
Index

- actual harm requirement 5
 - aggravated state responsibility 69, 86–90
 - aid workers *see* relief personnel
 - air disasters
 - Malaysian Airlines flight MH12 (2015) 514–15
 - air pollution
 - conventions 342–3
 - definition 342
 - alternative dispute resolution (ADR) 523–8
 - appropriateness 527–8
 - mediators / administrators 524–5
 - procedures 525–7
 - Anthropocene
 - definition 169
 - man-made / natural disasters, relationship between 169–72
 - armed conflict *see also under* humanitarian aid; international humanitarian law; transitional justice
 - children
 - impacts on 479–80
 - involvement in 397, 479, 482, 485, 492–3, 497–8
 - rights of 8–9
 - civil war 129
 - complex emergencies, and 6–7
 - cyber attacks, and 9
 - disaster definition, applicability 2–9, 111–12
 - exclusions 18–19
 - human rights law, applicability 482
 - international humanitarian law, applicability 132–4, 148, 150–51, 316
 - international investment agreements, and 215–17
 - national security, and 151
 - population displacement, and 115–16, 126, 367–8
 - prisoners of war, protections 388–9
 - property, protection 117–18
 - targeting, and 304–5
 - vulnerable persons, protection 387–90
 - war crimes 125–6
 - water security, and 301, 304–6
- assistance *see also* humanitarian aid; wildfires
 - Bruges Resolution 453, 462, 475–6
 - definitions 457–8
 - expectations of 459
 - firefighting services 338–9
 - formal recognition of private sector role 233–4
 - global wealth inequality, and 454–5
 - humanitarian aid vs. humanitarian action 458
 - ILC Draft articles 477
 - background 453–4, 460–61, 463
 - definitions 454, 464
 - donor unilateralism, and 475–7
 - duty to offer assistance 476
 - human rights, and 470–75
 - impartiality principle 474–5
 - international organizations, offers by 469–70
 - legal status 465–6
 - limitations 456–7, 462–4
 - national contingency planning, and 449–50
 - purpose 460, 463
 - responsibility to protect 466–7
 - right to offer assistance 460–65, 467–70
 - rights and obligations 463–5
 - state sovereignty, and 475–7
 - states, offers by 468
 - interference, as 474–5
 - intervention in non-consenting state 475–6
 - Mohonk Criteria 458–60, 462–3, 468
 - obligations
 - to cooperate in good faith 455–6
 - definition 454, 463–5
 - to donate 454–5
 - food assistance 261–2
 - ILC Draft articles on 463–5
 - limitations 455
 - to offer assistance 455–6, 471–2, 476–7
 - to provide assistance 90, 261–2, 315, 455–6, 462
 - to seek assistance 99, 471, 476–7
 - politicization 474–5
 - relief personnel, definition 457–8
 - right to offer 453, 460–65, 467–70
 - right to receive 456

- San Remo Principles 458–9, 469
- attacks, definition 121–2
- Badiou, Alain 107–8
- Barber, Rebecca 82–3, 88
- Bassiouni, M. Cherif 117
- Berlin Rules 307–8, 316
- biodiversity
 - food security, and 267–8
 - policy development 158
 - wildfires, and 337
- Bretton Woods consensus 31–2
- Brownlie, Ian 86
- Bruges Resolution 453, 462, 475–6
- Caribbean Catastrophe Risk Insurance Facility 244–5
- Caribbean Disaster Emergency Management Agency 442
- Cassese, Antonio 88
- children
 - armed conflict
 - human rights law, and 482
 - impacts on 479–80
 - involvement in 397, 479, 482, 485, 492–3, 497–8
 - post-conflict transitional justice 18, 489–99
 - protection during 8–9
 - best interests, definition 397–8
 - definition 479–80
 - derogable rights 397
 - with disabilities, rights of 399
 - disasters
 - impacts on 383–4, 479
 - protections during 499
 - economic, social and cultural rights 484
 - protection of
 - abuse, freedom from 398, 482
 - adoption 397
 - asylum seekers 399
 - birth registration 398
 - child labour 483
 - child prostitution and pornography 397, 485
 - conventions 396–9, 483–4
 - crimes against humanity 492–3
 - education and development 399, 480, 482, 499
 - health and healthcare 399, 484
 - orphaned or separated children 388, 482
 - post-conflict legal protections 481–6
 - sexual violence 482–3
 - refugee rights, and 390, 399
 - right to be heard 490–91
 - right to humanitarian aid 104, 137–8
 - right to identity and nationality 398
 - right to life 399
 - right to parental or foster care 398
 - transitional justice 18, 489–91, 499
 - institutional reform 497–9
 - involvement in reform process 490–91
 - prosecutions 492–3
 - reparations 496–7
 - Truth Commissions 493–6
 - vulnerability of 479, 489
 - water contamination risks 331–2
 - water insecurity risks, and 302–3
 - Chile
 - Santiago earthquake (2010) 93–4
 - China
 - energy security policies 292
 - Ciraolo, Giovanni 49–51
 - civil and personal rights
 - development 29–30
 - civil war 129
 - climate change
 - disaster prevention, and 76
 - disaster research, and 109–10
 - emergencies vs. slow-onset disasters 4, 157–8, 173–4
 - environmental displacement 1, 312–13, 359
 - environmental resilience policy
 - development 158–9
 - food security, and 255–7, 259–60, 268–9
 - geoengineering 173–4
 - influences on 52–3
 - land degradation, and 256–7
 - man-made / natural disasters, relationship
 - between 170
 - mitigation and adaptation 316
 - common but differentiated responsibilities 310
 - cooperative efforts 310–11
 - counterproductiveness of 259–60
 - emission-reduction targets 310
 - food security, and 254–60, 268–9
 - liability, judicial rulings 310
 - refugees, judicial rulings 312–13
 - water security, and 301–3, 309–11
 - Co-ordinated Emergency Response Measures (CERM) 279
 - compensation 85, 164 *see also* insurance and reinsurance
 - climate change compensation mechanisms 172

