

## NOTE

### CAPITOLO 1. L'INGRESSO IN UN MONDO NUOVO

1. David Adam, "Ice-Free Arctic Could be Here in 23 Years", *Guardian*, 5 settembre 2007.
2. Ibid.
3. Paul Brown, "Melting Ice Cap Triggering Earthquakes", *Guardian*, 8 settembre 2007.
4. Ibid.
5. Ibid.
6. Alister Doyle, "Sea Rise Seen Outpacing Forecasts Due to Antarctica", *Reuters*, 23 agosto 2007.
7. Emily Wax, "A Sacred River Endangered By Global Warming", *Washington Post*, 17 giugno 2007.
8. Clifford Coonan, "China's Water Supply Could be Cut Off as Tibet's Glaciers Melt", *The Independent*, 31 maggio 2007; "Glacier Study Reveals Chilling Prediction", *China Daily*, 23 settembre 2004.
9. U.N. Environment Programme (UNEP), *Global Outlook for Ice and Snow*, J. Hansen et al., "Climate Change and Trace Gases", *Philosophical Transactions of the Royal Society A*, vol. 365 (15 luglio 2007), pp. 1949-50.
10. Gordon McGranahan et al., "The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones", *Environment and Urbanization*, vol. 18, 1 (aprile 2007), pp. 17-37; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp).
11. Lester R. Brown, *Outgrowing the Earth*, W.W. Norton and Company, New York 2004; U.N. Population Division, op. cit. nota 10.
12. Fund for Peace and Carnegie Endowment for International Peace, "The Failed States Index", *Foreign Policy*, luglio/agosto 2005, luglio/agosto 2006, luglio/agosto 2007.
13. Nicholas Stern, *The Stern Review on the Economics of Climate Change*, HM Treasury, London 2006.
14. Agnus Maddison, "World Population, GDP, and Per Capita GDP, 12003 AD", pubblicato su [www.ggd.net/maddison](http://www.ggd.net/maddison); U.N. Population Division, op. cit. nota 10.
15. DSS Management Consultants Inc. and RWDI Air Inc., *Cost-Benefit Analysis: Replacing Ontario's Coal-Fired Electricity Generation*.
16. U.S. Department of Energy (DOE), Energy Information Administration, "Weekly Retail Gasoline and Diesel Prices", pubblicato su [tonto.eia.doe.gov/dnav/pet/pet\\_pri\\_gnd\\_dcus\\_us\\_w.htm](http://tonto.eia.doe.gov/dnav/pet/pet_pri_gnd_dcus_us_w.htm).
17. International Center for Technology Assessment (ICTA), *The Real Cost of Gasoline: An Analysis of the Hidden External Costs Consumers Pay to Fuel Their Automobiles*, Washington, DC, 1998; ICTA, *Gasoline Cost Externalities Associated with Global Climate Change: An Update to CTA's Real Price of Gasoline Report*, Washington, DC, 2004; ICTA, *Gasoline Cost Externalities: Security and Protection Services: An Update to CTA's Real Price of Gasoline Report*, Washington, DC, 2005; Terry Tamminen, *Lives Per Gallon: The True Cost of Our Oil Addiction*, Island Press, Washington, DC, 2006, p. 60; "Table 3 – Price Indices for Gross Domestic Product and Gross Domestic Purchases", in *GDP and Other Major Series, 1929-2007*, Washington, DC, 2007; DOE, op. cit. nota 16.
18. Munich Re, *Topics Annual Review: Natural Catastrophes 2001*, Munich, 2002, pp. 16-17; *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline); *International Financial Statistics*, pubblicato su [ifs.apdi.net/imf](http://ifs.apdi.net/imf).
19. "Forestry Cuts Down on Logging", *China Daily*, 26 maggio 1998; Erik Eckholm, "China Admits Ecological Sins Played Role in Flood Disaster", *New York Times*, 26 agosto 1998.
20. Eric Pfanner, "Failure Brings Call for Tougher Standards. Accounting for Enron: Global Ripple Effects", *International Herald Tribune*, 17 gennaio 2002.
21. World Business Academy, "Interface's Ray

- Anderson: Mid-Course Correction”, *Global Reconstruction*, vol. 19, issue 5 (2 giugno 2005); Ray Anderson, “A Call for Systemic Change”, National Conference on Science, Policy, & the Environment: Education for a Secure and Sustainable Future, Washington, DC, 31 gennaio 2003.
- 22.** Jared Diamond, *Collasso*, Einaudi, Torino 2005.
- 23.** Sandra Postel, *Pillar of Sand*, W. W. Norton & Company, New York 1999.
- 24.** Ibid.
- 25.** Ibid.
- 26.** Robert McC. Adams, in Joseph Tainter, *The Collapse of Complex Societies*, Cambridge University Press, Cambridge 1988.
- 27.** “Maya”, *Encyclopaedia Britannica*, pubblicato su [www.britannica.com](http://www.britannica.com).
- 28.** Guy Gugliotta, “The Maya: Glory and Ruin”, *National Geographic*, agosto 2007.
- 29.** Maddison, op. cit. nota 14; IMF, *World Economic Outlook Database 2007*, pubblicato su [www.imf.org/external/pubs](http://www.imf.org/external/pubs).
- 30.** Mathis Wackernagel et al., “Tracking the Ecological Overshoot of the Human Economy”, *Proceedings of the National Academy of Sciences*, vol. 99, 14 (9 luglio 2002), pp. 9, 266-71; Global Footprint Network, WWF and Zoological Society of London, *Living Planet Report 2006*, Global Footprint Network, Oakland, CA, 2006.
- 31.** Brown, op. cit. nota 11, pp. 101-02; Peter H. Gleick et al., *The World's Water 2004-2005* (Washington, DC, 2004), p. 88; U.N. Population Division, op. cit. nota 10.
- 32.** Millennium Ecosystem Assessment (MA), *Ecosystems and Human Well-Being: Synthesis*, Island Press, Washington, DC, 2005; MA, *Ecosystems and Human Well-Being: Policy Responses*, Island Press, Washington, DC, 2005, p. 180.
- 33.** Geoffrey Lean, “A Disaster to Take Everyone's Breath Away”, *Independent*, 24 luglio 2006; Daniel Nepstad, “Climate Change and the Forest”, *Tomorrow's Amazonia: Using and Abusing the World's Last Great Forests*, The American Prospect Washington, DC, 2007.
- 34.** Lean, op. cit. nota 33.
- 35.** Ibid.; Nepstad, op. cit. nota 33.
- 36.** U.N. Food and Agriculture Organization (FAO), *ForesSTAT*, pubblicato su [faostat.fao.org](http://faostat.fao.org); Patrick B. Durst et al., *Forests Out of Bounds: Impacts and Effectiveness of Logging Bans in Natural Forests in Asia-Pacific*, FAO, Asia-Pacific Forestry Commission, Bangkok 2001; Eckholm, op. cit. nota 19; Andy White et al., *China and the Global Market for Forest Products: Transforming Trade to Benefit Forests and Livelihood*, Forest Trends, Washington, DC, 2006, p. 12.
- 37.** FAO, *The State of World Fisheries and Aquaculture 2004*, pp. 24, 30-32; Ted Williams, “The Last Bluefin Hunt”, in Valerie Harms et al., *The National Audubon Society Almanac of the Environment*, Grosset/Putnam, New York 1994, p. 18; Konstantin Volkov, “The Caviar Game Rules”, Reuters-IUCN Environmental Media Award winner, 2001; Camillo Catarci, *World Markets and Industry of Selected Commercially-Exploited Aquatic Species*, FAO, Roma 2004.
- 38.** The New Road Map Foundation, “All-Consuming Passion: Waking up from the American Dream”, *EcoFuture*, gennaio 2002.
- 39.** USDA, op. cit. nota 18; International Iron and Steel Institute, *Steel Statistical Yearbook 2006*, Brussels 2006, pp. 77-79.
- 40.** IMF, op. cit. nota 29; U.N. Population Division, op. cit. nota 10.
- 41.** U.N. Population Division, op. cit. nota 10; FAO, op. cit. nota 36.
- 42.** Ward's Automotive Group, *World Motor Vehicle Data 2006*, Ward's Automotive Group, Southfield, MI: 2006; Lester R. Brown, “Paving the Planet: Cars and Crops Competing for Land”, *Issue Alert*, Earth Policy Institute, Washington, DC, 14 febbraio 2001; USDA, op. cit. nota 18.
- 43.** BP, *Statistical Review of World Energy 2007* (London, 2007); U.N. Population Division, op. cit. nota 10; International Energy Agency (IEA), *Oil Market Report* (Paris, luglio 2007).
- 44.** U.N. Population Division, op. cit. nota 10.
- 45.** Carlotta Gall, “Opium Harvest at Record Levels in Afghanistan”, *New York Times*, 3 settembre 2006; Ania Lichtarowica, “Conquering Polio's Last Frontier”, *BBC News*, 2 agosto 2007.
- 46.** Fund for Peace and Carnegie Endowment, luglio/agosto 2005, op. cit. nota 12.
- 47.** World Bank, *Global Monitoring Report 2007: Millennium Development Goals* (Washington, DC, 2007) p. 5; Department for International Development, *Why We Need to Work More Effectively in Fragile States* (London, 2005), pp. 27-28.
- 48.** Fund for Peace and Carnegie Endowment, luglio/agosto 2005, 2006, e 2007, op. cit. nota 12.
- 49.** Fund for Peace and Carnegie Endowment, luglio/agosto 2005, op. cit. nota 12.
- 50.** Fund for Peace and Carnegie Endowment, luglio/agosto 2005, 2006, e 2007, op. cit. nota 12.
- 51.** Tabella 1.1, ibid.
- 52.** U.N. Population Division, op. cit. nota 10; Fund for Peace and Carnegie Endowment, luglio/agosto 2007, op. cit. nota 12.

53. U.N. Population Division, op. cit. nota 10; Fund for Peace and Carnegie Endowment, luglio/agosto 2007, op. cit. nota 12; Richard Cincotta, Elizabeth Leahy, "Population Age Structure and Its Relation to Civil Conflict: A Graphic Metric", *Woodrow Wilson International Center for Scholars Environmental Change and Security Program Report*, vol. 12 (2006-07), pp. 55-58.
54. Lydia Polgreen, "In Congo, Hunger and Disease Erode Democracy", *New York Times*, 23 giugno 2006; Richard Brennan, Anna Husarska, "Inside Congo, An Unspeakable Toll", *Washington Post*, 16 luglio 2006; Lydia Polgreen, "Hundreds Killed Near Chad's Border With Sudan", *New York Times*, 14 novembre 2006.
55. Postel, op. cit. nota 23, pp. 13-21; Gugliotta, op. cit. nota 28.
56. UNAIDS, "HIV and AIDS Estimates and Data, 2003 and 2005", *2006 Report on the Global Aids Epidemic* (Geneva, 2006).
57. U.N. Population Division, op. cit. nota 10.
58. Colin J. Campbell, "Short Written Submission to the National Petroleum Council", Earth Policy Institute, 14 agosto 2007, p. 5; "Iceland Launches Energy Revolution", *BBC News*, 24 dicembre 2001; John Vidal, "Sweden Plans to be World's First Oil-Free Economy", *The Guardian*, 8 febbraio 2006.
59. USDA, op. cit. nota 18; Chicago Board of Trade, "Market Commentaries", pubblicato su [www.cbot.com](http://www.cbot.com).
60. "Ethanol Biorefinery Locations", pubblicato su [www.ethanolrfa.org](http://www.ethanolrfa.org); *Agricultural Projections to 2016*, USDA, Washington, DC, 2007); *Feed Grains Database*, pubblicato su [www.ers.usda.gov/Data/FeedGrains](http://www.ers.usda.gov/Data/FeedGrains).
61. John B. Rae, *The American Automobile Industry*, Thwayne Publishers, Boston 1984, pp. 87-97.
62. James Brooke, "Japan Squeezes to Get the Most of Costly Fuel", *New York Times*, 4 giugno 2005; *Light Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2006*, EPA Office of Transportation and Air Quality, Washington, DC, 2006.
63. *Global Wind 2006 Report* (Brussels: 2007), p. 4; *Power Technologies Energy Data Book*, DOE, Oak Ridge, TN, 2006; Flemming Hansen, "Denmark to Increase Wind Power to 50% by 2025, Mostly Offshore", *Renewable Energy Access*, 5 dicembre 2006; Global Wind Energy Council, "Global Wind Energy Markets Continue to Boom-2006 Another Record Year", (Brussels, 2007); *Renewables Global Status Report, 2006 Update*, Worldwatch Institute, Washington, DC, 2006, p. 21; Bingham Kennedy, Jr., *Dissecting China's 2000 Census*, Population Reference Bureau, Washington, DC, 2001; Iceland National Energy Authority and Ministries of Industry and Commerce, *Geothermal Development and Research in Iceland*, Iceland, Reykjavik, 2006, p. 16.
64. FAO, *FAOSTAT*, pubblicato su [www.faostat.fao.org](http://www.faostat.fao.org).
65. FAO, *FISHSTAT Plus*, pubblicato su [www.fao.org](http://www.fao.org).
66. Se-Kyung Chong, "Anmyeon-do Recreation Forest: A Millennium of Management", in Patrick B. Durst et al., *In Search of Excellence: Exemplary Forest Management in Asia and the Pacific*, Asia-Pacific Forestry Commission, FAO Regional Office for Asia and the Pacific, Bangkok 2005.
67. Daniel Hellerstein, "USDA Land Retirement Programs", in USDA, *Agricultural Resources and Environmental Indicators 2006* (Washington, DC, 2006); USDA, Economic Research Service, *Agri-Environmental Policy at the Crossroads: Guideposts on a Changing Landscape*, Agricultural Economic Report 794 (Washington, DC, 2001); USDA, op. cit. nota 18.
68. City of Amsterdam, "Bike Capital of Europe", pubblicato su [www.iamsterdam.com/visiting\\_exploring](http://www.iamsterdam.com/visiting_exploring); Molly O'Meara, *Reinventing Cities for People and the Planet*, Worldwatch Paper 147, Worldwatch Institute, Washington, DC, 1999, p. 47; *World Urbanization Prospects: The 2005 Revision Population Database*, pubblicato su [esa.un.org/unup](http://esa.un.org/unup), 2006; Serge Schmemmann, "I Love Paris on a Bus, a Bike, a Train and in Anything but a Car", *New York Times*, 26 luglio 2007; Randy Kennedy, "The Day The Traffic Disappeared", *New York Times Magazine*, 20 aprile 2003, pp. 42-45.
69. CalCars, "All About Plug-In Hybrids", pubblicato su [www.calcars.org](http://www.calcars.org).
70. Tim Johnston, "Australia Is Seeking Nationwide Shift to Energy-Saving Light Bulbs", *New York Times*, 21 febbraio 2007; Rob Gillies, "Canada Announces Greenhouse Gas Targets", *Associated Press*, 25 aprile 2007; Matthew L. Wald, "A U.S. Alliance to Update the Light Bulb", *New York Times*, 14 marzo 2007; Ian Johnston, "Two Years to Change EU Light Bulbs", *Scotsman* (U.K.), 10 marzo 2007; Deborah Zabarenko, "China to Switch to Energy-Efficient Lightbulbs", *Reuters*, 3 ottobre 2007; *Light's Labour's Lost: Policies for Energy-Efficient Lighting* (Paris: 2006); IEA, *World Energy Outlook 2006* (Paris, 2006).

## CAPITOLO 2. PICCO DEL PETROLIO E SICUREZZA ALIMENTARE

1. International Energy Agency (IEA), *Oil Market Report* (Paris, 2001); U.S. Department of Defense, Twentieth Century Petroleum Statistics (Washington, DC, 1945), in Christopher Flavin, Seth Dunn, "Reinventing the Energy System", in Lester R. Brown, Christopher Flavin, e Hilary French, *State of the World 1999*, Edizioni Ambiente, Milano, 1999; Seth Dunn, "Coal Use Continues Rebound", in Lester R. Brown et al., *Vital Signs 1998*, Edizioni Ambiente, Milano, 1998.
2. U.N. Population Division, *World Urbanization Prospects: The 2005 Revision* (New York, 2006), p. 1; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp).
3. IEA, *Oil Market Report* (Paris, 2007); Colin J. Campbell, "Short Written Submission to the National Petroleum Council", e-mail a Frances Moore, Earth Policy Institute, 14 agosto 2007.
4. Michael T. Klare, "Entering the Tough Oil Era", *TomDispatch.com*, 16 agosto 2007; Campbell, op. cit. nota 3.
5. International Monetary Fund, International Financial Statistics, pubblicato su [ifs.apdi.net](http://ifs.apdi.net); Chicago Board of Trade, "Market Commentaries", pubblicato su [www.cbct.com](http://www.cbct.com).
6. Gary Schnitkey, Darrel Good, Paul Ellinger, "Crude Oil Price Variability and Its Impact on Break – Even Corn Prices", *Farm Business Management*, 30 maggio 2007; U.S. Department of Agriculture (USDA), Economic Research Service (ERS), *Feed Grains Database*, pubblicato su [www.ers.usda.gov](http://www.ers.usda.gov); U.S. Department of Agriculture (USDA), *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline); Renewable Fuels Association, "Ethanol Biorefinery Locations", pubblicato su [www.ethanolrfa.org](http://www.ethanolrfa.org); Interagency Agricultural Projections Committee, *Agricultural Projections to 2016* (Washington, DC, USDA, 2007).
7. U.S. Department of Energy (DOE), Energy Information Administration (EIA), "Select Crude Oil Spot Prices", pubblicato su [www.eia.doe.gov/emeu/international/crude1.htm](http://www.eia.doe.gov/emeu/international/crude1.htm) l, 20 ottobre 2007; John Vidal, "The End of Oil Is Closer Than You Think", *Guardian*, 21 aprile 2005; Alfred J. Cavallo, "Oil: Caveat Empty", *Bulletin of the Atomic Scientists*, vol. 61, 3 (maggio/giugno 2005), pp. 16-18.
8. Vidal, op. cit. nota 7; M. King Hubbert, "Nuclear Energy and the Fossil Fuels", American Petroleum Institute, marzo 1956.
9. DOE, EIA, "Table 4.1: World Crude Oil Production, 1970-2006, Selected Countries", pubblicato su [www.eia.doe.gov/emeu/international/oilproduction.html](http://www.eia.doe.gov/emeu/international/oilproduction.html), visionato il 14 settembre 2007.
10. DOE, op. cit. nota 9; Vidal, op. cit. nota 7; DOE, EIA, "Petroleum (Oil) Production", *International Petroleum Monthly*, pubblicato su [www.eia.doe.gov/ipm/supply.html](http://www.eia.doe.gov/ipm/supply.html).
11. DOE, op. cit. nota 9; Klare, op. cit. nota 4; Paula Dittrick, "CGES: OPEC Pushing Limits of Oil Production Capacity", *Oil and Gas Journal*, 20 ottobre 2004.
12. Neil Chatterjee, "'Peak Oil' Gathering Sees \$100 Crude This Decade", *Reuters*, 26 aprile 2005; Adam Porter, "Expert Says Saudi Oil maggio Have Peaked", *Al Jazeera*, 20 febbraio 2005; James D. Hamilton, "Running Dry?" *The Atlantic*, ottobre 2007; IEA, op. cit. nota 3.
13. DOE, op. cit. nota 9; Vidal, op. cit. nota 7.
14. Michael T. Klare, "The Energy Crunch to Come", *TomDispatch.com*, 22 marzo 2005; Jad Mouawad, "Big Oil's Burden of Too Much Cash", *New York Times*, 12 febbraio 2005; Mark Williams, "The End of Oil?" *Technology Review*, febbraio 2005; Vidal, op. cit. nota 7.
15. Peter Maass, "The Breaking Point", *New York Times Magazine*, 21 agosto 2005.
16. James Picerno, "If We Really Have the Oil", *Bloomberg Wealth Manager*, settembre 2002, p. 45; Klare, op. cit. nota 14; Kenneth S. Deffeyes, *Beyond Oil: The View from Hubbert's Peak*, Hill and Wang, New York 2005; Richard C. Duncan and Walter Youngquist, "Encircling the Peak of World Oil Production", *Natural Resource Research*, vol. 12, 4 (dicembre 2003), p. 222; A.M. Samsam Bakhtiari, "World Oil Production Capacity Model Suggests Output Peak by 2006-07", *Oil and Gas Journal*, 26 aprile 2004, pp. 18-20.
17. IEA, op. cit. nota 3; IEA, *Oil Market Report* (Paris, 2007).
18. Fredrik Robelius, *Giant Oil Fields – The Highway to Oil*, Uppsala University Press, Uppsala, 2007.
19. IEA, op. cit. nota 3; IEA, *Oil Market Report* (Paris, 1993); U.N. Population Division, *World Population Prospects*, op. cit. nota 2; IEA, *World Energy Outlook 2006* (Paris, 2006), pp. 85, 492.
20. Robert Collier, "Canadian Oil Sands: Vast Reserves Second to Saudi Arabia Will Keep America Moving, But at a Steep Environmental Cost", *San Francisco Chronicle*, 22 maggio 2005; Vidal, op. cit. nota 7; Walter Youngquist, "Survey of Energy Resources: Oil Shale", *Energy Bulletin*, 24 aprile 2005.
21. Gargi Chakrabarty, "Shale's New Hope", *Rocky Mountain News*, 18 ottobre 2004; Walter

- Youngquist, "Alternative Energy Sources", in Lee C. Gerhard, Patrick Leahy, Victor Yannacone (a cura di), *Sustainability of Energy and Water through the 21st Century*, Kansas Geological Survey, Lawrence, KS, 2002, p. 65; Cavallo, op. cit. nota 7.
- 22.** Collier, op. cit. nota 20; Alberta Energy and Utilities Board, *Alberta Energy Resource Industries Monthly Statistics*, pubblicato su [www.eub.ca](http://www.eub.ca), visionato l'8 agosto 2007; BP, *BP Statistical Review of World Energy* (London, 2007).
- 23.** "Exxon Says N. America Gas Production Has Peaked", *Reuters*, 21 giugno 2005; Collier, op. cit. nota 20; Richard Heinberg, "The End of the Oil Age", *Earth Island Journal*, vol. 18, 3.
- 24.** Youngquist, op. cit. nota 20; Youngquist, op. cit. nota 21, p. 64; Vidal, op. cit. nota 7; WWF-Canada, "Oil Sands Pushing Canada Further from Kyoto, WWF and UK Think-Tank Warn", (Toronto, 2007).
- 25.** Danielle Murray, "Oil and Food: A Rising Security Challenge", *Eco-Economy Update*, Earth Policy Institute, Washington, DC, 9 maggio 2005; "Energy Use in Agriculture", in USDA, *U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2001*, Global Change Program Office, Office of the Chief Economist, Washington, DC, 2004.
- 26.** James Duffield, USDA, e-mail a Danielle Murray, Earth Policy Institute, 31 marzo 2005; James Duffield, USDA, e-mail a Frances Moore, Earth Policy Institute, 17 agosto 2007; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
- 27.** Conservation Technology Information Center, "Conservation Tillage and Other Tillage Types in the United States – 1990-2004", in *2004 National Crop Residue Management Survey*, Pur-due University, West Lafayette, IN, 2004; Duffield, e-mail a Murray, op. cit. nota 26; U.N. Food and Agriculture Organization (FAO), *FAOSTAT Statistics Database*, pubblicato su [apps.fao.org](http://apps.fao.org), 4 aprile 2005.
- 28.** Duffield, e-mail a Murray, op. cit. nota 26; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
- 29.** DOE, EIA, *Annual Energy Outlook 2003* (Washington, DC, 2004); "Table 20: Energy Expenses for On-Farm Pumping of Irrigation Water by Water Source and Type of Energy: 2003 and 1998", in USDA, National Agricultural Statistics Service, *2003 Farm & Ranch Irrigation Survey, Census of Agriculture* (Washington, DC, 2004); Fred Pearce, "Asian Farmers Sucking the Continent Dry", *New Scientist.com*, 28 agosto 2004.
- 30.** Murray, op. cit. nota 25; DOE, EIA, "Total Primary Energy Consumption, All Countries, 1980-2004", pubblicato su [www.eia.doe.gov/emeu/international/energyconsumption.html](http://www.eia.doe.gov/emeu/international/energyconsumption.html), visionato il 2 agosto 2007.
- 31.** Murray, op. cit. nota 25; M. Heller e G. Keoleian, *Life-Cycle Based Sustainability Indicators for Assessment of the U.S. Food System*, Center for Sustainable Systems, University of Michigan, Ann Arbor, MI, 2000, p. 42.
- 32.** U.S. Department of Transportation (DOT), Bureau of Transportation Statistics (BTS), *Freight Shipments in America* (Washington, DC, 2004), pp. 9-10; Andy Jones, *Eating Oil – Food in a Changing Climate*, Sustain and Elm Farm Research Centre, London 2001.
- 33.** "Shipment Characteristics by Three-Digit Commodity and Mode of Transportation: 2002", in BTS and U.S. Census Bureau, *2002 Commodity Flow Survey* (Washington, DC, 2004); Jones, op. cit. nota 32; James Howard Kunstler, *The End of Suburbia: Oil Depletion and the Collapse of The American Dream*, The Electric Wallpaper Co., Toronto, ON, 2004.
- 34.** Heller e Keoleian, op. cit. nota 31, p. 42; David Pimentel, Marcia Pimentel, *Food, Energy and Society*, University Press of Colorado, Boulder, CO, 1996.
- 35.** Center for American Progress, *Resources for Global Growth: Agriculture, Energy and Trade in the 21st Century* (Washington, DC, 2005); USDA, ERS, "Price Spreads from Farm to Consumer", pubblicato su [www.ers.usda.gov/Data](http://www.ers.usda.gov/Data), 22 giugno 2007.
- 36.** Murray, op. cit. nota 25, pp. 1, 3; Duffield, e-mail a Murray, op. cit. nota 26; John Miranowski, "Energy Demand and Capacity to Adjust in U.S. Agricultural Production", pubblicato su Agricultural Out-look Forum 2005, Arlington, VA, 24 febbraio 2005.
- 37.** Worldwatch Institute, *Signposts 2001*, Washington, DC, 2001; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
- 38.** Worldwatch Institute, op. cit. nota 37; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
- 39.** Worldwatch Institute, *Signposts 2002*, Washington, DC, 2002; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
- 40.** Lester R. Brown, *Outgrowing the Earth*, W.W. Norton & Company, New York 2004).
- 41.** USDA, *Production, Supply and Distribution*, op. cit. nota 6; U.N. Population Division, *World Population Prospects*, op. cit. nota 2; FAO, *FAOSTAT Food Security*, pubblicato su [www.fao.org/faostat](http://www.fao.org/faostat), 30 giugno 2006.

