Index

Aarhus Convention 232–3
Almaty Guidelines 232–3
NGO speaking rights 234
Task Force on Public Participation 233–4
Abramovay, R. 340
ABS see equity in environmental governance
adaptation, meaning of 126
afforestation see under forests
African (Banjul) Charter on Human and Peoples Rights 17–18, 20, 21
climate change 228
right to a healthy environment 129
African Commission on Human Rights 229
African Court of Human Rights 229
African Union 136
Agenda 21 22, 34, 35, 148–9, 151
protection of mountain ecosystems 276
Agha, Billy 13–14
agriculture
agricultural pests 402
ambivalent role in protecting biodiversity and climate change 357–8
biosecurity, integrating agricultural and environmental strategies for 424–5
see also biosecurity
CAP see EU Common Agricultural Policy, contribution of
competition over agricultural/grazing land 122–3, 126–7, 136
deforestation see under forests
diseases see under diseases
overgrazing 128
releasing greenhouse gases 357
sugarcane see sugarcane
threats to biodiversity from 357, 358
Aguirre v Pimentel (Philippines) 50
Ahmed, Abdul Rahman Abu Zayd 134–5
air pollution
acid rain in Niger Delta 5, 15
effects of 15
gas flaring 3
Airamé, S. 382
alternative energy see renewable/alternative energy
Amazon rainforest 328–53
Brazil protecting 328
climate change and ethanol production in Brazil 329–32
climate change and sugarcane: jurisprudence 343–7
ethanol production from sugarcane 329–32
Brazilian climate change jurisprudence 343–7
potential damage from 328, 334
largest reserve of biodiversity in the world 332
monocultures, harmful nature of 332, 334
relevant legislation protecting 335–43
agroecological zooming of sugarcane 338–41
Amazon rainforest as national heritage 335–6
ban on sugarcane burning 341–3
legal instruments for environmental protection 336–8
legal reserves 337
permanent preservation areas 337–8
soya crops 332
standstill principle and protection of biodiveristy, relationship between 347–51
sugarcane
agroecological zoning of sugarcane 338–41
burning sugarcane straw 333, 341
burning sugarcane straw, ban on 333, 341–3
burning sugarcane straw, damage from 328, 334
climate change jurisprudence 343–7
expansion in Amazon rainforest/threats to biological diversity 331, 332–5
American Convention on Human Rights 227
Aragonès, Lemnuel 52–3
Asian Environmental Compliance and Enforcement Network (AECEN) 45
Association of South East Asian Nations (ASEAN) 300
Australia 212, 213
Australia Climate Justice Programme 213
biosecurity 404, 415
Beale Review 421
comprehensive framework 419
post-entry controls 421
protected marine reserves 390
Awas Tingni v Nicaragua (Nicaragua) 230

Badenoch, Nathan 284
Baja to Bering Sea Marine Protected Areas Project (B2B) 380–92
discussion 386–92
absence of globally agreed criteria and policies 390
Canada’s Federal Marine Protected Areas Strategy 387–8
criteria for selecting/developing protected areas 387
development of regional networks yet to materialise 392
ecological criteria represented by US law 388–9
global warming 390–91
size/scale criterion, importance of 391
international and national waters, harmonizing legislation for 389–90
new international legal provisions for connectivity, importance of 390
purposes of marine protected networks 386–7
methodology 383–4
results of analysis 384–6
scope of study 380–83
CEC defining priority conservation areas 380–81
distinguishing between legislation to establish/manage protected areas 383
rationales for creating marine protected areas along North America 382–3
Bali Action Plan 178, 182, 241
Barr, B. 378
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 157, 158–9
Belgium
case study of the Scheldt river 313–21
flood control area Kruiibeke 315–19
Hedwige-Prosperpolder project 319–21
lessons learned 324–7
Sigma Plan 313–15, 316, 319
Spatial Structure Olan 314–15
zoning plans 314–15, 316–21
Sigma Plan 313–15, 316, 319
lessons learned 324–7
planning instruments for achieving the Sigma plan 321–3
Index

Sigma dike 313
Sigma Plan, revised 314, 325–6
early nature results from 323–4
land use 314, 321
Belize 22
biosecurity 419
post-entry controls 421
hydro power 216–17
Bezaury-Creel, J.E. 384
Biocultural Community Protocols
200–201
biodiversity
agriculture 357, 358
Amazon rainforest see Amazon rainforest
CBD see Convention on Biological Diversity (CBD)
climate change, biodiversity impacts on 209–15
climate change as major cause of biodiversity loss 210–11
ocean acidification and climate change 213–15
World Heritage Sites and climate change 211–13
combating loss see combating climate change and biodiversity loss
current biodiversity and climate change debates at international level 180–83
education and knowledge, role of 58, 72–3
Ethiopia, biodiversity conservation in see under Ethiopia, sustainable development in
EU Floods Directive see EU Floods Directive and biodiversity protection
forestry credits in biodiversity market see under forests
human rights, biodiversity and climate change, nexus between 16–21
intergovernmental platform on biodiversity 72
marine biodiversity 33
marine protected areas see marine protected area networks in Pacific North America
mitigation measures on biodiversity, impacts of 216–21
hydro power and impact of dams on biodiversity 216–19
ocean iron fertilization and moratorium on geo-engineering 219–21
mountain biodiversity see transboundary conservation of mountain biodiversity
in Niger Delta see under Nigeria in Philippines see under Philippines
REDD mechanism 244–51
definition of forests and REDD activities 245–7
key areas 244–5
monitoring and financing co-benefits 248–51
see also REDD and REDD-plus projects
renewable energy 222
hydro power see hydro power and impact of dams on biodiversity
see also renewable/alternative energy
security 123
synergy between biodiversity and climate change legal regimes 221–7
integrating biodiversity considerations in UNFCC and Kyoto Protocol 225–7
integrating climate change impacts in regional biodiversity policies 224–5
using national biodiversity laws to combat climate change 22–4
transboundary conservation see transboundary conservation of mountain biodiversity
utilitarian nature 84, 90
biofuels 77–8, 222, 330–31
climate change and ethanol production in Brazil 329–32
ethanol production from sugarcane
burning sugarcane straw to reduce harvest costs 333
encouraging 349, 350
potential damage from 328, 346
reduced benefits as alternative energy source 334
global warming 331–2
sugarcane alcohol 349, 350
turning public opinion in favour of 331–2
biosecurity 401–28
biodiversity and climate change 405–8
biosecurity contributing to ecosystem resilience 406–7
genetic modifications, potential impacts of 407–8
IAS 405–7
loss of biodiversity increasing biosecurity risk 407
trade and other risk pathways affecting species and ecosystems 405
definition of 404, 415–16
expanded definition 404–5
developing biosecurity for the future 415–27
building domestic capacity 419–20
defining biosecurity 415–16
integrating agricultural and environmental strategies 424–5
international cooperation and harmonization 416–19
post-entry controls 421–2
responding to modern understanding of risk/technological advances 422–3
understanding the cost of biosecurity 425–7
invasive alien species (IAS)
biodiversity, affecting 405–6
difficulty of regulating 417–18
negative impacts globally 402, 406
new IAS emerging as result of changes to biodiversity/climate 407
pests, diseases and pathogens 406