- complex emergencies
 - armed conflict, and 6–7
 - definition 4
 - international humanitarian law, and 147–9
- conflict *see also* armed conflict
 - definition 272
- consent
 - humanitarian aid, to 138–9, 141, 143–5, 150–51, 369
 - denial, and duty to intervene 475–6
 - marriage, to 396
- cooperation principle 195–8
 - good faith 455–6
 - state sovereignty, and 197–8
- corporate social responsibility 225–6, 237–9, 246–7
- corporations
 - corporate social responsibility 225–6, 237–9, 246–7
 - corporate welfare 37–8
 - disaster management stakeholder roles 13–14
 - economic decolonisation 33–4
 - humanitarian aid from
 - benefits 226–7, 245–6
 - challenges and obstacles 230–32
 - involvement trends 226
 - privileges and immunities 231–2
 - regulatory avoidance 40–41
 - taxation 38–9
- corruption 115, 126
- Crawford, James 87
- crimes against humanity 113, 117, 120–21
 - attack, interpretation 121–2
 - child abuse / sexual violence, prosecutions for 492–3
 - denial of humanitarian aid 117, 121–2
 - deprivation 117, 128
 - disasters with natural causes, and 118–19
 - extermination and murder 122–3
 - genocide 482–3
 - inhumane acts 124
 - persecution 117, 125
 - starvation 105, 114, 117, 122, 128, 139, 306, 483
 - thresholds 121–2
- crisis *see also* financial crisis
 - definition 8, 272
 - environmental law development, and 153
 - international law generally, and 154
 - vs.* disaster 8, 272–3
 - water crisis, definition 299–300
- customary international law
 - international water law 307
 - non-international armed conflict 140–41
 - precautionary principle 88
 - responsibility to protect 88–9
- cyber law
 - due diligence approach 17, 416, 426
 - accidental cyber damage 421
 - applicability 418–20
 - benefits 420–22
 - development 417–18
 - limitations 422–5
 - reasonable steps to prevent 417–18, 420–23
 - international law development 408–10
 - jus ad bellum* and *jus in bello* applicability 410–15, 423–4, 426
 - limitations 408–10
 - non-state acts of aggression 414–15, 421
 - state acts of aggression 411–15
 - territoriality issues 418
 - use of force prohibition 411–15, 423–5
- cyberspace
 - definition 406
 - disasters and attacks
 - accidental disasters 415–16, 421
 - attribution, challenges of 414–15
 - definition 406–7
 - denial of service 17, 407
 - disaster response 16–17
 - Estonia (2007) 407
 - impacts 413–15
 - Iran (2010) 407–8
 - non-state attacks 415, 421
 - risks 407
 - self-defence response 411–15, 423–4
 - state attacks 411–15
 - terrorism, and 406, 421
 - transboundary nature 407–8
 - violence *vs.* economic impacts 411–15
- cyclones
 - Nargis (2008) 82–3, 103–4, 114, 118–19, 227
- de Vattel, Emer 78–9
- death penalty 393, 395
- death, threat of imminent 127
- Deng, Francis 71–3
- denial of service attacks 17
- deportation, forcible 123–4
- deregulation 32
- desertification
 - policy development 157–8
 - prevention obligations 158, 256–7

- disabled persons
 - children, rights of 399
 - disasters, uneven impacts on 384
 - protection of 384, 387–9, 399–401
- disaster cycle 119–20
- disaster-displaced persons *see* population displacement
- disaster management *see also* post-conflict disaster management
 - corporate roles 13–14
 - human rights, and 11, 96, 106–8
 - derogations 94–6, 392–3
 - national contingency planning 17
 - population displacement, and 363–4
 - private sector roles 13–14
- disaster mitigation *see also* responsibility to prevent
 - concept development 73–8
 - desertification prevention 158–9
 - international criminal law, and 11–12
- disaster prevention *see also* disaster risk reduction; responsibility to prevent
 - climate change, and 76
 - cooperation principle, and 195–8
 - due diligence 189–90, 193
 - international criminal law, and 11
 - international human rights law, and 11
 - international instruments 194–5
 - policy development 191–5
 - poverty, and 13
 - pre-disaster phase obligations 192
 - risk assessments 193–4
 - state responsibilities 70, 73–8
 - international law obligations, scope 10–11
 - sustainable development, and 177–80, 185–95
- disaster relief
 - codes of conduct 100–101
 - termination of 84–5
- disaster response *see also* responsibility to react
 - aggravated state responsibility, and 88–90
 - geoengineering 173–4
 - human rights law approach 237–41, 315
 - policy trends 180–81
- disaster risk governance 17
- disaster risk reduction (DRR)
 - concept development 328, 445
 - corruption, and 126
 - definition 327–8
 - human rights, and 106–9, 200–201, 329
 - Hyogo Framework 197–8, 445–6
 - ILC Draft Articles, and 449–50
 - national contingency planning, and 429–30, 445–51
 - policy development 177–8, 180–81
 - population displacement, and 363–4
 - mobility facilitation 366
 - planned relocation 366–7
 - resilience measures 365–7
 - risk maps 366
 - Red Cross / Red Crescent Society role 64–5
 - reverse DDR 120
 - right to life, and 201, 448
 - sustainable development, and 177–80, 185–7, 202
 - vulnerable persons, protection of 404
 - water contamination, and 327–9
 - Yokohama Strategy 445
- disasters, generally *see also* man-made disasters; natural disasters
 - definition 2–10, 112, 154–5, 206, 320, 502–3
 - actual harm requirement 5
 - armed conflict, and 2–9, 111–12
 - crisis *vs.* disaster 8, 272–3
 - elements / criteria 4–6, 93
 - force majeure* disasters 50
 - single *vs.* complex emergencies 4
 - social perspectives, and 4, 7
 - food safety, and 260
 - human and economic costs 46, 177
 - impact trends 69, 177
 - man-made / natural disasters, relationship between 169–72
 - social paradigm 93–4
- discrimination
 - prohibition against 394, 402
 - vulnerable persons, disaster impacts on 383–5
- disease
 - pandemics 439
 - post-disaster outbreaks 502, 506, 508–9, 516, 520–21, 523
 - water contamination and poor sanitation, and 321–3
- dispute settlement, generally *see also* post-conflict disaster management
 - awards, recognition and enforcement 513
 - international criminal law, and 513–15
 - international human rights law, and 504–7
 - international investment agreements, and 212–13
 - limitations 36–7, 39, 41–2
 - public interests, and 36–7, 39