42. USDA, *Production, Supply and Distribution*, op. cit. nota 6; Brown, op. cit. nota 40, p. 50.
43. USDA, *Production, Supply and Distribution*, op. cit. nota 6; Kelly Day Rubenstein et al., *Crop Genetic Resources: An Economic Appraisal*, USDA Economic Research Service, Washington, DC, 2005, p. 19.
44. USDA, *Production, Supply and Distribution*, op. cit. nota 6; U.N. Population Division, *World Population Prospects*, op. cit. nota 2.
45. USDA, *Production, Supply and Distribution*, op. cit. nota 6; U.N. Population Division, *World Population Prospects*, op. cit. nota 2; Michael Ma, "Northern Cities Sinking as Water Table Falls", *South China Morning Post*, 11 agosto 2001; Hong Yang, Alexander Zehnder, "China's Regional Water Scarcity and Implications for Grain Supply and Trade", *Environment and Planning A*, vol. 33 (2001); USDA, *Production, Supply and Distribution*, op. cit. nota 6.
46. Shaobing Peng et al., "Rice Yields Decline with Higher Night Temperature from Global Warming", *Proceedings of the National Academy of Sciences*, 6 luglio 2004, pp. 9971-75; Intergovernmental Panel on Climate Change, *Summary for Policymakers*, in *Climate Change 2007: Impacts, Adaptation, and Vulnerability*, Cambridge University Press, New York 2007, pp. 15-16.
47. F.O. Licht, "Too Much Too Soon? World Ethanol Production to Break Another Record in 2005", *World Ethanol and Biofuels Report*, vol. 3, 20 (21 giugno 2005), pp. 429-35; DOE, *World Crude Oil Prices, and U.S. All Grades All Formulations Retail Gasoline Prices*, pubblicato su [tonto.eia.doe.gov](http://tonto.eia.doe.gov), visionato il 31 luglio 2007; Renewable Fuels Association, op. cit. nota 6.
48. F.O. Licht, "World Ethanol Production 2007 to Hit New Record", *World Ethanol and Biofuels Report*, vol. 5, 17 (8 maggio 2007); USDA, ERS, op. cit. nota 6; USDA, statement before the U.S. Senate Committee on Environment and Public Works, 6 settembre 2006, p. 8; Oak Ridge National Laboratory (ORNL), "Bioenergy Conversion Factors", pubblicato su [bioenergy.ornl.gov/papers/misc/energy\\_conv.html](http://bioenergy.ornl.gov/papers/misc/energy_conv.html), visionato il 3 agosto 2007; DOE, EIA, *Annual Energy Outlook 2007* (Washington, DC, 2007); USDA, *Production, Supply and Distribution*, op. cit. nota 6.
49. Sergio Barros, *Brazil-Sugar-Annual Report-2006, GAIN Report BR6002* (Washington, DC, USDA, Foreign Agricultural Service, aprile 2006; CEPEA, *Indicadores de Preços – Açúcar Cristal*, pubblicato su [www.cepea.esalq.usp.br/acucar](http://www.cepea.esalq.usp.br/acucar), visionato il 31 luglio 2007.
50. F.O. Licht, op. cit. nota 48; "Stung by Bad Experience, Dutch Propose Tough Criteria for Importing Sustainable Biofuels", *International Herald Tribune*, 26 aprile 2007; "EU Ministers Agree Biofuel Target", *BBC News*, 15 febbraio 2007.
51. F.O. Licht, op. cit. nota 48; Collins, op. cit. nota 48; F.O. Licht, "E-5 Mandate to be Introduced by maggio", *World Ethanol and Biofuels Report*, vol. 4, 15 (7 aprile 2006), p. 355; Eric Unmacht, "Faced with Soaring Oil Prices, Indonesia Turns to Biodiesel", *Christian Science Monitor*, 5 luglio 2006; Naveen Thukral, "Malaysia Approves 52 Biodiesel Plants So Far", *Reuters*, 16 agosto 2006.
52. USDA, *Production, Supply and Distribution*, op. cit. nota 6.
53. Ibid.; USDA, *Crop Production 2006 Summary* (Washington, DC, 2007).
54. Robert Wisner, e-mail a Janet Larsen, Earth Policy Institute, 2 gennaio 2007; USDA, National Agricultural Statistics Service, *Agricultural Statistics Database*, pubblicato su [www.nass.usda.gov](http://www.nass.usda.gov), visionato il 27 dicembre 2006.
55. Madelene Pearson, Danielle Rossingh, "Wheat Price Rises to Record \$9 a Bushel on Global Crop Concerns", *Bloomberg*, 12 settembre 2007.
56. Ronald Buchanan, "Mexico Protest Prompts Food Price Assurance", *Financial Times*, 1 febbraio 2007; Carolyn Said, "Nothing Flat about Tortilla Prices: Some in Mexico Cost 60 Percent More, Leading to a Serious Struggle for Low-Income People", *San Francisco Chronicle*, 13 gennaio 2007; "Italy Urged to go on Pasta Strike", *BBC News*, 13 settembre 2007; Karen pubblicato su wood, "Rising Price of Wheat Signals End of Low-Cost Food, Warns Premier Chief", *The Independent*, 5 settembre 2007.
57. Lester R. Brown, "Distillery Demand for Grain to Fuel Cars Vastly Understated: World maggio be Facing Highest Grain Prices in History", *Eco-Economy Update*, Earth Policy Institute, Washington, DC, 2007; Collins, op. cit. nota 48; ORNL, op. cit. nota 48; DOE, op. cit. nota 48; USDA, *Production, Supply and Distribution*, op. cit. nota 6.
58. Ward's Communications, *Ward's World Motor Vehicle Data 2006* (Southfield, MI, 2006), p. 240; World Bank, "GNI Per Capita 2006, atlas Method and PPP", *World Development Indicators*, pubblicato su [siteresources.worldbank.org](http://siteresources.worldbank.org), 1 luglio 2007; U.N. Population Division, *World Population Prospects*, op. cit. nota 2.

59. USDA, *Feed Grains Database*, op. cit. nota 6; Collins, op. cit. nota 48; ORNL, op. cit. nota 48; DOE, op. cit. nota 48.
60. California Cars Initiative (CalCars), "All About Plug-In Hybrids (PHEVs)", pubblicato su [www.calcars.org/vehicles.html](http://www.calcars.org/vehicles.html), visionato il 27 dicembre 2006.
61. Patrick Barta, "Jatropha Plant Gains Steam in Global Race for Biofuels", *Wall Street Journal*, 24 agosto 2007.
62. Ibid.
63. Ibid.; Ben Macintyre, "Poison Plant Could Help to Cure the Planet", *The Times*, 28 luglio 2007.
64. Barta, op. cit. nota 61; Rebecca Renner, "Green Gold in a Shrub: Entrepreneurs Target the Jatropha Plant as the Next Big Biofuel", *Scientific American*, giugno 2007.
65. IEA, op. cit. nota 3; DOE, EIA, *International Energy Outlook 2007* (Washington, DC, 2007), p. 29; IEA, *World Energy Outlook 2006*, op. cit. nota 19, p. 86; Thomas Wheeler, "It's the End of the World as We Know It", *Baltimore Chronicle*, 3 agosto 2004.
66. "Table 1-12: U.S. Sales or Deliveries of New Aircraft, Vehicles, Vessels, and Other Conveyances", in BTS, *National Transportation Statistics 2005* (Washington, DC, DOT, 2005).
67. Darrin Qualman, "Peak Oil: The Short, Medium, and Long-Term", *Union Farmer Monthly*, vol. 56, 4 (agosto 2005).
68. Oliver Prichard, "SUV Drivers Reconsider", *Philadelphia Inquirer*, 1 giugno 2005; Danny Hakim, Jonathan Fuerbringer, "Fitch Cuts G.M. to Junk, Citing Poor S.U.V. Sales", *New York Times*, 24 maggio 2005; Fitch Corporate Ratings, pubblicato su [fitchratings.com](http://fitchratings.com), visionato il 8 agosto 2007.
69. U.N. Human Settlements Programme, *The State of the World's Cities 2004/2005* (London: Earthscan, 2004), pp. 24-25; U.N. Population Division, *Urban Agglomerations 2005*, wall chart (New York: marzo 2006).
70. U.S. Census Bureau, "American Spend More Than 100 Hours Commuting to Work Each Year, Census Bureau Reports", press release (Washington, DC, 2005).
71. Wheeler, op. cit. nota 65.
72. Micheline maggionard, "Surging Fuel Prices Catch Most Airlines Unprepared, Adding to the Industry's Gloom", *New York Times*, 26 aprile 2005; "Revealed: The Real Cost of Air Travel", *The Independent* (London), 29 maggio 2005; DOT - FAA, *FAA Aerospace Forecasts - Fiscal Years 2006-2017* (Washington, DC, 2006), p. 63.
73. "Table 1-4: Public Road and Street Mileage in the United States by Type of Surface", in BTS, *National Transportation Statistics 2007* (Washington, DC, 2007).
74. Gerhard Metschies, "Pain at the Pump", *Foreign Policy*, luglio-agosto 2007.
75. Edith M. Lederer, "U.N.: Hunger Kills 18,000 Kids Each Day", *Associated Press*, 17 febbraio 2007; Iraq Coalition Casualty Count, [icasualties.org/oif](http://icasualties.org/oif), 31 luglio 2007.
76. Loganaden Naiken, "Keynote Paper: FAO Methodology for Estimating the Prevalence of Undernourishment", pubblicato su [www.fao.org/docrep/005/y4249e/y4249e06.htm](http://www.fao.org/docrep/005/y4249e/y4249e06.htm), visionato il 1 agosto 2007; FAO, op. cit. nota 41.
77. C. Ford Runge, Benjamin Senauer, "How Biofuels Could Starve the Poor", *Foreign Affairs*, maggio/giugno 2007.
78. Missy Ryan, "Commodity Boom Eats into Aid for World's Hungry", *Reuters*, 5 settembre 2007.
79. FAO, Crop Prospects and Food Situation, 3, maggio 2007; Fund for Peace and Carnegie Endowment for International Peace, "The Failed States Index 2007", *Foreign Policy*, luglio/agosto 2007; U.N. Population Division, *World Population Prospects*, op. cit. nota 2.
80. Lederer, op. cit. nota 75.

### CAPITOLO 3. TEMPERATURE E MARI CRESCONO

1. U.N. Environment Programme (UNEP), *Global Outlook for Ice and Snow* (Nairobi, 2007).
2. Ibid.
3. U.S. Department of Agriculture (USDA), *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 11 giugno 2007; Janet Larsen, "Record Heat Wave in Europe Takes 35,000 Lives", *Eco-Economy Update* (Washington, DC, Earth Policy Institute, 9 ottobre 2003); USDA, National Agricultural Statistics Service, "Crop Production", news release (Washington, DC, 12 agosto 2005).
4. Janet Larsen, "Setting the Record Straight: More than 52,000 Europeans Died from Heat in Summer 2003", *Eco-Economy Update* (Earth Policy Institute, Washington, DC, 26 luglio 2006); National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (Washington, DC, U.S. Government Printing Office, 2004).
5. "Awful Weather We're Having", *The Economist*, 2 ottobre 2004; Richard Milne, "Hurricanes Cost Munich Re Reinsurance", *Financial Times*, 6 novembre 2004.

6. J. Hansen, NASA's Goddard Institute for Space Studies (GISS), "Global Temperature Anomalies in 0.1 C", pubblicato su [data.giss.nasa.gov/gistemp/tabledata/GLB.Ts.txt](http://data.giss.nasa.gov/gistemp/tabledata/GLB.Ts.txt), giugno 2007; Reto A. Ruedy, GISS, e-mail a Janet Larsen, Earth Policy Institute, 14 maggio 2003.
7. Hansen, op. cit. nota 6; USDA, op. cit. nota 3; USDA, *Grain: World Markets and Trade*.
8. Pieter Tans, "Trends in atmospheric Carbon Dioxide – Mauna Loa", NOAA/ESRL, pubblicato su [www.cmdl.noaa.gov](http://www.cmdl.noaa.gov), visionato il 16 ottobre 2007; Seth Dunn, "Carbon Emissions Dip", in Worldwatch Institute, *Vital Signs 1999* (W.W. Norton & Company, New York 1999), pp. 60-61; International Energy Agency, *World Energy Outlook 2006* (Paris, 2006), p. 493; Vattenfall, *Global Mapping of Greenhouse Gas Abatement Opportunities up to 2030: Forestry Sector Deep-Dive* (Stockholm, 2007), p. 27.
9. Intergovernmental Panel on Climate Change (IPCC), *Summary for Policymakers*, in *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge and New York, 2007), p. 13; IPCC, "Intergovernmental Panel on Climate Change and Its Assessment Reports", pubblicato su [www.ipcc.ch/press](http://www.ipcc.ch/press), visionato il 27 luglio 2007.
10. IPCC, *Summary for Policymakers*, op. cit. nota 9, p. 15.
11. National Center for Atmospheric Research and UCAR Center of Programs, "Drought's Growing Reach: NCAR Study Points to Global Warming as Key Factor", (Boulder, CO, 2005); Aiguo Dai, Kevin E. Trenberth, Taotao Qian, "A Global Dataset of Palmer Drought Severity Index for 1870-2002: Relationship with Soil Moisture and Effects of Surface Warming", *Journal of Hydrometeorology*, vol. 5 (dicembre 2004), pp. 1117-30.
12. Donald McKenzie et al., "Climatic Change, Wildfire, and Conservation", *Conservation Biology*, vol. 18, 4 (agosto 2004), pp. 890-902.
13. Camille Parmesan, Hector Galbraith, *Observed Impacts of Global Climate Change in the U.S.* (Arlington, VA: Pew Center on Global Climate Change, 2004); DeNeen L. Brown, "Signs of Thaw in a Desert of Snow", *Washington Post*, 28 maggio 2002; IPCC, *Summary for Policymakers*, op. cit. nota 9, p. 13.
14. Patty Glick, *Fish Out of Water: A Guide to Global Warming and Pacific Northwest Rivers* (Seattle, 2005); Elizabeth Gillespie, "Global Warming may Be Making Rivers Too Hot: Cold-Water Fish Will Struggle, Report Says", *Seattle Post-Intelligencer*, 24 marzo 2005.
15. Douglas B. Inkley et al., *Global Climate Change and Wildlife in North America* (Bethesda, MD, dicembre 2004); J. R. Pegg, "Global Warming Disrupting North American Wildlife", *Environment News Service*, 16 dicembre 2004.
16. John E. Sheehy, International Rice Research Institute, e-mail a Janet Larsen, Earth Policy Institute, 1 ottobre 2002; Pedro Sanchez, "The Climate Change – Soil Fertility – Food Security Nexus", Sustainable Food Security for All by 2020, Bonn, Germany, 4-6 settembre 2002; USDA, op. cit. nota 3.
17. Mohan K. Wali et al., "Assessing Terrestrial Ecosystem Sustainability", *Nature & Resources*, ottobre-dicembre 1999, pp. 21-33.
18. Sheehy, op. cit. nota 16; Sanchez, op. cit. nota 16.
19. Shaobing Peng et al., "Rice Yields Decline with Higher Night Temperature from Global Warming", *Proceedings of the National Academy of Sciences*, 6 luglio 2004, pp. 9971-75; *Proceedings of the National Academy of Sciences*, "Warmer Evening Temperatures Lower Rice Yields" (Washington, DC, 2004).
20. K.S. Kavi Kumar, Jyoti Parikh, "Socio-Economic Impacts of Climate Change on Indian Agriculture", *International Review for Environmental Strategies*, vol. 2, 2 (2001), pp. 277-93; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007.
21. UNEP, op. cit. nota 1, p. 131.
22. Emily Wax, "A Sacred River Endangered by Global Warming", *Washington Post*, 17 giugno 2007; UNEP, op. cit. nota 1, p. 131.
23. Clifford Coonan, "China's Water Supply Could be Cut Off as Tibet's Glaciers Melt", *The Independent* (London), 31 maggio 2007; UNEP, op. cit. nota 1, p. 131; "Yangtze River – Agriculture", *Encyclopedia Britannica*, pubblicato su <http://www.britannica.com>, visionato il 25 luglio 2007.
24. Jonathan Watts, "Highest Icefields Will Not Last 100 Years, Study Finds: China's Glacier Research Warns of Deserts and Floods Due to Warming", *Guardian*, 24 settembre 2004; "Glacier Study Reveals Chilling Prediction", *China Daily*, 23 settembre 2004.
25. UNEP, op. cit. nota 1, p. 131.
26. Lonnie G. Thompson, "Disappearing Glaciers Evidence of a Rapidly Changing Earth", American Association for the Advancement of Science Annual Meeting, San Francisco, febbraio 2001; "The Peak of Mt Kilimanjaro As It Has

- Not Been Seen for 11,000 Years”, *Guardian*, 14 marzo 2005; Nancy Wangui, “Crisis Looms as Rivers Around Mt. Kenya Dry Up”, *East Africa Standard*, 1 luglio 2007.
27. Eric Hansen, “Hot Peaks”, *OnEarth*, 2002, p. 8.
28. Leslie Josephus, “Global Warming Threatens Double-Trouble for Peru: Shrinking Glaciers and a Water Shortage”, *Associated Press*, 12 febbraio 2007; *Citation World Atlas* (Hammond World Atlas Corporation, Union, 2004).
29. Josephus, op. cit. nota 28; U.N. Population Division, op. cit. nota 20.
30. James Painter, “Peru’s Alarming Water Truth”, *BBC News*, 12 marzo 2007; U.N. Population Division, *Urban Agglomerations 2005 Wall Chart*, pubblicato su [www.un.org/esa/population](http://www.un.org/esa/population), visionato il 28 settembre 2007.
31. Michael Kiparsky, Peter Gleick, *Climate Change and California Water Resources: A Survey and Summary of the Literature* (Oakland, CA, 2003); Timothy Cavagnaro et al., *Climate Change: Challenges and Solutions for California Agricultural Landscapes*, California Climate Change Center, Sacramento, CA, 2006.
32. John Krist, “Water Issues Will Dominate California’s Agenda This Year”, *Environmental News Network*, 21 febbraio 2003.
33. Michael J. Scott et al., “Climate Change and Adaptation in Irrigated Agriculture – A Case Study of the Yakima River”, in UCOWR/NIWR Conference, *Water Allocation: Economics and the Environment* (Universities Council on Water Resources, Carbondale, 2004); Pacific Northwest National Laboratory, “Global Warming to Squeeze Western Mountains Dry by 2050”, (Richland, 16 febbraio 2004).
34. UNEP, op. cit. nota 1, p. 131; Mehrdad Khalili, “The Climate of Iran: North, South, Kavir (Desert), Mountains”, *Sani’ate Hamlo Naql*, marzo 1997, pp. 48-53.
35. UNEP, op. cit. nota 1, p. 103; IPCC, *Summary for Policymakers*, op. cit. nota 9, p. 13; Paul Brown, “Melting Ice Cap Triggering Earthquakes”, *Guardian*, 8 settembre 2007.
36. Arctic Climate Impact Assessment (ACIA), *Impacts of a Warming Arctic* (Cambridge University Press, Cambridge, U.K, 2004); ACIA Web site, pubblicato su [www.acia.uaf.edu](http://www.acia.uaf.edu), 13 luglio 2005; “Rapid Arctic Warming Brings Sea Level Rise, Extinctions”, *Environment News Service*, 8 novembre 2004; UNEP, op. cit. nota 1, p. 103.
37. J. R. Pegg, “The Earth is Melting, Arctic Native Leader Warns”, *Environment News Service*, 16 settembre 2004.
38. ACIA, op. cit. nota 36; Steven Armstrup et al., “Recent Observations of Intraspecific Predational Cannibalism among Polar Bears in the Southern Beaufort Sea”, *Polar Biology*, vol. 29, n. 11 (ottobre 2006), pp. 997-1002.
39. Julienne Stroeve et al., “Arctic Sea Ice Decline: Faster than Forecast”, *Geophysical Research Letters*, vol. 34 (maggio 2007); National Snow and Ice Data Center (NSIDC), “Arctic Sea Ice Shatters all Previous Record Lows”, (Boulder, CO, 1 ottobre 2007); Stroeve, in “Arctic Ice Retreating 30 Years Ahead of Projections”, *Environment News Service*, 30 aprile 2007.
40. Marc Kaufman, “Decline in Winter Arctic Ice Linked to Greenhouse Gases”, *Washington Post*, 14 settembre 2006; Joséfino C. Comiso, “Abrupt Decline in the Arctic Winter Sea Ice Cover”, *Geophysical Research Letters*, vol. 33, 30 settembre 2006.
41. David Adam, “Meltdown Fear as Arctic Ice Cover Falls to Record Winter Low”, *Guardian*, 15 maggio 2006.
42. NSIDC, “Processes: Thermodynamics: Albedo”, pubblicato su [nsidc.org/seaic/processes/albedo.html](http://nsidc.org/seaic/processes/albedo.html), visionato il 26 luglio 2007.
43. UNEP, op. cit. nota 1.
44. H. Jay Zwally et al., “Surface Melt-Induced Acceleration of Greenland Ice-Sheet Flow”, *Science*, vol. 297 (12 luglio 2002), pp. 218-22.
45. J.L. Chen, C.R. Wilson, B.D. Tapley, “Satellite Gravity Measurements Confirm Accelerated Melting of Greenland Ice Sheet”, *Science*, vol. 313 (29 settembre 2006), pp. 1958-60; Isabella Velicogna, John Wahr, “Acceleration of Greenland Ice Mass Loss in Spring 2004”, *Nature*, vol. 443 (21 settembre 2006), pp. 329-31; S. B. Luthke et al., “Recent Greenland Ice Mass Loss from Drainage System from Satellite Gravity Observations”, *Science*, vol. 314 (24 novembre 2006), pp. 1286-89; “Gravity Measurements Confirm Greenland’s Glaciers Precipitous Meltdown”, *Scientific American*, 19 ottobre 2006.
46. U.S. Department of Energy, Energy Information Administration, “Antarctica: Fact Sheet”, pubblicato su [www.eia.doe.gov](http://www.eia.doe.gov), settembre 2000.
47. University of Colorado, Boulder, “NASA, CU-Boulder Study Shows Vast Regions of West Antarctica Melted in Recent Past”, (Boulder, 2007).
48. “Breakaway Bergs Disrupt Antarctic Ecosystem”, *Environment News Service*, 9 maggio 2002; “Giant Antarctic Ice Shelves Shatter and Break Away”, *Environment News Service*, 19 marzo 2002.

49. NSIDC, "Antarctic Ice Shelf Collapses", pubblicato su [nsidc.org/iceshelves/larsenb2002](http://nsidc.org/iceshelves/larsenb2002), 19 marzo 2002; "Breakaway Bergs Disrupt Antarctic Ecosystem", op. cit. nota 48; "Giant Antarctic Ice Shelves Shatter and Break Away", op. cit. nota 48.
50. "Giant Antarctic Ice Shelves Shatter and Break Away", op. cit. nota 48; Andrew Revkin, "Large Ice Shelf in Antarctica Disintegrates at Great Speed", *New York Times*, 20 marzo 2002.
51. Michael Byrnes, "New Antarctic Iceberg Split No Threat", *Reuters*, 20 maggio 2002.
52. Gordon McGranahan et al., "The Rising Tide: Assessing the Risks of Climate Change and Human Settlements in Low Elevation Coastal Zones", *Environment and Urbanization*, vol. 18, n. 1 (aprile 2007), pp. 17-37.
53. Ibid.
54. Ibid.; U.N. Population Division, op. cit. nota 20.
55. International Institute for Environment and Development, "Climate Change: Study Maps Those at Greatest Risk from Cyclones and Rising Seas", (London, 2007); Catherine Brahic, "Coastal Living. A Growing Global Threat", *New Scientist.com*, 28 marzo 2007; UNEP, op. cit. nota 1.
56. Thomas R. Knutson, Robert E. Tuleya, "Impact of CO<sub>2</sub>-Induced Warming on Simulated Hurricane Intensity and Precipitation: Sensitivity to the Choice of Climate Model and Convective Parameterization", *Journal of Climate*, vol. 17, 18 (15 settembre 2004), pp. 3477-95.
57. Lester R. Brown, "Global Warming Forcing U.S. Coastal Population to Move Inland", *Eco-Economy Update* (Earth Policy Institute, Washington DC, 2006); Connie Kline, "New Orleans Looks Like Katrina Hit Yesterday; U.S. Needs to Step Up", *Ventura County Star*, 6 agosto 2006; Susan Saulny, "Despite a City's Hopes, an Uneven Repopulation", *New York Times*, 30 luglio 2006; Gary Rivlin, "Patchy Recovery in New Orleans", *New York Times*, 5 aprile 2006; "Katrina Recovery Deemed a Mixed Bag", *Associated Press*, 15 agosto 2006.
58. Peter Grier, "The Great Katrina Migration", *Christian Science Monitor*, 12 settembre 2005; Louisiana Recovery Authority, *Migration Patterns: Estimates of Parish Level Migrations Due to Hurricanes Katrina and Rita* (Baton Rouge, LA, 2007), pp. 7-9.
59. National Weather Service National Hurricane Center, *NHC Archive of Hurricane Seasons*, pubblicato su [www.nhc.noaa.gov](http://www.nhc.noaa.gov); Kevin E. Trenberth, "Warmer Oceans, Stronger Hurricanes", *Scientific American*, luglio 2007; Joseph Treaster, "High Winds, Then Premiums", *New York Times*, 26 settembre 2006.
60. Janet N. Abramovitz, "Averting Unnatural Disasters", in Lester R. Brown et al., *State of the World 2001* (Edizioni Ambiente, Milano, 2001).
61. National Climatic Data Center, National Oceanic & Atmospheric Administration, "Mitch: The Deadliest Atlantic Hurricane Since 1780", pubblicato su [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov), 1 luglio 2004; Flores citato in Arturo Chavez et al., "After the Hurricane: Forest Sector Reconstruction in Honduras", *Forest Products Journal*, novembre/dicembre 2001, pp. 18-24; International Monetary Fund (IMF), *World Economic Outlook Database*, pubblicato su [www.imf.org](http://www.imf.org), aprile 2003.
62. Michael Smith, "Bad Weather, Climate Change Cost World Record \$90 Billion", *Bloomberg*, 15 dicembre 2004; "Insurers See Hurricane Costs as High as \$23 Billion", *Reuters*, 4 ottobre 2004.
63. "Awful Weather We're Having", op. cit. nota 5; Munich Re, *Topics Geo Annual Review: Natural Catastrophes 2006* (Munich, 2007), p. 47.
64. "Disaster and Its Shadow", *The Economist*, 14 settembre 2002, p. 71; "Moody's Downgrades Munich Re's Ratings to 'Aa1'", *Insurance Journal*, 20 settembre 2002; Moody's Investor Service, "Issuer Research", pubblicato su [www.moody.com](http://www.moody.com), visionato il 26 luglio 2007.
65. Tim Hirsch, "Climate Change Hits Bottom Line", *BBC News*, 15 dicembre 2004.
66. Munich Re, "Natural Disasters: Billion-\$ Insurance Losses", in Louis Perroy, "Impacts of Climate Change on Financial Institutions' Medium to Long Term Assets and Liabilities", Staple Inn Actuarial Society, 14 giugno 2005; Munich Re, *Topics Geo Significant Natural Catastrophes in 2004, 2005, and 2006* (Munich, 2005, 2006, and 2007).
67. Munich Re, *Topics Annual Review: Natural Catastrophes 2001* (Munich, 2002), pp. 16-17; USDA, op. cit. nota 3; IMF, *International Financial Statistics*, pubblicato su [ifs.apdi.net/imf](http://ifs.apdi.net/imf), 2007.
68. Munich Re, "Natural Disasters", op. cit. nota 66; Munich Re, *Significant Natural Catastrophes in 2005 and 2006*, op. cit. nota 66.
69. Andrew Dlugolecki, "Climate Change and the Financial Services Industry", UNEP Financial Services Roundtable, Frankfurt, Germany, 16 novembre 2000; "Climate Change Could Bankrupt Us by 2065", *Environment News Service*, 24 novembre 2000.
70. Sir Nicholas Stern, *The Stern Review on the*

*Economics of Climate Change* (HM Treasury, London 2006), pp vi-ix.

**71.** S. Pacala, R. Socolow, “Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies”, *Science*, vol. 305 (13 agosto 2004), pp. 968-72.

**72.** Ibid.

**73.** “Earth’s Climate Approaches Dangerous Tipping Point”, *Environment News Service*, 1 giugno 2007; James Hansen et al., “Climate Change and Trace Gases”, *Philosophical Transactions of the Royal Society A*, vol. 365 (2007), pp. 1925-54.

**74.** Wax, op. cit. nota 22; Coonan, op. cit. nota 23; Watts, op. cit. nota 24; “Glacier Study Reveals Chilling Prediction”, op. cit. nota 24.

**75.** World Bank, *World Development Report 1999/2000* (Oxford University Press, New York 1999).

**76.** Brown, op. cit. nota 35.

**77.** Ibid.

**78.** Adam, op. cit. nota 41.

**79.** IPCC, *Summary for Policymakers*, op. cit. nota 9, p. 33; Sergey A. Zimov et al., “Permafrost and the Global Carbon Budget”, *Science*, vol. 312, 3780 (16 giugno 2006), pp. 1612-13.

