



# Index





*Note:*

Entries in **bold** refer to groups and tribes of Indigenous Peoples. Page numbers in *italics* refer to figures, those in **bold** refer to tables, annexes and boxes

- abalone 189
- aboriginal people (Australia)
  - avoidable deaths 17
  - death rate 16
  - infant mortality 16
  - obesity 13
- aboriginal people (Canada)
  - food insecurity 19
  - see also named tribes and groups*
- advocacy, human rights 259, 260
- Africa, Rural Outreach Program 288
- agricultural chemicals, food contamination 31
- agricultural systems
  - community 33
  - cultivars 37
  - Karen 163
  - local 33
  - Pohnpei 194
- Ainu** (Japan) 222, 223–32, **233**
  - assimilation policy 224, 230
  - “bad food” cultural implications 231–2
  - ceremonial dishes 227–8
  - child education on traditional foods 227
  - community newsletter 225–6, **233**, 247
  - cooking lessons 226–7, 231, 294
  - cultural knowledge 224
  - cultural revitalization 224–5
  - dam construction impact 289
  - deer meat use 225, **228**, 230
  - diet changes 225
  - education
    - disparities 285
    - traditional foods 227
  - fishing 29
  - food culture acquisition 229
  - food habits 229
    - changes 231–2
    - complexity 230
    - influences 229, 230
    - resocialization 230
  - food security 19
  - “good food” cultural implications 231–2
  - hunting 29
    - prohibition 230
  - hydroelectric dam construction impact 29–30
  - income assistance disparities 285
  - interventions 225–9, 249–50
    - cultural implications 229–32
    - outside community 228–9
    - resocialization 229–30
  - legal protection of culture and knowledge
    - 29–30
  - millet use **227**, 231
  - onion use 225
  - pig farming 230
  - pukusa* (wild onion/garlic) use 225, 231
  - pukusakina* (anenome) use 226
  - rice use 225, 231
  - salmon use 225
  - sito* dishes
    - development 228–9
    - preparation **228**
  - social discrimination 224, 225
  - socialization 229–30
  - socio-cultural health improvement 224–5
  - strategy successes 294

- territory 222, 224
- tonoto* 226, **227**
  - ceremonial use 228
  - fermentation 228
  - preparation **227**, 228
- traditional foods
  - educating children 227
  - promotion by university students 228–9
  - reintroduction 294
  - renaming with Japanese names 230
  - use 225
  - wild onion/garlic use 225, 231
  - wild vegetable use 225, 226, 230, 231
  - younger generation 230
- Ainu Food Culture Preservation Group 227–8
- Aka** (Central African Republic), infant mortality 16
- Alaska Natives** (USA)
  - life expectancy 16
  - overweight/obesity 14
  - physical activity patterns 241
- Alternative Public Distribution System (APDS), Dalit 78, 79, 80–2, 100
- aluminium smelting, contamination 31
- amaranthus (*Amaranthus*) 45
- Amazon Conservation Team 252, 290, 292
- Amazon region
  - armed militias 125
  - biodiversity 18, 123–4
  - cocaine production 125
  - deforestation 33
  - logging activity 125
  - mining 31
  - national parks 290
  - paramilitary groups 125
  - protected areas 290
- American Indians** (USA)
  - life expectancy 16
  - overweight/obesity 14
    - prevention 241
  - physical activity patterns 241
- anaemia
  - Awajún 56
  - Inuit preschoolers 12, 13
- Andean population (Argentina), overweight/obesity 14
- anemone (*Anemone flaccida*, *pukusakina*) 226
- animal foods
  - Awajún 57
  - Dalit 91
  - Inga 132
  - Inuit 157
- animal protein
  - Awajún 57, 70
  - complementary feeding 45, 46, 47–8
  - Karen 162, 163
  - Pohnpei 211
- antioxidant nutrient deficiency 20
- apples 45
- aquaculture, marine net-pen 28
- Arctic Monitoring and Assessment Program (AMAP) 154
- Arctic regions
  - ecosystem changes 156
  - food insecurity 19
  - persistent organic pollutants 31
  - radioactive contamination 32
- arid areas 13
- armed militias, Amazon area 125
- Artocarpus altilis/mariannensis* (breadfruit) 43
- Artocarpus communis* (breadfruit) 46
- Australia
  - healthy food availability 288
  - see also* aboriginal people (Australia)
- Awajún** (Peru) 54, 55–74, 61
  - access to land/resources 271–2
  - activities 55
  - anaemia 56
  - animal foods 57
  - animal protein 57, 70
  - biodiversity cultivation 18
  - BMI 12
    - women 57, 69, **69**, 71
  - breastfeeding 64, 67, 73
  - chicken raising workshops 60
  - childbirth 70
  - children
    - dietary intake 73

- energy intake 68–9, 73
- feeding 64, 73
- health status 56–7
- illness 70
- intestinal parasites 56
- malnutrition 271
- morbidity 70
- nutrient intake 68, 73
- nutritional status 56–7, 71
- stunting 271
- communication 56
- communities 271
- complementary feeding 47–8, 64, 67–8, 73
- crops 57
- cultural characteristics 56
- demographics 56
- education sessions 64
- energy
  - food sources 69–70
  - intake 68–9, 73
- environmental problem alleviation 35
- extractive industries impact 272
- families with food production activities **59**
- family characteristics 63
- fish raising workshops 60
- fishing 55, 57
- food consumption frequency 65
- food diversity 65, 72, 271
- food knowledge 63–4
- food production 64–5
- food security 65–6, 72–3
- food situation 271
- food workshops 60
- gold mining activity 271
- government social programme participation 66–7
- health
  - promotion 72
  - status 55–6, 56–7, 72
- heavy metal poisoning 272
- housing 56
- human rights 271–2, 277
- hunting 48, 55, 57, 66, 73
- hydrocarbon extraction concerns 32
- illness
  - children 70
  - women 70–1
- infant feeding 64
  - patterns 67–8
- interventions 57–61, 250–1
- intestinal parasites
  - children 56
  - women 71, 73
- lactation
  - diets 64
  - energy intake **69**
- local food harvesting 271
- malnutrition 56
  - children 271
- market foods
  - energy sources 70
  - knowledge 64
- maternal mental health 71
- mercury pollution fears 31
- milk/milk products for infants 67
- mothers' feeding practices for children 64
- nutrients
  - food sources 69–70
  - intake 68–9
- nutrition
  - knowledge 63–4
  - promotion 72
  - workshops 60
- nutritional status 55–6, 56–7, 72, 271
  - women **69**, 71
- oil concession 271–2
- overhunting 48, 57
- participatory project 57–74
  - activity monitoring 61
  - data analysis 62
  - difficulties 74
  - evaluation 61–72
  - methodology 62
  - results 63–72
- plant nursery promotion/creation 58–9
- policies affecting 289, 290
- policy success 291
- population 55