- regime challenges 40–41
- double jeopardy rule 393
- drought
 - causes 299
 - desertification, prevention obligations 158, 256–7
 - impacts 299–301, 360
 - water security, and 299
- due diligence *see also* responsibility to protect
 - common but differentiated responsibility 186, 310, 418
 - cyber law, and 17, 416, 426
 - applicability 418–20
 - benefits 420–22
 - development 417–18
 - limitations 422–5
 - definition 417
 - degree of care, interpretation 189–90
 - international human rights law, and 510–11
 - national contingency planning, and 448–9
 - necessary and appropriate measures, interpretation 193
 - obligations 17, 189–90
 - reasonable steps to prevent 417–18, 420–23
 - terrorism, and 421
- duress 127
- earthquakes
 - Christchurch (2011) 354
 - Haiti (2010) 84–5, 93, 96, 267, 360, 377, 510–11
 - humanitarian aid
 - emergency financial aid 267
 - technology impacts on 226–7
 - impacts 52–3, 115
 - insurance pools 244–5
 - Nepal (2015) 226–7
 - Pakistan (2005) 266, 360, 454
 - San Francisco (1906) 91–2, 227
 - Santiago, Chile (2010) 93–4
 - Sichuan (2008) 236
 - urbanization, and 52–3
- elderly persons, convention protections 401–2
- emergencies
 - complex emergencies 4, 6–7, 147–9
 - definition 393
 - human rights derogations during 94–6, 362, 392–3
 - vs.* slow-onset disasters 4, 157–8, 173–4
- emergency / aid workers *see* relief personnel
- emergency preparedness *see* national contingency planning
- energy security
 - Co-ordinated Emergency Response Measures (CERM) 279
 - conflict and crisis implications 14, 275–9, 292–4
 - coordination, need for 292–3
 - critical infrastructure
 - definition 281
 - identification 288–9
 - security policies 280–92
 - definition 273
 - EU policies 285–91
 - IEA role 278–9
 - importance of 272
 - interdependence 276–7, 292–3
 - international strategic approaches 277–8
 - national agency guidelines 283–5
 - OPEC role 278
 - political instability risks 275–6
 - regulatory limitations 279–80
 - stockholding policies 281, 289
 - terrorism, and 275–6, 280–81
 - trade agreements, and 277–8
 - transit route risks 275–7
 - US policies 280–85
- energy supply
 - importance 272
 - interdependence 14, 272–5
 - regulatory frameworks 274
 - risks 275–6
 - trade patterns 274
- environmental disasters *see* climate change; natural disasters
- equality *see also* global inequality
 - citizens' rights, development of 29–30
- Eritrea-Ethiopia Claims Commission 505–6
- Esping-Andersen, G. 29
- Estonia
 - cyber threats 407–8
- European Programme for Critical Infrastructure Protection (EPCIP) 288–9
- European Union
 - Civil Protection Mechanism 442–3
 - energy security policies 285–91
- extermination 122–3
- famine
 - causes 116
 - desertification, prevention of 158
 - Ethiopia (1982–1985) 114, 128
- Farber, D.A. 70, 74, 76, 173
- Fidler, David 48–9, 53, 75, 78, 83, 386
- financial crisis 23, 43

- firefighting services 338–9
- floods
 - causes 299
 - impacts 299–301
 - water security, and 299
- food security 14
 - access 254
 - availability 254
 - climate change, and 255–7, 259–60
 - mitigation and adaptation 254–60, 268–9
 - community vulnerability, and 258
 - conditions endangering
 - causes 255–6
 - disaster, and 259–60
 - duty to prevent or mitigate 254–60
 - cooperation, need for 269–70
 - crop diversity, and 267–8
 - disaster recovery, and 264–9
 - disaster response frameworks 251–2
 - disaster risk reduction programs
 - early warning systems 256, 259
 - policy implementation 259–60
 - self-sufficiency and sustainability, and 257–8
 - disaster victimization, and 251
 - famine, and 116
 - financial support 258–9, 267
 - food networks, importance of 269–70
 - food safety, and 260, 263
 - forests, importance of 339–40
 - genetic resources, and 268
 - humanitarian aid
 - codes of conduct 100–101, 264
 - consent to 262
 - protection of 262
 - insecurity trends 255–6
 - intergovernmental bodies, role 265–6
 - investment and reinvestment 264–5, 271
 - land tenure influences 258
 - local market protection 261
 - necessary aid 256
 - nutritional balance, and 270
 - poverty, and 257
 - principles 254
 - progressive realization, and 262
 - resilience mechanisms 267–8
 - right to food, and 252–3, 255–6
 - after a disaster 264–9
 - during a disaster 260–64
 - soft law mechanisms 261
 - Sphere Project Humanitarian Charter
 - 100–101, 264
 - stability, and 254
 - state and non-state actor obligations 251–2
 - consultation 261
 - conventions 256–7
 - delivery of aid 263
 - food assistance 261–2
 - national legal obligations 256
 - prevention and mitigation 254–60
 - utilization 254
 - World Bank investment role 264, 267
 - forced marriage 396
 - forcible transfer or deportation 123–4
 - Foreign Direct Investment 206
 - forests
 - forestry management
 - FAO role 341–2, 344–5
 - international regimes 339–40
 - importance of 339–40
 - freshwater pollution
 - disaster policy development 165–6
 - Fuller, Lon 71, 73
 - gender *see* women
 - genocide 113, 482–3, 507–8
 - geoengineering 173–4
 - Germany
 - energy security policies 289–90
 - Global Environment Facility (GEF) 268
 - global inequality
 - deregulation, and 32–3
 - disaster implications 10
 - globalisation, and 39–40
 - legal solutions, effectiveness of 23
 - state role and obligations 24–6
 - trends 10, 23–6
 - wealth, measurements of 40
 - global justice 24–5
 - globalisation
 - corporate welfare 37–8
 - global inequality, and 39–40
 - governance gap 30
 - hyperglobalisation 32
 - international trade and investment, and 32–3, 37–40
 - new medievalism 39–40
 - public interest influences 29–32, 37–40
 - social economic rights, and 30, 39
 - state sovereignty, and 29–30
 - Green Climate Fund 172
 - Gulf Coast Claims Facility (GCCF) 524–5
 - Habibis, Daphne 130
 - Hafner-Burton, E.M. 95

- Haiti
 earthquake (2010) 82, 84–5, 93, 96, 267, 360, 377, 510–11, 516, 520–21
 land rights 106–7
- Hannigan, John 100
- harm
 actual harm requirement 5
 no-harm rule 190–91
 threat of imminent serious harm 127
 transboundary harm, prevention of 159–60, 187–91
- hazardous substances
 environmental policy development 166–8
 transfer of 186
- Held, David 29
- Hilson, C. 103
- Hiroshima and Nagasaki nuclear detonation 166
- Hobbes, Thomas 25–7
- Hoffman, Michael 46
- human development indices 40
- human rights *see also under* natural disasters
 civil and political rights 394
 criticism of 107–8
 derogation from 94–6, 392–3
 disaster risk reduction, and 106–9, 200–201, 329
 economic, social and cultural rights 394–5
 ethics of 107–8
 food security, and 14
 freedom from
 inhuman or degrading treatment 373, 393
 slavery and servitude 393–4, 483
 harmful traditional practices, protection from 395–6
 interpretation of 96
 judicial rights 394
 obligation to seek assistance 99, 471, 476–7
 right to a home 85
 right to be heard 490–91
 right to development 185
 right to food 252–3, 255–6
 after a disaster 264–9
 during a disaster 260–64
 soft law mechanisms 261
 state and non-state actor obligations 261–2
 right to humanitarian aid 103–5
 right to justice 487
 right to life 98–9, 101–3, 201, 332, 448, 510
 children 399
 judicial interpretation 102–3
 protection obligations 98–9, 101–3, 332–3, 448, 510
 water contamination, and 332
 right to property 106–7
 right to sanitation 313, 330–31
 right to water 313–15, 330–31
 socio-economic rights 98, 511–12
 torture, freedom from 373, 388–9, 393
- human rights law 2
 armed conflict, and 314–15
 assistance, obligations to provide 90, 261–2, 315, 455–6, 462, 470–75
 death penalty, and 393, 395
 derogations
 during emergency situations 94–6, 362, 392–3
 non-derogable rights 393, 395
 disaster management, and 11
 sustainable development 199–201
 disaster risk reduction, and 106–9, 200–201, 329
 dispute settlement
 ICJ role 504–7
 limitations 512–13
 tribunals role 508–13
 double jeopardy rule 393
 due diligence, and 510–11
 focus trends 16
 humanitarian aid, private sector role 225, 237–41
 international humanitarian law, convergence with 316
 limitations 19
 national contingency planning, and 446–8
 population displacement, and
 cross-border displacement 377–9
 disaster-related displacement 362–3
 vulnerable persons, and 385
 water security, and 313–15
- human rights tribunals
 dispute settlement role 508–13
- human security
 definition 72
- human trafficking 395–6, 483
- humanitarian aid *see also* assistance; private sector
 armed conflict, and
 challenges 132–3
 consent 138–9, 141, 143–5, 150–51, 369
 Convention provisions 132–3
 High Contracting Party concern 144–5
 IHL and IDL protections, compared 149–52