post-entry controls 422
legal framework for biosecurity 408–14
CBD’s provisions on environmental issues 413–14
Codex 410, 411
common features shared by standard-setting bodies 411
imported produce measures 409
IPPC 410, 411
ISPMs 411
OIE 410–11
standard-setting bodies 410
WTO recognising standard-setting bodies 411–12
living modified organisms (LMOs) 408, 413–14
biosecurity as integrated framework for managing risks 404
burden of inspection increased 402
limitations on threats reduced by globalization 402–3
movement of people and vehicles 403
negative impacts of pests and diseases 402
packaging, risks from 403
managing biological risks 402–5
socio-economic impacts 406
Botsford, L.W. 387
Brazil 111, 182
Agricultural Research Corporation 331
Amazon rainforest, relevant legislation protecting 335–43
agroecological zooming of sugarcane 338–41
Amazon rainforest as national heritage 335–6
ban on sugarcane burning 341–3
legal instruments for environmental protection 336–8
legal reserves 337
permanent preservation areas 337–8
biofuels 349
climate change and ethanol production 329–32
climate change and sugarcane: jurisprudence 343–7
Constitution 328, 335–6, 348–9
dignity of life 348, 349
duty to protect the environment 348
environmental standstill principle 348, 350–51
deforestation 332–3, 347
causing emissions 331
ethanol production
burning sugarcane straw to reduce harvest costs 333
encouraged 349, 350
indigenous peoples 185
Institute of Geography and Statistics 331, 332
National Institute for Space Research 332–3
National Supply Company 333, 340
standstill principle/protecting Amazon biodiversity, relationship between 347–51
state apparatus absent 333
sugarcane
agroecological zoning of sugarcane 338–41, 350
burning sugarcane straw 333, 341
burning sugarcane straw, ban on 333, 341–3
and climate change jurisprudence 343–7
expansion in Amazon rainforest/threats to biological diversity 331, 332–5
British Petroleum 335
oil spill in Gulf of Mexico 379
Brundtland Report 286
Brunei
HoB Project see Heart of Borneo (HoB) Project
Canada 378, 379
CEC see Commission for Environmental Cooperation
contiguous national parks with US 379
marine protected areas
B2B plan see Baja to Bering Sea Marine Protected Areas Project (B2B)
federal legislation 385–6, 397
Federal Marine Protected Areas Strategy 387–8
global warming 390
precautionary principle 391
Cancun Agreements 182, 226, 231–2
encouraging REDD activities 242 phased approach 249
international cooperation 266
monitoring emissions 248
public participation in UNFCCC framework 233
safeguards 243–4, 254–5
Canotilho, J.J.G. 329
capacity
biosecurity in the future, building domestic capacity for 419–20
climate change, lack of human/institutional capacity to address 23–4
effective transboundary conservation, needed for 289–90
gas flaring 4
Carpenter, Dr Kent 33–4
Cartagena Protocol 171, 414
precautionary principle 416
see also Convention on Biological Diversity (CBD)
Center for Biological Diversity 215, 222, 223–4
Centre d’analyse stratégique (Centre for Strategic Analysis) 72
children
Convention on the Rights of the Child 139
human rights 129, 136, 140
climate change and the rights of the child 131, 136
Convention on the Rights of the Child 139
as soldiers 139, 140
Chile
hydro power 216
China 111
Darfur 137–8
civil society
CDM projects, participation of civil society/NGOs in selecting 234–5
citizen movements to save the environment/assert human rights 36–7, 40
women 36–7, 51, 109, 113
EU Flood Directive measures, public participation in 311
EU Water Framework measures, public participation in 308–9
public participation in environmental negotiations
Aarhus Convention 233–4
Almaty Guidelines 232–3
public participation in UNFCCC framework 233–4
speaking rights 234
see also equity in environmental governance; Philippines; United States
Clean Development Mechanism (CDM) 8, 240
civil society/NGOs participating in project selection 234–5
credits 251
funding 23
reforestation and afforestation projects under CDM 255–6
climate change
Amazon rainforest see Amazon rainforest
biodiversity, climate change impacts on 209–15
biodiversity loss, climate change as major cause of 210–11
mountains see under transboundary conservation of mountain biodiversity
ocean acidification and climate change 213–15
World Heritage Sites and climate change 211–13
causes of climate change 96
current biodiversity and climate change debates at international level 180–83
definition 95–6
and ethanol production in Brazil 329–32
felt effects of 57–8
floods see EU Floods Directive and biodiversity protection; floods
gas flaring 16, 17
global warming 16
rising sea levels 16
greenhouse gases 122
habitats more susceptible to invasion 407
climate change-related impacts affecting human rights 16–17
legal and institutional framework 7–8
mountain biodiversity see under transboundary conservation of mountain biodiversity
over-exploitation of natural resources 125
sea levels 16, 57
security 123
and sugarcane jurisprudence in Brazil 343–7
synergy between biodiversity and climate change legal regimes 221–7
integrating biodiversity considerations in UNFCCC and Kyoto Protocol 225–7
integrating climate change impacts in regional biodiversity policies 224–5
using national biodiversity laws to combat climate change 22–4
synergy between human rights and climate change legal regimes 227–35
human rights impacted by climate change 227–9
potential use of established human rights institutions/jurisprudence 229–32
Index

procedural human rights in UNFCCC framework 232–5
and World Heritage Sites 211–13
Climate Justice Programme 19
Codex Alimentarius Commission (Codex) 410, 411
Maximum Residue Limits 411
standards having to reflect WTO free trade/SPS Agreement principles 416
Colombia 182
combating climate change and biodiversity loss 32–61
biodiversity loss and destruction 33–7
endangered and vulnerable species 34
ecologically destructive projects 54–7
coal power plant operation 56–7
gas flaring see gas flaring mining 54
off-shore drilling for oil and gas 54–6
education integrating ESD into formal/non-formal education 59–60
mainstreaming human rights and environmental education 59
emerging solutions in combating climate change, biodiversity loss, poverty 58–60
integrating ESD in formal/non-formal education 59–60
mainstreaming human rights and environmental education 59
media advocacy 60
strengthened partnership among stakeholders 60
groundwater storage of carbon dioxide 76–7
law as a tool for environmental accountability in Philippines 40–47, 50–51
establishment of environmental courts/tribunals 45–6
hosting stakeholders’ summits on access to justice/environmental justice 46
intergenerational equity/responsibility 41, 48
procedural rules for environmental cases 46–7
role of courts in environmental protection/enforcement of laws 40–44
natural carbon sequestration 67, 70–71
Comiso, Josefino 57
Commission for Environmental Cooperation (CEC) 380–81
defining priority conservation areas 380–81
Marine Species of Common Conservation Concern 381
Strategic Plan for North American Cooperation 380
Committee on Economic Social and Cultural Rights environment and basic human rights 130
right to adequate food 131–2
Congo, Democratic Republic of 111
connectivity concept 379, 390
Conservation International (CI) 32–3
Contreras-Hermosilla, A. 196–7
Convention on Biological Diversity (CBD) access to resources see equity in environmental governance biosecurity 406–7, 418
environmental provisions 413–14, 416
IAS 413
LMOs 413–14
precautionary principle 413, 416
Cartagena Protocol 171, 414, 416
climatic change 211
clustering 149, 150, 155
Ethiopia 99
forests and the CBD 258–64
CBD’s bearing on forest governance 258–9
collaboration with UNFCCC 261
Biodiversity and climate change