- pregnancy
  - diets 64
  - energy intake 69
- right to food 271–2
- strategy success 291
- subsistence farming 55
- territory 54, 56, 271
- traditional food
  - availability 57, 271
  - diversity 65, 72
  - energy sources 70
  - knowledge 64
  - use changes 57
- traditional seed recuperation 58–9
- transportation 56
- water pollution 30, 272
- women
  - activities 71–2
  - BMI 57, 69, **69**, 71
  - energy intake 69, 73
  - health 70–1
  - illness 70–1
  - intestinal parasites 71, 73
  - nutrient intake 73
  - nutritional status **69**, 71
- Women's Programme 58, 59, 61, 72, 74
- workshops 60
  - community nutrition and health leaders 61

banana (*Musa*) 43, 48

- Pohnpei
  - availability 218
  - consumption 210, 211
  - varieties 207
- see also Karat* banana

banana (*Musa balbisiana* X *Musa*) 57

banana (*Musa sapientum*) 44, 45

*Banisteriopsis caapi* (vision vine) 124

beans, complementary feeding 45

**Bella Coola** *see* **Nuxalk** (Canada)

berry harvesting, Nuxalk 182, 185, 188

**Bhil** (India)

- complementary feeding 49
- malnutrition 13, 49

biodiversity

- Amazonia 18, 123–4
- food systems 37
- loss **26**, 28–9, 37
  - environmental degradation 18, 27

biofuel industry 19, 29

biotoxins 154

birth weight, disease risk 15

Bitot's spots
 

- Dalit children 98–9
- Dalit mothers **86**, 93

blood pressure, Gwich'in 109

body mass index (BMI) 12
 

- Pohnpei 215, **216**

Bohman dialogue 165

botulism 154

breadfruit (*Artocarpus altilis/mariannensis*) 43

breadfruit (*Artocarpus communis*) 46

breastfeeding 41, 42
 

- Awajún 64, 67, 73
- Dalit 91
- exclusive 43, 50
- Igbo 45
- Inga 133
  - healthcare during 129
- Karen 44
- Pohnpei 43
  - Mand club 200

burning regimes 35

calcium deficiency 20

Canada
 

- Arctic communities 19
- climate negotiations role 276
- community-level research 288
- food insecurity 19
- health research guidelines 245
- healthy food availability 288
- mortality disparities 16–17

- overweight/obesity 14
- research agreements 287
- see also named tribes and groups*
- Canarium schweinfurthii* (pears) 45
- cancer, Pohnpei 195
- capacity building 244–5, 247
  - data collection 249
  - research and development 287
- carbohydrate intake
  - Gwich'in 111, 112
  - Inuit 147
- caribou (*Rangifer tarandus*) 114
  - climate change impact 116, 117, 155
  - Gwich'in use 105, 110, 111, 114, 247
  - Inuit use 147–8
- caribou, porcupine (*Rangifer tarandus granti*) 46, 105
- Carica papaya* (papaya) 43, 44, 47
- carotene 92–3
- carotenoids 93
  - deficiency 20
  - Pohnpei intake 207, 208, 209, 210, 211
- cash cropping 29
- cassava (*Manihot esculenta*) 45, 47, 48
  - Awajún 57
- Centre for Indigenous Peoples' Nutrition and Environment (CINE) 5, 287
  - Food systems for Health Program 33
    - infant and young child feeding 42–3
    - map 4
- chagra*, Inga 127, 130, 135
- Chamorros** (Guam), obesity 18
- charcoal ovens, Pohnpei 199, 218
- Chernobyl catastrophe (Ukraine) 32
- chicha* 134
- chicken raising workshops for Awajún 60
- childbirth, Awajún 70
- children
  - diseases 126
  - health disparities 285
  - intervention focus 247
  - marketing of poor quality foods to 290
  - mortality rate 126
  - stunting 13, 84, 85
- see also infant and young child (IYC) feeding; named tribes and groups*
- cholera, water contamination 30
- Citrus* (oranges) 45
- clams, industrial contamination 31
- climate change 19, 26, 27, 32–3, 37, 242
  - Canada role in negotiations 276
  - caribou population impact 116, 117, 155
  - contaminant volatilization 154
  - contextual factor 248
  - extreme weather conditions 154
  - Federated States of Micronesia 277
  - fishing impact 32–3
  - flooding 154
  - food insecurity 19, 275
  - food resource gathering 32–3
  - Gwich'in 32–3, 107–8, 119–20
    - access to food/health 116–17
    - contextual factor 248
    - impact 104, 116–17
    - traditional foods access 117
  - hunting impact 19, 32–3, 116–17, 154
  - Inuit 19, 104, 151, 152–3, 153–5, 156
    - access to wildlife 277
    - contextual factor 248
    - diet impact 292
    - elders' observations 151, 152–3, 156
    - food safety 154
    - impact 275, 292
  - Maasai impact 270, 277
  - mitigation of effects 289
  - Nuxalk impact 189
  - Pohnpei 277
  - soil erosion 154
- coca crops/cocaine
  - destruction 32, 273
  - production in Amazon area 125
- cocasa 32
- coconut (*Cocos nucifera*) 43
- cocoyam (*Colocasia*) 45, 48
- collective rights 263
- Colocasia* (cocoyam) 45, 48
- colonialization
  - dietary change 18

- food insecurity 18
- impacts 282, 288
- poor health status 21
- co-management of habitats/resources 35
- Committee on Economic, Social and Cultural Rights (CESCR) 262
- community knowledge-sharing 244
- community projects 21, 34–5, 247
  - government agencies collaboration 36
  - kitchens programme 66–7
  - NGO collaboration 36
  - nutrition and health leaders workshops for Awajún 61
  - nutrition programmes 33
  - participatory research 36
  - partnerships 287
- complementary feeding 41–2
  - age of introduction 49–50
  - animal protein 45, 46, 47–8
  - Awajún 47–8, 64, 67–8, 73
  - Bhil 49
  - changes 50
  - cow milk 49
  - Dalit 43–4, 91, 98
  - education 50
  - fruit 49
  - Gwich'in 46
  - Igbo 45–6
  - infant cereal 49
  - Inga 46–7, 133, 134
  - Inuit 46
  - Karen 44
  - milk products 46, 47
  - Nuxalk 46
  - Pohnpei 43
  - reduction in traditional foods used 46
- conjunctival xerosis
  - Dalit children 98–9
  - Dalit mothers **86**, 93
- Cree** (Canada), hydroelectric project impact 29
- crop(s)
  - Awajún 57
  - plantation 29

- crop varieties
  - conservation 36, 37
  - decline 28–9
  - diversity 37
- cultural identity 21
- cultural keystone species 36–7
- cultural renewal 34
- culture
  - collective 263
  - food
    - Inuit 274
    - Pohnpei 268
  - human rights 260, 286
  - policies affecting practices 289
  - right to uphold 260
  - workshops for Awajún 60
- Cyrtosperma chamissonis* (giant swamp taro) 43, 210, 211, 215
- Daiwang* bananas 218
- Dalit** (India) 76, 77–100
  - agricultural production decline 78–9
  - Alternative Public Distribution System 78, 79, 80–2, 100
  - animal food 91
  - anthropometric measurements 82–3, 97, **98**
  - Bitot's spots
    - children 98–9
    - mothers **86**, 93
  - breastfeeding 91
  - children
    - anthropometric measurements 82–3, 97, **98**
    - Bitot's spots 98–9
    - conjunctival xerosis 98–9
    - dietary fibre intake 91
    - dietary intake **90**, 91–3
    - energy sources 91
    - health 97–9
    - iron deficiency **84**, 85, 97, **98**, **99**
    - iron intake 91–2
    - night blindness 98–9
    - nutrient intakes 91–3