- impartiality principle 138–9, 141
 - military necessity limitations 139
 - national security, and 151
 - non-international armed conflict 140–42, 145–6
 - non-occupied territories, in 137–40
 - non-state armed group obligations 145–6
 - non-state controlled territories 142–6
 - obstruction or denial of access 138–40
 - occupied territory, in 135–7
 - principles 134
 - relief personnel 136–7, 142, 145–6, 151–2
 - state obligations 134–7, 141–2, 147
 - supplies, movement of 138–9, 141–2, 144–6
 - transit states 135–8
 - UN Security Council intervention 146
 - undue hardship requirement 141, 147
 - challenges to 12–13
 - children's rights, and 104, 137–8
 - codes of conduct 263
 - complex emergencies, and 147–51
 - consent 50, 138–9, 141, 143–5, 150–51, 262, 369
 - denial or prevention of access 117, 121–2, 369–70, 475–6
 - duty to intervene, and 475–6
 - sovereign state, of 50, 138–9, 141
 - customs duties 135
 - donor unilateralism, and 475–7
 - expectations of 459
 - food safety regulations 263
 - humanitarian action, compared 458
 - impartiality principle 138–9, 141, 474–5
 - Mohonk Criteria 458
 - non-discrimination principle 369
 - obligations
 - delivery of food 263
 - non-state armed groups 145–6
 - policy development 48–55
 - politicization 474–5
 - privileges and immunities 231–2
 - protection of 262
 - right to food
 - after a disaster 265–9
 - during a disaster 260–64
 - right to intervene 105
 - right to receive 103–5, 456
 - technology impacts on 226–7
 - thresholds 50
 - trends 55, 236
- humanitarianism 474–5
- hurricanes 82
 - energy security impacts 277, 281
 - insurance mediation programs 525–6
 - insured losses 227
 - Katrina (2005) 83, 227, 277, 281, 511, 516, 525–6
 - Mitch (1998) 362
 - Rita (2005) 252, 277, 281
- Hyogo Framework for Action 2005–2015 13, 74, 171, 181
 - adoption 74
 - cooperation principle 197–8, 445–6
 - goals 74–5
 - Red Cross / Red Crescent Society role 64
- impartiality principle 138–9, 141, 474–5
- India
 - energy security policies 292
- industrial accidents
 - Bhopal (1984) 506, 509, 516–20, 522
 - Chernobyl (1986) 161, 167, 436
 - Deepwater Horizon (2010) 506, 516, 519, 522, 524–5
- dispute settlement 506
- Ecuador, Lago Agrio 204–6, 506, 512–13, 516–18, 520
- international law, and
 - limitations 512–13
 - obligations 436–7, 439–40
 - policy development 160–61
- inhuman or degrading treatment, freedom from 373, 388–9, 393
- insurance and reinsurance
 - climate change compensation mechanisms 172
 - disaster relief, and 225, 227
 - development trends 227
 - humanitarian aid, and 244–5
 - post-disaster recovery 85
 - mediation programmes 525–6
- Inter-American Court of Human Rights 513
- Intergovernmental Panel of Climate Change 170
- International Atomic Energy Agency 167
- international civil defence
 - wildfire prevention and assistance 353–4
- International Civil Defence Organization 353–4
- International Commission on Intervention and State Sovereignty 71–3
- International Court of Justice
 - jurisdiction 506–7

- post-disaster dispute resolution role 504–8, 528
- International Criminal Court 111
- international criminal law 317 *see also* crimes against humanity; genocide; war crimes
 - applicability
 - civil war or peacetime 129
 - interconnectedness of law 129–30
 - natural disasters 114–16
 - non-state actors 113
 - children's rights, and 8–9
 - civil war 129
 - crimes
 - attack, interpretation 121–2
 - causes attributable to natural disasters 118–20
 - characteristics of 112–13
 - corruption 126
 - creation of life-endangering conditions 117
 - crimes against humanity 117–25, 482–3
 - denial of humanitarian aid 117, 121–2
 - deprivation 117, 128
 - extermination and murder 122–3
 - forcible transfer or deportation 123–4
 - inhumane acts 124
 - persecution 117, 125
 - post-disaster restrictive behaviour 115–16
 - scope of 116–18
 - starvation 105, 114, 117, 122, 128, 139, 306, 483
 - terrorism 126
 - transboundary movement of waste 126
 - transnational organized crime 126–7
 - war crimes 113, 125–6
 - defences 127–8
 - duress 127
 - mistake of fact 127–8
 - threat of imminent serious harm / death 127
 - disaster prevention / mitigation, and 11–12
 - jurisdiction
 - air disasters 514–16
 - limitations 113, 128–9, 514–15
 - natural disasters 114–16
 - crimes with causes attributable to 118–20
 - post-disaster restrictive behaviour 115–16
 - principles 114
 - protections 117–18
 - responsibility to react 83, 89
 - water security, and 303–4, 306–7
- international criminal tribunals
 - dispute settlement role 513–15
 - limitations 514–15, 528–9
- international disaster law (IDL), generally
 - challenges 2
 - development 2, 303
 - international humanitarian law, and 8, 149–51
 - state sovereignty, and 151
 - study trends 132–3
 - water security, and 303
- international disaster response law (IDRL)
 - concept development 46–52, 463, 481–2
 - attitude changes 53
 - challenges and limitations 63
 - disaster risk reduction policy 64–7
 - humanitarian aid consent 50
 - IDRL Guidelines 60–63
 - influence and limitations on 48–9
 - information initiatives 46
 - peacetime relief 49
 - Red Cross / Red Crescent Society role 48–50, 55–9, 64–5, 481
 - scholarship trends 54
 - UN role 51–3
 - uptake progress 62–3
 - transitional justice, and 486–9
- International Energy Agency (IEA) 278–9
- International Energy Programme 278
- international environmental law 2 *see also* sustainable development
 - challenges 174–5
 - disasters, and
 - definition 154–5
 - disaster law, relevance of 153
 - emergency vs. slow-onset disasters 173–4
 - grave and imminent peril 155–6
 - human agency, and 153
 - man-made / natural, relationship between 169–72
 - mixed character of 157–8
 - recovery measures, environmental
 - impacts of 159
 - state responsibility for 155–6
- international law generally, and 155–6
- limitations 154–5, 174–5
- policy development 156–8
 - emergencies vs. slow-onset disasters 157–8
 - focus 12, 153, 169, 174–5
 - freshwater pollution and disasters 165–6
 - industrial accidents 160–61
 - influences on 153
 - marine pollution and disasters 162–4
 - polluter pays principle 161