Decision X/33 259–61, 264
ensuring REDD supports aims/ implementation of the CBD 259–60, 262
Expanded Programme of Work on Forest Biodiversity 259
expert workshops on links between biodiversity and REDD 262–4
forests as habitats/components of biodiversity 251, 258
indicators to assess REDD’s contribution to achieving CBD objectives 261–2
funding 167
habitats, protecting vulnerable 384, 396
implementation 283
integrating biodiversity considerations in UNFCCC/ Kyoto Protocol 225–7
links with climate change-related conventions 150, 168–72
growing awareness of linkages 169–70
involved conventions 170–71
limitations based on experience from chemicals-related conventions 171–2
as main instrument for protection of diversity 258
management processes and institutions for ecosystems 288
marine protected areas 383–4, 390
moratorium on geo-engineering projects 220–21
Nagoya Protocol on Access and Benefit Sharing 181, 200
Nigeria 10–11
obligations of contracting parties 10, 11
Philippines 35
precautionary principle 413, 416
REDD projects, coordinating with see REDD and REDD-plus projects
Sudan 123
and UNFCCC as ‘common interest treaties’ 252

Convention on Conservation of Migratory Species of Wild Animals (CMS) 35, 149, 155
Convention on International Trade in Endangered Species (CITES) 149
Nigeria 10–11
Convention on the Rights of the Child 139
see also children
Convention to Combat Desertification 99, 125–6
see also desertification
Coral Triangle Initiative (CI) Declaration 35
Costa Rica
Payment for Environmental Services 89
dams see hydro power and impact of dams on biodiversity
Darfur crisis, climate change and human rights 122–41
aggravating circumstances in conflict in Darfur 133–6
absence of environmental governance in Sudan 134–5
population displacement 135–6
Sudan lacking clear unified land tenure framework 123, 133–4, 138
biodiversity, loss of 127–8
causes of loss 127–8
conflict, effects of 128
fire, effects of 128
overgrazing 128
climate change and human rights 128–33
climate change and the rights of the child 131
costitutional right to a clean, diverse environment 129
environmental degradation and the right to life 132–3, 140
right to an adequate standard of living 130–31, 139
right to food affected by desertification 132
Index

right to shelter 140–41
Sudan’s failure to protect the environment 129–30
country background 124, 126–7
Darfur Peace Agreement 134, 136, 141
environmental degradation, causes of 125–6
decreasing rainfall 125
deforestation 126
population increase/pressure on resources 125–6
underdevelopment/inability to adapt 126
environmental degradation, consequences of 126–8
conflict 126–7
loss of biodiversity 127–8
environmental degradation leading to loss of life 122, 123
reaction to Darfur conflict 136–8
EU 136
recommendations 138–9
violence from competition over agricultural/grazing land 122–23, 126–7, 136
placement of victims of violence 127, 128, 132, 135–6
outbreak of violence 124, 127
scorched earth campaign 127, 129
de Waal, A. 125, 135–6
deforestation see under forests
desertification
Convention to Combat Desertification 99, 125–6
Ethiopia 97, 99, 117
Niger Delta 6
Sudan 123
Darfur 126, 132, 133
diseases
animal diseases 402
bluetongue disease 407
foot-and-mouth disease 426
combating spread and prevalence 401
dengue 58, 107
malaria 15, 107
in mountain regions 274
movement of people and vehicles
increasing risk of 403
negative impacts of 402, 406
OIE
list of notifiable diseases 422, 423
OIE framework/Terrestrial Animal Health Code 410–11
pine processional moth 407
rat lungworm 406
unusual weather events as drivers of disease 407
water-borne 107
zoonoses 402
as risk to human and animal health 403
undermining Millennium Development Goals 403
Dolphins case (Philippines) 55–6
Drilon v Lim (Philippines) 50–51
EarthJustice 213, 223
Ebeku, K. 4, 18
eco to legislation, linking see
marine protected area networks in Pacific North America
ecosystems services 65–90
definition of services linked to natural resources 68, 82
emerging concept 68–9
immature concept bringing some controversial synergies 81–90
questionable nature of recourse to economic instruments 85–90
questionable value of simplistic approach to ecosystem services 83–5
incorporation into EU law 68
Millennium Ecosystem Assessments (MEA) report 68, 69, 71, 73, 82
new concept with new synergies 69–81
essential acquisition of new scientific knowledge/expertise 71–3
EU normative systems to include biodiversity and ecosystem services 73–81
Biodiversity and climate change