- nutritional status 97
- protein intake 91
- protein-energy malnutrition 97–8
- stunting **84**, 85, 97, **99**, 100
- underweight **84**, 85, **99**
- vitamin A deficiency 97, **98**
- vitamin A intake 91, 92–3
- vitamin C intake 92
- wasting **84**, 85
- community interventions 79–80
- complementary feeding 43–4, 91, 98
- conjunctival xerosis
  - children 98–9
  - mothers **86**, 93
- Deccan Development Society initiatives 78–9, 292
  - sanghams* 79, 80, 81
- discrimination against 78
- energy
  - intake by mothers 85, 86–7, 88–9
  - requirements of mothers 88
  - sources 85, 91
- energy deficiency 13
  - mothers 93, **95**, 96, 97, 100
- fallow land reclamation 79
- food frequency questionnaire 81
- food insecurity 78
- food resource plants 79
- interventions 251–2
- iron
  - intake by children 91–2
  - intake by mothers 95
  - requirements of mothers 89–90
  - sources 86, 88
- iron deficiency
  - children **84**, 85, 97, **98**, **99**
  - mothers 96
  - pregnancy 96
- land reclamation/redistribution 79
- mothers
  - activity levels 87–8
  - Bitot's spots **86**, 93
  - conjunctival xerosis **86**, 93
  - diet correlates with health 96–7
  - dietary intake 85–91
  - energy deficiency 93, **95**, 96, 97, 100
  - energy intake 85, 86–7, 88–9
  - energy requirements 88
  - health 93–7
  - iron deficiency 96
  - iron intake 95
  - iron requirements 89–90
  - night blindness 93–4, 95–6, 97, 100
  - nutrient intakes 81–2
  - protein intake 86–7, 88–9
  - protein requirements 88
  - vitamin A deficiency 93–5, 96, 100
  - vitamin A requirements 90–1
  - vitamin A status 96
  - vitamin C intake 85, **87**, 90
- night blindness 83, 93–4, 95–6
  - children 98–9
  - mothers 100
  - pregnancy 96
- nutrient intakes
  - children 91–3
  - mothers 81–2
- participatory research
  - methods 81–5
  - statistical analysis 84–5
- pregnancy
  - iron deficiency 96
  - night blindness 96, 97
- protein
  - maternal requirements 88
  - sources 85
- protein intake
  - children 91
  - mothers 86–7, 88–9
- rice subsidies 78–9, 288, 290
- strategy success 292
- territory 76
- traditional cultural food use 100
- untouchables 78
- vitamin A
  - intake of children 91, 92–3
  - maternal requirements 90–1
  - maternal status 96

- sources 86, 89
- vitamin A deficiency 83, 84, 100
  - children 97, 98
  - mothers 93–5, 96
- vitamin C intake 85, 87
  - children 92
  - mothers 85, 87, 90
- dam construction *see* hydroelectric dam construction
- Deccan Development Society initiatives 78–9, 292
  - sanghams* 78, 79, 81
- Declaration of Atitlán (2002) 284
  - Indigenous Peoples' Global Consultation 263
- decolonizing methodologies 287
- deer meat, Ainu use 225, 228, 230
- deforestation 26, 28
  - Amazon region 33
  - livestock production 29
  - Maasai lands 270
  - tar sands 31
- Dene** (Canada) 103
  - climate change 104
  - cultural transformation 104
  - dietary quality loss 103–4
  - environmental deterioration 27
  - fishing 103
  - hunting 103
  - nutrition transition 103–4
    - see also* **Gwich'in** (Canada)
- Dene National Assembly 104
- dental health education, Nuxalk 186
- desertification 29
- developed countries, obesity risk for Indigenous Peoples 13
- development assistance 283
- development-related policies 261
- diabetes, gestational 15
- diabetes mellitus, type 2 13
  - complications rates 17
  - food insecurity 18
  - incidence 286
  - lifetime risk in Maoris 13–14
  - Nuxalk 189
  - Pohnpei 195
  - poverty 18
- thrifty gene hypothesis 14–16
  - United States Indigenous Peoples 14
- diamond mining 31
- diet
  - changes 18
  - social practice 241
- dietary fibre intake, Dalit children 91
- dietary indicators 249
- Dioscorea* (yam) 45
- dioxins 30
- discrimination
  - Ainu 224, 225
  - Dalit 78
    - against indigenous women 285
- disease, vulnerability to 265, 286
- drought 29
  - Maasai lands 270
- ecosystem enhancement 34–5
- ecotourism 289
- education
  - Ainu disparities 285
  - complementary feeding 50
  - curricula 288–9
  - environmental awareness 35–6
  - Karen children 166–7, 170
  - Nuxalk 183
    - see also* schools
- eggplant (*Solanum macrocarpum*) 45
- elders
  - Igbo 46
  - Inuit
    - climate change observations 151, 152–3, 156
    - storytelling 149–50, 155, 156, 288, 292
  - Nuxalk 181
- empowerment 247
- energy balance 18
- energy deficiency, Dalit 13
  - mothers 93, 95, 96, 97, 100
- energy density of food 18

- energy intake
  - Awajún 68–9, 73
  - Dalit mothers 85, 86–7, 88–9
  - Gwich'in 111–12
  - Inga 132
  - Inuit 146–7
  - Pohnpei **209**, 210–11
- energy requirements, Dalit mothers 88
- energy sources
  - Awajún 69–70
  - Dalit children 91
- engagement with Indigenous Peoples 286–7
- environmental challenges 25–38
  - food contamination 30–2
  - food security/systems **26**, 27
  - hydroelectric dam construction **26**, 29–30
  - resource species decline 27–8
  - water pollution **26**, 30–2
  - see also* biodiversity, loss; climate change
- environmental change
  - food insecurity 18
  - see also* climate change
- environmental contaminants
  - biomagnification in food web 30, 154
  - biotoxins 154
  - heavy metals 272
  - Inuit concerns 154, 275
  - see also* pollution; water pollution
- environmental degradation
  - biodiversity loss 18, 27
  - industrialization 240
- environmental programming 15–16
- environmental sustainability 33–7
- environment-based regulations 35
- epigenetic effects 15
- ethno-ecological restoration 34
- extractive industries
  - Awajún impact 272
  - see also* gas exploration; mining; oil exploration
- fat intake
  - Gwich'in **111**, 112
  - Inuit 147, 149
  - Karen 162
- Federated States of Micronesia 192, 193
  - climate change 277
  - colonial powers 194
  - human rights convention ratification record 276
  - independence 194
  - infant mortality 16
  - strategy successes 293–4
  - see also* Pohnpei (Federated States of Micronesia)
- First Nations and Inuit Health Board (FNIHB) 293
- fish eating
  - Nuxalk 181, 185, 188
  - Pohnpei 211
  - see also* ooligan (*Thaleichthys pacificus*); salmon (*Oncorhynchus*)
- fish stocks
  - depletion 28
  - overexploitation 25
- fishing
  - Ainu 29
  - Awajún 55, 57
  - climate change impact 32–3, 116–17
  - Dene 103
  - Gwich'in 32–3, 115, 116–17
  - Inuit 19
  - Pohnpei 194, 268
  - reefnet 36
- fish-raising workshops for Awajún 60
- flooding, climate change 154
- folate
  - deficiency 20
  - Nuxalk intake 185–6
- food
  - availability of health foods 288
  - contamination 30–2
  - fortification 20
  - poor quality in nutrition transition 286
  - prevention of sale of unhealthy food 289–90
  - promotion of local 283
  - rural indigenous resources 288
  - sovereignty 243
  - workshops for Awajún 60
- food aid 262

- Maasai 270
- food and nutrition programmes, community-based 242
- food culture
  - Inuit 274
  - Pohnpei 268
- food insecurity 12, 17–20
  - climate change 19, 275
  - Dalit 78
  - development projects 18–19
  - diabetes mellitus, type 2 18
  - Inuit 274, 277
  - Maasai 277
  - nutrition transition 240
  - obesity 18
  - poverty 19
  - world burden 282
- food prices
  - escalation 248
  - global 105, 219
  - Gwich'in 119–20
  - Inuit 274
- food resources
  - access to 37
  - climate change impact 32–3
  - co-management 35
  - harvesting 33
  - overexploitation 28
  - sustainable use 28
- food, right to 260, 261–3, 265–6, 282
  - adequate amounts 283–4
  - Awajún 271–2
  - case studies 267–75
  - guidelines 262
  - Inga 272–4
  - Inuit 274–5
  - Maasai 268–70
  - nation State duty-bearers 284
  - obligation to respect 262
  - Pohnpei 267–8
  - protection 265–6
  - resource use 289
  - respect for 265–6
- food security 17, 262
  - Awajún 65–6, 72–3
  - biofuel impact 29
  - cultural indicators 245
  - global crisis 240
  - Gwich'in 107, 115–16, 119
  - health improvement 284–6
  - human rights 243, 260, 284, 289
  - improvement 242
  - Inga 134–6, 273–4, 292
  - Inuit traditional foods 275
  - Karen 171
  - maintaining 33–7
  - nation State duty-bearers 284
  - necessity 285
  - obesity 17–18
- food strategies 241–3
  - local-based 242
- food systems
  - access to 259
  - basic knowledge 246
  - documentation 244
  - pride in local food/culture 246–7
- food web
  - contamination **26**, 154
  - environmental contaminant biomagnification 30, 154
  - sentinel species 31
- food-borne illness, Inuit 154
- forest resources, overexploitation **26**
- fruit, complementary feeding 45, 49
- fuel costs
  - Gwich'in 117, 119–20
  - Inuit 151, 274
  - Nuxalk 190
- furans 30
- garlic, wild 225, 231
- gas exploration 31–2
  - Awajún impact 271–2
  - Inga impact 273
- gathering of food
  - Gwich'in 104–5