**80.** G. Marland et al., “Global, Regional, and National CO<sub>2</sub> Emissions”, in *Trends: A Compendium of Data on Global Change* (Carbon Dioxide Information and Analysis Center, Oak Ridge National Laboratory, Oak Ridge, 2007); R.A. Houghton, J.L. Hackler, “Carbon Flux to the atmosphere from Land-Use Changes”, in *Trends: A Compendium of Data on Global Change* (Carbon Dioxide Information and Analysis Center, Oak Ridge National Laboratory, Oak Ridge, 2002); J. Hansen et al., “Dangerous Human-Made Interference with Climate: A GISS ModelE Study”, *Atmospheric Chemistry and Physics*, vol. 7 (2007), pp. 2287-312.

#### CAPITOLO 4. L'EMERGENZA IDRICA

**1.** U.N. Environment Programme (UNEP), *Africa's Lakes: Atlas of Our Changing Environment* (Nairobi, 2006); M.T. Coe, J. A. Foley, “Human and Natural Impacts on the Water Resources of the Lake Chad Basin”, *Journal of Geophysical Research (Atmospheres)*, vol. 106, D4 (2001), pp. 3349-56; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007.

**2.** I.A. Shiklomanov, “Assessment of Water

Resources and Water Availability in the World”, *Report for the Comprehensive Assessment of the Freshwater Resources of the World* (St. Petersburg, Russia, State Hydrological Institute, 1998), Peter H. Gleick, *The World's Water 2000-2001*, Island Press, Washington, DC, 2000, p. 52; U.S. Department of Agriculture (USDA), *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psd/psdonline](http://www.fas.usda.gov/psd/psdonline), 11 giugno 2007.

**3.** Emily Wax, “A Sacred River Endangered by Global Warming”, *Washington Post*, 17 giugno 2007; Clifford Coonan, “China’s Water Supply Could be Cut Off as Tibet’s Glaciers Melt”, *The Independent* (London), 31 maggio 2007.

**4.** Jacob W. Kijne, *Unlocking the Water Potential of Agriculture* (Rome, U.N. Food and Agriculture Organization – FAO, 2003), p. 26; Shiklomanov, op. cit. nota 2, p. 53.

**5.** Michael Ma, “Northern Cities Sinking as Water Table Falls”, *South China Morning Post*, 11 agosto 2001; Hong Yang, Alexander Zehnder, “China’s Regional Water Scarcity and Implications for Grain Supply and Trade”, *Environment and Planning A*, vol. 33 (2001); USDA, op. cit. nota 2.

**6.** Ma, op. cit. nota 5.

**7.** World Bank, *China: Agenda for Water Sector Strategy for North China* (Washington, DC, aprile 2001), pp. vii, xi.

**8.** John Wade, Adam Branson, Xiang Qing, *China Grain and Feed Annual Report 2002* (Beijing: USDA, 21 febbraio 2002).

**9.** USDA, op. cit. nota 2.

**10.** World Bank, op. cit. nota 7, p. viii; FAO, *Yield Response to Water* (Rome, 1979).

**11.** Peter H. Gleick et al., *The World's Water 2006-2007*, Island Press, Washington, DC, 2006, p. 148; Fred Pearce, “Asian Farmers Sucking the Continent Dry”, *New Scientist.com*, 28 agosto 2004.

**12.** Pearce, op. cit. nota 11; “Tamil Nadu at a Glance: Area and Population”, pubblicato su [www.tn.gov.in](http://www.tn.gov.in).

**13.** Pearce, op. cit. nota 11.

**14.** USDA, op. cit. nota 2; John Briscoe, *India's Water Economy: Bracing for a Turbulent Future* (New Delhi: World Bank, 2005); U.N. Population Division, op. cit. nota 1.

**15.** Tingju Zhu et al., “Energy Price and Groundwater Extraction for Agriculture: Exploring the Energy-Water-Food Nexus at the Global and Basin Level”, Linkages Between Energy and Water Management for Agriculture in Developing Countries, Hyderabad, India, gennaio 2007; U.S. Department of Energy, Energy Information Administration, *Country Analysis*

*Briefs: India; Country Analysis Briefs: China*

(Washington, DC, gennaio 2007, agosto 2006).

16. USDA, *Agricultural Resources and Environmental Indicators 2000* (Washington, DC, febbraio 2000), p. 6; FAO, *ResourceSTAT*, pubblicato su [faostat.fao.org/site/405/default.aspx](http://faostat.fao.org/site/405/default.aspx), 30 giugno 2007; USDA, op. cit. nota 2; Sandra Postel, *Pillar of Sand* (W.W. Norton & Company, New York, 1999), p. 77.

17. USDA, "Table 10: Irrigation 2002 and 1997", *2002 Census of Agriculture*, vol. 1 (Washington, DC, giugno 2004), pp. 319-26.

18. U.N. Population Division, op. cit. nota 1; "Pakistan: Focus on Water Crisis", U.N.

*Integrated Regional Information Networks News*, 17 maggio 2002.

19. "Pakistan: Focus on Water Crisis", op. cit. nota 18; "Water Crisis Threatens Pakistan: Experts", *Agence France-Presse*, 26 gennaio 2001.

20. Sardar Riaz A. Khan, "Declining Land Resource Base", *Dawn* (Pakistan), 27 settembre 2004.

21. USDA, op. cit. nota 2.

22. U.N. Population Division, op. cit. nota 1; Chenaran Agricultural Center, Ministry of Agriculture, Hamid Taravati, Iran, e-mail all'autore, 25 giugno 2002.

23. U.N. Population Division, op. cit. nota 1; Craig S. Smith, "Saudi's Worry as They Waste Their Scarce Water", *New York Times*, 26 gennaio 2003; USDA, op. cit. nota 2.

24. Smith, op. cit. nota 23.

25. Ibid.

26. U.N. Population Division, op. cit. nota 1; "Yemen's Water Crisis", British Yemeni Society in settembre 2000, luglio 2001; Christopher Ward, *The Political Economy of Irrigation Water Pricing in Yemen* (Sana'a, Yemen: World Bank, novembre 1998).

27. Marcus Moench, "Groundwater: Potential and Constraints", in Ruth S. Meinzen-Dick, Mark W. Rosegrant (a cura di), *Overcoming Water Scarcity and Quality Constraints* (Washington, DC, International Food Policy Research Institute, ottobre 2001).

28. U.N. Population Division, op. cit. nota 1; Ward, *Political Economy of Irrigation Water Pricing*, op. cit. nota 26; USDA, op. cit. nota 2, 13 settembre 2005; Fund for Peace and Carnegie Endowment for International Peace, "The Failed States Index 2007", *Foreign Policy*, luglio/agosto 2007, p. 57.

29. Deborah Camiel, "Israel, Palestinian Water Resources Down the Drain", *Reuters*, 12 luglio 2000.

30. U.N. Population Division, op. cit. nota 1;

Tushaar Shah et al., *The Global Groundwater Situation: Overview of Opportunities and Challenges* (Colombo, Sri Lanka: International Water Management Institute, 2000); Karin Kemper, "Groundwater Management in Mexico: Legal and Institutional Issues", Salman M. A. Salzman, ed., *Groundwater: Legal and Policy Perspectives*, Proceedings of a World Bank Seminar (Washington, DC, 1999), p. 117; U.N. Development Programme (UNDP), *Human Development Report 2006* (Palgrave Macmillan, Gordonsville, VA, 2006), p. 146.

31. Postel, op. cit. nota 16, pp. 59, 71-73, 94, 261-62; Lester R. Brown, Brian Halweil, "China's Water Shortages Could Shake World Food Security", *World Watch*, luglio/agosto 1998, p. 11.

32. Shiklomanov, op. cit. nota 2, p. 52.

33. Sandra Postel, *Last Oasis* (W.W. Norton & Company, New York, 1997), pp. 38-39; World Commission on Dams, *Dams and Development: A New Framework for Decision-Making* (Island Press, London, 2000), p. 8.

34. Postel, op. cit. nota 16, pp. 261-62; Jim Carrier, "The Colorado: A River Drained Dry", *National Geographic*, giugno 1991, pp. 4-32.

35. UNEP, *Afghanistan: Post-Conflict Environmental Assessment* (Geneva, 2003), p. 60.

36. Brown, Halweil, op. cit. nota 31.

37. Postel, op. cit. nota 16, pp. 71, 146.

38. Ibid., pp. 56-58; U.N. Population Division, op. cit. nota 1; Fund for Peace and Carnegie Endowment, op. cit. nota 28, p. 57.

39. Moench, op. cit. nota 27; U.N. Population Division, op. cit. nota 1.

40. Curtis J. Richardson et al., "The Restoration Potential of the Mesopotamian Marshes of Iraq", *Science*, vol. 307 (25 febbraio 2005), pp. 1307-10.

41. Janet Larsen, "Disappearing Lakes, Shrinking Seas", *Eco-Economy Update* (Earth Policy Institute, Washington, DC, 7 aprile 2005).

42. Megan Goldin, "Israel's Shrinking Sea of Galilee Needs Miracle", *Reuters*, 14 agosto 2001; Annette Young, "Middle East Conflict Killing the Holy Water", *The Scotsman*, 12 settembre 2004.

43. Caroline Hawley, "Dead Sea 'to Disappear by 2050'" *BBC*, 3 agosto 2001; Gidon Bromberg, "Water and Peace", *World Watch*, luglio/agosto 2004, pp. 24-30.

44. Quirin Schiermeier, "Ecologists Plot to Turn the Tide for Shrinking Lake", *Nature*, vol. 412 (23 agosto 2001), p. 756.

45. "Sea to Disappear within 15 Years", *News 24*, 22 luglio 2003; Caroline Williams, "Long Time No Sea", *New Scientist*, 4 gennaio 2003, pp. 34-37.

- 46.** Fred Pearce, “Poisoned Waters”, *New Scientist*, 21 ottobre 1995, pp. 29-33; Williams, op. cit. nota 45.
- 47.** Larsen, op. cit. nota 41; NASA, Earth Observatory, “Aral Sea”, pubblicato su [earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img\\_id=16277](http://earthobservatory.nasa.gov/Newsroom/NewImages/images.php3?img_id=16277), visionato il 25 gennaio 2005; Alex Kirby, “Kazakhs ‘to Save North Aral Sea,’” *BBC*, 29 ottobre 2003.
- 48.** Li Heng, “20 Natural Lakes Disappear Each Year in China”, *People’s Daily*, 21 ottobre 2002; “Glaciers Receding, Wetlands Shrinking in River Fountainhead Area”, *China Daily*, 7 gennaio 2004.
- 49.** Jim Carlton, “Shrinking Lake in Mexico Threatens Future of Region”, *Wall Street Journal*, 3 settembre 2003; U.N. Population Division, *World Urbanization Prospects: 2005 Revision*, pubblicato su [esa.un.org/unup](http://esa.un.org/unup), ottobre 2006.
- 50.** Postel, op. cit. nota 33; FAO, op. cit. nota 10; International Monetary Fund, *International Financial Statistics*, pubblicato su [ifs.apdi.net](http://ifs.apdi.net), luglio 2007; Chicago Board of Trade, “Market Commentaries”, pubblicato su [www.cbtc.com](http://www.cbtc.com).
- 51.** Noel Gollehon, William Quinby, “Irrigation in the American West: Area, Water and Economic Activity”, *Water Resources Development*, vol. 16, 2 (2000), pp. 187-95; Postel, op. cit. nota 33, p. 137.
- 52.** R. Srinivasan, “The Politics of Water”, *Info Change Agenda*, issue 3 (ottobre 2005); U.N. Population Division, op. cit. nota 49.
- 53.** Srinivasan, op. cit. nota 52; Pearce, op. cit. nota 11.
- 54.** “China Politics: Growing Tensions Over Scarce Water”, *The Economist*, 21 giugno 2004.
- 55.** Shah et al., op. cit. nota 30.
- 56.** Gollehon, Quinby, op. cit. nota 51; *The Water Strategist*, pubblicato su [www.waterstrategist.com](http://www.waterstrategist.com); Jedidiah Brewer et al., “Water Markets in the West: Prices, Trading and Contractual Forms”, *Arizona Legal Studies Discussion Paper No. 07-07* (8 febbraio 2007).
- 57.** Joey Bunch, “Water Projects Forecast to Fall Short of Needs: Study Predicts 10% Deficit in State”, *Denver Post*, 22 luglio 2004.
- 58.** Dean Murphy, “Pact in West Will Send Farms’ Water to Cities”, *New York Times*, 17 ottobre 2003; Tim Molloy, “California Water District Approves Plan to Pay Farmers for Irrigation Water”, *Associated Press*, 13 maggio 2004.
- 59.** U.N. Population Division, op. cit. nota 1.
- 60.** FAO, op. cit. nota 10.
- 61.** USDA, op. cit. nota 2.
- 62.** USDA, Foreign Agricultural Service, *Grain: World Markets and Trade*.
- 63.** U.N. Population Division, op. cit. nota 1; USDA, op. cit. nota 2.
- 64.** Postel, op. cit. nota 16, p. 77; USDA, op. cit. nota 2; FAO, op. cit. nota 10.
- 65.** U.N. Population Division, op. cit. nota 1; USDA, op. cit. nota 2.
- 66.** David Seckler, David Molden, Randolph Barker, “Water Scarcity in the Twenty-First Century”, Water Brief 1 (International Water Management Institute, Colombo, Sri Lanka, 1999), p. 2.
- 67.** USDA, op. cit. nota 2; FAO, op. cit. nota 16.
- 68.** UNDP, op. cit. nota 30, p. 135.
- 69.** FAO, *AQUASTAT*, pubblicato su [www.fao.org/nr/aquastat](http://www.fao.org/nr/aquastat), 11 febbraio 2003.
- 70.** Ibid.; World Resources Institute, *Annual Renewable Water Supply per Person by River Basin, 1995*, at [earth.trends.wri.org/maps\\_spatial](http://earth.trends.wri.org/maps_spatial), 2000.
- 71.** “World Conflict Chronology”, Gleick et al., op. cit. nota 11, pp. 192-213; UNDP, op. cit. nota 30, pp. 177-78; “At Least 14 Killed as Kenyan Tribes Clash over Scarce Water Supplies”, *Associated Press*, 25 gennaio 2005; “Pakistanis Clash Over Water, 12 Hurt”, *Reuters*, 20 giugno 2006.
- 72.** Naser I. Faruqi, “Responding to the Water Crisis in Pakistan”, *Water Resources Development*, vol. 20, 2 (giugno 2004), pp. 177-92.
- 73.** Pete Harrison, “Iraq Calls for Water Treaty to Avert Crisis”, *Reuters*, 23 agosto 2007.
- 74.** UNDP, op. cit. nota 30, p. 216.
- 75.** U.N. Population Division, op. cit. nota 1.

## CAPITOLO 5. SISTEMI NATURALI SOTTO STRESS

1. Walter C. Lowdermilk, *Conquest of the Land Through 7,000 Years*, USDA Bulletin 99 (Washington, DC, U.S. Department of Agriculture – USDA, Natural Resources Conservation Service, 1939).
2. Ibid., p. 10.
3. U.N. Food and Agriculture Organization (FAO), “FAO/WFP Crop and Food Assessment Mission to Lesotho Special Report”, pubblicato su [www.fao.org](http://www.fao.org), visionato il 29 maggio 2002; Michael Grunwald, “Bizarre Weather Ravages Africans’ Crops”, *Washington Post*, 7 gennaio 2003.
4. FAO, *Number of Undernourished Persons*, pubblicato su [www.fao.org/faostat/foodsecurity](http://www.fao.org/faostat/foodsecurity), 30 giugno 2006.
5. Species Survival Commission, *2000 IUCN Red List of Threatened Species* (Gland, Switzerland, and Cambridge, U.K.: World Conservation Union – IUCN, 2000), p. 1.

6. Teresa Cerojano, "Decades of Illegal Logging Blamed for High Death Toll in Philippine Storm", *Associated Press*, 1 dicembre 2004; Thailand from Patrick B. Durst et al., *Forests Out of Bounds: Impacts and Effectiveness of Logging Bans in Natural Forests in Asia-Pacific* (Bangkok, FAO, Asia-Pacific Forestry Commission, 2001); Munich Re, "Munich Re's Review of Natural Catastrophes in 1998", press release (Munich, 19 dicembre 1998); Harry Doran, "Human Activities Aid Force of Nature: Massive Destruction Has Worsened the Floods Which Have Struck Throughout History, But Lessons Are Being Learned", *South China Morning Post*, 24 luglio 2003.
7. FAO, *Global Forest Resources Assessment 2005* (Rome, 2006), p. 16.
8. *Ibid.*, pp. xii-xvi.
9. Forest Frontiers Initiative, *The Last Frontier Forests: Ecosystems and Economies on the Edge*, (Washington, DC, World Resources Institute – WRI, 1997).
10. FAO, *ForesSTAT*, database elettronico, pubblicato su [faostat.fao.org](http://faostat.fao.org), 22 dicembre 2006.
11. Alain Marcoux, "Population and Deforestation", in *Population and the Environment* (Rome, FAO, 2000); marzo Turnbull, "Life in the Extreme", *Africa Geographic Online*, 4 aprile 2005.
12. Nigel Sizer and Dominiek Plouvier, *Increased Investment and Trade by Transnational Logging Companies in Africa, the Caribbean, and the Pacific* (Belgium: World Wide Fund for Nature – WWF; WRI Forest Frontiers Initiative, 2000), pp. 21-35; Lester R. Brown, "Nature's Limits", in Lester R. Brown et al., *State of the World 1995* (W.W. Norton & Company, New York, 1995), p. 9.
13. Peter S. Goodman, Peter Finn, "Corruption Stains Timber Trade", *Washington Post*, 1° aprile 2007; Evan Osnos, "China Feeds U.S. Demand for Wood as Forests Suffer", *Chicago Tribune*, 18 dicembre 2006.
14. Goodman, Finn, op. cit. nota 13.
15. Andy White et al., *China and the Global Market for Forest Products* (Forest Trends, Washington, DC, 2006).
16. World Land Trust, "REGUA Project, Brazil", pubblicato su [www.worldlandtrust.org/projects/brazil.htm](http://www.worldlandtrust.org/projects/brazil.htm), visionato il 6 settembre 2007; WWF, "Amazon Deforestation", pubblicato su [www.panda.org/about\\_wwf/where\\_we\\_work/latin\\_america\\_and\\_caribbean](http://www.panda.org/about_wwf/where_we_work/latin_america_and_caribbean), visionato il 6 settembre 2007; Raymond Colitt, "Amazon Deforestation Drops Sharply: Brazilian Gov't", *Reuters*, 10 agosto 2007.
17. Christian Tsoumou, "Britain Gives US\$98 Mln to Protect Congo-Forests", *Reuters*, 29 marzo 2007.
18. Mario Rautner, Martin Hardiono, Raymond J. Alfred, *Borneo: Treasure Island at Risk* (WWF Germany, Frankfurt, giugno 2005), p. 7.
19. U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007; FAO, op. cit. nota 7, p. 193.
20. U.N. Population Division, op. cit. nota 19; "Madagascar's Rainforest Faces Destruction", *Guardian* (London), 29 giugno 2003.
21. Eneas Salati, Peter B. Vose, "Amazon Basin: A System in Equilibrium", *Science*, vol. 225 (13 luglio 1984), pp. 129-38.
22. Philip Fearnside, citato in Barbara J. Fraser, "Putting a Price on the Forest", *LatinamericaPress.org*, 10 novembre 2002; Philip M. Fearnside, "The Main Resources of Amazonia", Latin American Studies Association XX International Congress, Guadalajara, Mexico, 17-19 aprile 1997; Geoffrey Lean, "Dying Forest: One Year to Save the Amazon", *The Independent*, 23 luglio 2006; Geoffrey Lean, "A Disaster to Take Everyone's Breath Away", *The Independent*, 24 luglio 2006.
23. U.N. Population Division, op. cit. nota 19; Malawi Ministry of Mines, Natural Resources, and the Environment, *State of the Environment Report for Malawi 2002* (Lilongwe, Malawi, 2004); FAO, op. cit. nota 7, p. 196.
24. Charles Mkoka, "Unchecked Deforestation Endangers Malawi Ecosystems", *Environment News Service*, 16 novembre 2004.
25. Patrick B. Durst et al., *Forests Out of Bounds: Impacts and Effectiveness of Logging Bans in Natural Forests in Asia-Pacific* (Bangkok: FAO, Asia-Pacific Forestry Commission, 2001); Zhu Chunquan, Rodney Taylor, Feng Guoqiang, *China's Wood Market, Trade and Environment* (Science Press USA Inc., WWF International, Monmouth Junction, NJ, Beijing, 2004).
26. Un terzo nella stima dell'autore.
27. Yang Youlin, Victor Squires, Lu Qi, eds., *Global Alarm: Dust and Sandstorms from the World's Drylands* (Bangkok: Secretariat of the U.N. Convention to Combat Desertification, 2002), pp. 15-28.
28. John Steinbeck, *Furore* (Bompiani, Milano 2005).
29. FAO, *The State of Food and Agriculture 1995* (Rome, 1995), p. 175.
30. *Ibid.*; USDA, *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 12 luglio 2007;

FAO, *ProdSTAT*, pubblicato su faostat.fao.org, 30 giugno 2007.

- 31.** U.N. Environment Programme (UNEP), *Mongolia: State of the Environment 2002* (Pathumthani, Thailand, Regional Resource Centre for Asia and the Pacific, 2001), pp. 3-7; USDA, op. cit. nota 30; U.N. Population Division, op. cit. nota 19.
- 32.** National Aeronautics and Space Administration (NASA) Earth Observatory, "Dust Storm off Western Sahara Coast", pubblicato su earthobservatory.nasa.gov, visionato il 9 gennaio 2005.
- 33.** Paul Brown, "4x4s Replace the Desert Camel and Whip Up a Worldwide Dust Storm", *Guardian* (London), 20 agosto 2004.
- 34.** Ibid.
- 35.** Asif Farrukh, *Pakistan Grain and Feed Annual Report 2002* (Islamabad, Pakistan: USDA Foreign Agricultural Service, 2003).
- 36.** UNEP, *Africa Environment Outlook: Past, Present, and Future Perspectives* (Nairobi: 2002), pubblicato su www.unep.org/dewa/Africa.
- 37.** Stanley Wood, Kate Sebastian, Sara J. Scherr, *Pilot Analysis of Global Ecosystems: Agroecosystems* (Washington, DC, International Food Policy Research Institute and WRI, 2000), p. 3; FAO, op. cit. nota 30.
- 38.** FAO, *The State of Food Insecurity in the World 2003* (Rome 2003), p.15; FAO, op. cit. nota 30.
- 39.** FAO, op. cit. nota 30; U.N. Population Division, op. cit. nota 19.
- 40.** Robin P. White, Siobhan Murray, Mark Rohweder, *Pilot Analysis of Global Ecosystems: Grassland Ecosystems* (Washington, DC, WRI, 2000); FAO, op. cit. nota 30; U.N. Population Fund (UNFPA), *State of World Population 2006* (New York: 2006), p. 98; Southern African Development Coordination Conference, *SADCC Agriculture: Toward 2000* (Rome: FAO, 1984).
- 41.** U.N. Population Division, op. cit. nota 19; FAO, op. cit. nota 30.
- 42.** FAO, op. cit. nota 30.
- 43.** B. S. Sathe, "Dairy/Milk Production", in *Livestock Investment Opportunities in India*, pubblicato su www.fao.org/DOCREP/ARTICLE/AGRIPPA/657\_en00.htm, visionato il 9 settembre 2005.
- 44.** H. Dregne et al., "A New Assessment of the World Status of Desertification", *Desertification Control Bulletin*, 20, 1991.
- 45.** U.N. Population Division, op. cit. nota 19.
- 46.** "Case Studies of Sand-Dust Storms in Africa and Australia", in Yang Youlin, Victor Squires, Lu Qi, *Global Alarm: Dust and Sandstorms from the World's Drylands* (Bangkok, Secretariat of the

U.N. Convention to Combat Desertification, 2002), pp. 123-66.

- 47.** Government of Nigeria, *Combating Desertification and Mitigating the Effects of Drought in Nigeria*, Revised National Report on the Implementation of the United Nations Convention to Combat Desertification (Nigeria, 2002); U.N. Population Division, op. cit. nota 19; FAO, op. cit. nota 30.
- 48.** Iranian News Agency, "Official Warns of Impending Desertification Catastrophe in Southeast Iran", *BBC International Reports*, 29 settembre 2002.
- 49.** UNEP, *Afghanistan: Post-Conflict Environmental Assessment* (Geneva, 2003), p. 52.
- 50.** Wang Tao et al., "A Study on Spatial-temporal Changes of Sandy Desertified Land During Last 5 Decades in North China", *Acta Geographica Sinica*, vol. 59 (2004), pp. 203-12.
- 51.** Wang Tao, Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), Chinese Academy of Sciences, e-mail all'autore, 4 aprile 2004; Wang Tao, "The Process and Its Control of Sandy Desertification in Northern China", CAREERI, Chinese Academy of Sciences, Lanzhou, maggio 2002.
- 52.** Ann Schrader, "Latest Import From China: Haze", *Denver Post*, 18 aprile 2001; Brown, op. cit. nota 33.
- 53.** Howard W. French, "China's Growing Deserts Are Suffocating Korea", *New York Times*, 14 aprile 2002.
- 54.** Lester R. Brown, Janet Larsen, Bernice Fischlowitz Roberts, *The Earth Policy Reader* (W.W. Norton & Company, New York, 2002), p. 13.
- 55.** U.S. Embassy, "Desert Mergers and Acquisitions", *Beijing Environment, Science, and Technology Update* (Beijing, 2002), p. 2.
- 56.** Vedi tabella 5.2 in Lester Brown, *Outgrowing the Earth* (W.W. Norton & Company, New York, 2005), pp. 86-87.
- 57.** FAO, *FishStat Plus*, database elettronico, pubblicato su www.fao.org, marzo 2007.
- 58.** FAO, *The State of World Fisheries and Aquaculture 2006*, (Rome, 2007), p. 29.
- 59.** Ransom A. Myers, Boris Worm, "Rapid Worldwide Depletion of Predatory Fish Communities", *Nature*, vol. 432 (15 maggio 2003), pp. 280-83; Charles Crosby, "Blue Frontier is Decimated", *Dalhousie News*, 11 giugno 2003.
- 60.** Myers, Worm, op. cit. nota 59; Crosby, op. cit. nota 59.
- 61.** Myers, Worm, op. cit. nota 59.