- purpose 12, 169
- radioactive and hazardous substances 166–8
- soft law 156–8
- transboundary harm 159–61
- water security, and 303–4, 308
- precautionary principle, and 308
- international humanitarian law 2 *see also* humanitarian aid
- applicability
 - armed conflict, during 132–4, 148, 150–51, 316
 - non-international armed conflict, and 148–9, 152
 - non-state armed groups, and 143, 152
- complex emergencies, and 147–9
- coordination, need for 13–14
- development, influences on 48–9
- disabled persons, protections of 400
- disaster definition, and 7–8
- duty-based focus 96
- human rights law, convergence with 316
- international disaster law, and 8, 149–51
- peacetime relief 49
- vulnerable persons protections 387–90
- water security, and 303–6
- international investment agreements
 - armed conflict, applicability during 215–17
 - BITs 209–11
 - dispute settlement mechanisms 212–13
 - economic vs. societal conflicts 208–9
 - EPAs 211
 - exception justification model 217–20
 - fair and equitable treatment 213–14
 - FTAs 211
 - full protection and security criteria 213–15
 - legitimate interest protections 211–12
 - national treatment 220–23
 - non-discrimination principle 216
 - object and purpose 209–12
 - political risk, and 217
 - risk protection role 207–17
 - standards of protection 210–11, 213–15
 - trends 207–12
- International Law Commission
 - disaster response law policy development 65–7
 - Draft articles on disaster assistance 477
 - background 453–4, 460–61, 463
 - definitions 454, 464
 - donor unilateralism, and 475–7
 - duty to offer assistance 476
 - human rights, and 470–75
 - impartiality principle 474–5
- international organizations, offers by 469–70
- legal status 465–6
- limitations 456–7, 462–4
- national contingency planning, and 449–50
- purpose 460, 463
- responsibility to protect 466–7
- right to offer assistance 460–65, 467–70
- rights and obligations 463–5
- state sovereignty, and 475–7
- states, offers by 468
- international law, generally
 - accountability mechanisms 317
 - applicability 3
 - crises, influences of 154
 - duty to cooperate 195–8
 - effectiveness 3
 - limitations 316–17
 - regime interaction 316–17
 - role, increase in 129–30
- International Monetary Fund 31
- International Oil Pollution Compensation Fund (IOPCF) 164
- international refugee law
 - admission criteria 375–8
 - child refugee rights 390, 399
 - climate change refugee rulings 312–13
 - disaster displacement 364, 375–9
 - human rights law, and 377–9
 - non-refoulement 312, 373, 390
 - return measures 378–9
 - transhumance agreements 377
 - vulnerable persons, protection of 390–92
 - water security, and 311–13
- international relations
 - globalisation, and 30
 - Westphalian model 29–30
- international responsibility
 - long-term reconstruction, and 85
 - triggers 72–3
- International Search and Rescue Advisory Group (INSARAG) 59–60, 63, 354–5
- international solidarity 17–18
- international trade and investment *see also* international investment agreements
 - corporate taxation 38–9
 - corporate welfare 37–8
 - disasters, and 13
 - dispute settlement limitations 36–7, 39, 41–2
 - economic decolonization 33–4

- global justice, and 24–5
- globalisation, and 32–3, 37–40
- policy development 31–3
- private law governance 40–41
- procedural bias 36–7
- public interests, conflicts between 33–44
- stabilisation clauses 33–4, 40–41
- trade agreements
 - exception justification model 218–20
 - national treatment 220–23
- international water law
 - development 307–8
 - disasters, and 303–4
 - equitable and reasonable use 308
 - humanisation of 316
 - principles 308–9
 - water security, and 307–9, 315–16
- internationally wrongful acts 350–51
- investment law *see* international investment
 - agreements; international trade and investment
- Iran
 - cyber-attacks 407–8
- Islamic State of Iraq and the Levant (ISIL) 275–6
- jurisdiction
 - dispute settlement
 - forum non conveniens* 517–19, 529
 - immunity from 520–21
 - limitations 504–5, 515–16
- justice *see also* transitional justice
 - democracy, and 28
 - global justice, influences on 24–5
 - judicial review 28
 - peace-building, and 486–8
 - political justice 488–9
 - right to 487
 - socio-economic justice 489
 - victims, recourse to international courts / tribunals 516
- Kennedy, D. 30
- land tenure
 - food security, and 258
- Lillich, Richard 71
- man-made disasters
 - armed conflict, and 2–7
 - Bhopal (1984) 506, 516–20, 522
 - Chernobyl (1986) 161, 167, 436
 - definition 2–4
 - dispute settlement, court role 506–7
 - Ecuador, Lago Agrio 204–6, 506, 512–13, 516–18, 520
 - grave and imminent peril 155–6
 - human rights, and 508–9
 - natural disasters, relationship between 169–72
 - state responsibility for 155–6
 - water security, and 299
- marine environment
 - pollution and disasters policy development
 - civil liability 163–4
 - international law obligations 437–9
 - policy development 162–4
 - seabed mining 164
 - trends 162
- market regulation
 - benefits and limitations 43–4
- Marks, Susan 511–12
- marriage 396
- Marshall, T.H. 29
- micro-insurance 227
- Millennium Development Goals 76, 404
 - water safety and sanitation 322, 325–6
 - water security 298, 303
- minority groups, convention protections 402
- mitigation *see* climate change; disaster
 - mitigation
- Mohonk Criteria 458–60, 462–3, 468
- money laundering 127
- murder 122–3
- Nansen Initiative Protection Agenda 16, 374, 376
- national contingency planning 17
 - approaches 431–2
 - ASEAN 443–4
 - Caribbean 443
 - EU Civil Protection Mechanism 442–3
 - Hyogo Framework 197–8, 445–6
 - South Africa 432–4
 - Southeastern Europe 442–3
 - United States 434–5
 - Yokohama Strategy 445
 - civil defence, framework convention 444
 - definition 428–9
 - development 430–31
 - disaster risk reduction, and 429–30, 445–51
 - international law obligations 451–2
 - civil defence framework convention 444, 451
 - hazard-specific conventions 436–40
 - human rights 446–8