- Nuxalk berry harvesting 182, 185, 188
- gender disparities 245
- genetically engineered crops 29
- gestational diabetes 15
- Glass of Milk programme 66–7
- global economic crisis 19
- globalization 282
  - dietary change 18
  - food 240
  - food culture erosion 240
  - food security 18
- gold mining 31
  - Awajún impact 271
- governance 260–6
- government
  - conflict with other actors 266
  - intersectoral collaboration 287–8
- government agencies, community project
  - collaboration 36
- government responsibilities 261
  - Indigenous Peoples right to adequate food 265
  - right to food/food security 284
- grain supply 19
- green revolution 29
- Gwich'in** (Canada) 102, 103–20
  - anthropometric measurements 107, **108**, 109
  - blood pressure 109
  - carbohydrate intake **111**, 112
  - caribou use 105, **110**, 111, 114, 247
  - climate change 32–3, 104, 107–8, 119–20
    - contextual factor 248
    - impact on access to food/health 116–17
    - traditional foods access 117
  - clinical measurements 107, **108**, 109
  - communities 104
  - community activities 117–18, 119
  - complementary feeding 46
  - diet 105, 106, 118
  - dietary intake 110–11
  - energy intake 111–12
  - environmental deterioration 27
  - fat intake **111**, 112
  - fishing 32–3, 104–5, 115, 116–17
  - food access 115–16
    - climate change impact 116–17
  - food costs 119–20
  - food frequency 106–7, 110–11
  - food group servings **109**, 114
  - food price impact 105
  - food security 107, 115–16, 119
  - fuel costs 117, 119–20
  - gathering 104–5
  - health 105
    - climate change impact 116–17
  - hunting 32–3, 104–5, 109, 115, 116–17
  - interventions 252
  - local radio 118, 292
  - macronutrients 111–12
  - market foods
    - access to healthy 117
    - consumption 114, **115**, 117
  - micronutrient intake 106, 112–14
    - traditional foods 113–14
  - nutrient values of traditional foods 108
  - physical activity 107, 109–10, 118–19
  - protein intake **111**, 112
  - research project
    - activities in Tetlit Zheh 117–18, 119
    - findings 109–18
    - measurements 106–8
    - methods 106–8
    - objectives 105–6
    - participants 109
  - retail food outlets 119
  - socio-cultural information 107
  - strategy successes 292
  - territory 102
  - traditional foods 104–5
    - access 115–16, 117
    - book publication 118, 292
    - harvesting 116–17
    - intake **109**, **110**, 111, 113–14, 118
  - travel for hunting/fishing 116–17
- habitats
  - co-management 35

- loss 27, 28, 37
- Haisla** (Canada) 31
- health 37–8
  - determinants 11
  - indigenous foods 37
  - social determinants 20
- health care
  - availability 17
  - delivery 21
- health disparities 11–22
  - overnutrition 12–20
  - underlying causes 15–16
  - undernutrition 12–20
    - see also* micronutrient deficiencies
- health improvement 7, 33–4
  - food/nutrition security 284–6
- health promotion 8, 283
  - evaluation of programmes 245–6
  - food systems resources 287
  - qualitative methodologies 246
- health research guidelines 245
- heart disease
  - birth weight risk association 15
  - Pohnpei 195
- heavy metals
  - Awajún poisoning 272
  - lead levels in Inuit 154
  - mercury 30, 31
  - methylmercury biomonitoring of Inuit 154
- hepatic nuclear factor-1 alpha (HNF1A) G319S 14–15
- herbicides
  - aerial spraying 32, 273, 274
  - food contamination 31
- heroin 273
- Hokkaido Ainu Association 227
- huckleberry production 35
- human rights 259–78
  - advocacy 259, 260
  - analytical framework 266–7
  - case studies 276–7
    - right to food 267–75
  - collective 263
  - communities 266–7
  - consent for resource exploitation 264
  - control over territory 263–4
  - culture 260, 286
  - food security 243, 260, 284, 289
  - food sovereignty 243
  - food-based analysis 259–60
  - governance 260–6
  - information sources 266
  - international 261
  - land rights 264
  - monitoring 266
  - parity of indigenous/non-indigenous peoples 260
  - prior consultation on legislative/administrative actions affecting Indigenous Peoples 264
  - questionnaire 266
  - right to food 260, 261–3, 265–6, 282
    - case studies 267–75
    - food security 284
    - resource use 289
  - specific of Indigenous Peoples 263–4
  - universal 261–3
- hunting
  - Ainu 29
    - prohibition 230
  - Awajún 48, 55, 57, 66, 73
  - climate change impact 19, 32–3, 116–17, 154
  - Dene 103
  - evolutionary history 14
  - Gwich'in 104–5, 109, 115, 116–17
  - Inuit 19, 151, 153–4
    - costs 274
  - loss of opportunities 42, 47
  - Nuxalk 181–2
  - tourism 151, 153
- hydrocarbon exploitation 31–2, 271–2
  - Inga impact 273
- hydroelectric dam construction 26, 29–30, 289
- hypertension 13

**Igbo (Nigeria)**

- breastfeeding 45
- complementary feeding 45–6
- elders 46
- malnutrition 45
- stunting amongst children 13
- indigeneity 11, 20
  - assault on 243
  - definition 282
- indigenous foods, access to 240
- indigenous knowledge 7
- Indigenous Peoples' Global Consultation, Declaration of Atitlán 263
- industrial pollutants, food contamination 31
- industrialization, environmental damage 240
- infant and young child (IYC) feeding 41–50
  - Awajún 64, 67–8
  - cereals 49
  - indicators **42**  
*see also* breastfeeding; complementary feeding
- infant mortality
  - Africa 16
  - infectious disease 16
  - Inga 126
  - Latin American Indigenous Peoples 16
  - Nuxalk reduction 183
- infectious disease, infant mortality 16
- Inga (Colombia)** 122, 123–37, 138–9
  - aerial spraying of herbicides 32, 273, 274
  - agricultural products 125
  - animal breeding 134–5
  - animal food consumption 132
  - anthropometric assessment **132**, 133
  - assertion of rights 124
  - biodiversity of region 124
  - breastfeeding 133
    - healthcare during 129
  - chagra* 127, 130, 135
  - childhood mortality rate 126
  - children
    - health care 129
    - nutritional support 129
  - community health care 128
  - community organization 124–5

- complementary feeding 133, 134
- counterproductive policies 290
- cultural challenges 125
- cultural knowledge 124
- education 125, 130–1, 292
- energy intake 132
- environmental challenges 125
- family care 128
- food frequency 130, 131–2
- food security 130, 134–6, 139, 273–4, 292
- gas exploration 273
- health challenges 125–6, 292
- health status 131, 138
- healthcare
  - children 129
  - primary 292
  - women 129
- herbicide spraying 32, 273, 274
- human rights 272–4, 277
- hydrocarbon exploitation 273
- illicit drugs, fight against 273
- infant food history 130, 133–4, 138
- infant mortality rate 126
- interventions 252–3
- iron intake **132**, 133
- isolation 124
- land resources 273–4
- legal framework 272–3
- Life Plan 124, 136, 137
- linguistic knowledge 124
- medicinal plants **135**, 136
- menstruation 129
- military activity in region 273
- mining 273
- natural resources 273–4
- night blindness 131
- nutrition challenges 125–6
- oil exploration 273
- participatory research 126–31
  - achievements 136–7
  - barriers 136
  - interventions 127–31
  - objectives 127
  - participants 127