- 62.** Stephen Leahy, "Atlantic Bluefin Going Way of Northern Cod", *Interpress Service News Agency*, 24 agosto 2007; Ted Williams, "The Last Bluefin Hunt", in Valerie Harms et al., *The National Audubon Society Almanac of the Environment* (Grosset/Putnam, New York, 1994), p. 185; Callum Roberts, *The Unnatural History of the Sea*, Island Press, Washington, DC, 2007, p. 280; Konstantin Volkov, "The Caviar Game Rules", Reuters-IUCN Environmental Media Award winner, 2001; UNEP, "2006 Ban on Caviar Lifted", press release (Geneva 2007).
- 63.** National Marine Fisheries Service, National Oceanic and atmospheric Administration, *Annual Commercial Landings Statistics*, database elettronico, pubblicato su [www.st.nmfs.noaa.gov/st1/commercial/landings/annual\\_landings.html](http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html), 12 febbraio 2007.
- 64.** Caroline Southey, "EU Puts New Curbs on Fishing", *Financial Times*, 16 aprile 1997.
- 65.** Alex Kirby, "UK Cod Fishing 'Could be Halted'", *BBC News*, 6 novembre 2000; Norway Ministry of Fisheries and Coastal Affairs, "Norway and EU Agree Fish Quotas for 2006", (Oslo, Norway, 2005); European Commission, "Council Decision on 2007 Fish Quotas Confirms Gradual Approach to Sustainable Fisheries", press release (Brussels, 2006); European Commission, "Outcome of the Fisheries Council of 16-20 december 2002", pubblicato su [ec.europa.eu/fisheries/press\\_corner](http://ec.europa.eu/fisheries/press_corner), 23 dicembre 2002; Indrani Lutchman et al., *Indicators of Environmental Integration: Final Report* (London: Institute for European Environmental Policy, giugno 2006).
- 66.** Diadie Ba, "Senegal, EU Prepare for Fisheries Deal Tussle", *Reuters*, 28 maggio 2001; Charles Clover, *The End of the Line: How Overfishing is Changing the World and What We Eat* (Ebury Press, London, 2004), pp. 37-46.
- 67.** Clover, op. cit. nota 66, p. 38.
- 68.** John W. Miller, "Global Fishing Trade Depletes African Waters", *Wall Street Journal*, 23 luglio 2007.
- 69.** Lauretta Burke et al., *Pilot Analysis of Global Ecosystems: Coastal Ecosystems* (Washington, DC, WRI, 2001), pp. 19, 51; Lester R. Brown, Hal Kane, *Full House* (W.W. Norton & Company, New York, 1994).
- 70.** Clive Wilkinson, ed., *Status of Coral Reefs of the World: 2004* (Townsville, Australia: Global Coral Reef Monitoring Network, 2004), p. 9.
- 71.** Lauretta Burke, Jonathan Maidens, *Reefs at Risk in the Caribbean* (Washington, DC, WRI, 2004), pp. 12-14, 27-31.
- 72.** Mohammed Kotb et al., "Status of Coral Reefs in the Red Sea and Gulf of Aden in 2004", in Wilkinson, op. cit. nota 70, pp. 137-39.
- 73.** UNEP, Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities, *The State of the Marine Environment: Trends and Processes* (The Hague, 2006); Nancy Rabalais, Gene Turner, "Dead Zone Size Near Top End", press release (Louisiana Universities Marine Consortium, Cocodrie, 28 luglio 2007).
- 74.** UNEP, "Further Rise in Number of Marine 'Dead Zones'", press release (Beijing, Nairobi: 19 ottobre 2006); UNEP, *GEO Yearbook 2003* (Nairobi, 2004), p. 58.
- 75.** Organisation for Economic Co-operation and Development, *OECD Environmental Outlook* (Paris, 2001), pp. 109-20.
- 76.** David Quammen, "Planet of Weeds", *Harper's Magazine*, ottobre 1998.
- 77.** Species Survival Commission, *2007 IUCN Red List of Threatened Species*, pubblicato su [www.iucnredlist.org](http://www.iucnredlist.org), 12 settembre 2007.
- 78.** Ibid.; TRAFFIC, *Food for Thought: The Utilization of Wild Meat in Eastern and Southern Africa* (Cambridge, U.K., 2000).
- 79.** Danna Harman, "Bonobos' Threat: Hungry Humans", *Christian Science Monitor*, 7 giugno 2001; "Video: New Bonobo Ape Population Discovered", *National Geographic News*, 6 marzo 2007.
- 80.** Species Survival Commission, op. cit. nota 77; "Great Indian Bustard Facing Extinction", *India Abroad Daily*, 12 febbraio 2001; Çagan Sekercioglu, Gretchen C. Daily, Paul R. Ehrlich, "Ecosystem Consequences of Bird Declines", *Proceedings of the National Academy of Sciences*, vol. 101, 52 (28 dicembre 2004).
- 81.** Michael McCarthy, "Mystery of the Silent Woodlands: Scientists Are Baffled as Bird Numbers Plummet", *Independent* (London), 25 febbraio 2005; British Trust for Ornithology, "Tough Time for Woodland Birds", (Thetford, Norfolk, U.K., 25 febbraio 2005); J. A. Thomas et al., "Comparative Losses of British Butterflies, Birds, and Plants and the Global Extinction Crisis", *Science*, vol. 303 (19 marzo 2004), pp. 1879-81.
- 82.** Dennis Van Engelsdorp et al., "An Estimate of Managed Colony Losses in the Winter of 2006-2007: A Report Commissioned by the Apiary Inspectors of America", *American Bee Journal* (luglio 2007), pp. 599-603; Alexei Barrionuevo, "Bees Vanish, and Scientists Race for Reasons", *New York Times*, 24 aprile 2007.
- 83.** Joel Garreau, "Honey, I'm Gone", *Washington Post*, 1 giugno 2007; Erik Stokstad, "Puzzling Decline of U.S. Bees Linked to Virus

from Australia”, *Science*, vol. 317, issue 5843 (7 settembre 2007), pp. 1304-05.

**84.** Species Survival Commission, *2004 IUCN Red List of Threatened Species* (Gland, Switzerland, Cambridge, U.K.: IUCN, 2004), p. 89; Species Survival Commission, op. cit. nota 77.

**85.** James R. Spotila et al., “Pacific Leatherback Turtles Face Extinction”, *Nature*, vol. 405 (1° giugno 2000), pp. 529-30; “Leatherback Turtles Threatened”, *Washington Post*, 5 giugno 2000; Pilar Santidrián Tomillo et al., “Reassessment of the Leatherback Turtle (*Dermochelys coriacea*) Nesting Population at Parque Nacional Marino Las Baulas, Costa Rica: Effects of Conservation Efforts”, *Chelonian Conservation and Biology*, vol. 6, 1 (2007), pp. 54-62.

**86.** David Kaimowitz et al., *Hamburger Connection Fuels Amazon Destruction* (Jakarta, Indonesia: Center for International Forestry Research, 2004).

**87.** Conservation International, “The Brazilian Cerrado”, pubblicato su [www.biodiversityhotspots.org](http://www.biodiversityhotspots.org), visionato il 19 luglio 2007; Center for Applied Biodiversity Science, “Hotspots Revisited: Cerrado”, pubblicato su [www.biodiversityscience.org/publications/hotspots/Cerrado.html](http://www.biodiversityscience.org/publications/hotspots/Cerrado.html), visionato il 19 luglio 2007; Helena C. Morais et al., “Caterpillar Seasonality in a Central Brazilian Cerrado”, *Revista de Biología Tropical*, vol. 47, 4 (1999), pp. 1025-33.

**88.** Species Survival Commission, op. cit. nota 77.

## CAPITOLO 6. PREMATURI SEGNALI DI DECLINO

**1.** U.N. Population Division, *World Population Prospects: The 2002 Revision – Volume III: Analytical Report* (New York: 2004), pp. 136-58, 169.

**2.** World Health Organization (WHO), “Death by Causes, Sex and Mortality Stratum in WHO Regions, Estimates for 2002”, *World Health Report 2004* (Geneva, 2004); U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007; “Number of Inmates in State or Federal Prisons and Local Jails by Gender, Race, Hispanic Origin, and Age, 2006”, Bureau of Justice Statistics, U.S. Department of Justice, pubblicato su [www.ojp.gov/bjs/prisons.htm](http://www.ojp.gov/bjs/prisons.htm), 18 luglio 2007; U.S. Environmental Protection Agency (EPA), “Ag 101: Agricultural Demographics”, pubblicato su [www.epa.gov/oecaagct](http://www.epa.gov/oecaagct), visionato il 3 settembre 2007.

**3.** WHO, *World Health Statistics 2007* (Geneva, 2007), pp. 22-31; U.N. Food and Agriculture Organization (FAO), *Number of Undernourished Persons*, pubblicato su [www.fao.org/faostat/foodsecurity](http://www.fao.org/faostat/foodsecurity), 30 giugno 2006.

**4.** FAO, op. cit. nota 3; WHO, “Obesity and Overweight”, (Geneva, settembre 2006).

**5.** FAO, *The State of Food Insecurity in the World 2006* (Rome, 2006), pp. 8, 32, 33; FAO, *The State of Food Insecurity in the World 2002* (Rome, 2002); U.N. Population Division, op. cit. nota 2.

**6.** FAO, *The State of Food Insecurity in the World 2005* (Rome, 2005), p. 33.

**7.** FAO, *The State of Food Insecurity in the World 2004* (Rome, 2004).

**8.** Gary Gardner, Brian Halweil, “Nourishing the Underfed and Overfed”, in Lester R. Brown et al., *State of the World 2000* (W.W. Norton & Company, New York, 2000), pp. 70-73.

**9.** WHO and UNICEF, *Global Water Supply and Sanitation Assessment 2000 Report* (New York, 2000), pp. v, 2; WHO, op. cit. nota 2.

**10.** Population Reference Bureau, *Datafinder*, pubblicato su [www.prb.org/DataFind/datafinder7.htm](http://www.prb.org/DataFind/datafinder7.htm), 2007; U.N. Population Division, op. cit. nota 2.

**11.** “Population That Has sustained Tertiary Education (2003)”, in Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2005* (Paris: 2005); United Nations, *Millennium Development Goals Report 2007* (New York, 2007), p. 11; UNESCO, *EFA Global Monitoring Report 2007: Strong Foundations* (Paris, 2006), p. 2.

**12.** Hilaire A. Mputu, *Literacy and Non-Formal Education in the E-9 Countries* (Paris: UNESCO, 2001), pp. 5-13; UNESCO Institute for Statistics, “National Illiteracy Rates Youths (15-24) and Adults (15+)”, pubblicato su [www.uis.unesco.org](http://www.uis.unesco.org), 19 giugno 2007.

**13.** Gene B. Sperling, “Toward Universal Education”, *Foreign Affairs*, settembre/ottobre 2001, pp. 7-13.

**14.** Access to safe water from World Bank, *Global Monitoring Report 2007: Millennium Development Goals* (Washington, DC, 2007), p. 13; Peter H. Gleick, *Dirty Water: Estimated Deaths from Water-Related Disease 2000-2020* (Oakland, CA: Pacific Institute, 2002); U.N. Population Division, op. cit. nota 2.

**15.** Deaths calculated from U.N. Population Division, *World Population Prospects: The 2004 Revision* (New York, 2005); WHO/ UNICEF, *World Malaria Report 2005* (Geneva, 2005); Center for International Development at

- Harvard University and London School of Hygiene and Tropical Medicine, "Executive Summary for Economics of Malaria", pubblicato su [www.rbm.who.int](http://www.rbm.who.int), visionato il 3 agosto 2005.
- 16.** Lawrence K. Altman, "U.N. Forecasts Big Increase in AIDS Death Toll", *New York Times*, 3 luglio 2002.
- 17.** Worldwatch Institute, *Signposts 2004*, (Washington, DC, 2004); UNAIDS, *AIDS Epidemic Update*; UNAIDS, *2006 AIDS Epidemic Update* (Geneva, 2006), p. 10.
- 18.** UNAIDS, *2006 Report on the Global AIDS Epidemic* (Geneva, 2006), pp. 2-6, 320, 488.
- 19.** UNAIDS, *2004 Report on the Global AIDS Epidemic* (Geneva: 2004), pp. 39-66; FAO, "The Impact of HIV/AIDS on Food Security", 27th Session of the Committee on World Food Security, Rome, 28 maggio - 1 giugno 2001.
- 20.** UNAIDS, op. cit. nota 18, p. 95.
- 21.** UNAIDS, UNICEF, and U.S. Agency for International Development, *Children on the Brink 2004: A Joint Report on New Orphan Estimates and a Framework for Action* (Washington, 2004), p. 29; Michael Grunwald, "Sowing Harvests of Hunger in Africa", *Washington Post*, 17 novembre 2002.
- 22.** Stephen Lewis, New York, 8 gennaio 2003; Edith M. Lederer, "Lack of Funding for HIV/AIDS is Mass Murder by Complicity, Says U.N. Envoy", *Associated Press*, 9 gennaio 2003.
- 23.** Alex de Waal, "What AIDS Means in a Famine", *New York Times*, 19 novembre 2002.
- 24.** Sarah Janssen, Gina Solomon, and Ted Schettler, *Chemical Contaminants and Human Disease: A Summary of Evidence* (Alliance for a Healthy Tomorrow, Boston, 2004); Geoffrey Lean, "US Study Links More than 200 Diseases to Pollution", *Independent News* (London), 14 novembre 2004.
- 25.** Jonathan Watts, "Beijing Blames Pollutants for Rise in Killer Cancers", *Guardian* (London), 22 maggio 2007.
- 26.** Ibid.
- 27.** Pan Yue, "View: China's Green Debt", *Daily Times* (Pakistan), 1 dicembre 2006.
- 28.** Kent Ewing, "Behind the Hysteria About China's Tainted Goods", *Asia Times*, 18 luglio 2007; EPA, "About EPA", pubblicato su [www.epa.gov](http://www.epa.gov), visionato il 25 luglio 2007.
- 29.** Jane Houlihan et al., *Body Burden: The Pollution in Newborns* (Environmental Working Group, Washington, DC, 2005).
- 30.** Bernie Fischlowitz-Roberts, "Air Pollution Fatalities Now Exceed Traffic Fatalities by 3 to 1", *Eco-Economy Update* (Earth Policy Institute, Washington, DC, settembre 2002); WHO, "Air Pollution", *Fact Sheet 187* (Geneva, 2000); WHO, "Estimated Total Deaths, by WHO Member State, 2002", pubblicato su [www.who.int/healthinfo](http://www.who.int/healthinfo); Joel Schwartz, "Air Pollution Deadlier Than Previously Thought", (Cambridge, MA, 2000).
- 31.** C. Pritchard, D. Baldwin, A. Maggioers, "Changing Patterns of Adult (45-74 years) Neurological Deaths in the Major Western World Countries 1979-1987", *Public Health*, vol. 118, issue 4 (giugno 2004), pp. 268-83; Juliette Jowit, "Pollutants Cause Huge Rise in Brain Diseases: Scientists Alarmed as Number of Cases Triples in 20 Years", *The Observer* (London), 15 agosto 2004; A. Ascherio et al., "Pesticide Exposure and Risk for Parkinson's Disease", *Annals of Neurology*, vol. 60, issue 2 (agosto 2006), pp. 197-203.
- 32.** Global Environment Facility, U.N. Development Programme (UNDP), United Nations Industrial Development Organization, "Removal of Barriers to the Introduction of Cleaner Artisanal Gold Mining and Extraction Technologies", *UNDP Global Mercury Project Inception Document GLO/01/G34* (Washington, DC, 2002), p. 8; Ilan Levin, Eric Schaeffer, *Dirty Kilowatts: America's Most Polluting Power Plants* (Environmental Integrity Project, Washington, DC, 2007), p. 2; EPA, "EPA Decides Mercury Emissions from Power Plants Must Be Reduced", (Washington, DC, 2000).
- 33.** EPA, Office of Science and Technology, "National Listing of Fish Advisories: 2005-06 National Listing", (Washington, DC, 2007); Kathryn Mahaffey, EPA, Methylmercury: Epidemiology Update, presentation at The National Forum on Contaminants in Fish, San Diego, CA, 2004, pubblicato su [www.epa.gov/waterscience](http://www.epa.gov/waterscience).
- 34.** Anne Platt McGinn, *Why Poison Ourselves? A Precautionary Approach to Synthetic Chemicals*, Worldwatch Paper 153 (Worldwatch Institute, Washington, DC, 2000), p. 7; Pete Myers, "Meeting the Environmental Challenges of the 21st Century", Airlie Center, Warrenton, VA, 26 luglio 1999.
- 35.** EPA, "Toxics Release Inventory (TRI) Program", pubblicato su [www.epa.gov/tri](http://www.epa.gov/tri), 9 giugno 2006; EPA, "EPA Issues New Toxics Report, Improves Means of Reporting", (Washington, DC, 2001).
- 36.** U.S. Geological Survey, *Mineral Commodity Summaries 2007* (Washington, DC, U.S. Government Printing Office, 2007).
- 37.** Eric Lipton, "The Long and Winding Road Now Followed by New York City's Trash", *New York Times*, 24 marzo 2001.

- 38.** Lester R. Brown, "New York: Garbage Capital of the World", *Eco-Economy Update* (Earth Policy Institute, Washington, DC, aprile 2002); The City of New York Department of Sanitation, "DSNY-Fact Sheet", 27 ottobre 2003; Kirk Johnson, "To City's Burden, Add 11,000 Tons of Daily Trash", *New York Times*, 24 marzo 2001; Lhota citato in Lipton, op. cit. nota 37.
- 39.** Gilmore citato in Lipton, op. cit. nota 37.
- 40.** Joel Kurth, "N.J. Piles Demolition Trash on Michigan", *Detroit News*, 28 dicembre 2004; City of Toronto, Canada, Solid Waste Management Division, "Facts about Toronto's Trash", pubblicato su [www.toronto.ca/garbage/facts.htm](http://www.toronto.ca/garbage/facts.htm), 10 agosto 2006; Lipton, op. cit. nota 37.
- 41.** Niki Kitsantonis, "Athens Is in the Grip of a Garbage Crisis", *International Herald Tribune*, 28 gennaio 2007.
- 42.** "Fast Urbanization Dumps Garbage in Chinese Cities", *Xinhua News Agency*, 18 agosto 2006.
- 43.** Günther Baechler, "Why Environmental Transformation Causes Violence: A Synthesis", *Environmental Change and Security Project Report*, Issue 4 (spring 1998), pp. 24-44.
- 44.** U.S. Department of Agriculture (USDA), *Production, Supply, and Distribution Country Reports* (Washington, DC, 1990); USDA, *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 10 agosto 2007; U.N. Population Division, op. cit. nota 2.
- 45.** "Time for Action on Sudan", *New York Times*, 18 giugno 2004; "A First Step to Save Darfur", *New York Times*, 3 agosto 2007; Coalition for International Justice, "Estimates from Retrospective Mortality Surveys in Darfur and Chad Displacement Camps", pubblicato su [www.cij.org](http://www.cij.org), aprile 2005; "Sudan", in U.S. Central Intelligence Agency, *The World Fact Book*, pubblicato su [www.cia.gov/library/publications](http://www.cia.gov/library/publications), 6 settembre 2007.
- 46.** U.N. Population Division, op. cit. nota 2; FAO, *Prod-STAT*, pubblicato su [faostat.fao.org](http://faostat.fao.org), 30 giugno 2007.
- 47.** Somini Sengupta, "Where the Land is a Tinderbox, the Killing Is a Frenzy", *New York Times*, 16 giugno 2004; U.N. Population Division, op. cit. nota 2; Government of Nigeria, *Combating Desertification and Mitigating the Effects of Drought in Nigeria*, National Report on the Implementation of the United Nations Convention to Combat Desertification (Nigeria: novembre 1999).
- 48.** Sengupta, op. cit. nota 47.
- 49.** Ibid.
- 50.** James Gasana, "Remember Rwanda?" *World Watch*, settembre/ottobre 2002, pp. 24-32.
- 51.** Ibid.
- 52.** U.S. Census Bureau, Population Division, International Programs Center, *International Database*, pubblicato su [www.census.gov/ipc/www/idbacc.html](http://www.census.gov/ipc/www/idbacc.html), 26 aprile 2005; Gasana, op. cit. nota 50.
- 53.** Gasana, op. cit. nota 50; Emily Wax, "At the Heart of Rwanda's Horror: General's History Offers Clues to the Roots of Genocide", *Washington Post*, 21 settembre 2002.
- 54.** U.N. Population Division, op. cit. nota 2.
- 55.** Ibid.; Gasana, op. cit. nota 50.
- 56.** U.N. Population Division, op. cit. nota 2; Sandra Postel, *Pillar of Sand* (W. W. Norton & Company, New York, 1999), pp. 141-49.
- 57.** U.N. Population Division, op. cit. nota 2, p. 43; Postel, op. cit. nota 56, pp. 141-49.
- 58.** Postel, op. cit. nota 56, pp. 141-49; U.N. Population Division, op. cit. nota 2.
- 59.** O'Hara citato in Michael Wines, "Grand Soviet Scheme for Sharing Water in Central Asia is Foundering", *New York Times*, 9 dicembre 2002.
- 60.** "Scientists Meeting in Tunis Called for Priority Activities to Curb Desertification", *UN News Service*, 21 giugno 2006.
- 61.** Alan Cowell, "Migrants Found off Italy Boat Piled With Dead", *International Herald Tribune*, 21 ottobre 2003.
- 62.** Ibid.
- 63.** Miranda Leitsinger, "African Migrants Die an Ocean Away", *Washington Post*, 2 giugno 2006; Mar Roman, "A New Record For Africans Risking Boat Route to Europe", *Washington Post*, 4 settembre 2006.
- 64.** Ginger Thompson, "Mexico Worries About Its Own Southern Border", *New York Times*, 18 giugno 2006.
- 65.** "Mexico's Immigration Problem: The Kamikazes of Poverty", *The Economist*, 31 gennaio 2004.
- 66.** Frank Bruni, "Off Sicily, Tide of Bodies Roils Immigrant Debate", *New York Times*, 23 settembre 2002; Flora Botsford, "Spain Recovers Drowned Migrants", *BBC News*, 25 aprile 2002; "Boat Sinks Off Coast of Turkey: One Survivor and 7 Bodies Found", *Agence France-Presse*, 22 dicembre 2003; Mary Jordan and Kevin Sullivan, "Trade Brings Riches, But Not to Mexico's Poor", *Washington Post*, 22 marzo 2003; Robert McLeman and Barry Smit, "Climate Change, Migration and Security", *Commentary No. 86* (Ottawa: Canadian Security Intelligence Service, 2 marzo 2004); "Humane Approach to Border", *Denver Post*, 24 aprile 2003.

- 67.** Tushaar Shah et al., *The Global Groundwater Situation: Overview of Opportunities and Challenges* (Colombo, Sri Lanka: International Water Management Institute, 2000); U.N. Population Division, op. cit. nota 2, p. 42.
- 68.** Wang Tao, *Cold and Arid Regions Environmental and Engineering Research Institute* (CAREERI), Chinese Academy of Sciences, e-mail to author, 4 aprile 2004; Wang Tao, "The Process and Its Control of Sandy Desertification in Northern China", CAREERI, Chinese Academy of Sciences, Lanzhou, China, maggio 2002.
- 69.** Iranian News Agency, "Official Warns of Impending Desertification Catastrophe in Southeast Iran", *BBC International Reports*, 29 settembre 2002; Government of Nigeria, op. cit. nota 47, p. 6.
- 70.** Fund for Peace and Carnegie Endowment for International Peace, "The Failed States Index", *Foreign Policy*, luglio/agosto 2005, pp. 56-65.
- 71.** Fund for Peace and Carnegie Endowment for International Peace, "The Failed States Index", *Foreign Policy*, luglio/agosto 2007, pp. 54-63.
- 72.** Fund for Peace and Carnegie Endowment, op. cit. nota 70.
- 73.** Fund for Peace and Carnegie Endowment, op. cit. nota 71.
- 74.** *Ibid.*; U.N. Population Division, op. cit. nota 2.
- 75.** U.N. Population Division, op. cit. nota 2.
- 76.** Richard Cincotta, Robert Engelman, Daniele Anastasion, *The Security Demographic: Population and Civil Conflict After the Cold War* (Washington, DC, Population Action International, 2003).
- 77.** Ginger Thompson, "A New Scourge Afflicts Haiti: Kidnappings", *New York Times*, 6 luglio 2005; Madeleine K. Albright, Robin Cook, "The World Needs to Step It Up in Afghanistan", *International Herald Tribune*, 5 ottobre 2004; Desmond Butler, "5-Year Hunt Fails to Net Qaeda Suspect in Africa", *New York Times*, 14 giugno 2003.
- 78.** Abraham McLaughlin, "Can Africa Solve African Problems?" *Christian Science Monitor*, 4 gennaio 2005; Marc Lacey, "Beyond the Bullets and Blades", *New York Times*, 20 marzo 2005; "World Refugee Day: Testimony of Anne C. Richard, International Rescue Committee", before US House of Representatives Committee on Foreign Affairs Subcommittee on Africa and Global Health, Washington, DC, 20 giugno 2007.
- 79.** "Afghanistan: The Ignored War", in Christy Harvey, Judd Legum, and Jonathan Baskin, *The Progress Report* (Washington, DC, American Progress Action Fund, 2005); Fund for Peace and Carnegie Endowment, op. cit. nota 71; McLaughlin, op. cit. nota 78; "A Failing State: The Himalayan Kingdom Is a Gathering Menace", *The Economist*, 4 dicembre 2004.
- 80.** United Nations, "United Nations Peacekeeping Operations", pubblicato su [www.un.org/Depts/dpko/dpko/bnota.htm](http://www.un.org/Depts/dpko/dpko/bnota.htm), 31 luglio 2007; "US Official Calls for NATO Flexibility in Afghanistan", *Agence France-Presse*, 6 settembre 2007; Marc Lacey, "Congo Tribal Killings Create a New Wave of Refugees", *New York Times*, 6 marzo 2005.
- 81.** U.N. World Food Programme (WFP), "New Operation Provides WFP Food Aid to 550,000 Haitians", (Rome: 5 maggio 2005); WFP, "India Helps WFP Feed Afghan Schoolchildren", news release (Rome: 17 maggio 2005).
- 82.** Stephanie McCrummen, "In an Eastern Congo Oasis, Blood amid the Greenery", *Washington Post*, 22 luglio 2007.
- 83.** Roland Ogbonnaya, "Polio Pandemic... Is Nigeria Winning the Fight?" *This Day* (Lagos), 22 luglio 2007.
- 84.** David Brown, "A Blow to Anti-Polio Campaign", *Washington Post*, 10 maggio 2005; Donald G. McNeil, Jr., "Muslims' New Tack on Polio: A Vaccine en Route to Mecca", *New York Times*, 20 agosto 2005; "Wild Poliovirus 2000-2007", in WHO Global Polio Eradication Initiative, "Wild Poliovirus Weekly Update", pubblicato su [www.polioeradication.org](http://www.polioeradication.org), 2 ottobre 2007.
- 85.** "Wild Poliovirus 2000-2007", op. cit. nota 84; Celia W. Dugger, "Nigeria and India Cited in Rise of Polio Cases", *New York Times*, 13 ottobre 2006.