...
Index

Ethiopian climate and land,
description of 94–5
 calamities in Ethiopia 94–95, 97, 116
 fragile nature of the environment 98
 population 95, 97, 110–13
 floods 107
 forests
 and communities 102–3
deforestation/forest degradation 97, 98, 103–4
development/management 103, 104
 fires 94–5, 97, 98–9, 103
 ownership 103
 policy 99–100, 101, 102–3
 reforestation and forestation 102, 103–4, 116, 117–18
tropical rainforests, importance of 178
 wildlife 104–5
 legal/institutional arrangements
 addressing environmental degradation 99–101
 Ethiopian Environmental Agency 100–101
 Institute of Biological Diversity Conservation 101
 laws on protection of diversity 101–2
 national adaptation programme 99–100
 signatory to international conventions 99
 Oxfam International recommendations 109–10
 population
 challenges posed by population growth 113
 growth in 112, 113
 population policies to curb overpopulation 112–13
 and poverty 110–13
 poverty eradication 108–9
 and population growth 110–13
 poverty reduction and sustainable development 114–19
 sustainable development and poverty reduction 114–19
 achievements in relation to environmental sustainability 115
 environmental degradation 117–18
 environmental standards and enforcement 116
 government claims to economic growth 117–19
 Millennium Development Goals 114, 115
 national programmes/plans 114–16, 117
 poverty in Ethiopia 118–19
 EU Common Agricultural Policy’s contribution 357–74
 ambivalent role of agriculture in protecting biodiversity and climate change 357–8
 cross compliance as instrument to protect biodiversity/climate change 360–63
 compliance with EU command-and-control regulation 360
 maintaining land in good agricultural/environmental condition 360–63
 evaluation 366–73
 available options 366
 enrichment of cross compliance 368–70
 improvement of subsidization of environmental services 370–73
 role of social responsibility and polluter-pays principle 367–8
 stiffening administrative regulation 367
 major features of CAP 358–9
 environmental elements introduced into subsidization system 359
 fundamental changes over time 358–9
 income subsidies 358, 359
subsidization under Rural Development Regulation to protect biodiversity 363–5
EU Floods Directive and biodiversity protection 305–27
case study of the Scheldt river 313–21
flood control area Kruibeke 315–19
Hedwige-Prosperpolder project 319–21
lessons learned 324–7
revised Sigma Plan 314, 325–6
revised Sigma Plan, early nature results from 323–4
Sigma Plan 313–15, 316, 319
Sigma Plan, planning instruments for achieving the 321–3
climate change and flood risk in Northern Europe 305–7
EU Floods Directive, climate change and land use planning 309–13
aims of Directive 309
citizens’ right to participate in process 311
climate change as contributor to flood events 309
definition of ‘flood’ 309–10
definition of ‘flood risk’ 310
flexibility in determining objectives and measures to be taken 312
flood hazard maps and flood risk maps 310–11
flood risk management plans 309, 311
flood risk management as three stage process 310–11
land use planning, importance of 312–13
preliminary flood risk assessments, purpose of 310
prevention measures 311
scope 309
EU Water Framework Directive as background 307–9
aims 307
Common Implementation Strategy 309
participatory planning and stakeholder consultation 308–9
river basin management planning 308, 309
European Convention on Human Rights and fundamental Freedoms 228
European Court of Human Rights 229
climate change 230
European Environment Agency 306
European Union (EU) biodiversity acknowledgment of need to protect 70
Biodiversity Action Plan 224–5
EU normative systems to include biodiversity requirements 73–81
geological storage of carbon dioxide 76–7
integration of climate change impacts in regional biodiversity policies 224–5
marine environment protection 74
biofuels 77–8
biosecurity 421
CDM project appeals, participation 235
climatiche change
Green and White papers on adapting to 70–71, 75, 79
integration of climate change impacts in regional biodiversity policies 224–5
Common Agricultural Policy (CAP) 90, 358–9
biodiversity, protecting see EU Common Agricultural Policy’s contribution
cross compliance to protect biodiversity and climate change 360–63
environmental elements introduced into subsidization system 359
fundamental changes over time 358–9
income subsidies 358, 359
Index

Conservation of Natural Habitats and Wild Flora and Fauna Directive 311, 321, 323, 360
Conservation of Wild Birds Directive 311, 360
Darfur 136
economic instruments and voluntary approaches 80–81
Emissions Trading Directive 8, 366
environmental markets/market-based regulation 80–81, 85–6
greenhouse gas quotas 86
trading greenhouse gas emissions 80
failure to recognise interactions of climate change/biodiversity 65–8, 70, 224
climate change as priority over biodiversity 67
inadequacy of EU action 65–8
Floods Directive see EU Floods Directive and biodiversity protection
food safety 77
forests 79–80
greater convergence of climate change and biodiversity goals 70–71, 75, 224
move towards an integrated approach to climate/biodiversity issues 77–8
Nitrate Directive 360
Water Framework Directive 307–9, 360
aims 307
Common Implementation Strategy 309
participatory planning and stakeholder consultation 308–9
river basin management planning 308, 309

Faria Ludmila Evelin de 334
Fay, C. 196–7
Flint, Julie 125, 135–6
floods 225, 227
climate change 36, 107, 135, 305–7
definition of ‘flood’ 309–10
definition of ‘flood risk’ 310
as drivers of disease 407
effects of flooding 306
Ethiopia 107
EU Floods Directive see EU Floods Directive and biodiversity protection
Northern Europe and the EU 305–7
Philippines 36
Sudan 135
urban growth 307
food
food insecurity/security 401
Darfur 139
Ethiopia 96–7, 103, 107, 109, 111–12, 118
ocean acidification 215
zoonoses 403
food safety 77, 401, 402
changes in food production and supply 403
Codex Alimentarius 411
SPS Agreement 411–12
zoonoses 403
as a human right 17, 129, 131–2, 227
and climate change 132
Committee on Economic Social and Cultural Rights 131–2
impact of gas flaring 16
World Food Programme 137
Food and Agricultural Organization (FAO), United Nations
biosecurity agenda, development of 404
biosecurity, definition of 404–5
FAO-Norway case studies 419
Forest Resource Assessments 248
Tripartite Concept Note 417
zoonoses posing risk to human and animal health 403
Forest Carbon Partnership Facility (FCPF) 198–9, 256–8, 263
forests 79–80
carbon storage and clearing role 237, 357–8
CBD 258–64
CBD’s bearing on forest governance 258–9
collaboration with UNFCCC 261
Decision X/33 259–61, 264
ensuring REDD supports aims/implementation of the CBD 259–60, 262
Expanded Programme of Work on Forest Biodiversity 259
expert workshops on links between biodiversity and REDD 262–4
forests as habitats/components of biodiversity 251, 258
indicators to assess REDD’s contribution to achieving CBD objectives 261–2
certification tools 248–9
and communities 102–3
definition 245, 258
deforestation and forest degradation 97, 98, 103–4, 126, 247
around Darfur camps 132, 135
Brazil 331, 322–3, 347
carbon emissions, causing 237–8
Ethiopia 97, 98, 103–4
EU fight against 79
failure to address global drivers of deforestation 238–9
to international trade in timber and agricultural products 238
development/management 103, 104
emissions, reducing
Bali Action Plan to reduce emissions 178, 182, 241
failure to address global drivers of deforestation 238–9
REDD projects under UNFCCC see REDD and REDD-plus projects
fires 94–5, 97, 98–9, 103
burning sugarcane straw 333
causes 98–9
fire-adapted ecosystems 245
forest peoples see equity in environmental governance
forestry credits in biodiversity market 87–8

Payment for Environmental Services 89
fuel, use of forests/wood as 99, 126, 128
International Year of Forests 79
owner 103
replanting and afforestation 246–7
afforestation, effects of 246–7
CDM projects 255–6
Ethiopia 102, 103–4, 116, 117–18
Mexico 104
plantations creating a ‘carbon debt’ through emissions 246
types of forests 247
UN-REDD programme 256–8, 263
see also REDD and REDD-plus projects
wildlife 104–5
World Bank Forest Carbon Partnership Facility 198–9
France
Pelagos Sanctuary 379
gas flaring
capacity to be captured and utilised 4
greenhouse gases, contributing to 3–4
human rights, biodiversity and climate change, nexus between 16–21
in the Niger Delta see under Nigeria purpose 3
toxins and air pollution, producing 3, 5, 15–16
geo-engineering projects, moratorium on 220–21
Germany 348
CAP 361, 362
Global Diversity Outlook 226–7
Global Environmental Facility (GEF) 7
funding 23, 167, 195
PALM project 270, 293
global warming
biofuels 331–2
burning sugarcane straw 333
fossil fuels 330
gas flaring 16
global consequences 329, 330
Index