- results 131–4
  - plant cultivation 134–5
  - plant food consumption 131–2, 133
  - pollutants 274
  - pregnancy 129
  - pre-mastication practices 134
  - primary health care 292
  - protein intake 132
  - right to food 272–4
  - school food 130
  - strategy successes 292
  - territory 122, 123–4, 125, 272
    - ancestral 273–4
    - traditional foods 124
      - availability 134, 135
      - nutrients 132–3
      - production 135–6
      - promotion 127, **128**
    - vitamin A intake **132**, 133
    - women's healthcare 129
    - yagé* culture 124
    - yoco* drinking 131
- Ingano** (Colombia)
  - biodiversity cultivation 18
  - BMI 12
  - complementary feeding 46–7
  - malnutrition 46
  - protected area development/management 18–19
- international collaboration among Indigenous Peoples 21
- International Covenant on Civil and Political Rights (ICCPR) 264
- International Covenant on Economic, Social and Cultural Rights (ICESCR) 261–2, 263
  - countries ratifying **261**, 264
- International Labour Organization (ILO)
  - convention on Indigenous and Tribal Peoples' rights 284
- international policy making 283
- intervention strategies 239–56
  - building pride in 246–7
  - capacity building 244–5, 247, 249
  - case studies 249–55
    - commitment 247
    - common themes 244–5
    - community knowledge-sharing 244
    - community ownership 247
    - community-based health promotion 243
    - concepts for creating 243–6
    - contextual strengths/weaknesses 248
    - cultural indicators for food security 245
    - dietary indicators 249
    - disparities 241
    - empowerment 247
    - evaluation constraints 249
    - food 241–3
    - food-based 243
    - funding constraints 248–9
    - indicators of effectiveness 244
    - inter-project communications 246
    - intra-project communications 248
    - knowledge of resources 243–4
    - multidisciplinary stakeholders 247–8
    - nutrition 241–3
    - partnerships 245
    - pre-/post-assessments 249
    - qualitative methodologies 246
    - results evaluation/sharing 245–6
    - scaling up 242–3, 248
      - nutrition interventions 290–1
    - successful 246–9
    - working with government 249
- intestinal parasites
  - Awajún children 56
  - Awajún women 71, 73
- introduced species 28
- Inuit** (Arctic Canada) 142, 143–51, **152–3**, 153–6, 157
  - adaptation to change 155
  - anaemia amongst preschoolers 12, 13
  - bacterial food-borne illness 154
  - biotoxins 154
  - caribou meat use 147–8
  - children 275
    - obesity 240
  - climate change 19, 104, 151, **152–3**, 153–5, 156
    - access to wildlife 277



- contextual factor 248
- elders' observations 151, **152–3**, 156
- food safety 154
- impact 275, 292
- complementary feeding 46
- elders
  - climate change observations 151, **152–3**, 156
  - storytelling 149–50, 155, 156, 288, 292
- environmental contaminants 154, 275
- environmental deterioration 27
- fishing 19
- food chain 154
- food culture 274
- food insecurity 19, 274, 277
- food prices 274
- food safety 154
- food security 151, **152–3**, 153–5
  - traditional foods 275
- fuel costs 151, 274
- governance 276
- health promotion programmes 155–6
- health services 274
- housing standards 274
- human rights 274–5, 276
- hunting 19, 151, 153–4
  - costs 274
- interventions 253
- land rights/policy 275
- lead levels 154
- market foods 143, 146, 147, 151
  - access to 274
  - carbohydrate source 275
  - preference of young people 274
- methylmercury biomonitoring 154
- nutrition transition 143–4, 275
- overweight/obesity 14
- Pangnirtung community 274
  - young people 144–9
- pathogens in food 154
- polar bear 155
  - hunting 151, 153
  - meat 154
  - populations 155
- pollution 154
- poverty 19
- rate of change 156
- right to food 274–5
- seals
  - fur sale ban 153–4
  - population reduction 155
- sharing ethos 274
- standard of living 274
- storytelling and health promotion research
  - 149–50, 288, 292
  - elders 149–50
  - youth radio drama 150
- strategy successes 292
- territory 142
- traditional foods 274
  - food security 275
  - promotion 143–4, 151, 153–5
  - reduced consumption 143–4
- youth health survey, Pangnirtung 144–9
  - animal foods 147–8, 157
  - body mass index 144
  - carbohydrate intake 147
  - dietary consumption 144
  - dietary recall 146–7, **148**
  - energy intake 146–7
  - fat intake 147, 149
  - food frequency 145, 146, 148–9, 157
  - market foods 143, 146, 147, 151, 274
  - micronutrient intake 146–7
  - nutrient intake 145–6
  - protein intake 147, 148
  - soft drink consumption 147, 148, 149, 275
  - traditional food use 145, 146, 147, **148**, 157
- invasive species 27, 28
- Ipomea batatas* (sweet potato) 43
- iron deficiency 20
  - Dalit children **84**, 85, 97, **98**
  - Dalit mothers 96
  - Karen children 161
- iron intake
  - Dalit children 91–2
  - Dalit mothers 95
    - sources 86, 88
  - Inga **132**, 133

- Karen 171
  - children 172–3
- iron levels, Nuxalk 185–6
- iron requirements
  - Dalit mothers 89–90
  - lactation 89
  - pregnancy 89
- ischaemic heart disease 15
- Island Food Community of Pohnpei (IFCP) 195, 196, 201, 219, 293
  - activities 202, **204**
  - membership drive 205
- James Bay project (Hydro-Quebec, Canada) 29
- JUNTOS cash transfer programme 66–7
- Kahawá:ke Diabetes Prevention Project 21
- Karat* banana 43, 198, 200, 203
  - availability 218
  - vitamin A 207
- Karen** (Thailand) 160, 161–75, 166
  - activities 162
  - agriculture 163
  - animal protein 162, 163
  - BMI 13
  - change agents
    - children 170, 173
    - examples for others 171
  - children
    - agents of change 170, 173
    - education 170
    - haemoglobin levels 171, 172
    - iron deficiency 161
    - iron levels 172–3
    - motivation 166–7
    - nutrition education 166–7, 244, 246
    - nutritional status 171, 172, 172–3
    - undernutrition 161
  - community leaders 167–8
  - complementary feeding 44
  - family structure 162
    - food consumption 163
  - fat intake 162
  - food security 171
  - food system 162–3
  - fruits 162, 169
    - growing 171
    - teaching children 170
  - government support 249
  - interventions 163–6, 253–4
    - activities 166–8
    - results 168–73
  - iron
    - deficiency in children 161
    - sources 171
  - knowledge of food species 244
  - local capacity strengthening 172
  - local researchers 167–8
  - meaning of food 7
  - minerals intake 162–3
  - mushrooms 163
  - national character involvement 290
  - nutrition outcomes 172–3
  - nutrition security 171
  - participatory project 161–3
    - Bohman dialogue 165
    - collective action 165
    - commitment 168–9
    - communication 164–5
    - community involvement 169
    - context 162
    - culture-based development approach 163–5, 174
    - implementation 174
    - indirect contributions 168
    - lessons learned 174
    - objectives 163
    - results 168–73
    - shared expectation 165
    - social dialogue 164–5
    - trust 168–9, 174
  - policies affecting cultural practices 289
  - rice 162, 163, 171
  - strategy successes 293
  - SWA* 165–6, 173, 174
  - territory 160, 162
  - traditional farming techniques 163

traditional foods 163  
     awareness/availability 169–70  
     community awareness 173  
     community knowledge 167  
     diversity 167, 169  
     growing 163  
     increased production at home 166, 167, 173  
     rehabilitation 173  
     teaching of importance to schoolchildren  
         166–7, 170  
     uses 170–1  
 vegetables  
     growing/sharing 171  
     teaching children 170  
     use 162, 163, 169  
 vitamins intake 162–3, 171  
 water supply 166  
 women  
     cooking training 167  
     empowerment 167, 173  
 youths 167–8  
 Kitimat (Canada) 31  
**Kogi Indians** (Colombia), environmental  
     deterioration 27  
  
 lactation  
     diets for Awajún 64  
     iron requirements 89  
     *see also* breastfeeding  
 land  
     access to 37  
     transition to individual ownership 276  
 land rights 264  
     Inuit 275  
 landraces  
     conservation 36  
     decline 28–9  
 Latin American Indigenous Peoples, infant mortality  
     16  
 law, equality before 266  
 lead, Inuit levels 154  
 lead-shot 154

livestock production 29  
 logging, Amazon area 125  
 low-income countries, poverty 14  
  