## CAPITOLO 7. DEBELLARE LA POVERTÀ, STABILIZZARE LA POPOLAZIONE

1. U.N. General Assembly, "United Nations Millennium Declaration", General Assembly, 8 settembre 2000; World Bank, *Global Monitoring Report 2007: Millennium Development Goals* (Washington, DC, 2007), p. 39; International Monetary Fund (IMF), *World Economic Outlook*, [www.imf.org](http://www.imf.org), marzo 2007.
2. World Bank, *World Development Report 2005* (Oxford University Press, New York, 2004); Jeffrey D. Sachs, "India Takes the Lead", *Korea Herald*, 4 agosto 2004.
3. United Nations, "Poverty, Percentage of Population Below \$1 (PPP) Per Day,

- Percentage”, *Millennium Development Goals Indicators Database*, 27 luglio 2007; World Bank, op. cit. nota 1, pp. 1, 3.
- 4.** U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007; G-8 leaders, “Gleneagles Communiqué on Africa, Climate Change, Energy and Sustainable Development”, document from G-8 Summit, Gleneagles, Scotland, luglio 2005; fragile states from World Bank, op. cit. nota 1, p. 4.
- 5.** U.N. General Assembly, op. cit. nota 1.
- 6.** World Bank, op. cit. nota 1, pp. 1-6; U.N. Food and Agriculture Organization (FAO), *Number of Undernourished Persons*, pubblicato su [www.fao.org/faostat/foodsecurity](http://www.fao.org/faostat/foodsecurity), 30 giugno 2006; UNICEF, *Excluded and Invisible: The State of the World's Children 2006* (New York: 2005), pp. vii, 114-17.
- 7.** All Party Parliamentary Group on Population Development and Reproductive Health, *Return of the Population Growth Factor: Its Impact on the Millennium Development Goals* (London: Her Majesty's Stationery Office, gennaio 2007), pp. 1, 3-9; Martha Campbell et al., “Return of the Population Growth Factor”, *Science*, vol. 315 (16 marzo 2007), pp. 1501-02.
- 8.** Campbell et al., op. cit. nota 7; Martha Campbell, conversazione con Janet Larsen, Earth Policy Institute, 8 ottobre 2007; All Party Parliamentary Group, op. cit. nota 7, p. 4.
- 9.** United Nations, Millennium Development Goals Report 2007 (New York: 2007), p. 11; Hilaire A. Mputu, Literacy and Non-Formal Education in the E-9 Countries (Paris: UNESCO, 2001), p. 5; Polly Curtis, “Lack of Education ‘a Greater Threat than Terrorism’: Sen”, *Guardian* (London), 28 ottobre 2003.
- 10.** Paul Blustein, “Global Education Plan Gains Backing”, *Washington Post*, 22 aprile 2002; World Bank, “World Bank Announces First Group of Countries for ‘Education For All’ Fast Track”, press release (Washington, DC, 2002); Gene Sperling, “The G-8 – Send 104 Million Friends to School”, *Bloomberg News*, 20 giugno 2005.
- 11.** World Bank, op. cit. nota 1, pp. 5, 24.
- 12.** Gene Sperling, “Toward Universal Education”, *Foreign Affairs*, settembre/ottobre 2001, pp. 7-13.
- 13.** Gene Sperling, “Educate Them All”, *Washington Post*, 20 aprile 2002.
- 14.** UNESCO, *EFA Global Monitoring Report 2007: Strong Foundations* (Paris: 2006), p.2; U.N. Commission on Population and Development, Thirty-sixth Session, Population, Education, and Development, 31 marzo – 4 aprile 2003; UNESCO, “Winners of UNESCO Literacy Prizes 2003”, press release, 27 maggio 2003.
- 15.** U.K. Treasury, *From Commitment to Action: Education* (London: Department for International Development, settembre 2005).
- 16.** George McGovern, *The Third Freedom: Ending Hunger in Our Time* (Simon & Schuster, New York, 2001), chapter 1.
- 17.** Jeffrey Sachs, “A New Map of the World”, *The Economist*, 22 giugno 2000; George McGovern, “Yes We CAN Feed the World's Hungry”, *Parade*, 16 dicembre 2001.
- 18.** McGovern, op. cit. nota 17.
- 19.** Ibid.
- 20.** Ibid.
- 21.** Population Reference Bureau (PRB), *Datafinder*, pubblicato su [www.prb.org/DataFind/datafinder7.htm](http://www.prb.org/DataFind/datafinder7.htm), 2007; U.N. Population Division, op. cit. nota 4.
- 22.** U.N. Population Division, op. cit. nota 4; United Nations, “Total Population (Both Sexes Combined) By Major Area, Region and Country, Annually for 1950-2050”, *World Population Prospects: The 2006 Revision, Extended Dataset*, CD-ROM (Rome: 15 giugno 2007).
- 23.** U.N. Population Division, op. cit. nota 4.
- 24.** Program for Appropriate Technology in Health (PATH) and U.N. Population Fund (UNFPA), *Meeting the Need: Strengthening Family Planning Programs* (Seattle: 2006), pp. 5-11; All Party Parliamentary Group, op. cit. nota 7, p. 22.
- 25.** Janet Larsen, “Iran’s Birth Rate Plummeting at Record Pace”, in Lester R. Brown, Janet Larsen, Bernie Fischlowitz-Roberts, *The Earth Policy Reader* (W.W. Norton & Company, New York, 2002), pp. 190-94; Homa Hoodfar, Samad Assadpour, “The Politics of Population Policy in the Islamic Republic of Iran”, *Studies in Family Planning*, marzo 2000, pp. 19-34; Farzaneh Roudi, “Iran’s Family Planning Program: Responding to a Nation’s Needs”, *MENA Policy Brief*, giugno 2002; United Nations, *World Population Prospects: The 2004 Revision* (New York: 2005).
- 26.** Larsen, op. cit. nota 25.
- 27.** Ibid.
- 28.** Ibid; population growth rates from PRB, *2005 World Population Data Sheet*, wall chart (Washington, DC, agosto 2005), and from U.N. Population Division, op. cit. nota 4.
- 29.** Pamela Polston, “Lowering the Boom: Population Activist Bill Ryerson is Saving the World – One ‘Soap’ at a Time”, *Seven Days*, pubblicato su

www.populationmedia.org/archives/archives2.html, visionato il 5 ottobre 2007.

30. Ibid.

31. Ibid.

32. Ibid.

33. Additional spending from J. Joseph Speidel et al., *Family Planning and Reproductive Health: The Link to Environmental Preservation* (San Francisco: Bixby Center for Reproductive Health and Research Policy, University of California, 2007), p. 10, J. Joseph Speidel, J. Matthew Roney, Earth Policy Institute, 16 ottobre 2007.

34. PATH and UNFPA, op. cit. nota 24, p. 18.

35. "Bangladesh: National Family Planning Program", *Family Planning Programs: Diverse Solutions for a Global Challenge* (Washington, DC, PRB, 1994); Speidel et al., op. cit. nota 33, p. 10; Speidel, op. cit. nota 33.

36. World Bank, op. cit. nota 1, p. 5.

37. Ibid., p. 13.

38. Mustaque Chowdhury, *Health Workforce for TB Control by DOTS: The BRAC Case, Joint Learning Initiative Working Paper 5-2* (Global Health Trust, 2004).

39. Jeffrey D. Sachs, Commission on Macroeconomics and Health, *Macroeconomics and Health: Investing in Health for Economic Development* (Geneva: World Health Organization (WHO), 2001); "UNICEF Lists Top Causes of Child Deaths", *Reuters*, 13 settembre 2007; Ruth Levine, What Works Working Group, *Millions Saved: Proven Successes in Global Health* (Washington, DC, Center for Global Development, 2004).

40. Bill and Melinda Gates Foundation, "Vaccine-Preventable Diseases", pubblicato su [www.gatesfoundation.org/GlobalHealth](http://www.gatesfoundation.org/GlobalHealth), visionato il 13 settembre 2007.

41. John Donnelly, "U.S. Seeks Cuts in Health Programs Abroad", *Boston Globe*, 5 febbraio 2003.

42. Sachs, Commission on Macroeconomics and Health, op. cit. nota 39; WHO, "Smallpox", pubblicato su [www.who.int](http://www.who.int), visionato il 10 ottobre 2005.

43. WHO, "Polio Eradication: Now More Than Ever, Stop Polio Forever", pubblicato su [www.who.int/features/2004/polio/en](http://www.who.int/features/2004/polio/en), visionato il 17 settembre 2007; Rotary International, "About PolioPlus", pubblicato su [www.rotary.org/foundation/polioplus/index.htm](http://www.rotary.org/foundation/polioplus/index.htm), visionato il 17 settembre 2007.

44. Polio cases from "Wild Poliovirus 2000-2007", in WHO Global Polio Eradication Initiative, "Wild Poliovirus Weekly Update", pubblicato su [www.polioeradication.org](http://www.polioeradication.org), 2 ottobre 2007; Nigeria from WHO, *Global Polio*

*Eradication Initiative: Annual Report 2006* (Geneva 2007), p. 6.

45. "Pakistan Polio Drive is Suspended", *BBC News*, 8 agosto 2007.

46. Michele Barry, M.D., "The Tail of Guinea Worm-Global Eradication Without a Drug or Vaccine", *New England Journal of Medicine*, vol. 356, 25 (21 giugno 2007), pp. 2561-64.

47. Ibid.; country information from "Reported Cases of Dracunculiasis by Country, 1972-2005", in Peter H. Gleick, *The World's Water 2006-2007* (Washington, DC, Pacific Institute, 2006), pp. 293-97.

48. WHO, "Chronic Obstructive Pulmonary Disease (COPD)", (Geneva, 2006); "The Tobacco Epidemic: A Crisis of Startling Dimensions", pubblicato su [www.who.int](http://www.who.int); air pollution from WHO, "Air Pollution", (Geneva, 2000).

49. Alison Langley, "Anti-Smoking Treaty Is Adopted by 192 Nations", *New York Times*, 22 maggio 2003; WHO Tobacco Free Initiative pubblicato su [www.who.int/tobacco/index.cfm](http://www.who.int/tobacco/index.cfm); Alexi A. Wright, Ingrid T. Katz, "Tobacco Tightrope - Balancing

Disease Prevention and Economic Development in China", *New England Journal of Medicine*, vol. 356, 15 (12 aprile 2007), pp. 1493-96.

50. Cigarette consumption from U.S. Department of Agriculture (USDA), *Production, Supply and Distribution*, database elettronica, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 31 agosto 2006; Tom Capehart, *Tobacco Outlook* (Washington, DC, USDA Economic Research Service, 24 aprile 2007); U.N. Population Division, op. cit. nota 4; Daniel Yee, "Smoking Declines in U.S. - Barely", *CBS News*, 10 novembre 2004.

51. USDA, op. cit. nota 50; U.N. Population Division, op. cit. nota 4.

52. Smoking Bans Around the World", *Reuters*, 10 gennaio 2005; "New Zealand Stubs Out Smoking in Bars, Restaurants", *Reuters*, 13 dicembre 2004.

53. "Bangladesh Bans Smoking in Many Public Places", *Reuters*, 15 marzo 2005; "Europeans Back Public Smoking Ban", *BBC News*, 31 maggio 2006; "England Smoking Ban Takes Effect", *BBC News*, 1 luglio 2007; France from Howard K. Koh et al., "Making Smoking History Worldwide", *New England Journal of Medicine*, vol. 356, 15 (12 aprile 2007), pp. 1496-1498.

54. Bernard Wysocki, Jr., "Companies Get Tough With Smokers, Obese to Trim Costs", *Wall Street Journal*, 12 ottobre 2004.

55. Sachs, Commission on Macroeconomics and Health, op. cit. nota 39.

56. Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO, *2006 AIDS Epidemic Update* (Geneva: dicembre 2006), p. 3; Worldwatch Institute, *Signposts 2004*, CD-Rom (Washington, DC, 2004), and in UNAIDS and WHO, *AIDS Epidemic Update* (Geneva: various years).
57. Nita Bhalla, "Teaching Truck Drivers About AIDS", *BBC*, 25 giugno 2001; C.B.S. Venkataramana, P.V. Sarada, "Extent and Speed of Spread of HIV Infection in India Through the Commercial Sex Networks: A Perspective", *Tropical Medicine and International Health*, vol. 6, 12 (dicembre 2001), pp. 1040-61, cited in "HIV Spread Via Female Sex Workers in India Set to Increase Significantly by 2005", *Reuters Health*, 26 dicembre 2001.
58. Mark Covey, "Target Soldiers in Fight Against AIDS Says New Report", press release (London, 2002); "Free Condoms for Soldiers", *South Africa Press Association*, 5 agosto 2001; UNAIDS, *2006 Report on the Global AIDS Epidemic* (Geneva, 2006), p. 421.
59. Condoms needed from UNFPA, *Donor Support for Contraceptives and Condoms for STI/HIV Prevention 2005* (New York: 2005); UNFPA, *Achieving the ICPD Goals: Reproductive Health Commodity Requirements 2000-2015* (New York: 2005); Nada Chaya and Kai-Ahset Amen, with Michael Fox, *Condoms Count: Meeting the Need in the Era of HIV/AIDS* (Washington, DC, 2002).
60. Chaya and Amen, with Fox, op. cit. nota 59; UNFPA, *Achieving the ICPD Goals*, op. cit. nota 59.
61. "Who Pays for Condoms", op. cit. nota 59; Communications Consortium Media Center, "U.N. Special Session on Children Ends in Acrimony", *PLANetWIRE.org*, 14 maggio 2002; Adam Clymer, "U.S. Revises Sex Information, and a Fight Goes On", *New York Times*, 27 dicembre 2002.
62. UNAIDS, *Report on the Global HIV/AIDS Epidemic* (Geneva: giugno 2000), pp. 9-11; UNAIDS, op. cit. nota 58, pp. 20, 446, 487; UNAIDS, "Uganda: Country Situation Analysis", pubblicato su [www.unaids.org/en/Regions\\_Countries](http://www.unaids.org/en/Regions_Countries), visionato il 14 settembre 2007.
63. UNAIDS, WHO, op. cit. nota 56, p. 10; UNAIDS, WHO, *Progress on Global Access to HIV Antiretroviral Therapy: An Update on "3 by 5"* (Geneva, 2005), pp. 7, 13.
64. Clive Bell, Shantayanan Devarajan, and Hans Gersbach, "The Longrun Economic Cost of AIDS: Theory and an Application to South Africa", Policy Research Working Paper Series (Washington, 2003); "AIDS Summit: The Economics of Letting People Die", *Star Tribune*, 16 luglio 2003; Deborah Mitchell, "HIV Treatment: 2 Million Years of Life Saved", *Reuters Health*, 28 febbraio 2005.
65. "AIDS Summit", op. cit. nota 64.
66. Organisation for Economic Co-operation and Development (OECD), *Agricultural Policies in OECD Countries: At a Glance 2006* (Paris: 31 luglio 2006), pp. 18, 19; OECD, "Development Aid from OECD Countries Fell 5.1% in 2006", (Paris, 2007); "The Hypocrisy of Farm Subsidies", *New York Times*, 1° dicembre 2002.
67. European Commission, *General Budget of the European Union for the Financial Year 2007: The Figures* (Brussels, 2007), p. 4; OECD, *Agricultural Policies*, op. cit. nota 66, pp. 18-22; "The Hypocrisy of Farm Subsidies", op. cit. nota 66.
68. OECD, "Development Aid", op. cit. nota 66; "South Africa: Weaning States Off Subsidies", *Africa News*, 19 agosto 2005.
69. Vedi capitolo 2 per approfondimenti sul prezzo del petrolio e sull'etanolo.
70. Oxfam International, "Oxfam Dismisses US Cotton Market Access Offer as 'Empty Promise'", press release (London, 2005); Julian Alston et al., *Impacts of Reductions in US Cotton Subsidies on West African Cotton Producers* (Oxfam America, Boston, 2007); OECD, *OECD Statistics*, pubblicato su [stats.oecd.org/wbos](http://stats.oecd.org/wbos), 25 settembre 2007; U.N. Population Division, op. cit. nota 4.
71. Elizabeth Becker, "Looming Battle Over Cotton Subsidies", *New York Times*, 24 gennaio 2004; Elizabeth Becker, "U.S. Will Cut Farm Subsidies in Trade Deal", *New York Times*, 31 luglio 2004; Randy Schnepf, *U.S. Agricultural Policy Response to WTO Cotton Decision* (Washington, DC, Congressional Research Service, 8 settembre 2006).
72. Schnepf, op. cit. nota 71; Mark Drajem, Carlos Caminada, "WTO Rules Against U.S. in Cotton Dispute With Brazil (Update 1)", *Bloomberg News*, 27 luglio 2007; Alan Bjerga, "Bush's Opposition to 'Soviet' Farm Bill maggio Get Plowed Under", *Bloomberg News*, 23 luglio 2007.
73. "Ending the Cycle of Debt", *New York Times*, 1 ottobre 2004; World Bank, *Little Data Book on External Debt in Global Development Finance 2007* (Washington, DC, 2007), p. 8; IMF, *World Economic and Financial Surveys: Regional Economic Outlook - Sub-Saharan Africa* (Washington, DC, settembre 2006), pp. 36, 43; David Goldsbrough, "IMF Programs and Health

Spending”, presented at Global Conference on Gearing Macroeconomic Policies to Reverse the HIV/AIDS Epidemic, Brasilia, Brazil, 20 novembre 2006, U.N. Population Division, op. cit. nota 4.

**74.** “G8 Finance Ministers’ Conclusions on Development”, Pre Summit Statement by G-8 Finance Ministers, London, 10-11 giugno 2005; Oxfam International, “Gleneagles: What Really Happened at the G8 Summit?” *Oxfam Briefing Note* (London: 29 luglio 2005).

**75.** Oxfam International, “The View From the Summit – Gleneagles G8 One Year On”, (Oxford, U.K., 2006).

**76.** Abid Aslam, “18 Poor Countries to See Debt Slate Wiped Clean, Saving \$10 Million Per Week”, *One World US*, 26 settembre 2005; Oxfam International, op. cit. nota 75.

**77.** UNFPA, *The State of World Population 2004* (New York, 2004), pp. 14-15.

**78.** United Nations, *World Population Prospects: The 2004 Revision* (New York: 2005); UNFPA, op. cit. nota 77, p. 39.

**79.** U.K. Treasury, op. cit. nota 15; McGovern, op. cit. nota 17; Speidel et al., op. cit. nota 33, p. 10; Sachs and Commission on Macroeconomics and Health, op. cit. nota 39; UNFPA, *Donor Support for Contraceptives and Condoms*, op. cit. nota 59, and from UNFPA, *Achieving the ICPD Goals*, op. cit. nota 59.

**80.** Sachs and Commission on Macroeconomics and Health, op. cit. nota 39.

**81.** Ibid.; Wu Xiaoling, “Statement of Madam Wu Xiaoling, Deputy Governor of the People’s Bank of China”, Speech delivered at the 39th Annual Meeting of the Board of Governors of the African Development Bank (Group), Kampala, Uganda, 25-26 maggio 2004.

## CAPITOLO 8. RISANARE LA TERRA

**1.** Craig A. Cox, “Conservation Can Mean Life or Death”, *Journal of Soil and Water Conservation*, novembre/dicembre 2004.

**2.** Remaining forests from “Table 2.1. Distribution of Forests by Subregion 2005”, in U.N. Food and Agriculture Organization (FAO), *Forest Resources Assessment (FRA) 2005* (Rome, 2006).

**3.** FAO, *ForesSTAT Statistics Database*, pubblicato su faostat.fao.org, 22 dicembre 2006; U.S. Environmental Protection Agency, *Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2005* (Washington, DC, 2005).

**4.** FAO, op. cit. nota 3; Daniel M. Kammen,

“From Energy Efficiency to Social Utility: Lessons from Cookstove Design, Dissemination, and Use”, in José Goldemberg, Thomas B. Johansson, *Energy as an Instrument for Socio-Economic Development* (U.N. Development Programme, New York, 1995).

**5.** Kevin Porter, “Final Kakuma Evaluation: Solar Cookers Filled a Critical Gap”, in Solar Cookers International, *Solar Cooker Review*, vol. 10, 2 (novembre 2004); “Breakthrough in Kenyan Refugee Camps”, pubblicato su solarcooking.org/kakuma-m.htm, visionato il 30 luglio 2007.

**6.** FAO, *Agriculture: Towards 2015/30, Technical Interim Report* (Geneva: Economic and Social Department, 2000), pp. 156-57.

**7.** Johanna Son, “Philippines: Row Rages Over Lifting of Ban on Lumber Exports”, *InterPress Service*, 17 aprile 1998; John Aglionby, “Philippines Bans Logging After Fatal Floods”, *Guardian* (London), 6 dicembre 2004; Republic of the Philippines, “President Okays Selective Lifting of Log Ban”, (Manila, 2005).

**8.** Alliance for Forest Conservation and Sustainable Use, “WWF/World Bank Forest Alliance Launches Ambitious Program to Reduce Deforestation and Curb Illegal Logging”, press release (World Bank/WWF, New York, 25 maggio 2005); Alliance for Forest Conservation and Sustainable Use, “World Bank/WWF Alliance for Forest Conservation & Sustainable Use: Questions & Answers”, World Bank/WWF, pubblicato su www.worldwildlife.org/alliance, visionato il 30 luglio 2007; Alliance for Forest Conservation and Sustainable Use, “WWF/World Bank Alliance Targets”, pubblicato su www.worldwildlife.org/alliance, visionato il 30 luglio 2007.

**9.** Forest Stewardship Council, *FSC Certified Forests* (Bonn, Germany: 2005), pp. 34, 40, 53; Forest Stewardship Council, “FSC Certification: Maps, Graphs, and Statistics (luglio 2007)”, pubblicato su www.fsc.org/en/whats\_new/fsc\_certificates/maps, visionato il 30 luglio 2007.

**10.** A. Del Lungo, J. Ball, J. Carle, *Global Planted Forests Thematic Study: Results and Analysis* (Rome: FAO Forestry Department, dicembre 2006); U.S. Department of Agriculture (USDA), *Production Supply and Distribution*, pubblicato su www.fas.usda.gov/psdonline, 10 agosto 2007.

**11.** R. James, A. Del Lungo, “Comparisons of Estimates of ‘High Value’ Wood With Estimates of Total Forest Plantation Production”, in *The Potential for Fast-Growing Commercial Forest Plantations to Supply High Value Roundwood*

- (Rome: FAO Forestry Department, febbraio 2005), p. 24; FAO, op. cit. nota 3.
- 12.** “Table 4. Total Planted Forest Area: Productive and Protective – 61 Sampled Countries”, in Del Lungo, Ball, Carle, op. cit. nota 10, pp. 66-70; Ashley T. Mattoon, “Paper Forests”, *World Watch*, marzo/aprile 1998, pp. 20-28.
- 13.** Mattoon, op. cit. nota 12; USDA, op. cit. nota 10.
- 14.** FAO, op. cit. nota 6, p. 185; Chris Brown, D. J. Mead., “Future Production from Forest Plantations”, *Forest Plantation Thematic Paper* (Rome, FAO, 2001), p. 9.
- 15.** Reed Funk, lettera all'autore, 9 agosto 2005.
- 16.** M. Davis et al., “New England – Acadian Forests”, in Taylor H. Ricketts et al., *Terrestrial Ecoregions of North America: A Conservation Assessment*, Island Press, Washington, DC, 1999; David R. Foster, “Harvard Forest: Addressing Major Issues in Policy Debates and in the Understanding of Ecosystem Process and Pattern”, LTER Network News: The Newsletter of the Long Term Ecological Network, spring/summer 1996; U.S. Forest Service, “2006 Forest Health Highlights”, pubblicato su [fhm.fs.fed.us](http://fhm.fs.fed.us), visionato il 2 agosto 2007.
- 17.** C. Csaki, “Agricultural Reforms in Central and Eastern Europe and the Former Soviet Union: Status and Perspectives”, *Agricultural Economics*, vol. 22 (2000), pp. 37-54; Igor Shvytov, *Agriculturally Induced Environmental Problems in Russia*, Discussion Paper 17 (Halle, Germany: Institute of Agricultural Development in Central and Eastern Europe, 1998), p. 13.
- 18.** Se-Kyung Chong, “Anmyeon-do Recreation Forest: A Millennium of Management”, in Patrick B. Durst et al., *In Search of Excellence: Exemplary Forest Management in Asia and the Pacific*, Asia-Pacific Forestry Commission (Bangkok: FAO Regional Office for Asia and the Pacific, 2005), pp. 251-59.
- 19.** Ibid.
- 20.** Turkish Foundation for Combating Soil Erosion (TEMA), pubblicato su [english.tema.org.tr](http://english.tema.org.tr), visionato il 31 luglio 2007.
- 21.** U.S. Embassy, Niamey, Niger, “Niger: Greener Now Than 30 Years Ago”, FRAME workshop, ottobre 2006; Chris Reij, “More Success Stories in Africa’s Drylands Than Often Assumed”, Network of Farmers’ and Agricultural Producers’ Organisations of West Africa (ROPPA) Forum on Food Sovereignty, 7-10 novembre 2006.
- 22.** U.S. Embassy, op. cit. nota 21; Reij, op. cit. nota 21.
- 23.** Secretariat of the U.N. Convention to Combat Desertification, “The Great North American Dust Bowl: A Cautionary Tale”, *Global Alarm Dust and Sandstorms from the World’s Drylands* (Bangkok, 2002), pp. 77-121.
- 24.** Jeffrey Zinn, Conservation Reserve Program: Status and Current Issues (Washington, DC, Congressional Research Service, 8 maggio 2001); USDA, Economic Research Service, *Agricultural Policy at the Crossroads: Guideposts on a Changing Landscape* (Washington, DC, 2001).
- 25.** USDA, Natural Resources Conservation Service, *CORE4 Conservation Practices Training Guide: The Common Sense Approach to Natural Resource Conservation* (Washington, DC, agosto 1999); Rolf Derpsch, “Frontiers in Conservation Tillage and Advances in Conservation Practice”, in D.E. Stott, R.H. Mohtar, G.C. Steinhardt, *Sustaining the Global Farm*, 10th International Soil Conservation Organization Meeting, Purdue University, USDA-ARS National Soil Erosion Research Laboratory, 24-29 maggio 1999 (Washington, DC, 2001), pp. 248-54.
- 26.** Conservation Technology Information Center, Purdue University, “National Tillage Trends (1990-2004)”, *2004 National Crop Residue Management Survey Data*; FAO, *Intensifying Crop Production with Conservation Agriculture*, pubblicato su [www.fao.org/ag](http://www.fao.org/ag), visionato il 20 maggio 2003; Rolf Derpsch, e-mail a J. Matthew Roney, Earth Policy Institute, 6-11 agosto 2007; Doug McKell, Soil Conservation Council of Canada, “No-till Census Data-Canada”, Confederation of American Associations for the Production of Sustainable Agriculture, Bella Vista, Paraguay, 12-14 settembre 2007.
- 27.** FAO, op. cit. nota 26.
- 28.** “Algeria to Convert Large Cereal Land to Tree-Planting”, *Reuters*, 8 dicembre 2000; Souhail Karam, “Drought-Hit North Africa Seen Hunting for Grains”, *Reuters*, 15 luglio 2005.
- 29.** Godwin Nnanna, “Africa’s Message for China”, *China Dialogue*, 18 aprile 2007; International Institute for Sustainable Development, “African Regional Coverage Project”, Eighth African Union Summit – Briefing Nota, vol. 7, issue 2 (Geneva, 7 febbraio 2007), p. 8; Federal Republic of Nigeria, Ministry of Environment, “Green Wall Sahara Programme”, pubblicato su [www.greenwallsahara.org](http://www.greenwallsahara.org), visionato il 17 ottobre 2007.
- 30.** Evan Ratliff, “The Green Wall of China”, *Wired*, aprile 2003; Wang Yan, “China’s Forest Shelter Project Dubbed ‘Green Great Wall’”, *Xinhua News Agency*, 9 luglio 2006; Sun

Xiufang, Ralph Bean, *China Solid Wood Products Annual Report 2002* (Beijing: USDA, 2002).

31. Conversazione dell'autore con funzionari della contea di Helin, Mongolia centrale (Nei Monggol), 17 maggio 2002.
32. Ibid.
33. U.S. Embassy, *Grapes of Wrath in Inner Mongolia* (Beijing: maggio 2001).
34. India's dairy industry from A. Banerjee, "Dairying Systems in India", *World Animal Review*, vol. 79/2 (Rome: FAO, 1994).
35. Andrew Balmford et al., "The Worldwide Costs of Marine Protected Areas", *Proceedings of the National Academy of Sciences*, vol. 101, 26 (29 giugno 2004), pp. 9694-97; "Costs of a Worldwide System of Marine Parks", press release (York: The University of York, 12 luglio 2004); World Wildlife Fund (WWF), "Problems: Inadequate Protection", pubblicato su [www.panda.org](http://www.panda.org), visionato il 9 agosto 2007.
36. Balmford et al., op. cit. nota 35; Tim Radford, "Marine Parks Can Solve Global Fish Crisis, Experts Say", *Guardian* (London), 15 giugno 2004.
37. Balmford et al., op. cit. nota 35; Radford, op. cit. nota 36.
38. Radford, op. cit. nota 36; Richard Black, "Protection Needed for 'Marine Serengetis,'" *BBC News*, 6 agosto 2003; Balmford et al., op. cit. nota 35.
39. American Association for the Advancement of Science (AAAS), "Leading Marine Scientists Release New Evidence that Marine Reserves Produce Enormous Benefits within Their Boundaries and Beyond", (Washington, DC, 12 marzo 2001); "Scientific Consensus Statement on Marine Reserves and Marine Protected Areas", presented pubblicato su the AAAS annual meeting, 15-20 febbraio 2001.
40. AAAS, op. cit. nota 39; "Scientific Consensus Statement", op. cit. nota 39, p. 2.
41. R. J. Diaz, J. Nestlerode, M.L. Diaz, "A Global Perspective on the Effects of Eutrophication and Hypoxia on Aquatic Biota", in G.L. Rupp, M.D. White, *Proceedings of the 7th Annual Symposium on Fish Physiology, Toxicology and Water Quality, Estonia, 12-15 maggio 2003* (Athens, GA, U.S. Environmental Protection Agency, Ecosystems Research Division, 2004); U.N. Environment Programme (UNEP), *GEO Yearbook 2003* (Nairobi: 2004).
42. WWF, *Hard Facts, Hidden Problems: A Review of Current Data on Fishing Subsidies* (Washington, DC, 2001), pp. ii; Balmford et al., op. cit. nota 35; Radford, op. cit. nota 36; Fisheries Center University of British

Columbia, *Catching More Bait: A Bottom-Up Re-Estimation of Global Fisheries Subsidies* (2nd Version) (Vancouver, BC: The Fisheries Center, 2006), p. 21.