human activity 330
increasing average temperatures of air and oceans 329, 390–91
IPCC 329, 330
marine reserves 390
Godard, Olivier 86
Green Belt movement 36–7
Greenpeace 332–3

hard laws 380
Hawkins, J.P. 391
health
animal health see World Animal Health Organization (OIE)
gas flaring, health implications of 3, 5, 15–16
ocean health 214, 215
One Health Initiative 417
plant health see International Standards for Phytosanitary Measures (ISPMs)
precautionary principle 416
right to health 227
right to a healthy environment 16, 129–30, 139
World Health Organization 417
Heart of Borneo (HoB) Project
270–71
Declaration on Heart of Borneo Initiative 296–7
evaluation against 11+1 criteria for effective transboundary conservation 296–8
key issues 298–300
established across all levels 299–300
legal instruments that enable the process exist 299
net benefits of going transboundary considered in the circumstances 298
political buy-in 299
Holdren, John 112
Holt, Richard 290
human rights
adequate standard of living, right to 129, 131–2, 139
African (Banjul) Charter on Human and Peoples Rights 17–18, 20, 21
climate change 228
right to a healthy environment 129
African Commission on Human Rights 229
African Court of Human Rights 229
asserting human rights 36–7
litigation in Nigeria 17–21
litigation in Philippines 40–44
procedural rules for environmental cases 46–7
and biodiversity and climate change, nexus between 16–21
children’s rights 129, 136, 140
climate change and the rights of the child 131, 136
Convention on the Rights of the Child 139
and climate change 128–33
climate change broadening to human rights law 128–9, 130
in Darfur region see Darfur crisis, climate change and human rights
environmental degradation affecting economic/social/cultural rights 16–17
environmental degradation undermining human rights 129
human rights impacted by climate change 227–9
right to a healthy environment 16, 129–30, 139
food and water, right to 17, 129, 131–2, 227
and climate change 132
Committee on Economic Social and Cultural Rights 131–2
desertification affecting 132
health, right to 227
healthy environment, right to 16, 129–30, 139
Human Rights and Climate Change Working Group 233
Human Rights Committee 229
Human Rights Council 229
human rights and climate change 17, 231
Inter-American Commission on
Human Rights (IACHR) 219, 229
climate change 229–30
indigenous communities 228
Inuit petition 229
Inter-American Court of Human
Rights 229
indigenous peoples’ rights 230
see also indigenous peoples
mainstreaming rights and
environmental education 58
meaning 128
OHCHR 17, 231
Philippines 38–9, 40–47, 49
privacy, right to 230
shelter, right to 140–41, 227
synergy between human rights and
climate change legal regimes
227–35
human rights impacted by climate
change 227–9
potential use of established human
rights institutions/jurisprudence 229–32
procedural human rights in
UNFCCC framework 232–5
UDHR 128
climate change 227–8
right to an adequate standard of
living 130
right to life, liberty and security
132, 228
women’s rights 129
Human Rights and Climate Change
Working Group 233
Human Rights Committeee 229
hydro power and impact of dams on
biodiversity 216–19
Belize 216–17
biodiversity, effects on 216–17, 218
Chile 216
Ukraine 217–18
Ikechukwu Opara v Shell Petroleum
Development Company Nig. Ltd
(Nigeria) 20–21
indigenous peoples 39
Bicicultural Community Protocols
200–201
Brazil 185
climate change, effects of 122, 228
culture and land, link between 228–9
dams affecting indigenous territories
219
Ecuador 189–90
exploitation of natural resources in
indigenous territories 219
Indonesia 198–9
meaning of ‘indigenous peoples’ 189
participation in environmental
policies 182, 188–92
Peru, ABS in 183, 188–92
collective knowledge 183, 191, 192–3
communal assemblies 190–91
legal personality 188
meaning of ‘indigenous peoples’
189–90, 191
rights over resources 190
property rights, conflict around 134
rights of indigenous peoples,
recognition of
IACHR 228
ILO Convention on Indigenous and
Tribal Peoples 189
United Nations Declaration of the
Rights of Indigenous Peoples
228–9
well-being, rights related to 202
Indonesia
ABS lessons for REDD-plus see
under equity in environmental
governance
biosecurity 419
comprising distinct ethnic, linguistic
and religious groups 198
HoB Project see Heart of Borneo
(HoB) Project
indigenous peoples 198–9
Letter of Intent, Norway-Indonesia
203, 204, 205
Index

Inter-American Commission on Human Rights (IACHR) 219, 229
climate change 229–30
indigenous communities 228
Inuit petition 229
Inter-American Court of Human Rights 229
indigenous peoples’ rights 230
intergenerational equity/responsibility 41, 48
Intergovernmental Panel on Climate Change (IPCC) 72, 180
adaptation 126
flooding 306
global warming 329, 330
Good Practices Guidelines 199
ocean acidification 214–15
Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) 180
International Covenant on Civil and Political Rights (ICCPR)
climate change 227–8
Human Rights Committee 229
right to life 132
International Covenant on Economic, Social and Cultural Rights (ICESCR) 131–2, 202
climate change 227
international environmental governance (IEG) system 147, 149, 151, 155, 163
Belgrade Process on reform 151, 173
see also multilateral environmental agreements (MEAs)
international environmental law (IEL) 119
clustering 165, 168
fragmented nature 147, 170, 175
legitimacy and transparency 148, 164
development 129
international framework for sustainable development governance (IFSD) 151
International Labour Organisation (ILO) Convention on Indigenous and Tribal Peoples 189
international law
compliance, lacking means to ensure 281
environmental law see international environmental law (IEL)
intergenerational equity 41, 48
pacta sunt servanda principle 252
polluters-must-pay principle 48, 367–8
precautionary principle/approach 221
Canadian parks legislation 391
CBD biosecurity provisions 413, 416
environmental and health protection 416
marine protected areas 390–91
Philippines 47, 48
International Plant Protection Convention (IPPC) 410, 411, 420
economic impact as basis for regulation 425–6
ISPMs see International Standards for Phytosanitary Measures (ISPMs)
mandate extending to wild fauna 417
risk analysis for plant pests 422
standards having to reflect WTO free trade/SPS Agreement principles 416
International Standards for Phytosanitary Measures (ISPMs)
difficulty of regulating IAS 418
difficulty of regulating IAS 418
economic impacts 425–6
environmental considerations in assessing plant health risk 417
Pest Risk Analysis 417–18
International Treaty on Plant Genetic Resources for Food and Agriculture 149
Inuit petition to IACHR 229
invasive alien species (IAS) see under biosecurity
Irigaray, C.T, 333, 334, 341
iron fertilization 219–21
Italy
Pelagos Sanctuary 379
Biodiversity and climate change