- ILC Draft Articles 449–50
- industrial accidents 436–7, 439–40
- nuclear disasters 439–40
- oil pollution 437–9
- pandemics 439
- multilateral resolutions and declarations 444–6
- national security, and 432
- preparedness cycles 429–30
- principles 428–9, 431–5
- regional arrangements, and 440–44
 - early warning systems 443–4
 - limitations 440–41, 451
- risk assessment 443–4
- sovereignty, and 430
- natural disasters
 - danger zones, global population distribution in 52
 - definition 3, 93
 - human impacts
 - adverse agency 118–20
 - corruption 115
 - urbanization 52–3
 - human rights, and 93–6, 508–9
 - ambiguous relationship 108–9
 - codes of conduct 100–101
 - derogation from 94–6
 - disaster management 106–9
 - IASC Guidelines 95–8
 - ILC Draft Articles 98–100
 - obligation to seek assistance 99, 471, 476–7
 - protection of freedoms 98
 - protection of property 98
 - right to humanitarian aid 103–5
 - right to intervene 105
 - right to life 88–9, 101–3, 201, 510
 - right to property 106–7
 - socio-economic rights 98, 511–12
 - state obligations 99
 - impact trends 69, 177
 - international criminal law, and 114–16
 - loss impact trends 69, 177
 - man-made disasters, relationship between 169–72
 - understanding, developments in 53
- necessity
 - military necessity limitations 139
 - necessary and appropriate measures 193
 - necessary food aid 256
 - principle of 350–51
- new medievalism 39–40
- new technologies *see also* cyber law; cyberspace
 - risks vs. benefits, balancing 34
- Nigeria
 - energy security policies 291
- no-harm rule 190–91
- non-government organisations
 - human rights duties to offer / provide assistance 471–2
 - humanitarian role 225
 - offers of assistance by 469–70
- non-international armed conflict
 - definition 140–41
 - humanitarian aid 140–42
 - international humanitarian law, applicability 148, 152
 - water security, and 304–5
- non-occupied territory
 - humanitarian aid obligations 137–40
- non-refoulement principle 312, 373, 390
- non-state actors
 - cyber attacks by 415, 421
- non-state armed groups
 - humanitarian aid in areas controlled by 142–6
 - aid facilitation 145–6
 - challenges 142
 - humanitarian access 143–5
 - obligations 143, 145–6
 - UN Security Council intervention 146
- humanitarian law applicability to 152
- nuclear disasters
 - Chernobyl (1986) 161, 167, 436
 - Hiroshima and Nagasaki detonations 166
 - international law obligations 439–40, 507
- occupied territory
 - humanitarian aid obligations 135–7
- oil pollution
 - civil liability 163–4, 437–9
 - international law obligations 437–9
- OPEC 278
- organized crime 126–7
- pandemics 439
- Piketty, Thomas 32
- polluter pays principle 161
- pollution
 - air pollution 342–3
 - civil liability 163–4
 - disaster policy development 165–6
 - freshwater pollution 165–6
 - marine pollution 162–4, 437–9

- oil pollution 163–4
- Polyani, Karl 26–9
- population displacement 16
 - armed conflict, and 115–16, 126, 367–8
 - bilateral and regional migration agreements 364
- causes 359, 361
 - climate change / environmental 1, 312–13, 359
 - forcible transfer or deportation 123–4
 - multi-causal displacement 360
 - sudden-onset disasters 359–60
- cross-border displacement 360, 364
 - admission criteria 375–8
 - inhuman or degrading treatment 373
 - international law, and 372–3
 - Nansen Initiative 16, 374, 376
 - non-return criteria 378–9
 - protection regime 372–5
 - regime reform proposals 373
 - threat to life 373
 - transhumance agreements 377
- disaster displacement
 - causes 359–60
 - disaster management, and 363–4
 - international human rights law, and 362–3
 - international refugee law 364, 375
 - non-return measures 378–9
 - protection during 379–80
- disaster risk reduction 363–4
 - mobility facilitation 366
 - planned relocation 366–7
 - resilience measures 365–7
 - risk maps 366
- humanitarian access, and 369–70
- internal displacement 360, 363
 - duration 371
 - legal regime 367, 390
 - protection during 367–70
 - regime limitations 390
 - returning home 370–72
- international procedural guidelines 363, 368–71
 - limitations of 379–81
- relatives, location of 370
- responsibility to protect, and 365, 368–70
- trends 16, 52, 358–60
- voluntary migration 364, 366
- water security, and 311–13
- post-conflict disaster management
 - alternative dispute resolution 523–8
 - appropriateness 527–8
 - mediators / administrators 524–5
 - procedures 525–7
- dispute settlement 18
 - awards, recognition and enforcement 513
 - damages, distribution of 521
 - domestic court role 516–23
 - forum non conveniens* 517–19, 529
 - human rights treaty bodies role 508–13, 528–9
 - ICJ role 504–8, 528
 - immunity from jurisdiction 520–21
 - international court / tribunal role, generally 503–4, 515–16, 528–9
 - international criminal tribunals role 513–15, 528–9
 - man-made disasters 506–7
 - parties, identification difficulties 519–20
 - study limitations 503–4
 - transboundary harm, and 507–8
- insurance and compensation 85
- jurisdiction
 - forum non conveniens* 517–19, 529
 - immunity from 520–21
 - limitations 504–5, 515–16
- reconstruction limitations 18
- responsibility to rebuild 70, 83–5
- transitional justice 18
- poverty
 - disproportionate impacts of disasters 13
 - earthquake fatalities, and 115
 - eradication, as sustainable development goal 185
 - food security, and 257
 - public policy development 26–7
 - State role and obligations 24–5
 - trade and investment influences on 24–5
 - trends 23–4, 257
- precautionary principle 88, 308
- prisoners of war 388–9
- private sector
 - corporate social responsibility 225–6, 237–9, 246–7
 - corporate welfare 37–8
 - definition 229–30
 - disaster management role 13–14
 - disasters, liability for 506–7
 - dispute settlement, and 506–7
 - economic decolonisation 33–4
 - humanitarian aid 225
 - accountability 246–7
 - benefits of 226–7, 245–6
 - challenges and obstacles 230–32
 - characteristics 226