43. U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007.
44. WWF, op. cit. nota 35.
45. Conservation International, "Biodiversity Hotspots", pubblicato su [www.biodiversityhotspots.org](http://www.biodiversityhotspots.org), visionato il 31 luglio 2007.
46. U.S. Fish and Wildlife Service, "The Endangered Species Act of 1973", pubblicato su [www.fws.gov/endangered](http://www.fws.gov/endangered), visionato il 31 luglio 2007; Mark Clayton, "New Tool to Fight Global Warming: Endangered Species Act", *Christian Science Monitor*, 7 settembre 2007; U.S. Fish and Wildlife Service-Alaska, "Polar Bear Conservation Issues", pubblicato su [alaska.fws.gov/fisheries/mmm/polarbear/issues.htm](http://alaska.fws.gov/fisheries/mmm/polarbear/issues.htm), 5 ottobre 2007.
47. Vattenfall, *Global Mapping of Greenhouse Gas Abatement Opportunities up to 2030: Forestry Sector Deep-Dive* (Stockholm, 2007), p. 1.
48. Ibid., p. 6; World Resources Institute, *Climate Analysis Indicator Tool*, pubblicato su [cait.wri.org](http://cait.wri.org), 2007.
49. "Forestry Cuts Down on Logging", *China Daily*, 26 maggio 1998; Erik Eckholm, "China Admits Ecological Sins Played Role in Flood Disaster", *New York Times*, 26 agosto 1998; Erik Eckholm, "Stunned by Floods, China Hastens Logging Curbs", *New York Times*, 27 settembre 1998; Chris Brown, Patrick B. Durst, Thomas Enters, *Forests Out of Bounds: Impacts and Effectiveness of Logging Bans in Natural Forests in Asia-Pacific* (Bangkok, Thailand: FAO Regional Office for Asia Pacific, 2001); John Aglionby, "Philippines Bans Logging After Fatal Floods", *Guardian* (London), 6 dicembre 2004.
50. Geoffrey Lean, "A Disaster to Take Everyone's Breath Away", *The Independent* (London), 24 luglio 2006; Daniel Nepstad, "Climate Change and the Forest", *Tomorrow's Amazonia: Using and Abusing the World's Last Great Forests* (Washington, DC, The American Prospect, settembre 2007); S.S. Saatchi et al., "Distribution of Aboveground Live Biomass in the Amazon Rainforest", *Global Change Biology*, vol. 13, 4 (aprile 2007), pp. 816-37.
51. Vattenfall, op. cit. nota 47, p. 16; UNEP Billion Tree Campaign, "Fast Facts", pubblicato su [www.unep.org/billiontreecampaign](http://www.unep.org/billiontreecampaign), visionato il 10 ottobre 2007; Robert N. Stavins,

- Kenneth R. Richards, *The Cost of U.S. Forest Based Carbon Sequestration* (Arlington, VA: Pew Center on Global Climate Change, gennaio 2005), p. 10.
- 52.** Vattenfall, op. cit. nota 47, pp. 1, 16; “Benchmark Currency Rates”, pubblicato su [www.bloomber.com/markets](http://www.bloomber.com/markets), visionato il 17 ottobre 2007.
- 53.** UNEP Billion Tree Campaign, pubblicato su [www.unep.org/billiontreecampaign](http://www.unep.org/billiontreecampaign), visionato il 12 ottobre 2007; “Mexico Celebrates Día del Arbol with a Commitment to Plant 250 Million Trees”, pubblicato su [www.unep.org/billiontreecampaign/CampaignNews](http://www.unep.org/billiontreecampaign/CampaignNews), visionato il 26 ottobre 2007; Daniel Wallis, “UN Wins Pledges to Plant a Billion Trees”, *Reuters*, 22 maggio 2007; “Global Tree Planting Campaign Puts Down a Billion Roots on International Biological Diversity Day”, pubblicato su [www.unep.org/Documents.Multilingual](http://www.unep.org/Documents.Multilingual), visionato il 12 ottobre 2007.
- 54.** “The State of Parana in Brazil Undertakes a Major Reforestation Project”, pubblicato su [www.unep.org/billiontreecampaign/CampaignNews](http://www.unep.org/billiontreecampaign/CampaignNews), visionato il 12 ottobre 2007; “31 July – The Greenest Day of the Calendar in India and a Tree Planting Record by 600.000 Volunteers”, pubblicato su [www.unep.org/Documents.Multilingual](http://www.unep.org/Documents.Multilingual), visionato il 12 ottobre 2007; Vattenfall, op. cit. nota 47, p. 16.
- 55.** Ministry for the Environment, *New Zealand’s Climate Change Solutions: An Overview* (Wellington, New Zealand: settembre 2007), p. 19; U.N. Population Division, op. cit. nota 43.
- 56.** Chang-Ran Kim, “Tokyo Turns to Rooftop Gardens to Beat the Heat”, *Reuters*, 7 agosto 2002; Washington, D.C., pubblicato su [www.caseytrees.org](http://www.caseytrees.org), visionato il 12 ottobre 2007.
- 57.** Kathy Wolf, “Urban Forest Values: Economic Benefits of Trees in Cities”, (Seattle, WA, Center for Urban Horticulture, novembre 1998); Greg McPherson et al., “Municipal Forest Benefits and Costs in Five US Cities”, *Journal of Forestry*, dicembre 2005, pp. 411-16.
- 58.** Patrick Barta, “Jatropha Plant Gains Steam in Global Race for Biofuels”, *Wall Street Journal*, 24 agosto 2007.
- 59.** Rattan Lal, “Soil Carbon Sequestration Impacts on Global Climate Change and Food Security”, *Science*, vol. 304 (11 giugno 2004), pp. 1623-27.
- 60.** Lester R. Brown, Edward C. Wolf, “Reclaiming the Future”, in Lester R. Brown et al., *State of the World 1988* (W.W. Norton & Company, New York, 1988), p. 174; FAO, *Fuelwood Supplies in the Developing Countries*, Forestry Paper 42 (Rome, 1983); Vattenfall, op. cit. nota 47, p. 16; UNEP, *Status of Desertification and Implementation of the United Nations Plan of Action to Combat Desertification* (Nairobi, 1991), pp. 73-92; Balmford et al., op. cit. nota 35; World Parks Congress, *Recommendations of the Vth IUCN World Parks Congress* (Durban, South Africa, 2003), pp. 17-19; World Parks Congress, “The Durban Accord”, pubblicato su [www.iucn.org/themes/wcpa](http://www.iucn.org/themes/wcpa), visionato il 19 ottobre 2007.
- 61.** Se-Kyung Chong, “Anmyeon-do Recreation Forest: A Millennium of Management”, in Durst et al., op. cit. nota 18.
- 62.** Brown and Wolf, op. cit. nota 60, p. 175.
- 63.** Runsheng Yin et al., “China’s Ecological Rehabilitation: The Unprecedented Efforts and Dramatic Impacts of Reforestation and Slope Protection in Western China”, in Woodrow Wilson International Center for Scholars, China Environment Forum, China Environment Series, Issue 7 (Washington, DC, 2005), pp. 17-32.
- 64.** Brown and Wolf, op. cit. nota 60, p. 176.
- 65.** Vattenfall, op. cit. nota 47, p. 16; Amy Belasco, *The Cost of Iraq, Afghanistan and Other Global War on Terror Operations Since 9/11* (Washington, DC, Congressional Research Service, 16 luglio 2007).
- 66.** Brown, Wolf, op. cit. nota 60, pp. 173-74.
- 67.** *Ibid.*, p. 174.
- 68.** *Ibid.*
- 69.** *Ibid.*
- 70.** UNEP, op. cit. nota 60; U.S. Department of Commerce, Bureau of Economic Analysis, “Table C.1. GDP and Other Major NIPA Aggregates”, in *Survey of Current Business*, settembre 2005, p. D-48.
- 71.** H.E. Dregne, Nan-Ting Chou, “Global Desertification Dimensions and Costs”, in *Degradation and Restoration of Arid Lands* (Lubbock, TX: Texas Tech. University, 1992); UNEP, op. cit. nota 60.
- 72.** Balmford et al., op. cit. nota 35.
- 73.** World Parks Congress, *Recommendations of the Vth IUCN World Parks Congress*, op. cit. nota 60; World Parks Congress, “The Durban Accord”, op. cit. nota 60.
- 74.** FAO, *FAOSTAT Statistics Database*, pubblicato su [apps.fao.org](http://apps.fao.org).
- 75.** Tom Gardner-Outlaw, Robert Engelman, *Sustaining Water. Easing Scarcity: A Second Update* (Washington, DC, Population Action International, 1997); Sandra Postel, *Last Oasis*

(W.W. Norton & Company, New York, 1997), pp. 150-51.

**76.** Sandra Postel, *Pillar of Sand* (W.W. Norton & Company, New York, 1999), pp. 230-35; Postel, op. cit. nota 75, pp. 167-68.

## CAPITOLO 9. NUTRIRE BENE OTTO MILIARDI DI PERSONE

**1.** “Last Food Shipment Signals End of 25-Year WFP Aid to China”, *Asian Economic News*, 8 aprile 2005; U.S. Department of Agriculture (USDA), *Production, Supply and Distribution*, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 10 agosto 2007; U.N. World Food Programme, “China Emerges as World’s Third Largest Food Aid Donor”, press release (Rome, 20 luglio 2006).

**2.** Xie Wei and Christian DeBresson, *China’s Progressive Market Reform and Opening* (Geneva, U.N. Industrial Development Organization, 2001); USDA, op. cit. nota 1.

**3.** U.N. Food and Agriculture Organization (FAO), *The State of Food Insecurity in the World 2006* (Rome, 2006), p. 8; Madelene Pearson, Danielle Rossingh, “Wheat Price Rises to Record \$9 a Bushel on Global Crop Concerns”, *Bloomberg*, 12 settembre 2007.

**4.** Thomas R. Sinclair, “Limits to Crop Yield”, The 1999 National Academy Colloquium, Plants and Populations: Is There Time? Irvine, CA, 5-6 dicembre 1998; Patrick Heffer, *Short-Term Prospects for World Agriculture and Fertilizer Demand 2005/06-2007/08* (Buenos Aires, Argentina: International Fertilizer Industry Association, gennaio 2007); USDA, in Worldwatch Institute, *Signposts 2001*, CD-Rom (Washington, DC, 2001); USDA, op. cit. nota 1.

**5.** U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, at [esa.un.org/unpp](http://esa.un.org/unpp), 2007.

**6.** USDA, op. cit. nota 1.

**7.** *Ibid.*; Worldwatch Institute, op. cit. nota 4.

**8.** USDA, National Agricultural Statistics Service (NASS), *Crop Production 2006 Summary* (Washington, DC, gennaio 2007); USDA, NASS, *QuickStats*, pubblicato su [www.nass.usda.gov/Data\\_and\\_Statistics/QuickStats](http://www.nass.usda.gov/Data_and_Statistics/QuickStats), visionato il 28 settembre 2007.

**9.** USDA, op. cit. nota 1; Worldwatch Institute, op. cit. nota 4.

**10.** John Wade, Adam Branson, Xiang Qing, *China Grain and Feed Annual Report 2002* (Beijing, USDA, 2002); USDA, op. cit. nota 1.

**11.** Double-cropping yields from USDA, *India Grain and Feed Annual Report 2003* (New Delhi,

2003); U.N. Population Division, op. cit. nota 5; USDA, op. cit. nota 1.

**12.** Richard Magleby, “Soil Management and Conservation”, in USDA, *Agricultural Resources and Environmental Indicators 2003* (Washington, DC, febbraio 2003), 4.2, p. 14.

**13.** USDA, op. cit. nota 1; Randall D. Schnepf et al., *Agriculture in Brazil and Argentina* (Washington, DC, USDA Economic Research Service (ERS), 2001), pp. 8-10.

**14.** FAO, *ResourceSTAT*, database elettronico, pubblicato su [faostat.fao.org/site/405/default.aspx](http://faostat.fao.org/site/405/default.aspx), 30; USDA, op. cit. nota 1.

**15.** Pedro Sanchez, “The Climate Change – Soil Fertility – Food Security Nexus”, (Bonn: International Food Policy Research Institute, 4 settembre 2001).

**16.** Edward Cody, “Chinese Lawmakers Approve Measure to Protect Private Property Rights”, *Washington Post*, 17 marzo 2007; Jim Yardley, “China Nears Passage of Landmark Property Law”, *New York Times*, 9 marzo 2007; Zhu Keliang and Roy Prosterman, “From Land Rights to Economic Boom”, *China Business Review*, luglio-agosto 2006.

**17.** Worldwatch Institute, op. cit. nota 4; USDA, op. cit. nota 1; FAO, *Crops and Drops* (Rome: 2002), p. 17.

**18.** FAO, *Yield Response to Water* (Rome: 1979); I.A. Shiklomanov, “Assessment of Water Resources and Water Availability in the World”, *Report for the Comprehensive Assessment of the Freshwater Resources of the World* (St. Petersburg, Russia, State Hydrological Institute, 1998), Peter H. Gleick, *The World’s Water 2000-2001*, Island Press, Washington, DC, 2000, p. 53.

**19.** Sandra Postel, Amy Vickers, “Boosting Water Productivity”, in Worldwatch Institute, *State of the World 2004* (Edizioni Ambiente, Milano, 2004).

**20.** Wang Shucheng, conversazione personale con l’autore, Beijing, maggio 2004.

**21.** FAO, op. cit. nota 17, p. 17; Alain Vidal, Aline Comeau, Hervé Plusquellec, *Case Studies on Water Conservation in the Mediterranean Region* (Rome: FAO, 2001), p. vii.

**22.** FAO, op. cit. nota 17, p. 17; Vidal, Comeau, Plusquellec, op. cit. nota 21, p. vii.

**23.** Postel, Vickers, op. cit. nota 19, p. 53.

**24.** Sandra Postel et al., “Drip Irrigation for Small Farmers: A New Initiative to Alleviate Hunger and Poverty”, *Water International*, marzo 2001, pp. 3-13.

**25.** *Ibid.*

**26.** “Punjab’s Depleting Groundwater Stagnates Agricultural Growth”, *Down to Earth*, vol. 16, 5 (30 luglio 2007).

27. R. Maria Saleth, Ariel Dinar, *Water Challenge and Institutional Response: A Cross-Country Perspective* (Washington, DC, World Bank, 1999), p. 26.
28. *Ibid.*, p. 6.
29. World Bank and Swiss Agency for Development and Cooperation, Summary Report, Middle East and North Africa Regional Water Initiative Workshop on Sustainable Groundwater Management, Sana'a, Yemen, 25-28 giugno 2000, p. 19.
30. Peter Wonacott, "To Save Water, China Lifts Price", *Wall Street Journal*, 14 giugno 2004.
31. USDA, op. cit. nota 1; USDA, Foreign Agricultural Service (FAS), "Egyptian Rice Acreage Continues to Exceed Government-Designated Limitations", Foreign Countries' Policies and Programs, *FASonline*, visionato il 28 settembre 2007; "Rice Cropped for Water", *China Daily*, 9 gennaio 2002.
32. U.N. Population Division, op. cit. nota 5; USDA, op. cit. nota 1; FAO, op. cit. nota 18.
33. USDA, op. cit. nota 1.
34. FAO, *FAOSTAT*, pubblicato su faostat.fao.org, 30 giugno 2007; Worldwatch Institute, op. cit. nota 4.
35. Robert V. Bishop et al., *The World Poultry Market-Government Intervention and Multilateral Policy Reform* (Washington, DC, USDA, 1990); Allen Baker, Feed Situation and Outlook staff, ERS, USDA, conversazione personale con l'autore, 27 aprile 1992; Leland Southard, Livestock and Poultry Situation and Outlook staff, ERS, USDA, conversazione personale con l'autore, 27 aprile 1992; Rosamond L. Naylor et al., "Effect of Aquaculture on World Fish Supplies", *Nature*, vol. 405 (29 giugno 2000), pp. 1017-24.
36. USDA, op. cit. nota 1.
37. FAO, *FishStat Plus*, pubblicato su www.fao.org, marzo 2007; Naylor et al., op. cit. nota 35.
38. Naylor et al., op. cit. nota 35; FAO, op. cit. nota 37; Taija-Riitta Tuominen, Maren Esmark, *Food for Thought: The Use of Marine Resources in Fish Feed* (Oslo: WWF-Norway, 2003).
39. FAO, op. cit. nota 37.
40. S. F. Li, "Aquaculture Research and Its Relation to Development in China", in *World Fish Center, Agricultural Development and the Opportunities for Aquatic Resources Research in China* (Penang, Malaysia: 2001), p. 26; FAO, op. cit. nota 37.
41. FAO, op. cit. nota 37; FAO, op. cit. nota 34.
42. Naylor et al., op. cit. nota 35; W.C. Nandeesha et al., "Breeding of Carp with Oviprim", in Indian Branch, Asian Fisheries Society, *India, Special Publication No. 4* (Mangalore, India, 1990), p. 1.
43. "Mekong Delta to Become Biggest Aquatic Producer in Vietnam", *Vietnam News Agency*, 3 agosto 2004; "The Mekong Delta Goes Ahead with the WTO", *Vietnam Economic News Online*, 8 giugno 2007; FAO, op. cit. nota 37.
44. Naylor et al., op. cit. nota 35; USDA, NASS, *Catfish Production* (Washington, DC, febbraio 2003), p. 5.
45. USDA, op. cit. nota 1; Suzi Fraser Dominy, "Soy's Growing Importance", *World Grain*, 13 aprile 2004.
46. USDA, FAS, *Oilseeds: World Markets and Trade* (Washington, DC, agosto 2007).
47. USDA, op. cit. nota 1.
48. *Ibid.*
49. Worldwatch Institute, op. cit. nota 4; USDA, op. cit. nota 1.
50. FAO, op. cit. nota 34.
51. S.C. Dhall, Meena Dhall, "Dairy Industry - India's Strength in Its Livestock", *Business Line, Financial Daily*, 7 novembre 1997; Surinder Sud, "India Is Now World's Largest Milk Producer", *India Perspectives*, maggio 1999, pp. 25-26; A. Banerjee, "Dairying Systems in India", *World Animal Review*, vol. 79, 2 (1994).
52. USDA, op. cit. nota 1; U.N. Population Division, op. cit. nota 5.
53. Dhall, Dhall, op. cit. nota 51; Banerjee, op. cit. nota 51; FAO, op. cit. nota 34.
54. Wade, Branson, Xiang, op. cit. nota 10; Gao Tengyun, "Treatment and Utilization of Crop Straw and Stover in China", *Livestock Research for Rural Development*, febbraio 2000.
55. USDA, ERS, "China's Beef Economy: Production, Marketing, Consumption, and Foreign Trade", *International Agriculture and Trade Reports: China* (Washington, DC, luglio 1998), p. 28.
56. FAO, op. cit. nota 34; U.N. Population Division, op. cit. nota 5.
57. International Monetary Fund (IMF), *World Economic Outlook Database*, pubblicato su www.imf.org/external/pubs/ft/weo, 11 aprile 2007; U.N. Population Division, op. cit. nota 5; FAO, op. cit. nota 34.
58. Micronutrient Initiative, *Double Fortification of Salt: A Technical Breakthrough to Alleviate Iron and Iodine Deficiency Disorders Around the World* (Ottawa, Canada: 2005); Alan Berg, conversazione personale con l'autore, 13 marzo 2007.
59. *Ibid.*
60. USDA, op. cit. nota 1; U.N. Population Division, op. cit. nota 5.

61. USDA, op. cit. nota 1; U.N. Population Division, op. cit. nota 5; FAO, op. cit. nota 34.
62. Organisation for Economic Co-operation and Development, "Total Expenditure on Health Per Capita, US\$ PPP", table, *OECD Health Data 2007-Frequently Requested Data*, pubblicato su [www.oecd.org](http://www.oecd.org), luglio 2007; FAO, op. cit. nota 34.
63. Gidon Eshel, Pamela A. Martin, "Diet, Energy, and Global Warming", *Earth Interactions*, vol. 10, 9 (aprile 2006), pp. 1-17; USDA, op. cit. nota 1; U.N. Population Division, op. cit. nota 5.
64. Pearson and Rossingh, op. cit. nota 3; Chicago Board of Trade, "Market Commentaries", pubblicato su [www.cbot.com](http://www.cbot.com); IMF, *International Financial Statistics* (Washington, DC, 2007); Missy Ryan, "Commodity Boom Eats Into Aid for World's Hungry", *Reuters*, 5 settembre 2007.
65. USDA, ERS, Natural Resources and Environment Division, *Agricultural Resources and Environmental Indicators, 1996-1997*, Agricultural Handbook 712 (Washington, DC, 1997).

## CAPITOLO 10. PROGETTARE CITTÀ A MISURA D'UOMO

1. U.N. Population Division, *World Urbanization Prospects: The 2005 Revision Population Database*, database elettronico, pubblicato su [esa.un.org/unup](http://esa.un.org/unup), 2006.
2. Urban population in 1900 from Mario Polèse, "Urbanization and Development", *DevelopmentExpress*, 4, 1997; U.N. Population Fund (UNFPA), *State of World Population 2007* (New York, 2007), p. 1.
3. Molly O'Meara, *Reinventing Cities for People and the Planet*, Worldwatch Paper 147 (Washington, DC, Worldwatch Institute, giugno 1999), pp. 14-15; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, database elettronico, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007; "The 30 Largest Urban Agglomerations Ranked By Population Size", Table A.11, in U.N. Population Division, *World Urbanization Prospects: The 2005 Revision* (New York: ottobre 2006).
4. Christopher Flavin, "Hearing on Asia's Environmental Challenges: Testimony of Christopher Flavin", Committee on International Relations, U.S. House of Representatives, Washington, DC, 22 settembre 2004; Subir Bhaumik, "Air Pollution Suffocates Calcutta", *BBC News*, 3 maggio 2007; David Schrank, Tim Lomax, *2005 Urban Mobility Study* (College Station, TX: Texas Transportation Institute, maggio 2005).
5. Francesca Lyman, "Twelve Gates to the City: A Dozen Ways to Build Strong, Livable, and Sustainable Cities", *Words and Pictures Magazine*, Issue 5 (2007); Lisa Jones, "A Tale of Two mayors: The Improbable Story of How Bogota, Colombia, Became Somewhere You Might Actually Want To Live", *Grist Magazine*, 4 aprile 2002.
6. Claudia Nanninga, "Energy Efficient Transport – A Solution for China", *Voices of Grassroots*, novembre 2004; Enrique Peñalosa, "Parks for Livable Cities: Lessons from a Radical mayor", keynota address at the Urban Parks Institute's Great Parks/Great Cities Conference, Chicago, 30 luglio 2001; Susan Ives, "The Politics of Happiness", *Trust for Public Land*, 9 agosto 2002; Jones, op. cit. nota 5.
7. Peñalosa, op. cit. nota 6.
8. Jones, op. cit. nota 5; O'Meara, op. cit. nota 3, p. 47.
9. O'Meara, op. cit. nota 3, p. 47; Walter Hook, "Bus Rapid Transit: The Unfolding Story", in Worldwatch Institute, *State of the World 2007* (Edizioni Ambiente, Milano, 2007); U.N. Population Division, op. cit. nota 1.
10. Los Angeles from Sandra Postel, *Last Oasis*, rev. ed. (New York: W. W. Norton & Company, 1997), p. 20; Mexico City from Joel Simon, *Endangered Mexico* (San Francisco: Sierra Club Books, 1997); Chinese Ministry of Water Resources, *Country Report of the People's Republic of China* (Marseilles, France: World Water Council, 2003), pp. 60-61.
11. U.S. Department of Agriculture, Foreign Agricultural Service, *Grain: World Markets and Trade and Oilseeds: World Markets and Trade* (Washington, DC).
12. Richard Register, "Losing the World, One Environmental Victory pubblicato su a Time – And a Way to Solve That Problem", (Oakland, CA: Ecocity Builders, Inc., 31 agosto 2005); Richard Register, *Ecocities: Rebuilding Cities in Balance with Nature: Revised Edition* (Gabriola Island, BC: New Society Publishers, 2006).
13. Register, "Losing the World, One Environmental Victory at a Time", op. cit. nota 12.
14. Ibid.; U.S. Census Bureau, *Population Finder*, pubblicato su [factfinder.census.gov](http://factfinder.census.gov), visionato il 16 agosto 2007.
15. Register, "Losing the World, One Environmental Victory pubblicato su a Time", op. cit. nota 12.

16. Confronta il capitolo 12 per approfondimenti sull'economia dell'energia.
17. Jay Walljasper, "Unjamming the Future", *Ode*, ottobre 2005, pp. 36-41; Bus Rapid Transit Policy Center, *Transport Innovator* (newsletter), vol. 3, 4 (luglio/agosto 2007); BRT Information Clearinghouse, "Existing BRT Programs", pubblicato su [path.berkeley.edu/informationclearinghouse/brt/existing.html](http://path.berkeley.edu/informationclearinghouse/brt/existing.html), visionato il 27 settembre 2007; Yingling Liu, "Bus Rapid Transit: A Step Toward Fairness in China's Urban Transportation", *China Watch* (Washington, DC, Worldwatch Institute, 9 marzo 2006).
18. Walljasper, op. cit. nota 17; Bus Rapid Transit Policy Center, op. cit. nota 17; BRT Information Clearinghouse, op. cit. nota 17.
19. Molly O'Meara Sheehan, "Making Better Transportation Choices", in Lester R. Brown et al., *State of the World 2001* (Edizioni Ambiente, Milano, 2001).
20. William D. Eggers, Peter Samuel, and Rune Munk, *Combating Gridlock: How Pricing Road Use Can Ease Congestion* (Deloitte, New York, novembre 2003); Tom Miles, "London Drivers to Pay UK's First Congestion Tax", *Reuters*, 28 febbraio 2002; Randy Kennedy, "The Day the Traffic Disappeared", *New York Times Magazine*, 20 aprile 2003, pp. 42-45; James Savage, "Congestion Charge Returns to Stockholm", *The Local*, 1 agosto 2007; [www.bloomberg.com/invest/calculators/currency.html](http://www.bloomberg.com/invest/calculators/currency.html).
21. Transport for London, *Central London Congestion Charging: Impacts Monitoring – Second Annual Report* (London, 2004), pp. 2, 39; Transport for London, *Central London Congestion Charging: Impacts Monitoring – Fifth Annual Report* (London: luglio 2007), pp. 21, 22, 47.
22. Transport for London, *Fifth Annual Report*, op. cit. nota 21, pp. 3, 7.
23. "Milan to Impose 'Pollution Charge' on Cars", *Reuters*, 23 luglio 2007; "Congestion Charging Sweeps The World – A Rash of Cities Round the Globe is Set to Travel the Same Road as London", *Guardian* (London), 15 febbraio 2004; Aaron O. Patrick, "Life in the Faster Lane: How London Car Curbs Inspired U.S. Cities", *Wall Street Journal*, 20 luglio 2007.
24. Serge Schmemmann, "I Love Paris on a Bus, a Bike, a Train and in Anything but a Car", *New York Times*, 26 luglio 2007; Katrin Bennhold, "A New French Revolution's Creed: Let Them Ride Bikes", *New York Times*, 16 luglio 2007.
25. Bennhold, op. cit. nota 24; Alexandra Topping, "Free Wheeling: Paris's New Bike System", *Washington Post*, 23 settembre 2007.
26. Schmemmann, op. cit. nota 24; La Fédération de Paris du Parti Socialiste, ed., *Ce Que Nous Avons Fait Ensemble* (Paris: Office of mayor Bertrand Delanoë, 2007), pp. 20-25.
27. John Ritter, "Narrowed Roads Gain Acceptance in Colo., Elsewhere", *USA Today*, 29 luglio 2007; John Ritter, "'Complete Streets' Program Gives More Room for Pedestrians, Cyclists", *USA Today*, 29 luglio 2007.
28. National Complete Streets Coalition, "Complete the Streets: Who We Are", pubblicato su [www.completestreets.org/whowere.html](http://www.completestreets.org/whowere.html), visionato il 16 agosto 2007; AARP, "AARP: Creating a New Health Care Paradigm", pubblicato su [www.aarp.org/about\\_aarp/new\\_paradigm.html](http://www.aarp.org/about_aarp/new_paradigm.html), visionato il 16 agosto 2007; Ritter, "Narrowed Roads", op. cit. nota 27.
29. Ritter, "Narrowed Roads", op. cit. nota 27; Ritter, "'Complete Streets' Program", op. cit. nota 27.
30. Stime dell'autore.
31. O'Meara, op. cit. nota 3, p. 45.
32. United Nations, *Yearbook of Industrial Statistics* (New York); *Industrial Commodity Statistics Yearbook* (New York); "World Players in the Bicycle Market", table in John Crenshaw, *Bicycle Retailer and Industry News*, e-mail a Janet Larsen, Earth Policy Institute, 8 ottobre 2007; Song Mo, Wen Chihua, "Turning Full Cycle", *China Daily*, 28 settembre 2006; Ward's Automotive Group, *Ward's World Motor Vehicle Data 2006* (Southfield, MI, 2006), p. 16.
33. Matthew Hickman, Brian A. Reaves, *Local Police Departments, 2003* (Washington, DC, U.S. Department of Justice, Bureau of Justice Statistics, maggio 2006), pp. 3, 13.
34. Glenn Collins, "Old Form of Delivery Thrives in New World of E-Commerce", *New York Times*, 24 dicembre 1999.
35. O'Meara, op. cit. nota 3, pp. 47-48.
36. Ibid.; Barbara McCann, "Complete the Streets!" *Planning Magazine: Special Transportation Issue*, maggio 2005.
37. Walljasper, op. cit. nota 17; Interface for Cycling Expertise (I-ce), *Locomotives: Annual Report 2006* (Utrecht, The Netherlands, dicembre 2006), pp. 3-4; I-ce, "Locomotives", pubblicato su [www.cycling.nl/frameset.htm](http://www.cycling.nl/frameset.htm), visionato il 21 agosto 2007.
38. O'Meara, op. cit. nota 3, pp. 47-48.
39. Sunita Narain, "The Flush Toilet is Ecologically Mindless", *Down to Earth*, 28 febbraio 2002, pp. 28-32; dead zones from U.N. Environment Programme, "Further Rise in

Number of Marine 'Dead Zones', (Nairobi, 19 ottobre 2006).