**Maasai** (Kenya)  
     access to land/resources 18, 270  
     assimilation 270  
     climate change impact 270, 277  
     deforestation 270  
     drought 270  
     education requirements 277  
     food aid 270  
     food insecurity 277  
     food situation 268–9, 277  
     government actions impact 270  
     health centres 269–70  
     health needs 277  
     human rights 276–7  
     land sales 270  
     malnutrition 13  
     nutrition status 268–9  
     political progress 270  
     right to food 268–70  
     stunting amongst children 13  
     territory 269  
         taken over by farmers 270  
     traditional foods 268–9  
     underweight 13  
     water supply 270, 276–7  
 maize (*Zea mays*) 45  
 malnutrition 283  
     Awajún 56, 271  
     Bhil 13, 49  
     causes 265  
     double burden 240  
     Igbo 45  
     Ingano 46  
     Maasai 13  
     origins of problems 288  
     vulnerability to 265  
**Mand** (Federated States of Micronesia)  
     vitamin A deficiency 12

*see also* Pohnpei (Federated States of Micronesia)  
 mango (*Mangifera indica*) 43, 44, 45  
*Manihot esculenta* (cassava) *see* cassava (*Manihot esculenta*)  
**Maori** (New Zealand)  
   avoidable deaths 17  
   food insecurity 19  
   mortality rate 16  
   obesity 13–14  
 marine environments 28  
   Pohnpei ecosystem 268  
 market economies, dependence on 19  
 market foods  
   Awajún  
     energy sources 70  
     knowledge 64  
   Gwich'in  
     access to healthy food 117  
     consumption 114, **115**, 117  
   Inuit 143, 146, 147, 151, 174  
     carbohydrate source 275  
   Nuxalk expenditure reduction 185  
   Pohnpei 194  
   reliance of urban populations 288  
 market forces  
   food insecurity 18  
   grain supply 19  
 Mato Grosso (Brazil), dam construction 29  
 Mau Complex (Kenya) 270, 277  
**Mbendjele** (northern Congo) 16  
 medicinal remedies 21  
   plants used by Inga **135**, 136  
 mental health 286  
 mercury 30, 31  
 methylmercury, biomonitoring of Inuit 154  
**Métis** (Canada) 103  
 microcredit, access to 245  
 micronutrient deficiencies 12  
   amelioration 12  
   conditions **22**  
   food fortification 20  
   obesity 20  
   worldwide prevalence **22**

milk/milk products  
   Awajún infants 67  
   complementary feeding 46, 47  
   cow's milk for complementary feeding 49  
 Millennium Development Goals (UN) 19, 126  
 millet (*Pennisetum*) 45  
   Ainu use **227**, 231  
   barnyard **227**  
   egg **227**  
   finger 77  
   foxtail 77, **227**  
   pearl 77  
   promotion of production and sale 288  
   *tonoto* making **227**  
*milpes* (*Oenocarpus bataua*) 47  
 minerals, Karen 162–3  
 mining  
   Awajún impact 271, 272  
   food contamination 31  
   Inga impact 273  
 moose, climate change impact on migration 116  
 morbidity 17  
 mortality  
   avoidable 17  
   children 126  
   disparities 16–17  
   *see also* infant mortality  
 multinational industries, profit from Indigenous Peoples' land/water resources 243  
*Musa* (banana) *see* banana (*Musa*)  
*Musa balbisiana* X *Musa* (banana) 57  
*Musa sapientum* (banana) 44, 45  
*Musa troglodytarum* (*Karat*) 43  
   *see also* *Karat* banana  
  
 n-3 fatty acid deficiency 20  
 Nanavut Land Claim Agreement (1993) 275  
 national parks 290  
 Nibutani Dam (Hokkaido, Japan) 29–30  
 night blindness  
   Dalit children 98–9  
   Dalit women 83, 93–4, 95–6, 97, 100



- Inga 131
- non-governmental organizations (NGOs) 33–4
  - Amazon Conservation Team 252, 290, 292
  - community project collaboration 36
  - community-based programmes 242
  - intervention funding 249
  - Pohnpei 254
  - scaling-up activities 290
  - stakeholders 247
  - see also* Deccan Development Society initiatives
- nutrition
  - circumstances compared with non-indigenous people 285
  - disparities 285
  - education in schools 241
  - improvements 8
  - insecurity 240
  - policies for improvement 281–94
  - programmes targeting deficiencies 20
  - public health 260
  - research 260
  - right to adequate level 261–2
  - scaling up of interventions 242–3, 248
  - security
    - health improvement 284–6
    - Karen 171
  - strategies for improvement 241–3, 281–94
    - case studies 291–4
  - workshops for Awajún 60
- nutrition transition 240–1
  - Inuit 143–4, 275
  - poor quality food 286
- nutritional health 21, 260
- Nuxalk** (Canada) 178, 179–90
  - abalone use 189
  - anthropometric assessments 186
  - berry harvesting 182, 185, 188
  - biodiversity 180
  - climate 180
  - climate change impact 189
  - collaborative research project 179
    - activities 183
    - revisiting 186–8
  - community plant identification 187–8, 247
  - complementary feeding 46
  - dental health education 186, **187**
  - diabetes incidence 189
  - dietary change 185–6
  - division of labour 181
  - elders 181
  - fish eating 181, 185, 188
  - fitness benefits 188
  - folate 185–6
  - food availability assessment 181
  - food system 181–3
  - fuel costs 190
  - harvesting cycle 181
  - health change 181–3
  - health promotion activities 182, 183
  - health status 182–3, 186
    - assessment 181
  - hunting 181–2
  - infant mortality reduction 183
  - interventions 254
    - activities 183–5, 188–9
    - measurements 184–5
    - methods 183–5
    - results 185–6
  - iron levels 185–6
  - landscape diversity 180
  - life expectancy 182–3
  - lifestyle education 188–9
  - market food expenditure reduction 185
  - nutrition education 188–9
  - nutrition status 181–3
    - assessment 184–5
  - ooligan use 181, 185, 189
    - stock decline 189, 293
  - project 8
  - strategy successes 293
  - territory 178, 180
    - privatization 190
  - traditional food 188
    - access to 293
    - plant 182
    - preservation 188
    - processing equipment 183
    - promotion opportunities 189–90