- cluster approach 241–2
- codes of conduct *vs.* best practice 239–41
- coordination challenges 243–5
- coordination policies 241–3
- duty to cooperate, and 233
- ethical principles 244
- EU agency role 236
- formal recognition of assistance role 233–4
- guidance for 225–6, 229–30, 232–3
- human rights law approach 237–41
- inappropriate relief 228–9
- insurance 244–5
- integration into system 228–9
- involvement trends 225–6, 228
- limitations 13–14
- national legal frameworks 234–7
- partnership models 242–3
- privileges and immunities 231–2
- US agency role 236
- insurance and reinsurance 227
- non-government organisations
 - human rights duties to offer / provide assistance 471–2
 - humanitarian role 225
 - offers of assistance by 469–70
- regulatory avoidance 40–41
- taxation 38–9
- proceeds of crime 127
- property
 - land tenure, and 258
 - protection obligations 98
 - right to 106–7
- public goods
 - private goods, and 44
 - protection 28
- public interests
 - concept development 26–30
 - dispute settlement, and 36–7, 39
 - free market influences 32–4
 - globalisation, and 29–32, 37–40
 - importance of 43–4
 - international trade, conflicts between 33–44
 - justice, and 28
 - nation state accountability, and 29–30
 - new technologies, and 34
 - procedural bias, and 36–7
 - public safety, and 34–5
 - welfare trends 25, 27
- public-private partnerships 13
- radioactive substances
 - environmental policy development 166–8
- Rawson, J. 173
- recovery and reconstruction *see* responsibility to rebuild
- Red Cross / Red Crescent Societies
 - disaster risk reduction role 64–5, 70, 79–80
 - IDRL Guidelines 60–63, 79
 - International Disaster Response Law Project 46–7, 56–9
 - organisational structure 49
 - policy development role 46–50, 55–9, 65–6, 481
 - responsibility to react 79–80
- refugees *see also* international refugee law; population displacement
 - child refugee rights 390, 399
 - definition 390
 - disaster-related, trends 384
- Regional Comprehensive Economic Partnership (RCEP) 207
- reinsurance 227
- relief personnel
 - armed conflict, and 142, 151–2
 - state obligations 136–7, 145–6
 - visas, taxes and permits 145–6
 - convention rights 232–4, 246, 339
 - definition 457–8
 - entry, planning for 338–9
 - firefighting services 338–9
 - right to work in safe conditions 339
- resilience, generally *see also* responsibility to prevent
 - definition 404
- responsibility, generally *see* international responsibility; state responsibility
- responsibility to prevent 70, 73–8
 - common but differentiated 186, 310, 418
 - concept development 73–8
 - definition 73
 - due diligence 189–90, 193
 - policy development 74–5
 - reasonable steps 417–18, 420–23
 - risk mitigation 74
 - scope 74
 - sustainable development, and 177–80, 185–95
- responsibility to protect
 - concept development 69–73
 - customary international law, and 88–9, 417
 - ILC Draft articles 466–7
 - international crimes, and 83, 89
 - disasters with natural causes 118–20
 - limitations 89–90
 - obligation to assist 90, 261–2, 315

- obligation to seek assistance 99, 471, 476–7
- population displacement 365, 368–70
- responsibility to prevent 70, 73–8
- responsibility to react 70, 78–83
- responsibility to rebuild 70, 83–5
- responsible sovereignty concept 118–19
- right to intervene, and 105
- right to life, and 201, 448
- scope 73
- responsibility to react 70, 78–83
 - concept development 78–9
 - industrial accidents 436–7, 439–40
 - international crimes 83, 89
 - national contingency planning, and 448–9
 - nuclear disasters 439–40
 - oil pollution 437–9
 - pandemics 439
 - third party state responsibilities 81
- responsibility to rebuild 70, 83–5
 - definition 83–4
 - disaster relief termination 84
 - insurance and compensation 85
 - limitations 84
 - long-term reconstruction projects 85
 - post-disaster recovery, and 84–5
- right to be heard 490–91
- right to development 185
- right to food 252–3, 255–6
 - after a disaster 264–9
 - during a disaster 260–64
 - soft law mechanisms 261
 - state and non-state actor obligations 261–2
- right to intervene 105
- right to justice 487
- right to life
 - children 399
 - judicial interpretation 102–3
 - protection obligations 98–9, 101–3, 332–3, 448, 510
 - water contamination, and 332
- right to property 106–7
- right to sanitation 313, 330–31
- right to water 313–15, 330–31
- Rodrik, D. 31–2
- Ruggie, J. 27, 41
- rule of law 487
- Sachs, J. 30
- Saechao, Tyra 82–3
- Samuels, J.W. 54
- San Remo Principles 458–9, 469
- sanitation
 - disease, and 322–3
 - human right to 313, 330–31
 - Millennium Development Goals 322
 - right to water, and 330–31
- Scharpf, F. 27
- search and rescue 354–5
- security *see* energy security; food security; water security
- Sen, Amartya 116
- Sendai Framework 2015 94, 119, 123–4, 129, 171, 181
 - cooperation principle 197–8
 - disaster, definition 303
 - population displacement 363, 365–6
 - principles 75, 270, 303
- sexual violence 9, 398, 482–3
- slavery and servitude, freedom from 393–4, 483
- slow-onset / creeping disasters 4, 157–8, 173–4
- social economic rights
 - development 26–30
 - globalisation, and 30, 39
- social progress indices 40
- soft law
 - human rights in natural disasters 100–101
 - limitations 19
 - role of 19, 57–8
- South Africa
 - contingency planning 432–4
- Sphere Project 239
 - Humanitarian Charter 100–101, 264, 314
- starvation 105, 114, 117, 122, 128, 139, 306, 483
- state responsibility 17, 89–90
 - accountability 72
 - aggravated state responsibility 69, 86–90
 - carbon emission reductions 76
 - civil defence 353–4
 - common but differentiated 186, 310, 418
 - customary international law, and 88–9, 417
 - disaster notification 185, 190
 - erga omnes* obligations 507–8
 - human rights, and disasters 99
 - communication of essential information 448
 - disaster-affected states, duties of 471
 - entities external to disaster 471–2
 - national contingency planning 446–8
 - right to life, and 98–9, 101–3, 201, 332–3, 448, 501
 - humanitarian aid
 - armed conflict, during 134–5