IUCN Red List of Threatened Species 34
Jay, M. 404
Jessen, S. 390
Johannesburg Declaration on Sustainable Development 114
Joint Implementation (JI) 8
Kyoto Protocol, 3, 86
adoption 7
aims 7
Clean Development Mechanism (CDM) 8, 240
civil society/NGOs participating in project selection 234–5
credits 251
funding 23
reforestation and afforestation projects under CDM 255–6
clustering 171
Emissions Trading (carbon credit) 8
enforcement, civil society and NGOs participating in 234–5
EU 68
forest, definition of 245, 258
integrating biodiversity considerations in UNFCC/Kyoto Protocol 225–7
Joint Implementation (JI) 8
negotiations 181, 182
reduce greenhouse gas emissions, agreement to 7–8
Landcare 290
Leibler, S. 403–4
Libarios, Roan 46
see also human rights
Lim, Mundita 33–4
Linden, O. 4
Lindholm, J. 378
living modified organisms (LMOs) 408, 413–14
London Dumping Convention 220
Lovelock, J. 331–2
Maathai, Wangari 36–7
Malaysia
HoB Project see Heart of Borneo (HoB) Project
Mamdani, M. 126–7
marine protected area networks in Pacific North America 377–400
absence of globally agreed criteria and policies 390
B2B plan see Baja to Bering Sea Marine Protected Areas Project (B2B)
commercial fisheries, protecting 383
connectivity among networks of marine protected areas 377–8, 379, 383
ecological concepts and criteria for protected areas defined in law 379–80
international and national waters, harmonizing legislation for 389–90
networks, advantages of 379
role of marine protected areas in offsetting impacts of global climate change 378
size of marine protected areas 378
soft law and hard laws, importance of 380
market-based regulation see environmental markets/market-based regulation
media advocacy 60
Mexico
B2B plan 384
see also Baja to Bering Sea Marine Protected Areas Project (B2B)
CEC see Commission for Environmental Cooperation
reforestation 104
marine protected areas 384
Meyerson, L.A. 426
Index

Milaré, E. 336–7
Millennium Development Goals, UN 95, 205, 401
Ethiopia 114–15
objectives 114
zooneses undermining 403
Millennium Ecosystem Assessment 272, 274–5
Minas, Getachew 113
Mittermeier, Russell A. 32, 34
MMDA v Residents of Manila Bay (Philippines) 42–3, 51
Moffat, D. 4
Monaco
Pelagos Sanctuary 379
monitor lizards 33
mountain biodiversity see
transboundary conservation of
mountain biodiversity
multilateral environmental agreements (MEAs) 147–75
clustering process of the three chemicals-related conventions 157–69
Basel Convention 157, 158–9
common elements 161–2
conclusion 168–9
process and outcomes 162–3
Rotterdam Convention 157, 159–60
Stockholm Convention 157, 160–61
successes and limitations 163–8
establishing a definition 152–7
better governance as clustering goal 153, 163–4
clustering as a customized political process 152, 153, 154
clustering efforts to be COP-driven 152
COP powers and competences 153–4
definition of clustering 152, 153
implied powers theorem applicable to MEAs 153–4
limits to clustering 154
merging as legal clustering 152–3
overview 157, 158
which elements of MEAs should be clustered? 156–7
which MEAs should be clustered? 154, 155–6
linkages between biodiversity and climate-change related conventions 150, 168–72
growing awareness of linkages 169–70
involved conventions 170–71
limitations based on experience from chemicals-related conventions 171–2
precautionary principle 416
proliferation of MEAs, fragmentation/problems as result of 147–50
Belgrade Process 151, 173
clustering of MEAs as means of addressing concerns 148–9, 150–52
Joint Liaison Group between the three Rio conventions 149, 265
joint work programmes 149–50
liaison group of biodiversity-related conventions 149
REDD and REDD+ projects 79, 150, 170
subject linkages 150
successes and limitations 163–8, 171–2
cost-savings 164
better governance and cost-efficiency 163–4
limitations 165–6
political and legal restraints 166–8
work-intensive process 165–6
UNEP: alternative for or involved party with clustering? 172–5
general co-ordinating role not likely option 174, 175, 175
limitations on UNEP’s involvement 173–4
potential role 174
potential World Environmental Organization 166, 174, 175
**Biodiversity and climate change**

UNEP’s aim to ensure coherent collective environmental efforts 172–3

Nagoya Protocol on Access and Benefit Sharing 181, 200

NASA 57

National Research Council 219

Nepal 212

Netherlands
  Hedwige-Prospelpolder project 319–21
  national ecological networks 379

New Zealand
  biosecurity 404, 415
  comprehensive framework 419

Nigeria
  biodiversity protection 10–11, 22
  biodiversity data, dearth of 22–3
  defective legislation on biodiversity conservation 11
  human rights approach to mitigate biodiversity loss 14–21
  legislation 10–11
  non-applicability of conservation legislation to Niger Delta 10–11
  signatory to CBD and CITES 10

climate change
  active participant in discussions/rhetorical commitment 3, 4, 13–14, 21, 24–5
  biodiversity data, dearth of 22–3
  CDM, Presidential Implementation Committee on 12
  corruption as barrier to implementing climate change law 24
  eligible to host CDM projects 8
  encouraging utilisation of gas 12–13
  failure to ascertain greenhouse gas emissions/identify mitigation options 8
  global warming from gas flaring 16
  human/institutional capacity, lack of 23–4
  human rights approach to mitigate climate change 14–21
  National Climate Change Commission, attempts to establish 12
  national legal framework absent 22
  signing Kyoto Protocol 3, 7
  signing UNFCCC 3, 7
  Special Climate Change Unit 12
  Constitution 20–21, 25
  gas flaring 3–27
  challenges of developing/implementing climate change law to mitigate 21–4
  corruption, impact of 24
  financial incentives to reduce gas flaring 9–10, 12–13
  funding problems 23
  gas utilisation 4, 8–9, 11–14, 23, 24
  good governance in environmental matters, need for 26–7
  government failure to mitigate/end gas flaring 4, 8–10, 13–14, 17–18, 24–7
  government’s economic interest in oil industry 4, 8–9, 18–20, 21–2, 26
  human rights approach to mitigate gas flaring 14–21, 26
  human rights, biodiversity and climate change, nexus between 16–21
  human rights litigation 17–21, 26
  infrastructure and technology problems 23
  legal and institutional framework 8–10, 22–3, 24, 26
  local impacts of gas flaring 3, 4–5, 15–16, 25–6
  reasons for continuation of gas flaring 4
  reduction initiatives 11–14
  rising sea levels, causing 16
  size and scale of gas flaring 3–4
Niger Delta
academic research and
development for
6
acid rain from gas flaring, effects
of 5, 15
aquatic animals, economic returns
from 6, 15
biodiversity 5–6, 15–16
biodiversity, impact of oil industry/
gas flaring on 3, 4–5, 15–16, 25–6
climate change from gas flaring
16–17
conservation legislation,
non-applicability of 10–11
economic consequences of gas
flaring 15
environmental threats to,
non-oil-related 6
foodstuffs, impact of gas flaring on
16
gas flaring 3–27
health implications of gas flaring 3,
5, 15–16
human rights approach to protect
environment and biodiversity
14–21
human rights litigation 17–21, 26
militants’ action 14, 22, 24
native plants and animals,
medicinal purposes of 5–6
occupations in 4, 15
raw materials from 6
recreation and tourism 6
regional/global importance of
area’s biodiversity 4–5
sea levels rising from gas flaring,
effects of 16
spiritual links to land of inhabitants 6
toxins and air pollution from gas
flaring 3, 5, 15–16
wildlife, gas flaring effects on 15
population growth 111
North America Protected Areas
Network 381

