human Rights 215
USAID (to Pakistan) 22
volcanic eruptions 238
vulnerabilities to climate change
Bangladesh 172
flooding 157
food security 157
LECZ population 161
macro-economic 155–7
sea level rise 158–62, see also sea level
sectoral 157–8
socioeconomic indicators 156
South Asia by country 159–60
water access 157
water
access 157
and carbon sequestration 243
efficiency improvement 228
Climate change and growth in Asia

freshwater resources 65–6, 68–76, 80, 103
freshwater usage boundaries 198
governance 70–76
harvesting 70
resources and climate change 152, 159–60	weather extremes and climate change 62–3, 153
treaty (Ganges Treaty) 75
see also sea level
water vapour as greenhouse gas 237
Waxman-Markey Bill 116

Wen Jiaobao 184, 185
Will, George 243
World Bank (WB), climate change impacts 4–5, 23
World Economic Forum 184
World Summit on Sustainable Development and its Critical Trends Report 199
Zeitgeist practice 208, 210
zero-sum trade-offs 201