agricultural investments, 96, 103–4, 128, see land grabbing
Al Awda, Salman, 22–3
Al Maktoum, Sheikh Mohammed bin Rashid, 48, 111
Al Nahyan, Shaikh Zayed bin Sultan, 48
Al Nahyan, Sheikh Abdullah bin Zayed, 20
Al Qassemi, Sultan Sooud, 42
Al Thani, Hamad bin Jasim bin Jabr, 22
Al Thani, Sheikh Tamim bin Hamad, 42
Al-Faisal, Prince Turki, 122
al-Sabah, Sheikh Nasser al Mohammad, 21
Amery, Leopold, 136, 139
Arab Spring
food prices and, 82
food security and, 73
GCC countries and, 22–3
guest workers and, 59
Imam Salman Al Awda and, 23
infrastructure in the UAE and, 18
social media and, 54
sociopolitical effects of, 22
specialized professionals and, 62
subsidization of utilities and, 20
unemployment and, 31
Aramco – Saudi Arabian Oil Company, 67
Aswan High Dam, 100
Bedouin, 26
mass naturalization of, 39
bread riots, 73
Brooks, D. B., 108
Bushehr nuclear plant (Iran), 131
Buzan, B., 137

carrying capacity, 24, 74
Choucri, N. and North, R. C., 15
Corruption Perceptions Index, 92–3
critical infrastructure, 43, 47, 69, 138
failure of, 118

protection of, 33
security and, xiii
terrorism and, 27, 31, 68
worker origin and, 129
cultural security
threats to, 27
cyber attacks, 66–7
cyclone Gonu, 34, 36
demand management, xii, 102, 108–9
Department of Homeland Security (DHS), 33
definition of resilience, 33
downstream states
elements of, 31
virtual, 72
water stress and, 11
Dubai Electricity and Water Authority (DEWA), 111, 116, 122
education
need for, 56, 95
water and, 106–7, 109, 123, 134
Emirates Nuclear Energy Corporation (ENEC), 123
Environment Agency of Abu Dhabi (EAD), 116

Federal Electricity and Water Authority of the UAE (FEWA)
Strategic Plan for 2014, 124
flood irrigation
Gulf states attitude regarding, 135
recommendations regarding, 112
food riots, 88
foodshed, 72, 77
overseas farming as expansion of, 14

Gleick, Peter, 66, 104
Global Water Security
US intelligence report, 10
guest workers, 68
as percentage of population, 25
GCC countries reliance on, 128
GCC countries view of, 38
grievances and, xii
grievances of, 24, 27, 137
in Germany post WW2, 26
in Kuwait, 39
in Saudi Arabia, 23, 30
private sector and, 56
rights of, 25, 41
security in GCC countries and, 10
treatment of, 69
treatment of in GCC countries, 40
water professionals, 109
Gulf Cooperation Council (GCC), 2
freshwater in, 3, 5
Gulf exceptionalism, 21
Gulf War
aftermath of first war in Saudi Arabia, 23
creation of refugees and, 27
immigration policy in Gulf states and first war, 50
public perception of foreign workers in Gulf states and, 68
intelligence community assessment, 11
US interests and Gulf states’ water problems, 11
Iran–Iraq War, 45
Iraq War
and balance of Gulf state powers, 57
creation of refugees and, 27
Shia and, 57
Islam
democracy and, 23
water management in religious facilities, 120
Islamic law
water and, 17
Islamic State
in Syria and Iraq, 129
Israel
as likely target of Iran, 46
food blockade and, 73
Palestinian rights to work in, 138
refugees and creation of, 27
Jubail Desalination Plant
security of, 47
King Saud University, 129
land grabbing, 71, 92, 103, see agricultural investments
definition of, 93
lateral pressure, 15
food security and, 19–20
technology and, 20
water security and, 20
Nasser, Gamal Abdel, 100
National Academy of Sciences of the United States of America, 138
national identity, 21, 37, 47–8
agriculture and, 104–5
demographic imbalance and, 49
globalization and, 76
in Kuwait, 39
in the UAE, 69
language, culture, and, 40–1
National Science Agency of Saudi Arabia, 122
national security
and food security, 86
and Kuwait’s Selective Migration Policy, 39
as related to lateral pressure, 15
business and, 137
human capital and, 65
immigration in Gulf states and, 27
infrastructure security and, 47
migration and, 27
migration, population, and, 40–3
native unemployment and, 55
Qatar policies regarding, 78
science and, 128–31
terrorism in the Gulf states and, 61
unemployment and, 31
United States, 10–11
water and, 2, 10, 133
natural hazard
potential effects of, xii, 137
Nblock, T., 129
nomads, 26
in Oman, 125
land use by, 85, 94
normal accident theory, 32
nuclear power
in Saudi Arabia, 122
in the Gulf states, 131
in the UAE, 122
nuclear power plants
international perception of, 37
potentia failures of, 32
oil infrastructure
violence and, 97
OPEC, 19, 87
Perrow, Richard, 32
pipelines, 51–2, 121–2
fuel, 27
Jubail Desalination Plant security and, 47
loss of water in Saudi Arabian, 118
oil, 53
oil and gas, 46
security and, 66
water, 33
political stability
employment of youth and, 55
external manipulation of, 52
future of, 139
guest-worker grievances and, 69
political stability (cont.)
in GCC countries, 22, 87, 117
job creation and, 31
outsourced farming and, 100
scenarios affecting, 10
supply disruptions and, xii, 7
Sahwa
insurrection, 23
sectarianism
in Bahrain, 22
sedentary farmers, 26
Shatt al-Arab
freshwater imports from, 17
oil exports from, 45
social contract, 15, 17, 23
food uprisings and, 73
freshwater and, 12
subsidies and, 116
social welfare, 15, 124, 129
solar energy, 107, 131–2
desalination and, 119, 122
spillover effects, 2, 61
Strait of Hormuz, 44
strategic installations
as targets for terrorism, 46
strategic reserve, 119–21
strategic reservoirs, 120
strategic storage, 118
construction of facilities for, 122
strategic targets
of Iran, 45
strategic vulnerability
Iran, 46

supply system, 43, 47
food, 73, 75, 79
water, 120, 128
Tanker War, 45
tanks
for water storage, 36
Toshka, 100–1
tropical cyclones
cyclone Phet, 35
impacts of, 35
tropical cyclones
climate change and, 34
upstream states, 11, 31–2
urbanization, 3, 13–14, 76
drop of agriculture in Bahrain and, 81
utilities infrastructure
terrorism and, 52
water infrastructure
conflict and, 10
cyclones and, 35
GCC countries and, 121
maintenance of, 107
security and, 11, 44, 52
terrorism and, 66
vulnerability of, 66
water management and, 133
water pricing and, 110
water pricing, 111
water solidarity, 24
water subsidies, xiii, 112, 114
Woertz, E., 17, 86, 100