40. Narain, op. cit. nota 39.

41. Ibid.

42. World Health Organization, *World Health Report 2007* (Geneva: 2007), p. 4; U.N. Food and Agriculture Organization (FAO), *The State of Food Insecurity in the World 2005* (Rome: 2005).

43. U.S. Environmental Protection Agency (EPA), "Water Efficiency Technology Factsheet – Composting Toilets", (Washington, DC, settembre 1999); Jack Kieffer, Appalachia – Science in the Public Interest, *Humanure: Preparation of Compost from the Toilet for Use in the Garden* (Mount Vernon, KY: ASPI Publications, 1998).

44. EPA, op. cit. nota 43; EPA, "Wastewater Virtual Tradeshow Technologies", pubblicato su [www.epa.gov/region1/assistance/ceitts/wastewater/techs.html](http://www.epa.gov/region1/assistance/ceitts/wastewater/techs.html), 10 settembre 2007.

45. EcoSanRes (ESR), Stockholm Environment Institute (SEI), *EcoSanRes Phase 2 Project Document: 2006-2010* (Stockholm: 22 febbraio 2006), p. 14; ESR, "Conferences", pubblicato su [www.ecosanres.org/newspublications.htm](http://www.ecosanres.org/newspublications.htm), 21 settembre 2007; ESR, "Ecological Sanitation Research", pubblicato su [www.ecosanres.org](http://www.ecosanres.org), 21 settembre 2007.

46. ESR, "China-Sweden Erdos Eco-Town Project, Dong Sheng, Inner Mongolia, China", pubblicato su [www.ecosanres.org/asia.htm](http://www.ecosanres.org/asia.htm), 21 settembre 2007; ESR, "Sweden-China Erdos Eco-Town Project, Dongsheng, Inner Mongolia", Fact Sheet 11 (Stockholm: maggio 2007); *Innovative Practices to Enhance Implementation of WSSD Targets-Swedish Initiative for Ecological Sanitation, Water and Sanitation*, Background Paper 20, 8th Special Session of the Governing Council / Global Ministerial Environment Forum, Jeju, South Korea, 29-31 marzo 2004; U.N. Development Programme, *Human Development Report 2006* (New York: 2006), p. 33.

47. *Innovative Practices*, op. cit. nota 46; ESR and SEI, op. cit. nota 45.

48. Tony Sitathan, "Bridge Over Troubled Waters", *Asia Times*, 23 agosto 2002; "Singapore Opens Fourth Recycling Plant to Turn Sewage into Water", *Associated Press*, 12 luglio 2005.

49. Peter H. Gleick, *The World's Water 2004-2005: The Biennial Report on Freshwater Resources*, Island Press, Washington, DC, 2004, p. 149.

50. Ibid.

51. "Farming in Urban Areas Can Boost Food Security", *FAO Newsroom*, 3 giugno 2005.

52. Ibid.

53. Jac Smit, "Urban Agriculture's Contribution to Sustainable Urbanisation", *Urban Agriculture*, agosto 2002, p. 13; Hubert de Bon, "Dry and Aquatic Peri-urban and Urban Horticulture in Hanoi, Vietnam", in René van Veenhuizen, ed., *Cities Farming for the Future – Urban Agriculture for Green and Productive Cities* (Philippines: ETC-Urban Agriculture, 2006), pp. 338-39.

54. Smit, op. cit. nota 53, p. 13; Nitai Kundu et al., "Planning for Aquatic Production in East Kolkata Wetlands", in van Veenhuizen, op. cit. nota 53, pp. 408-09; Stuart Bunting et al., "Urban Aquatic Production", in van Veenhuizen, op. cit. nota 53, p. 386.

55. Smit, op. cit. nota 53, p. 12.

56. "Gardening for the Poor", *FAO Newsroom*, 2004; P. Bradley, C. Marulanda, "A Study on Microgardens That Help Reduce Global Poverty and Hunger", *Acta Horticulturae (ISHS)*, vol. 742 (2007), pp. 115-23.

57. Katherine H. Brown, Anne Carter, *Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe* (Venice, CA: Community Food Security Coalition, ottobre 2003), p. 10; U.N. Population Division, *World Urbanization Prospects*, op. cit. nota 3.

58. Brown and Carter, op. cit. nota 57, p. 7.

59. Ibid.

60. U.S. Department of Agriculture, Agricultural Monitoring Service, "Farmers Market Growth", pubblicato su [www.ams.usda.gov/farmersmarkets/FarmersMarketGrowth.htm](http://www.ams.usda.gov/farmersmarkets/FarmersMarketGrowth.htm), visionato il 17 agosto 2007.

61. U.N. Population Division, *World Population Prospects*, op. cit. nota 3; U.N. Population Division, *World Urbanization Prospects*, op. cit. nota 3, pp. 1-5.

62. Hari Srinivas, "Defining Squatter Settlements", Global Development Research Center Web site, [www.gdrc.org/uem/define-squatter.html](http://www.gdrc.org/uem/define-squatter.html), visionato il 9 agosto 2005.

63. Ibid.

64. O'Meara, op. cit. nota 3, p. 49.

65. Rasna Warah, *The Challenge of Slums: Global Report on Human Settlements 2003* (U.N. Human Settlements Programme, New York, 2003).

66. Srinivas, op. cit. nota 62.

67. E. O. Wilson, *Biofilia* (Mondadori, Milano, 1985); S.R. Kellert, E.O. Wilson, eds., *The Biophilia Hypothesis*, Island Press, Washington, DC, 1993.

68. Theodore Roszak, Mary Gomes, Allen Kanner, eds., *Restoring the Earth, Healing the Mind* (Sierra Club Books, San Francisco, 1995).

69. American Public Transportation Administration, "Unlinked Passenger Trips By Mode, Millions", in *2007 Public Transportation Factbook* (Washington, DC, 2007), p. 12.
70. Ding Guangwei, Li Shishun, "Analysis of Impetuses to Change of Agricultural Land Resources in China", *Bulletin of the Chinese Academy of Sciences*, vol. 13, 1 (1999).
71. Molly O'Meara Sheehan, *City Limits: Putting the Breaks on Sprawl*, Worldwatch Paper 156 (Worldwatch Institute, Washington, DC, giugno 2001), p. 11; Schrank, Lomax, op. cit. nota 4.
72. Jim Motavalli, "The High Cost of Free Parking", *E: The Environmental Magazine*, marzo-aprile 2005; Donald Shoup, *The High Cost of Free Parking* (Chicago: American Planning Association Planners Press, 2005), p. 591; Daniel B. Klein, "Free Parking Versus Free Markets", *The Independent Review*, vol. XI, 2 (Fall 2006), pp. 289-97.
73. O'Meara, op. cit. nota 3, p. 49; Donald C. Shoup, "Congress Okays Cash Out", *Access*, Fall 1998, pp. 2-8.
74. "Paris To Cut City Centre Traffic", *BBC News*, 15 marzo 2005; J. H. Crawford, "Carfree Places", pubblicato su [www.carfree.com](http://www.carfree.com), visionato il 17 agosto 2007; also J. H. Crawford, *Carfree Cities* (International Books, Utrecht, Netherlands, luglio 2000).
75. Lyndsey Layton, "Mass Transit Popularity Surges in U.S.", *Washington Post*, 30 aprile 2000; Bruce Younkin, Penn State University, State College, PA, conversazione privata con Janet Larsen, Earth Policy Institute, 4 dicembre 2000.

## CAPITOLO 11. MIGLIORARE L'EFFICIENZA ENERGETICA

1. G. Marland et al., "Global, Regional, and National CO<sub>2</sub> Emissions", in *Trends: A Compendium of Data on Global Change* (Oak Ridge, TN, Carbon Dioxide Information and Analysis Center, Oak Ridge National Laboratory, 2007); R.A. Houghton and J.L. Hackler, "Carbon Flux to the atmosphere from Land-Use Changes", in *Trends: A Compendium of Data on Global Change* (Oak Ridge, TN: Carbon Dioxide Information and Analysis Center, Oak Ridge National Laboratory, 2002), in J. Hansen et al., "Dangerous Human-Made Interference with Climate: A GISS ModelE Study", *Atmospheric Chemistry and Physics*, vol. 7 (2007), pp. 2287-312; Pieter Tans, "Trends in pubblicato sumospheric Carbon Dioxide - Mauna Loa", NOAA/ESRL, pubblicato su [www.esrl.noaa.gov/gmd/ccgg/trends](http://www.esrl.noaa.gov/gmd/ccgg/trends), visionato il 16 ottobre 2007.
2. International Energy Agency (IEA), *World Energy Outlook 2006* (Paris: 2006), p. 493; U.S. Department of Energy (DOE), Energy Information Administration (EIA), *Regional Energy Profile - U.S. Household Electricity Report* (Washington, DC, luglio 2005).
3. IEA, op. cit. nota 2; coal reduction from DOE, EIA, *International Energy Annual 2005* (Washington, DC, giugno-ottobre 2007).
4. Bill Moore, "California Bans Future Purchase of Coal-Generated Power", *EV World*, 28 giugno 2007; Rebecca Smith, "Coal's Doubters Block New Wave of Power Plants", *Wall Street Journal*, 25 luglio 2007; California Energy Commission, "California's Major Sources of Energy", pubblicato su [www.energy.ca.gov](http://www.energy.ca.gov), 10 ottobre 2007; Matthew L. Wald, "Citing Global Warming, Kansas Denies Plant Permit", *New York Times*, 20 ottobre 2007.
5. Steven Mufson, "Coal Rush Reverses, Power Firms Follow Plans for New Plants Stalled by Growing Opposition", *Washington Post*, 4 settembre 2007; James Hansen, "Why We Can't Wait", *The Nation*, 7 maggio 2007; Martin Griffith, "Reid Opposes New Coal-fired Power Plants Worldwide", *Las Vegas Sun*, 18 agosto 2007.
6. IEA, *Light's Labour's Lost: Policies for Energy-efficient Lighting* (Paris, 2006), pp. 25, 29; Larry Kinnery, *Lighting Systems in Southwestern Homes: Problems and Opportunities*, DOE, *Building America Program through the Midwest Research Institute*, National Renewable Energy Laboratory Division (Boulder, CO, Southwest Energy Efficiency Project, giugno 2005), pp. 4-5.
7. U.S. Environmental Protection Agency (EPA) and DOE, "Energy Star Change a Light, Change the World: 2006 Campaign Facts and Assumptions Sheet", fact sheet (Washington, DC, 23 aprile 2007).
8. Ministry for the Environment and Natural Resources, "World First! Australia Slashes Greenhouse Gases from Inefficient Lighting", (Canberra, Australia, 20 febbraio 2007); Rob Gillies, "Canada Announces Greenhouse Gas Targets", *Associated Press*, 25 aprile 2007.
9. "Alliance Calls for Only Energy-Efficient Lighting in U.S. Market By 2016, Joins Coalition Dedicated to Achieving Goal", (Washington, DC, Alliance to Save Energy, 14 marzo 2007).
10. Earth Policy Institute, ottobre 2007.
11. Ian Johnston, "Two Years to Change EU Light Bulbs", *Scotsman* (U.K.), 10 marzo 2007; Matt Prescott, "Light Bulbs: Not Such a Bright Idea", *BBC News*, 3 febbraio 2006; U.K. Ban the Bulb campaign pubblicato su

www.banthebulb.org; James Kilner, "Moscow Tells Residents to Change Their Light Bulbs", *Reuters*, 28 febbraio 2007.

12. IEA, op. cit. nota 6, p. 375; Deborah Zabarenko, "China to Switch to Energy-Efficient Lightbulbs", *Reuters*, 3 ottobre 2007.

13. "Greenpeace Urges India to Ban the Bulb", *Reuters*, 17 aprile 2007; Greenpeace India, "Greenpeace Launches a Signature Drive Against the Inefficient Bulbs in India", (New Delhi, 19 aprile 2007).

14. Philips, "Philips Calls for Action to Replace Incandescent Bulbs with Energy Saving Lamps", press release (Brussels, 2006); European Lamp Companies Federation, "European Lamp Industry Commits to a Government Shift to Energy Efficient Lighting in the Home", (Brussels, 2007).

15. Wal-Mart, "With Consumers Facing High Utility Costs and Environmental Challenges, Retailer Offers Simple Solution", (Bentonville, AR: 29 novembre 2006); Wal-Mart as world's biggest retailer from "Sales for World's Top 250 Retailers Show 6 Percent Gain Over Previous Year", (New York: Deloitte & Touche USA LLP, 11 gennaio 2007); Hillary Osborne, "Currys to Stop Selling Incandescent Bulbs", *Guardian* (London), 13 marzo 2006.

16. DOE, "Energy Efficiency of White LEDs", (Washington, DC, 2006).

17. "Company Profile: Expanding LED Possibilities at Samsung Electromechanics", *LEDs Magazine*, aprile 2007; Anthony DePalma, "It Never Sleeps, but It's Learned to Douse the Lights", *New York Times*, 11 dicembre 2005.

18. IEA, op. cit. nota 6; IEA, op. cit. nota 2.

19. IEA, op. cit. nota 6, p. 38.

20. Steven Nadel, *The Federal Energy Policy Act of 2005 and Its Implications for Energy Efficiency Program Efforts* (Washington, DC, American Council for an Energy-Efficient Economy (ACEEE), settembre 2005).

21. Steven Nadel et al., *Leading the Way: Continued Opportunities for New State Appliance and Equipment Efficiency Standards* (Washington, DC, ACEEE, marzo 2006), p. v.

22. Jiang Lin, "One Rice-cooker, Two Cell Phones, and Three TVs: Consumer Appliances and the Energy Challenge for China", *BusinessForum China*, novembre/dicembre 2005, p. 19.

23. Jiang Lin, "Appliance Efficiency Standards and Labeling Programs in China", *Annual Review of Energy and the Environment*, vol. 27 (2002), pp. 349-67.

24. U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*,

pubblicato su esa.un.org/unpp, 2007; Greenpeace, "Your Energy Savings", pubblicato su www.greenpeace.org/ international/ campaigns/climate-change.

25. Marianne Haug et al., *Cool Appliances: Policy Strategies for Energy Efficient Homes* (Paris: IEA, 2003).

26. Ibid.; Alan K. Meier, *A Worldwide Review of Standby Power Use in Homes* (Berkeley, CA: Lawrence Berkeley National Laboratory, 2002).

27. Lloyd Harrington et al., *Standby Energy: Building a Coherent International Policy Framework – Moving to the Next Level* (Stockholm: European Council for an Energy Efficient Economy, marzo 2007).

28. Meier, op. cit. nota 26.

29. IEA, op. cit. nota 2, p. 493.

30. U.S. Green Building Council (USGBC), "Buildings and Climate Change", (Washington, DC, 2007); USGBC, "Green Building Facts", (Washington, DC, agosto 2007).

31. Edward Mazria, "It's the Architecture, Stupid! Who Really Holds the Key to the Global Thermostat? The Answer Might Surprise You", *World and I*, maggio/giugno 2003; Clinton Foundation, "Energy Efficiency Building Retrofit Program", (New York, 2007).

32. Davis Langdon, *The Cost & Benefit of Achieving Green Buildings* (Sydney, 2007).

33. USGBC, "About LEED", (Washington, DC, 2007).

34. USGBC, "Green Building Facts", op. cit. nota 30; USGBC, "LEED for New Construction" (Washington, DC, 2007).

35. USGBC, *Green Building Rating System for New Construction and Major Renovations*, Version 2.2 (Washington, DC, ottobre 2005).

36. Ibid.

37. USGBC, "Green Building Facts", op. cit. nota 30.

38. Ibid.

39. National Renewable Energy Laboratory, "The Philip Merrill Environmental Center – Highlighting High Performance" (Golden, CO, aprile 2002); "Toyota Seeks Gold for New Green Buildings", *GreenBiz.com*, 23 aprile 2003; "The Green Stamp of Approval", *Business Week*, 11 settembre 2006.

40. Nick Carey and Ilaina Jonas, "Feature – Green Buildings Need More Incentives in US", *Reuters*, 15 febbraio 2007; Taryn Holowka, "World Trade Center Going for LEED Gold", *USGBC News*, 12 settembre 2006.

41. Carey and Jonas, op. cit. nota 40.

42. Barnaby J. Feder, "Environmentally Conscious Development", *New York Times*, 25 agosto 2004.

43. Information on World Green Building Council pubblicato su [www.worldgbc.org](http://www.worldgbc.org); USGBC, op. cit. nota 33.
44. Ibid.; “Clinton Unveils \$5 Billion Green Makeover for Cities”, *Environment News Service*, 16 maggio 2007.
45. “Clinton Unveils \$5 Billion Green Makeover for Cities”, op. cit. nota 44.
46. Mazria, op. cit. nota 31; Information on the 2030 Challenge, pubblicato su [www.architecture2030.org](http://www.architecture2030.org).
47. Mazria, op. cit. nota 31.
48. U.N. Population Division, op. cit. nota 24; Ward’s Automotive Group, *World Motor Vehicle Data 2006* (Southfield, MI: 2006), p. 202.
49. U.N. Population Division, *World Urbanization Prospects: The 2005 Revision Population Database*, pubblicato su [esa.un.org/unup](http://esa.un.org/unup), 2006; Ward’s Automotive Group, op. cit. nota 48.
50. U.S. Bureau of the Census, “Most of Us Still Drive to Work Alone – Public Transportation Commuters Concentrated in a Handful of Large Cities”, press release (Washington, DC, 13 giugno 2007).
51. Ken Livingstone, “Clear Up the Congestion-Pricing Gridlock”, *New York Times*, 2 luglio 2007.
52. Sara Kugler, “NYC’s Taxi Fleet Going Green by 2012”, *Associated Press*, 22 maggio 2007; City and County of San Francisco, Office of the mayor, “Mayor Newsom Urges Taxi Commission to Approve Resolution Requiring Taxi Emissions to be Reduced by 50% Over Next Four Years”, (San Francisco, 12 giugno 2007).
53. David Schrank et al., *The 2007 Urban Mobility Report* (College Station, TX, Texas Transportation Institute, settembre 2007).
54. Hiroki Matsumoto, “The Shinkansen: Japan’s High Speed Railway”, Subcommittee on Railroads, Pipelines and Materials (Washington, DC, Committee on Transportation and Infrastructure, 19 aprile 2007).
55. Ibid.
56. Ibid.
57. Inaki Barron, “High Speed Rail: The Big Picture”, Subcommittee on Railroads, Pipelines and Materials (Washington, DC, Committee on Transportation and Infrastructure, 19 aprile 2007).
58. Ibid.
59. “A High-Speed Revolution”, *The Economist*, 5 luglio 2007.
60. John L. Mica, “Opening Statement of Rep. Shuster from Today’s Hearing on High Speed Rail”, press release (Washington, DC, Committee on Transportation and Infrastructure), 19 aprile 2007.
61. “Bullet Time”, *The Economist*, 17 maggio 2007.
62. “The People’s Vote: 100 Documents that Shaped America”, *U.S. News and World Report*, 22 settembre 2003.
63. Gerhard Metschies, “Pain at the Pump”, *Foreign Policy*, luglio/agosto 2007; Ward’s Automotive Group, op. cit. nota 48, pp. 202, 244.
64. U.S. Department of Transportation, *Summary of Fuel Economy Performance* (Washington, DC, ottobre 2006), EPA, Office of Transportation and Air Quality, “EPA Issues New Test Method for Fuel Economy Window Stickers”, regulatory announcement (Washington, DC, dicembre 2006).
65. Ernst Ulrich von Weizsäcker, Amory B. Lovins, L. Hunter Lovins, *Fattore 4 – Come ridurre l’impatto ambientale moltiplicando per 4 l’efficienza della produzione*, (Edizioni Ambiente, Milano, 1998); Friedrich Schmidt-Bleek et al., *Factor 10: Making Sustainability Accountable, Putting Resource Productivity into Praxis* (Carnoules, France: Factor 10 Club, 1998), p. 5.
66. William McDonough, Michael Braungart, *Dalla culla alla culla* (Blu edizioni, Torino, 2003); Rebecca Smith, “Beyond Recycling: Manufacturers Embrace ‘C2C’ Design”, *Wall Street Journal*, 3 marzo 2005.
67. Claude Mandil et al., *Tracking Industrial Energy Efficiency and CO<sub>2</sub> Emissions* (Paris: IEA, 2007), pp. 39, 59-61.
68. International Iron and Steel Institute (IISI), “Crude Steel Production by Process”, World Steel in Figures 2007 pubblicato su [www.worldsteel.org](http://www.worldsteel.org), visionato il 16 ottobre 2007; Mandil et al., op. cit. nota 67, pp. 95-96.
69. U.S. Geological Survey (USGS), “Iron and Steel Scrap”, in *Mineral Commodity Summaries* (Reston, VA: U.S. Department of the Interior, 2007), pp. 86-87; “Steel Recycling Rates at a Glance”, (Pittsburgh, PA, Steel Recycling Institute, 2007); Mississippi Department of Environmental Quality, “Recycling Trivia”, pubblicato su [www.deq.state.ms.us](http://www.deq.state.ms.us), visionato il 17 ottobre 2007.
70. Mandil et al., op. cit. nota 67, p. 106; IISI, op. cit. nota 75; McKinsey Global Institute, *Curbing Global Energy Demand Growth: The Energy Productivity Opportunity* (Washington, DC, maggio 2007).
71. Mandil et al., op. cit. nota 67, pp. 139-142;

- U.N. Environment Programme, *Buildings and Climate Change: Status, Challenges and Opportunities* (Paris, 2007), p. 19; Mandil et al., op. cit. nota 67.
- 72.** John Shonsey et al., *RTD Bus Transit Facility Design Guidelines and Criteria* (Denver, CO, Regional Transportation District, febbraio 2006); Stacy C. Davis, Susan W. Diegel, *Transportation Energy Data Book: Edition 26* (Oak Ridge, TN: Oak Ridge National Laboratory, DOE, 2007), p. 415; American Public Transportation Association, *The Benefits of Public Transportation – An Overview* (Washington, DC, settembre 2002).
- 73.** Mandil et al., op. cit. nota 67, p. 106.
- 74.** “New Hampshire Town Boosts Recycling with Pay-As-You-Throw”, *Environment News Service*, 21 marzo 2007; Town of Lyme Web site, pubblicato su [www.lymenh.gov](http://www.lymenh.gov).
- 75.** “New Hampshire Town Boosts Recycling with Pay-As-You-Throw”, op. cit. nota 74.
- 76.** Sue McAllister, “Commercial Recycling Centers: Turning Debris into Treasure”, *San Jose Mercury News*, 10 aprile 2007.
- 77.** Ibid.
- 78.** Junko Edahiro, Japan for Sustainability, e-mail a Janet Larsen, Earth Policy Institute, 16 ottobre 2007; Tim Burt, “VW is Set for \$500m Recycling Provision”, *Financial Times*, 12 febbraio 2001; Mark Magnier, “Disassembly Lines Hum in Japan’s New Industry”, *Los Angeles Times*, 13 maggio 2001.
- 79.** Brian Hindo, “Everything Old is New Again”, *BusinessWeek Online*, 25 settembre 2006.
- 80.** Daniel Michaels, “Boeing and Airbus Compete to Destroy What They Built”, *Wall Street Journal*, 1 giugno 2007.
- 81.** Ibid.
- 82.** “FT Report – Waste and the Environment: EU Tackles Gadget Mountain”, *Financial Times*, 18 aprile 2007; Nokia example from Jeremy Faludi, “Pop Goes the Cell Phone”, *Worldchanging*, 4 aprile 2006.
- 83.** Rick Ridgeway, Vice President, Environmental Initiatives and Special Media Projects, Patagonia, Inc., conversazione personale con l’autore, 22 agosto 2006.
- 84.** Finland in Brenda Platt and Neil Seldman, *Wasting and Recycling in the United States 2000* (Athens, GA: GrassRoots Recycling Network, 2000); Prince Edward Island Government, “PEI Bans the Can”, pubblicato su [www.gov.pe.ca](http://www.gov.pe.ca), visionato il 15 agosto 2005.
- 85.** Brenda Platt, Doug Rowe, *Reduce, Reuse, Refill!* (Washington, DC, Institute for Local Self-Reliance, 2002); David Saphire, *Case Reopened: Reassessing Refillable Bottles* (INFORM, Inc., New York, 1994).
- 86.** USGS, “Gold”, in *Mineral Commodity Summaries* (Reston, VA, U.S. Department of the Interior, 2005), pp. 72-73, 84-87; New Jersey Mining Company Reserves & Resources, “Estimated Ore Reserves”, pubblicato su [www.newjerseymining.com](http://www.newjerseymining.com), 31 dicembre 2006; Mandil et al., op. cit. nota 67, p. 115; Gavin M. Mudd, “Resource Consumption Intensity and the Sustainability of Gold Mining”, 2nd International Conference on Sustainability Engineering and Science, Auckland, New Zealand, 20-23 febbraio 2007; USGS, *Mineral Commodity Summaries*, pubblicato su [minerals.usgs.gov/products/index.html](http://minerals.usgs.gov/products/index.html), gennaio 2007; EPA, *Emission Facts: Average Annual Emissions and Fuel Consumption for Passenger Cars and Light Trucks* (Washington, DC, aprile 2000).
- 87.** Catherine Ferrier, *Bottled Water: Understanding a Social Phenomenon* (Surrey, U.K.: WWF, 2001).
- 88.** Charles Fishman, “Message in a Bottle”, *Fast Company*, Issue 117 (luglio 2007), p. 110; Paula Hunt, “Why are We Still Guzzling that Bottled Water?” *San Antonio Express*, 8 agosto 2007.
- 89.** Jennifer Gitlitz et al., *Water, Water Everywhere: The Growth of Non-carbonated Beverages in the United States* (Washington, DC, Container Recycling Institute, febbraio 2007); Pacific Institute, “Bottled Water and Energy”, fact sheet, (Oakland, CA: 2007).
- 90.** Bill Marsh, “A Battle Between the Bottle and the Faucet”, *New York Times*, 15 luglio 2007; Cecilia M. Vega, “Mayor to Cut Off Flow of City Money for Bottled Water”, *San Francisco Chronicle*, 22 giugno 2007; Doug Smeath, “Rocky Wants to Deep-Six H<sub>2</sub>O Bottles”, *Deseret Morning News*, 22 giugno 2007; Ross C. Anderson, Salt Lake City mayor, national press telephone conference, Think Outside the Bottle Campaign, 9 ottobre 2007.
- 91.** IEA, op. cit. nota 2, p. 492; IEA, op. cit. nota 6.
- 92.** Mandil et al., op. cit. nota 67, pp. 39, 59-61, 95-96, 139-42.