see also marine protected area
networks in Pacific North
America
Norway 25
FAO-Norway case studies 419
Letter of Intent Norway-Indonesia
203, 204, 205
nuclear power 330
see also renewable/alternative energy
Nugkuag, Evaristo 184–5
Oberthür, S. 154
oceans and seas
marine area networks see marine
protected area networks in
Pacific North America
ocean acidification and climate
change 213–15
serious threat to health of oceans
214, 215
ocean iron fertilization 219–21
oceanic warming 329, 390–91
addressing changes induced by
390–91
sea levels rising 57
from gas flaring 16
Office of the United Nations High
Commissioner for Human Rights
(OHCHR) 17, 231
One Health Initiative 417
Oneryildiz v Turkey (Turkey) 132–3
Oposa Jr, Antonio 46
Oposa v Factoran (Philippines) 41–42
Osorio, Rose-Liza 55
OSPAR Convention 153
Oxfam International 109–10
Oxford Poverty and Human
Development Initiative (OPHI)
118
pacta sunt servanda principle 252
Pamir-Alai Land Management (Palm)
project
evaluation against 11+1 criteria for
effective transboundary
conservation 293–5, 298
integrated transboundary initiative
270–71, 293
key issues 295–6
complexity recognised and
appropriate resources secured
296
explicit objective of conservation
295
rules and legal instruments existing
to enable the process 295–6
objective 293
project area 293
Paris Declaration on Aid effectiveness
281, 284, 289
Peru 182, 212
ABS see under equity in
environmental governance
Amazon project 199
Pesticides in International Trade 157,
159–60
Philippines 32–61
biodiversity loss/biodiversity crisis
33–6, 37–8
causes 34, 53, 52–7
challenges in addressing 36, 52–7
citizen movements to save the
environment/assert human
rights 36–7, 40
costs and effects 34, 36, 55–6
endangered and vulnerable species
34
government ignoring 34–6, 40, 42,
44, 49, 52–3
Philippine Agenda 21 42
challenges in addressing biodiversity
loss and climate crisis 36, 52–7
almost nil implementation of laws
52
ecologically destructive projects
54–7
patronage politics 49, 52–3
poverty and climate change 57
climate change, felt effects of 57–8
floods 36
Constitution 38–40
disrespect for 40
doctrine of incorporation for
international law 48
human rights 38, 41
judiciary, role of 40, 41
local authority obligations to
citizens 51
local autonomy 48
people’s organizations/NGOs 38–9
sectoral representation at local
lawmaking body 39
State’s obligations 39–40
ecologically destructive projects
54–7
coal power plant operation 56–7
mining 54
off-shore drilling for oil and gas
54–6
emerging solutions in combating
climate change, biodiversity
loss, poverty 58–60
integrating ESD in formal/
non-formal education 59–60
mainstreaming human rights and
environmental education 59
media advocacy 60
strengthened partnership among
stakeholders 60
Final report on the Philippine
Biodiversity Conservation
Priorities 34, 54
IAS 406
judiciary’s role as ecological
champion 37, 40–47, 50–51
applying international law
principles and rulings from
other jurisdictions 43
environmental protection/
enforcement of laws: Oposa to
MMDA 40–43
establishment of environmental
courts/tribunals 45–6
hosting stakeholders’ summits on
access to justice/
environmental justice 46
other significant environmental
cases related to local
autonomy 43–4
procedural rules for environmental
cases 46–7
as mega-diversity ‘superstar’ 32–4, 52–3
marine biodiversity, centre of 33
new species, discovery of 33
reasons for unique biodiversity 32–3
national laws and international conventions 35, 47–52
international law principles, adhering to 48
Philippines as signatory to international conventions 35, 48
strengthening local autonomy/harnessing engaged stakeholders 48–51
tools for accountability and participation 51–2
UNFCCC 48
strong legal framework for healthful and balanced ecology 37–52
pro-participation/environment/sustainability Constitution 38–40
Supreme court’s role in championing sustainability 37, 40–47
pikas, American 210, 223
Pisupati, B. 150, 204
Plaza, Charlene Maria C. de Ávila 334
polar bears 222–3
polluters-must-pay principle 48, 367–8
population see under poverty
Population Bomb, The (Ehrlich and Erhlich) 110
Population Bomb, Revisited, The (Ehrlich and Ehrlich) 110–11
Population Explosion, The (Ehrlich and Ehrlich) 110
Population Reference Bureau 111
poverty and climate change 57, 97
combating 57–60
measuring 118–19
Multidimensional Poverty Index (MPI) 118
and population growth 110–13
Africa 111–12, 125–6
challenges posed by population increases 113, 125–6
demographic crisis 111
population growth, debate on 110–11
resources, availability/scarcity of 112, 113
Powell, C.B. 6
precautionary principle/approach 221
Canadian parks legislation 391
CBD biosecurity provisions 413, 416
environmental and health protection 416
marine protected areas 390–91
Philippines 47, 48
Price, Martin F. 292
Prior, Julian 290
Procópio, A. 334–5
Province of Rizal v Executive Secretary (Philippines) 43–4, 50
ptarmigans, white-tailed 223–4
Ramsar Convention 105–6, 149
Reaser, J.K. 406
reforestation see under forests
REDD and REDD-plus projects 226, 237–67
biodiversity and REDD mechanism 244–51
definition of forests and REDD activities 245–7
key areas 244–5
monitoring and financing co-benefits 248–51
Cancun Agreements see Cancun Agreements
clustering 79, 150, 170
coordinating efforts with CBD 239
REDD-plus agreements 179, 182–2
ABS lessons for REDD plus see under equity in environmental governance
role of 181
REDD and the UNFCCC: state of play 241–4
expansion of REDD concept 242–3, 246
Biodiversity and climate change