- teaching resources 183–4
- tradition decline 189
- use decline 181
- use improvement **184**, 186
- unemployment 183
- vegetables 182, 185
- vegetation 180
- vitamin A levels 185–6

obesity 12–14, 283

- control through nutrition interventions 241
- food insecurity 18
- food security 17–18
- incidence 286
- Inuit children 240
- micronutrient deficiencies 12, 20
- origins of problems 288
- Pohnpei 195, 267
- poverty 18
- prevalence disparities 240
- prevention amongst American Indians 241
- risk for Indigenous Peoples in developed countries 13
- Suruí Indians 241
- Oenocarpus bataua* (*milpes*) 47
- oil exploration 31–2
  - Awajún 271–2
  - Inga impact 273
- Oji-Cree** (northern Ontario), diabetes 14–15
- Oncorhynchus* (salmon) *see* salmon (*Oncorhynchus*)
- onion, wild 225, 231
- ooligan (*Thaleichthys pacificus*) 46
  - complementary feeding 46
  - industrial contamination 31
  - Nuxalk use 181, 185, 189
  - stock decline 189, 293
- opium production 273
- Orang Asli (Timian)** (Malaysia) 17
- oranges (*Citrus*) 45
- organic industrial compounds 30–1
- Oryza sativa* (rice) 44
- overharvesting prohibitions 28

- overnutrition 12–17
- overweight 12–14
  - micronutrient deficiencies 12
  - origins of problems 288
  - Pohnpei 195
  - see also* obesity

- Pacific Islanders** (New Zealand), food insecurity 19
- Pan-American Health Organization (PAHO) 8
- papaya (*Carica papaya*) 43, 44, 47
- paramilitary groups, Amazon area 125
- participatory processes 7
- partnerships 245
- pasturelands, degradation 29
- Pathways Program for American Indian schoolchildren 241
- pears (*Canarium schweinfurthii*) 45
- Pennisetum* (millet) *see* millet (*Pennisetum*)
- permafrost, melt 32
- persistent organic pollutants (POPs) 30–1
  - biomagnification 154
- pesticides, food contamination 31
- physical activity 241
  - Gwich'in 107, 109–10, 118–19
  - improvement in schools 241
- phytonutrient deficiency 20
- Pima Indians** (Arizona)
  - birth weight 15
  - diabetes risk 14
  - gestational diabetes risk 15
- Pingelapese** (Federated States of Micronesia) 43
- plant nurseries, promotion/creation in Awajún project 58–9
- plantation crops 29
- Pohnpei (Federated States of Micronesia) 192, 193–208, **209–10**, 210–11, **212–15**, 215, **216**, 217–20
  - access to land/resources 267–8
  - animal protein 211
  - anthropometrics 206, 215, **216**
  - bananas
    - availability 218

- consumption 208, 211
- varieties 207
- blood pressure **216**, 217
- body mass index 215, **216**
- breastfeeding 43
  - Mand club 200
- campaign slogans 197, 201–2
- cancer 195
- carotenoid intake 207, 208, **209**, 210, 211
- cash income 194
- charcoal oven development 199, 218
- children
  - stunting 267
  - vitamin A deficiency 195
- climate change 277
- collaborative research projects 205
- colonial powers 194
- community intervention programme 193
  - awareness of/exposure to activities 217
  - community-level activities 197–200, 207–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217
  - documentation 196–7, 207
  - interest from other communities 218
  - interventions 197, 206–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217–19
  - lessons learned 219–20
  - methodology 195–206
  - objectives 195
  - participatory research 196
  - phase 1 195, 196–7, 207
  - phase 2 195, 197–205
  - promotion 197, 206–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217–19
  - rationale 195
  - regional/international level activities 205, 219
  - results 206–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217–19
  - state/nation-level activities 200–5, 217–19
  - study site 196
- community meetings 197
- community-level evaluation survey 205–6
- complementary feeding 43
- container gardening 199
- counselling through home visits 199
- cultural characteristics 194
- Daiwang* bananas 218
- demography 194
- development projects 268
- diabetes mellitus 195
- dietary change 208, **209–10**, 210, 268
- dietary intake assessment 206, 208, **209–10**, 210, 211, **211**, **212–15**, 215
- e-mail network 218–19
- energy intake **209**, 210–11
- environmental problem alleviation 35
- farm genebank 200
- fasting blood glucose 215, **216**, 217
- fish eating 211
- fishing 194, 268
- food culture 268
- food diversity 206, 210, **211**, **212–15**
- food frequency 206
- food preferences 268
- food system 194
- giant swamp taro 210, 211, 215
- global food prices 219
- Go Local campaign 200–3, **204**, 218, 219
- government support 248, 249
- health status 194–5, 215, **216–17**, 217
- heart disease 195
- human rights 276
- IFCP 195, 196, 201, 202
  - activities **204**, 219
  - membership drive 205
- imported food consumption 211, **212–15**, 215
- independence 194
- infant feeding practice changes 43
- information dissemination 205
- interventions 206–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217–19, 254–5
- Karat* banana 43, 198, 200, 203
  - availability 218
  - vitamin A 207
- land-use management 267–8
- lemon grass intake 211–12
- local food
  - attitude towards 207–8

- consumption 211, **212–15**, 215
- nutrient content 204
- print/promotional materials 202–3
- small-scale processing 204
- stalls selling take-outs 218
- Mand Community Working Group meetings
  - 197–9
- marine ecosystem 268
- market foods 194
- mass media 202
- national character involvement 290
- NGOs 254, 294
- nursery project 199
- nutrition status 194–5, 267
- nutrition transition 268
- obesity 195, 267
- overweight/obesity 13, 195
- planting competitions 199
- printed/promotional materials 202–3
- promotions 206–8, **209–10**, 210–11, **212–15**, 215, **216–17**, 217–19
- protein intake 211
- recipe collections 203
- rice
  - consumption 208, 210–11
  - home production 219
- right to food 267–8
- sakau* production 267–8
- sea level rise 32
- soft drinks
  - ban 218
  - consumption 211
- strategy successes 293–4
- subsistence farming 194
- territory 192, 193
- traditional food
  - attitudes 268
  - cooking/serving/documenting dishes 199
  - crops 194
  - seed/seedlings provision 246
- USDA supplementary feeding programmes 194
- vegetables 194
  - consumption 210, 211
  - growing 199
- vitamin A deficiency 12
  - children 195
- water provision 267
- weight loss competitions 199
- youth involvement 199–200, 204
- polar bear (*Ursus maritimus*) 155
  - hunting 151, 153
  - meat 154
  - populations 155
- policies
  - case study successes 291–4
  - counterproductive 290
  - cultural practices 289
  - development-related 261
  - international 287–90
  - international policy making 283
  - Inuit land rights 275
  - national 287–90
  - national character involvement 290
  - nutrition improvement 281–94
  - traditional food systems interventions 8
  - United Nations for Indigenous Peoples 284
- pollinators, loss 28
- pollution **26**, 27, 37
  - biomagnification in food web 30, 154
  - food contamination by industrial pollutants 31
  - Inga impact 274
  - livestock production 29
  - persistent organic pollutants 30–1, 154
  - see also* water pollution
- polybrominated compounds 30
- polychlorinated biphenyls (PCBs) 30
- polychlorinated compounds 30
- poverty
  - diabetes mellitus, type 2 18
  - food insecurity 19
  - global economic crisis 19
  - low-income countries 14
  - obesity 18
  - vulnerability to 265
- pregnancy
  - Awajún
    - diets for 64
    - energy intake 69