- non-international armed conflict, during
 - 141–2
 - occupying states 135–7
 - transit states 135–8
- industrial accidents 436–7, 439–40
- internationally wrongful acts 350–51
- man-made disasters, for 155
 - grave and imminent peril 155–6
- nuclear disasters 439–40, 507
- obligation to assist 90, 261–2, 315, 455–6
- obligation to seek assistance 99, 471, 476–7
- oil pollution 437–9
- pandemics 439
- precautionary principle 89
- principle of necessity 350–51
- responsibility to prevent 70, 73–8, 192
 - sustainable development, and 177–80, 185–95
- responsibility to protect 69–73, 83, 88–90, 118–19, 365
- responsibility to react 70, 78–83
- responsibility to rebuild 70, 83–5
- scope 73
- search and rescue 354–5
- state sovereignty, and 71–3
- sustainable development 177–80, 187–95
- third party state responsibilities 81
- transboundary harm, prevention of 160–61, 187–9
- water contamination 332–3
- state sovereignty
 - disaster assistance, and 475–7
 - globalisation, and 29–30
 - international disaster law, and 151
 - national contingency planning, and 430
 - obligation to seek assistance, and 99
 - principle of cooperation, and 197
 - responsible sovereignty concept 118–19
 - state responsibilities, and 71–3, 118–19
- sudden-onset disasters 4
- sustainable development
 - anthropocentrism, and 185
 - definition 181–4
 - disasters, and
 - human rights law, and 199–201
 - prevention obligations 177–80, 185–95, 201–3
 - risks of 12–13, 177–8
 - due diligence 189–90, 193
 - environmental protection requirement 184
 - forestry management 339–40
 - judicial interpretation 182–3
 - parameters 184
 - policy development 181–4
 - principles 184–7
 - common but differentiated responsibilities 186
 - cooperation 185–6, 195–8
 - dangerous substances, transfer of 186
 - developing countries, special situations 186
 - disaster prevention 177–80, 185–95
 - intergenerational equity 184
 - poverty eradication 185
 - precautionary principle 190–91
 - prevention of transboundary harm 187–91
 - sustainable production and consumption 185
 - right to development 185
 - risk assessment 193–4
 - role and importance 177–8, 184
 - state responsibility 187–95
 - water contamination, and 320, 324–7, 334
- Sustainable Development Agenda 2030 303
- Sustainable Development Goals 2015 15, 24, 320, 326
- Syria
 - UN Security Council intervention 146
- terrorism 126, 275–6
 - cyberspace threats 406, 421
 - due diligence, and 421
- Texaco-Chevron Ecuador case 204–6, 506, 512–13, 516–18
- threat of imminent serious harm / death 127
- Tokunga, E. 78
- Toman, Jiri 55
- too big to fail 39–40
- torture, freedom from 373, 388–9, 393
- Trans-Pacific Partnership (TPP) 207
- Transatlantic Trade and Investment Partnership (TTIP) 207
- transboundary harm *see also* pollution
 - cyberspace disasters, and 407–8
 - dispute settlement 507–8
 - international law obligations
 - industrial accidents 436–7, 439–40
 - nuclear disasters 439–40
 - oil pollution 437–9
 - pandemics 439
 - prevention of
 - environmental policy development 159–61
 - reasonable steps 417–18, 420–23
 - sustainable development, and 187–91
- transitional justice 18

- changing attitudes to 488
- children, post-conflict justice for 18, 489–91, 499
 - institutional reform 497–9
 - prosecutions 492–3
 - reparations 496–7
 - role in reform 490–91
 - Truth Commissions 493–6
- international disaster response, and 486–9
- peace-building, and 486–8
- Truth Commissions 493–6
- tsunamis 82
 - corporate humanitarian engagement 245
 - dispute settlement, ADR role in 526–7
 - environmental policy development 159
 - Indian Ocean (2008) 79, 83, 225, 236, 245, 360, 367, 379, 511
 - vulnerable persons, impacts on 383–4
- Turkish Catastrophe Insurance Pool (TCIP) 245
- typhoons
 - Ketsana (2006) 377
- UN Office for Disaster Risk Reduction 74
- United Kingdom
 - energy security policies 289–91
- United Nations
 - disaster relief policy
 - development 51–3, 74–5
 - IDRL Guidelines, and 61
 - peacebuilding support 84–5
- United States
 - contingency planning 434–5
 - energy security policies 280–85
- urbanization 52–3, 299
- use of force, definition 411–15
- Van Harten, G. 35–6
- Van Zyl, P. 488
- victims
 - international courts / tribunals, recourse to 515–16
- vulnerable persons *see also* children;
 - population displacement
 - disabled persons 384, 387–9, 399–401
 - disasters, impacts on 383–5
 - elderly persons 401–2
 - minority groups 402
 - protection regime 16, 385–6, 392, 403–5
 - armed conflict, during 387–90
 - derogation clauses 392–3
 - development 403–4
 - international human rights law 314–15, 392
 - international humanitarian law 387–90
 - international refugee law 390–92
 - limitations 389–90, 403–4
 - UNHCR role 391–2
 - sick or wounded persons 388–9
 - women 383–4, 395–6
- war crimes 113, 125–6, 306–7
- Warsaw Mechanism for Loss and Damage
 - Associated with Climate Change Impacts 172
- Washington consensus 32
- water *see also* drought; floods; water
 - contamination; water security; water supply
 - domestic *vs.* agricultural use 321
 - water contamination 15
 - causes 321–3
 - disaster risk reduction 327–9, 334
 - disasters, role in 320
 - disease, and 322–3
 - effects of 319, 321–3
 - human rights, and 333–4
 - right to life 332
 - right to water 313–15, 330–31
 - sanitation 330–31
 - industrial waste 323
 - International Drinking Water Decade 324–5
 - Millennium Development Goals 322, 325–6
 - prevention, international law role 320, 334
 - risks of 319
 - safety challenges 321–2
 - soft law instruments 326
 - state obligations 332–3
 - sustainable development, and 320, 324–7, 334
 - toxic contaminants 323
- water crisis 319
 - definition 299–300
- water security 14–15
 - armed conflict, and 301, 304–6
 - climate change, and 301–3, 309–11
 - definition 296–8
 - disasters, and 295
 - armed conflict, and 301
 - floods and drought 299–301
 - obstacles and threats to water security 300–301
 - water insecurity causing 299–300
 - water-related disasters 299
 - equitable and reasonable use 308

- equity principle 317
- global demand trends 295
- governance approaches 296–7
- individual perspective 298
- insecurity, influences on 296–7
- international criminal law, and 303–4, 306–7
- international environmental law, and 307–9
- international human rights law, and 313–15
- international humanitarian law, and 303–6
- international refugee law, and 311–13
- international water law 307–9, 315–16
- legal regime limitations 316–17
- levels of 297–8
- population displacement, and 311–13
- precautionary principle, and 308
- risks
 - geographical distribution 301–3
 - socio-economic distribution 301–3
- starvation, and 306
- war crimes, and 306–7
- water crisis, definition 299–300
- water supply
 - access and demand trends 295, 334–5
 - disaster implications 295
- wealth
 - measurement of 40
 - unequal distribution 23–4, 32
- Westphalian model of international relations 29–30
- White, Rob 130
- Whitmore, J. 173
- wildfires 15–16
 - assistance and cooperation 338–9
 - bilateral arrangements 344–9
 - challenges 352–3
 - FAO Fire Management Global Assessment 341–2, 344–5
 - human rights conventions 339
 - international civil defence 353–4
 - international environmental law, generally 343–4
 - international search and rescue 354–5
 - local and regional arrangements 349–50
 - state obligations, generally 343–4, 350–52
 - transboundary pollution regime 342–3
 - UN Resolutions 339–40
 - unilateral action 350–52
- definition 336–7
- firefighting services, provision 338–9
- forestry management, and 339–40
- forests, importance of 339–40
- human rights, and 339
- impacts 337, 339–40
- international law applicability 15–16
- soft law
- unique disaster characteristics 337–8, 350–51
- women
 - convention protections 383–4, 395–6
 - disasters, impacts on 383–4
 - harmful traditional practices, protection from 395–6
 - marriage, consent to 396
 - water insecurity risks 302–3
- Wong, Jarod 82–3
- World Bank 264, 267
- World Trade Organization
 - GATT 31–2
- Yokohama Message / Strategy and Plan of Action 74, 177–8, 180, 194, 328