role of REDD in UNFCCC framework 241–2
safeguards 251–66
biodiversity safeguards under UNFCCC 244, 253–8
Cancun Agreements 243–4, 254–5
CBD and UNFCCC as ‘common interest treaties’ 252
debate on scope and means of implementation 239–40, 253–4
Forest Carbon Partnership Facility 256–8
forests and the CBD see under Convention on Biological Diversity (CBD)
institutional cooperation 264–6
monitoring implementation 250–51
need for internationally coordinated standards 255
not part of mandatory conditions for implementing REDD 254–5
reforestation and afforestation projects under CDM 255–6
UN-REDD programme 256, 257–8, 263
Rees, M. 330
renewable/alternative energy
bio-energy/bio-fuels see biofuels
hydro power see hydro power and impact of dams on biodiversity 216–19
nuclear power 330
not meeting biodiversity policies 216, 222
search for 330–31
solar power 330
wind power/wind turbines 222, 330
Ridolfi, E. 334
Rio Conference (UNCED) 147
Rio Conventions 149, 151, 170–71, 261
Joint Liaison Group 149, 265
Rio Declaration on Environment and Development 22, 38, 114
governance 284
participation in environmental issues 51
Rio+20 summit 151, 227
Roberts, C. M. 382, 391
Robinson, C.L.K. 382
Roderick, Peter 19–20
Rotterdam Convention on the Prior Informed Consent for Certain Hazardous Chemicals and Russia 111
Sachs, I. 341, 346
Sanitary and Phytosanitary Measures (SPS Agreement) 411–12
risk management 423
standard-setting bodies reflecting principles 416
Santos, Nivaldo dos 334
Santos III v Northwest Orient Airlines (Philippines) 48
Saudia Arabia 25
Sauré, David 306
Scheldt river flooding see under EU Floods Directive and biodiversity protection
Schroeder, D. 204
seas see oceans and seas
Sec Alvarez v PICOP (Philippines) 44
Shell
ethanol production 335
gas flaring in Nigeria 9–10
acid rain 15
human rights litigation 17–21
utilisation of gas projects 12–13
shelter, right to 140–41, 227
Shine, C. 288
Singh, R.B. 420
snails 33
Social Watch Philippines 54
soft laws 380
solar power 330
see also renewable/alternative energy
sovereignty 182, 202
states’ permanent sovereignty over forests 238
standstill principle 348, 350–51
Stern report 72
Index

Stockholm Declaration 16, 129
Sudan
absence of environmental governance 134–5
absence of unified land tenure legal framework 123, 133–4, 138
biodiversity obligations 123
Constitution 134
constitutional right to a clean, diverse environment in 129
country background 124
Darfur crisis see Darfur crisis, climate change and human rights
failure to protect the environment 129–30
floods 135
poverty and famine 122
rich natural resources 122
violence from competition over agricultural and grazing land 122–23
sugarcane
agroecological zoning of sugarcane in Brazil 338–41
burning sugarcane straw 333, 341
banned in Brazil 333, 341–3
damage from 334
and climate change jurisprudence in Brazil 343–7
expansion in Amazon rainforest/ threats to biological diversity 331, 332–5
Sukhdev, Pavan 82, 89

Tajikistan
PALM project see Pamir-Alai Land Management (PALM) project
Tanada v Angara (Philippines) 48
Taño v Socrates (Philippines) 43, 53
Third Global Biodiversity Outlook 282–3
Thomas, V.G. 380, 383
transboundary conservation of mountain biodiversity 268–301
criteria for effective transboundary conservation 277–93
adaptive management practised/ existence of clear success indicators 285–6
complexity recognised and appropriate resources secured 290–91
costs and benefits of transboundary conservation equitably distributed 282
designated institutions identified/ linkages established across all levels 287–9
explicit objective of conservation 283–4
good governance practised 284–5
integrated ecosystem approach incorporating available science 282–3
mountain-specific issues incorporated in a meaningful manner 291–3
operating in consideration of capacity 289–90
operating at each level of political organization 278–80
political buy-in 280–82
rules and legal instruments existing to enable the process 286–7
threshold consideration: whether to ‘go transboundary’ 277–8
importance of transboundary approaches 275–93
appropriate management/ cooperation for whole ecological unit 275–6
criteria for effective transboundary conservation 277–93
political benefits from transboundary cooperation 276
risk of conflict arising from use of shared resources 276
international border areas, biologically intact ecosystems in 269, 270
Index

PALM project see Pamir-Alai Land Management (PALM) project
UNEP-WCMC report on international proposed networks 392
United Nations Framework Convention on Climate Change (UNFCCC) 99, 136
access to resources see equity in environmental governance
adaptation policies 106
additionality 199
biodiversity safeguards under 244, 253–8
causes of climate change 96
and CBD as 'common interest treaties' 252
clustering 155, 171
definition of climate changes 95–6
forests as carbon sinks and sources 251
GEF see Global Environmental Facility (GEF)
human rights and climate change 231–2
procedural human rights in UNFCCC framework 232–5
integrating biodiversity considerations in UNFCC/Kyoto Protocol 225–7
mountainous ecosystems, fragile 271–2
objective 7, 210–11
principles guiding State Parties 7
United Nations Global Compact 198
United Nations Human Rights Council 229
human rights and climate change 17, 231
United Nations University
PALM project see Pamir-Alai Land Management (PALM) project
United Nations World Charter for Nature 35
United States
biosecurity 415
difficulties 419–20
post-entry controls 421
CEC see Commission for Environmental Cooperation
climate change, using biodiversity laws to combat 210, 222–4
contiguous national parks with Canada 379
marine protected areas 378–9
B2B plan see Baja to Bering Sea Marine Protected Areas Project (B2B)
ecological criteria represented by US law 388–9
federal legislation 385, 396–7
state legislation 386, 390, 398–400
national parks 378
ocean acidification 215
Universal Declaration of Human Rights (UDHR) 128
climate change 227–8
right to an adequate standard of living 130
right to life, liberty and security 132, 228
van der Linde, P.J. 288, 291
Vásárhelyi C. 380, 383
Verifiable Carbon standards 199
Von der Weid, J.M. 332
Von Moltke, K. 152
water
EU Water Framework Directive see under European Union (EU)
mountain resources 273
right to food and water 17, 129, 131–2, 227
wetlands
carbon stock 78
Ethiopia 97, 105–6
Niger Delta 5
wind power/wind turbines 222, 330
see also renewable/alternative energy
women
businesses, starting 113
citizen movements/participation 36–7, 51, 109, 113
climate change affecting 36
Biodiversity and climate change

gender equality 114
marginalized 39
UN programme in Darfur 137
women’s rights 129
World Animal Health Organization (OIE) 410–11
economic impact as basis for regulation 425
list of notifiable diseases 422, 423
standards having to reflect WTO free trade/SPS Agreement principles 416
Terrestrial Animal Health Code 410–11, 417
Tripartite Concept Note 417
World Bank 117
Forest Carbon Partnership Facility 198–9, 256–8, 263
Operational Policies and Procedures 256–7
Safeguard Policies 257, 63
World Conservation Monitoring Centre (WCMC) 150
UNEP-WCMC report on international proposed networks 392
World Conservation Union (IUCN) 391

World Environmental Organization, creation of 166, 174, 175
World Health Organization 417
World Heritage Committee 212, 213
World Heritage Convention 149, 211–12
World Heritage Sites and climate change 211–13
List of World Heritage Sites in Danger 212
World Meteorological Organization (WMO) 213
World Summit on Sustainable Development 181
Plan of Implementation 271
World Summit Outcome Document 151
World Trade Organization recognising standard-setting bodies 411–12
Sanitary and Phytosanitary Measures (SPS Agreement) 411–12
risk management 423
standard-setting bodies reflecting principles 416
World Wildlife Fund 199, 210

Zanatta, M. 331
zoonoses see under diseases