- Dalit
    - iron deficiency 96
    - night blindness 96, 97
  - Inga healthcare during 129
  - iron requirements 89
  - pre-mastication practices 42
    - avoidance 73
    - Inga 134
  - primary health care 17, 21
  - protected areas 290
  - protein intake
    - Dalit
      - children 91
      - mothers 86–7, 88–9
    - Gwich'in 111, 112
    - Inga 132
    - Inuit 147, 148
    - Pohnpei 211
  - protein-energy malnutrition, Dalit children 97–8
  - public health, nutrition 260
  - pukusa* (wild onion/garlic) 225, 231
  - pukusakina* (*Anemone flaccida*) 226
- 
- racism against indigenous women 285
  - radioactive contamination 32
  - Rangifer tarandus* (caribou) *see* caribou (*Rangifer tarandus*)
  - Rangifer tarandus granti* (porcupine caribou) 46, 105
  - research into traditional food systems 36–7
    - engagement with Indigenous Peoples 286–7
  - resource species decline 27–8
  - resources
    - co-management 35
    - exploitation 264
    - management systems 36
  - Ribeirinhos** (Brazil), overweight/obesity 14
  - rice (*Oryza sativa*) 44
    - Ainu use 225, 231
    - Karen use 162, 163, 171
    - Pohnpei community use 208, 210–11, 219
    - subsidized provision 78–9, 288, 290
  - rivers, turbidity 32
  - Roundup 273
  - Rural Outreach Program (Africa) 288
- 
- Saanich** (Canada) 35
  - Sacha Runa** (Ecuador), biodiversity cultivation 18
  - sakau* production, Pohnpei 267–8
  - salmon (*Oncorhynchus*) 46
    - Ainu use 225
    - farming 28
    - harvesting 35
    - persistent organic pollutants 31
    - stocks 189
    - wild Pacific 28
  - Sanephong *see* **Karen** (Thailand)
  - scaling up of nutrition interventions 242–3, 248, 290–1
  - schools
    - community 33
    - curricula 288–9
    - Inga food 130
    - nutrition education 241
    - physical activity improvement 241
    - teaching of traditional foods importance to
      - Karen schoolchildren 166–7, 170
    - see also* education
  - sea level rise 32
  - seals
    - complementary feeding to infants 46
    - fur sale ban impact on Inuit 153–4
    - persistent organic pollutants 31
    - population reduction 155
  - seeds, recuperation in Awajún project 58–9
  - self-determination 21
    - right to 263
  - self-esteem 21
  - semi-arid areas 13
  - sentinel species, food web 31
  - sewage pollution 30
  - shrimp, industrial contamination 31
  - sito* dishes **228**
    - development 228–9
  - social practice, dietary strategies 241

- social support networks 21
- soft drink consumption
  - Inuit youth 147, 148, 149, 275
  - Pohnpei 211
    - ban 218
- soil erosion **26**
  - climate change 154
- Solanum macrocarpum* (eggplant) 45
- sorghum (*Sorghum vulgare*) 44
  - rural India 77
- Sphenostylis stenocarpa* (yam bean) 46
- storytelling, Inuit 149–50, 288, 292
  - elders 149–50, 155, 156, 288, 292
  - youth radio drama 150
- Straits Salish First Nation** (Canada)
  - reefnets fishing 35
  - seafood contamination 30
- stunting, children
  - Awajún 271
  - Dalit **84**, 85, 97, **99**, 100
  - Ibo 13
  - Maasai 13
  - Pohnpei 267
- subsistence crops 29
- subsistence farming
  - Awajún 55
  - Pohnpei 194
- suicide rate 286
- Suruí** (Amazon) 14
  - obesity 241
- SWA 165–6, 173, 174
- sweet potato (*Ipomea batatas*) 43
- territory
  - access to 259
  - control over 263–4
  - ties to 37
- Thaleichthys pacificus* (ooligan) *see* ooligan  
(*Thaleichthys pacificus*)
- thrifty gene hypothesis 14–16
- thrifty phenotype 15
- tonoto* 226, **227**
  - preparation and use 228
- Torres Strait Islanders** 13
- trace metals, food web 154
- traditional food systems 5–6
  - access to 287
  - cultural identity 21
  - environmental challenges to integrity 25–38
  - environmental impacts **26**
  - interventions 5–6
    - context 6–7
    - implications for policy 8
    - participatory processes 7
    - themes 7–8
  - promotion 21
  - research 36–7
  - resource documentation 287
  - retention 20
  - scientific credibility building 7
  - threats to 18
- traditional knowledge retention 20
- tuna, persistent organic pollutants 31
- Twa** (Uganda), infant mortality 16
- typhoid, water contamination 30
- undernutrition 12–17, 286
  - food insecurity association 17–18
  - Maasai 13
  - origins of problems 288
- underweight 12–14
  - Dalit children **84**, 85, **99**
- unemployment, Nuxalk 183
- United Nations
  - involvement of Indigenous Peoples 283
- tar sands (Alberta, Canada) 31–2
- taro gardens, destruction by sea level rise 32
- taro, giant swamp (*Cyrtosperma chamissonis*) 43, 210, 211, 215
- Task Force on Indigenous Peoples' Food Systems and Nutrition of the International Union of Nutritional Sciences (IUNS) 5

policies for Indigenous Peoples 284  
 scaling up of nutrition interventions 291  
 United Nations Convention on Biodiversity (1992) 35  
 United Nations Declaration on the Rights of Indigenous Peoples (2007) 35, 263–4, 278, 283, 284  
 United Nations Millennium Development Goals 19, 126  
 United Nations Permanent Forum on Indigenous Issues (UNPFII) 283  
 United States Department of Agriculture (USDA) supplementary feeding programmes, Pohnpei 194  
 United States of America  
   diabetes/overweight/obesity in Indigenous Peoples 14  
   *see also* **Alaska Natives** (USA); **American Indians** (USA)  
 Unity of First People of Australia 21  
 Universal Declaration of Human Rights 261  
 uranium mining 31  
 urbanization  
   environmental damage 240  
   market food reliance 288  
*Ursus maritimus* (polar bear) *see* polar bear (*Ursus maritimus*)  
  
 vegetables  
   Ainu wild vegetable use 225, 226, 230, 231  
   Karen  
     growing/sharing 171  
     teaching children 170  
     use 162, 163, 169  
   Nuxalk 182, 185  
   Pohnpei 194  
     consumption 210, 211  
     growing 199  
 Victoria (Canada), contamination of beaches 30  
 Vienna Declaration from World Conference on Human Rights 262  
 vision vine (*Banisteriopsis caapi*) 124

vitamin(s), Karen 162–3, 171  
 vitamin A  
   breastmilk 44  
   Dalit mothers' sources 86, 89  
   Inga **132**, 133  
   *Karat* banana 207  
   Nuxalk 185–6  
   requirements 90–1  
 vitamin A deficiency 12, 20  
   Dalit **83**, 84  
     children 97, **98**  
     mothers 93–5, 96, 100  
   Pohnpei children 195  
   provitamin A carotenoids 207  
 vitamin A intake  
   complementary foods 44  
   Dalit children 91, 92–3  
 vitamin B<sub>12</sub> deficiency 20  
 vitamin C  
   Dalit  
     children's intake 92  
     mothers' intake 85, **87**, 90  
   deficiency 20  
 vitamin D deficiency 20  
  
 water  
   access to 37  
   shortages **26**  
 water pollution **26**, 30–2  
   Awajún 272  
   disease risk 30  
 well-being 20–1  
   increasing for Indigenous Peoples 33–4  
 wildlife, tar sands impact 31–2  
 women  
   Awajún  
     activities 71–2  
     BMI 57, 69, **69**, 71  
     energy intake 69, 73  
     health 70–1  
     illness 70–1  
     intestinal parasites 71, 73

- nutrient intake 73
  - nutritional status 69, 71
  - Women's Programme 58, 59, 61, 72, 74
- crop diversity conservation 36
- discrimination against 285
- disparities 245
- health disparities 285
- healthcare amongst Inga 129
- Karen
  - cooking training 167
  - empowerment 167, 173
- night blindness in Dalit women 83, 93–4, 95–6, 97, 100
- participation in nutrition programmes 245
- racism against 285
- World Conference on Human Rights 283–4
- Vienna Declaration 262
- World Food Summit 262

  

- yagé* culture, Inga 124, 127
- yam (*Dioscorea*) 45
- yam bean (*Sphenostylis stenocarpa*) 46
- yoco* 131
- young children feeding *see* infant and young child (IYC) feeding
- young people
  - focus of intervention 204
  - intervention focus 247
  - Inuit 144–9
    - market food use 143, 146, 147, 151, 274
  - involvement in Pohnpei programme 199–200, 204
  - Karen 167–8

  

- Zea mays* (maize) 45
- zinc deficiency 20