## CAPITOLO 12. PASSARE ALLE ENERGIE RINNOVABILI

- 1.** Christoph Podewils, “There’s a Lot of Water in the Wine: Renewable Energy Lobby Criticizes the EU’s Highly Praised Goal for Alternative Energy”, *PHOTON International*, aprile 2007, p. 14; Global Wind Energy Council (GWEC) e

Greenpeace, *Global Wind Energy Outlook 2006* (Brussels 2006); U.S. Department of Energy (DOE), Energy Information Administration (EIA), *Electric Power 2006* (Washington, DC, ottobre 2007), p. 26.

**2.** “Texas Decision Could Double Wind Power Capacity in the U.S.”, *Renewable Energy Access*, 4 ottobre 2007; Iceland National Energy Authority and Ministries of Industry and Commerce, *Geothermal Development and Research in Iceland* (Reykjavik, Iceland, aprile 2006), p. 16; European Wind Energy Association (EWEA), “Wind Power on Course to Become Major European Energy Source by the End of the Decade”, (Brussels, 22 novembre 2004); Renewable Energy Policy Network for the 21st Century (REN21), *Renewables Global Status Report, 2006 Update* (Washington, DC, Worldwatch Institute, 2006), p. 21; Bingham Kennedy, Jr., *Dissecting China's 2000 Census* (Washington, DC, Population Reference Bureau, giugno 2001); Geothermal Energy Association (GEA), “World Geothermal Power Up 50%, New US Boom Possible”, (Washington, DC, 11 aprile 2002).

**3.** International Telecommunications Union, “Mobile Cellular Subscribers per 100 People”, *ICT Statistics Database*, pubblicato su [www.itu.int/ITU-D/icteye](http://www.itu.int/ITU-D/icteye), 2007; Molly O. Sheehan, “Mobile Phone Use Booms”, Worldwatch Institute, *Vital Signs 2002* (W.W. Norton & Company, New York, 2002), p. 85.

**4.** Computer Industry Almanac Inc, “25Year PC Anniversary Statistics”, press release, pubblicato su [www.c-i-a.com](http://www.c-i-a.com), 14 agosto 2006; solar cell production (sales) from Worldwatch Institute, *Vital Signs 2005*, CD-Rom (Washington, DC, 2005); Paul Maycock, Prometheus Institute, *Photovoltaic News*, vol. 26, 3 (marzo 2007), p. 6.

**5.** Cristina L. Archer, Mark Z. Jacobson, “Evaluation of Global Windpower”, *Journal of Geophysical Research*, vol. 110 (30 giugno 2005); Jean Hu et al., “Wind: The Future is Now”, *Renewable Energy World*, luglio-agosto 2005, p. 212.

**6.** D.L. Elliott, L.L. Wendell, G.L. Gower, *An Assessment of the Available Windy Land Area and Wind Energy Potential in the Contiguous United States* (Richland, WA: Pacific Northwest Laboratory, 1991); C.L. Archer, M.Z. Jacobson, “The Spatial and Temporal Distributions of U.S. Winds and Wind Power at 80 m Derived from Measurements”, *Journal of Geophysical Research*, 16 maggio 2003.

**7.** W. Musial, S. Butterfield, *Future of Offshore Wind Energy in the United States* (Golden, CO,

DOE, National Renewable Energy Laboratory (NREL), giugno 2004); DOE, EIA, *Electric Power Annual 2005* (Washington, DC, novembre 2006); Garrad Hassan and Partners, *Sea Wind Europe* (London: Greenpeace, marzo 2004).

**8.** “Wind Market Global Status 2007”, *Windpower Monthly*, marzo 2007, p. 37; GWEC, “Global Wind Energy Markets Continue to Boom – 2006 Another Record Year”, press release (Brussels: 2 febbraio 2007).

**9.** GWEC, *Global Wind 2006 Report* (Brussels: 2007), p. 7; BP, *Statistical Review of World Energy 2007* (London: 2007), and GWEC, op. cit. p. 4, NREL, *Power Technologies Energy Data Book* (Golden, CO: DOE, agosto 2006); Janet L. Sawin, “Wind Power Blowing Strong”, in Worldwatch Institute, *Vital Signs 2006-2007* (W.W. Norton & Company, New York, 2006).

**10.** Flemming Hansen, “Denmark to Increase Wind Power to 50% by 2025, Mostly Offshore”, *Renewable Energy Access*, 5 dicembre 2006.

**11.** GWEC, op. cit. nota 9.

**12.** Laurie Jodziewicz, American Wind Energy Association (AWEA), e-mail all'autore, 16 ottobre 2007; GWEC and Greenpeace, op. cit. nota 1.

**13.** NREL, op. cit. nota 9; DOE, *Wholesale Market Data*, pubblicato su [www.eia.doe.gov/cneaf/electricity](http://www.eia.doe.gov/cneaf/electricity), 4 ottobre 2007; Union of Concerned Scientists, “Farming the Wind: Wind Power and Agriculture”, pubblicato su [www.ucsusa.org/clean\\_energy](http://www.ucsusa.org/clean_energy).

**14.** Renewable Fuels Association (RFA), *Homegrown for the Homeland: Ethanol Industry Outlook 2005* (Washington, DC, 2005); Allen Baker et al., “Ethanol Reshapes the Corn Market”, *Amber Waves*, vol. 4, 2 (aprile 2006), pp. 32, 34.

**15.** Godfrey Chua, “Wind Power 2005 in Review, Outlook for 2006 and Beyond”, *Renewable Energy Access*, 6 gennaio 2006.

**16.** United States and Spain from GWEC, op. cit. nota 9; “Spanish Wind Power Industry attacks New Rules”, *Reuters*, 2 febbraio 2007; “EWEA Aims for 22% of Europe's Electricity by 2030”, *Wind Directions* (novembre/dicembre 2006), p. 34; DOE, EIA, *Regional Energy Profile – U.S. Household Electricity Report* (Washington, DC, luglio 2005); NREL, op. cit. nota 9.

**17.** Carl Levesque, “Wind Companies Make \$10 Billion Investment Commitment”, *Wind Energy Weekly*, vol. 25, 1211 (6 ottobre 2006); “Texas Decision Could Double Wind Power Capacity in the U.S.”, op. cit. nota 2.

**18.** Paul Klein, Media Relations Group, Southern California Edison, conversazione personale con Jonathan Dorn, Earth Policy

Institute, 22 ottobre 2007; Jim Dehlsen, Clipper Wind, conversazione personale con l'autore, 30 maggio 2001; Kathy Belyeu, AWEA, conversazione personale con Jonathan Dorn, Earth Policy Institute, 22 ottobre 2007.

**19.** "British Columbia", *WT News*, Wind Today, 1st Quarter 2007, p. 30; "UK Plans World's Biggest Offshore Windfarm", *Reuters*, 18 maggio 2007; Yang Jianxiang, "China Showing All Signs of Major Market Status", *Windpower Monthly*, marzo 2007, p. 38; EWEA, *Wind Force 12* (Brussels: 2002); "China to Build Offshore Wind Complex", *Associated Press*, 15 agosto 2005.

**20.** Mike Jacobs, "U.S. States Hatch Solution to Transmission 'Chicken-Egg' Dilemma", *Renewable Energy Access*, 7 maggio 2007.

**21.** Ibid.; Leonard Anderson, "Western U.S. States Plan Major Power System", *Reuters*, 5 aprile 2005; Carl Levesque, "SPP Study Envisions Transmission Project Linking 13,000 MW of Wind with East", *Wind Energy Weekly*, vol. 26, 1247 (6 luglio 2007); Carl Levesque, "Now Proposed at PUC, CAPX 2020 Transmission Project Would Have Big Wind Implications", *Wind Energy Weekly*, vol. 26, no. 1253 (17 agosto 2007).

**22.** "Pan-European Wind Energy Grid Proposed", *Renewable Energy Access*, 10 maggio 2006; "Airtricity and ABB Push for European Offshore Supergrid", *Wind Directions*, luglio/agosto 2006, p. 7; Chris Veal, *European Offshore Supergrid Proposal: Vision and Executive Summary* (Dublin: Airtricity, 2006), *State of the Environment in the South West 2006* (Rotherham, U.K.: Environment Agency, 2006), p. 22.

**23.** GWEC, op. cit. nota 9, pp. 4, 8; U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su [esa.un.org/unpp](http://esa.un.org/unpp), 2007.

**24.** Ward's Automotive Group, *World Motor Vehicle Data 2006* (Southfield, MI: Ward's Automotive Group, 2006), p. 218; Windustry, "How Much Do Wind Turbines Cost?", pubblicato su [www.windustry.org](http://www.windustry.org), visionato il 21 ottobre 2007; "Trillions in Spending Needed to Meet Global Oil and Gas Demand, Analysis Shows", *International Herald Tribune*, 15 ottobre 2007.

**25.** Harry Braun, *The Phoenix Project: Shifting from Oil to Hydrogen with Wartime Speed*, Renewable Hydrogen Roundtable, World Resources Institute, Washington, DC, 10-11 aprile 2003, pp. 3-4.

**26.** Christian Parenti, "Big is Beautiful", *The Nation*, 7 maggio 2007.

**27.** Environmental Protection Agency (EPA), pubblicato su [www.fueleconomy.gov](http://www.fueleconomy.gov), visionato il

23 agosto 2007; fleet average from Robert M. Heavenrich, *Light Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2007* (Washington, DC, EPA, Office of Transportation and Air Quality, settembre 2007).

**28.** Lester R. Brown, "The Short Path to Oil Independence", *Eco-Economy Update* (Earth Policy Institute, Washington, DC, 13 ottobre 2004); Lionel Laurent, "Boeing's Dreamliner, Airbus's Nightmare", *Forbes*, 9 luglio 2007; Roger Duncan, "Plug-In Hybrids: Pollution-Free Transport on the Horizon", *Solar Today*, maggio/giugno 2007, p. 46.

**29.** Amory B. Lovins et al., *Winning the Oil Endgame: Innovation for Profits, Jobs, and Security* (Rocky Mountain Institute, Snowmass, CO, 2004), p. 64.

**30.** Michael Kintner-Meyer et al., *Impacts Assessment of Plug-in Hybrid Vehicles on Electric Utilities and Regional U.S. Power Grids - Part 1: Technical Analysis* (Richland, WA: DOE, Pacific Northwest National Laboratory, 2006).

**31.** Randy Swisher, AWEA, e-mail all'autore, 16 ottobre 2007.

**32.** Joseph Romm and Peter Fox-Penner, *Plugging into the Grid: How Plug-in Hybrid Electric Vehicles Can Help Break America's Oil Addiction and Slow Global Warming* (Progressive Policy Institute, Washington, DC, 2007); Roger Duncan, "Plug-In Hybrids: Pollution-Free Transport on the Horizon", *Solar Today*, maggio/giugno 2007, p. 47.

**33.** Martin Crutsinger, "U.S. Trade Deficit a Record 6.5% of Economy", *Associated Press*, 15 marzo 2007.

**34.** Lisa Braithwaite, Plug-In Partners National Campaign, e-mail a Jonathan Dorn, Earth Policy Institute, 19 ottobre 2007.

**35.** Ben Hewitt, "Plug-in Hybrid Electric Cars: How They'll Solve the Fuel Crunch", *Popular Mechanics*, maggio 2007; Pacific Gas and Electric Company, *Greening Fleets with New Technologies*, pubblicato su [www.pge.com/about\\_us/environment](http://www.pge.com/about_us/environment), visionato il 20 ottobre 2007.

**36.** General Motors (GM), "Fuel Solutions", pubblicato su [www.chevrolet.com/electricar](http://www.chevrolet.com/electricar), visionato il 23 ottobre 2007; Plug-In Partners National Campaign, *Building a Market for Gas-Optional Flexible-Fuel Hybrids*, (Austin, TX: 2007).

**37.** REN21, op. cit. nota 2, p. 21; Kennedy, Jr., op. cit. nota 2; Ryan Hodum, "Kunming Heats Up as China's 'Solar City'", *China Watch* (Worldwatch Institute, Global Environmental Institute, Washington, DC, 5 giugno 2007);

Emma Graham-Harrison, "China Solar Power Firm Sees 25 Percent Growth", *Reuters*, 4 ottobre 2007.

**38.** European Solar Thermal Industry Federation (ESTIF), "Worldwide Capacity of Solar Thermal Energy Greatly Underestimated", *ESTIF News* (10 novembre 2004); NREL, op. cit. nota 9.

**39.** Ole Pilgaard, *Solar Thermal Action Plan for Europe* (Brussels, Belgium, ESTIF, 2007); Janet L. Sawin, "Solar Industry Stays Hot", in Worldwatch Institute, op. cit. nota 9, p. 38.

**40.** Pilgaard, op. cit. nota 39; Sawin, op. cit. nota 39.

**41.** Uwe Brechlin, "Study on Italian Solar Thermal Reveals a Surprisingly High Contribution to EU Market: 130 MWth in 2006", (Brussels, ESTIF, 24 aprile 2007); Sawin, op. cit. nota 39; Les Nelson, "Solar-Water Heating Resurgence Ahead?" *Solar Today*, maggio/giugno 2007, p. 28; Pilgaard, op. cit. nota 39.

**42.** Nelson, op. cit. nota 41, p. 27.

**43.** Sawin, op. cit. nota 39; U.N. Population Division, op. cit. nota 23.

**44.** U.N. Population Division, op. cit. nota 23; REN21, *Renewables 2005 Global Status Report* (REN21 Secretariat and Worldwatch Institute, Washington, DC, 2006); REN21, op. cit. nota 2, p. 21; Sawin, op. cit. nota 39; ESTIF, op. cit. nota 38.

**45.** Nelson, op. cit. nota 41, p. 26.

**46.** *Ibid.*, p. 28.

**47.** Worldwatch Institute, op. cit. nota 4; Maycock, op. cit. nota 4; Anne Kreuzmann et al., "Exceeding Expectations: Survey Indicates more than 1 GW Installed in Germany in 2006", *PHOTON International*, aprile 2007.

**48.** Travis Bradford, "23rd Annual Data Collection – Final", *PV News*, vol. 26, 4 (aprile 2007), p. 9; Travis Bradford, "World Cell Production Grows 40% in 2006", *PV News*, vol. 26, 3 (marzo 2007), pp. 6-8.

**49.** International Energy Agency (IEA), *World Energy Outlook 2006* (Paris: 2006); "Power to the Poor", *The Economist*, 10 febbraio 2001, pp. 21-23.

**50.** "Solar Loans Light Up Rural India", *BBC News*, 29 aprile 2007.

**51.** IEA, *Light's Labour's Lost: Policies for Energy-efficient Lighting* (Paris: 2006), pp. 201-02; Kuwait oil production from DOE, EIA, *International Petroleum Monthly*, pubblicato su [www.eia.doe.gov/emeu](http://www.eia.doe.gov/emeu), 12 ottobre 2007.

**52.** Christoph Podewils, "As Cheap as Brown Coal: By 2010, a kWh of PV Electricity in Spain Will Cost Around 9¢ to Produce", *PHOTON International*, aprile 2007.

**53.** Worldwatch Institute, op. cit. nota 4; maggiocock, op. cit. nota 4; IEA, op. cit. nota 49.

**54.** Sybille de La Hamaide, "Bangladesh Seeks World Bank Loan for Solar Power", *Reuters*, 26 aprile 2007.

**55.** Dana Childs, "South Korea Building Largest Solar Installation in World", *Inside Greentech*, 10 maggio 2007; "Santander and BP Solar Partner in Major Euro Photovoltaic Project", *Green Car Congress*, 24 aprile 2006; Google, Solar Panel Projects pubblicato su [www.google.com/corporate](http://www.google.com/corporate), 20 ottobre 2007; "Google Sets Precedent for Clean Business Practices", *Renewable Energy Access*, 23 ottobre 2006.

**56.** Sawin, op. cit. nota 39; Sara Parker, "Maryland Expands RPS: 1,500 MW Solar by 2022", *Renewable Energy Access*, 12 aprile 2007.

**57.** "Largest Solar Thermal Plant in 16 Years Now Online", *Energy Efficiency and Renewable Energy News*, 13 giugno 2007; Asjlyln Loder et al., "FPL Unveils Plans for a Solar Plant", *St. Petersburg Times*, 27 settembre 2007.

**58.** Georg Brakmann et al., *Concentrated Solar Thermal Power – Now!* (Brussels, European Solar Thermal Power Industry Association, 2005).

**59.** "Algeria Aims to Export Power – Solar Power", *Associated Press*, 11 agosto 2007; "Algeria Plans to Develop Solar Power for Export", *Reuters*, 19 giugno 2007.

**60.** "Algeria Aims to Export Power – Solar Power", op. cit. nota 59.

**61.** Charles F. Kutscher, *Tackling Climate Change in the U.S. – Potential Carbon Emissions Reductions from Energy Efficiency and Renewable Energy by 2030* (Boulder, CO: American Solar Energy Society, 2007).

**62.** Brakmann et al., op. cit. nota 58.

**63.** Karl Gawell et al., *International Geothermal Development Directory and Resource Guide* (Washington, DC, GEA, 2003); REN21, op. cit. nota 2, p. 17.

**64.** Eric Martinot, Tsinghua-BP Clean Energy Research and Education Center, e-mail a Joseph Florence, Earth Policy Institute, 12 aprile 2007; REN21, op. cit. nota 44; "World Geothermal Power Up 50%, New US Boom Possible", (Washington, DC, GEA, 11 aprile 2002); Karl Gawell et al., *2007 Interim Report: Update on World Geothermal Development* (Washington, DC, GEA, 1 maggio 2007), p. 1; Ruggiero Bertani, "World Geothermal Generation 2001-2005: State of the Art", *Proceeding of the World Geothermal Congress* (Antalya, Turkey: 24-29 aprile 2005), p. 3.

**65.** Jefferson Tester et al., *The Future of Geothermal Energy: Impact of Enhanced*

*Geothermal Systems (EGS) on the United States in the 21st Century* (Cambridge, MA: Massachusetts Institute of Technology, 2006);

John W. Lund, Derek H. Freeston, "World-Wide Direct Uses of Geothermal Energy 2000", *Geothermics*, vol. 30 (2001), pp. 34, 46, 51, 53.

66. Tester et al., op. cit. nota 65.

67. Gawell et al., op. cit. nota 64, p. 11; Hal Kane, "Geothermal Power Gains", in Lester R. Brown et al., *Vital Signs 1993* (W.W. Norton & Company, New York, 1993), p. 54; DOE, EIA, "Japan", *EIA Country Analysis Brief* (Washington, DC, agosto 2004).

68. Peter Janssen, "The Too Slow Flow: Why Indonesia Could Get All Its Power From Volcanoes – But Doesn't", *Newsweek*, 20 settembre 2004.

69. World Bank, "Geothermal Energy", PB Power and World Bank partnership program, [www.worldbank.org](http://www.worldbank.org), visionato il 23 gennaio 2003.

70. Iceland National Energy Authority and Ministries of Industry and Commerce, *Geothermal Development and Research in Iceland* (Reykjavik, Iceland: aprile 2006), p. 16; World Bank, op. cit. nota 69.

71. Lund and Freeston, op. cit. nota 65, pp. 34, 51, 53.

72. World Bank, op. cit. nota 69.

73. Ibid.

74. Lund and Freeston, op. cit. nota 65, pp. 46, 53.

75. U.N. Population Division, op. cit. nota 23.

76. Kutscher, op. cit. nota 61, p. 118; EIA, "Net Generation by Other Renewables", pubblicato su [www.eia.gov/cneaf](http://www.eia.gov/cneaf), 10 ottobre 2007.

77. Swedish Energy Agency, *Energy in Sweden 2005* (Eskilstuna, Sweden: novembre 2005), p. 37.

78. U.S. Bureau of the Census, *State & County Quickfacts*, database elettronico, pubblicato su [quickfacts.census.gov](http://quickfacts.census.gov), 31 agosto 2007; Anders Rydaker, "Biomass for Electricity & Heat Production", presentation at Bioenergy North America 2007, Chicago, IL, 16 aprile 2007.

79. World Alliance for Decentralized Energy, *Bagasse Cogeneration – Global Review and Potential* (Washington, DC, giugno 2004), p. 32; U.S. Department of Agriculture (USDA), *Commodities and Products*, pubblicato su [www.fas.usda.gov/commodities](http://www.fas.usda.gov/commodities), maggio 2007.

80. Waste to Energy Conference, "Power and Heat for Millions of Europeans", (Bremen, Germany: 20 aprile 2007).

81. Robin Pence, "AES AgriVerde: An AES-

AgCert Joint Venture", (Arlington, VA: AES Corporation, maggio 2006).

82. Ray C. Anderson, presentazione a Chicago Climate Exchange, Chicago, IL, 14 giugno 2006.

83. F.O. Licht, "World Fuel Ethanol Production", *World Ethanol and Biofuels Report*, vol. 5, 17 (8 maggio 2007), p. 354; F.O. Licht, "World-Biodiesel Production (tonnes)", *World Ethanol and Biofuels Report*, vol. 5, 14 (23 marzo 2007), p. 291.

84. F.O. Licht, "World Fuel Ethanol Production", op. cit. nota 83; RFA, *Ethanol Biorefinery Locations*, pubblicato su [www.ethanolrfa.org](http://www.ethanolrfa.org), 28 settembre 2007.

85. Fiona Harvey et al., "Biofuels Growth Hit by Soaring Price of Grain", *Financial Times*, 22 febbraio 2007; Nigel Hunt, "Biofuel Bandwagon Slows as Feedstock Prices Surge", *Reuters*, 5 ottobre 2007; Bill Guerin, "European Blowback for Asian Biofuels", *Asia Times*, 8 febbraio 2007.

86. USDA, *Biomass as Feedstock for a Bioenergy and Bioproducts Industry: The Technical Feasibility of a Billion-Ton Annual Supply* (Washington, DC, aprile 2005).

87. Kutscher, op. cit. nota 61, p. 127.

88. IEA, op. cit. nota 49, pp. 219, 479; IEA, *Member Countries and Countries Beyond the OECD*, pubblicato su [www.iea.org/Textbase](http://www.iea.org/Textbase), visionato il 20 ottobre 2007; International Rivers Network, "Frequently Asked Questions about Dams", (Berkeley, CA: 2004).

89. "Rural Areas Get Increased Hydro Power Capacity", *Xinhua*, 7 maggio 2007.

90. Choe Sang-Hun, "South Korea Seeks Cleaner Energy Sources", *International Herald Tribune*, 9 maggio 2007; Choe Sang-Hun, "As Tides Ebb and Rise, South Korea Prepares to Snare Them", *International Herald Tribune*, 31 maggio 2007.

91. "China Endorses 300 MW Ocean Energy Project", *Renewable Energy Access*, 2 novembre 2004; "Company Plans 200-Megawatt Tidal Power Plant in New Zealand", *Energy Efficiency and Renewable Energy News*, 29 novembre 2006; Sang-Hun, "As Tides Ebb and Rise", op. cit. nota 90.

92. Sang-Hun, "As Tides Ebb and Rise", op. cit. nota 90; Igor Veletriminsky, "Anatoly Chubais Wants Russia to Lead the World in Tidal Power", *FreeEnergy.ca*, 26 febbraio 2007, pubblicato su [www.freeenergy.ca/news](http://www.freeenergy.ca/news).

93. "Company Plans 200-Megawatt Tidal Power Plant in New Zealand", op. cit. nota 91; Oceana Energy Company, "Oceana Subsidiary Signs Collaborative Agreement with PG&E, City of San Francisco", (Washington, DC, 19

giugno 2007); Dan Power, Oceana Energy Company, conversazione personale con Jonathan Dorn, Earth Policy Institute, 22 ottobre 2007.

- 94.** Robert Silgado et al., *Finavera Renewables Inc.: Where There is Wind There is a Wave* (Toronto, ON: Dundee Securities Corporation, 18 giugno 2007); Federal Energy Regulatory Commission, *Hydrokinetics – Issued and Pending Permits*, database elettronico, pubblicato su [www.ferc.gov/industries](http://www.ferc.gov/industries), 6 agosto 2007.
- 95.** “Wave Hub Names Fourth Developer for Wave Energy Farm”, *Renewable Energy Access*, 15 maggio 2007; European Commission, *Report on the Workshop on Hydropower and Ocean Energy – Part I: Ocean Energy*, 13 giugno 2007, pp. 1, 3; IEA, op. cit. nota 88.
- 96.** Lila Buckley, “Hydropower in China: Participation and Energy Diversity Are Key”, *China Watch* (Washington, DC, Worldwatch Institute and Global Environmental Institute, 24 aprile 2007); “Rural Areas Get Increased Hydro Power Capacity”, op. cit. nota 89; Pallavi Aiyar, “China: Another Dammed Gorge”, *Asia Times*, 3 giugno 2006; Gary Duffy, “Brazil Gives Amazon Dams Go-Ahead”, *BBC News*, 10 luglio 2007; Patrick McCully, *Before the Deluge: Coping with Floods in a Changing Climate* (Berkeley, CA: International Rivers Network, 2007), pp. 22-23.
- 97.** Tabella 12.1 da Earth Policy Institute; Worldwatch Institute, op. cit. nota 4, e maggiocock, op. cit. nota 4; GWEC, op. cit. nota 8; from Gawell et al., op. cit. nota 64; REN21, op. cit. nota 2; REN21, op. cit. nota 2; IEA, *Renewables in Global Energy Supply: An IEA Fact Sheet*, pp.13, 25, pubblicato su [www.iea.org/textbase](http://www.iea.org/textbase); IEA, *Solar Heating and Cooling Program, Solar Heat Worldwide: Markets and Contribution to the Energy Supply 2005* (Paris, aprile 2007); REN21, op. cit. nota 2; REN21, op. cit. nota 44; Tester et al., op. cit. nota 65, p. 9.
- 98.** GM, op. cit. nota 36.
- 99.** Bureau of Transportation Statistics, *Freight in America: A New National Picture* (Washington, DC, gennaio 2006), pp. 7, 28.
- 100.** Ashlea Ebeling, “What Would You Pay to Stay Cool?” *Forbes*, 15 agosto 2007.

## CAPITOLO 13. LA GRANDE MOBILITAZIONE

- 1.** “New Zealand Commits to 90% Renewable Electricity by 2025”, *Renewable Energy Access*, 26 settembre 2007; Vattenfall, *Global Mapping of Greenhouse Gas Abatement Opportunities up to 2030: Forestry Sector Deep-Dive* (Stockholm, giugno 2007), p. 16.

- 2.** U.N. Environment Programme, *Global Outlook for Ice and Snow* (Nairobi: 2007), p. 103.
- 3.** Dahle, conversazione personale con l'autore, State of the World Conference, Aspen, CO, 22 luglio 2001.
- 4.** Redefining Progress, *The Economists' Statement on Climate Change* (Oakland, CA, 1997).
- 5.** Nicholas Stern, *The Stern Review on the Economics of Climate Change* (HM Treasury, London, 2006), p. 27.
- 6.** Centers for Disease Control and Prevention, *Sustaining State Programs for Tobacco Control: Data Highlights 2006* (Atlanta, GA, 2006).
- 7.** World Health Organization, “Chronic Obstructive Pulmonary Disease (COPD)”, (Geneva, novembre 2006); Campaign for Tobacco Free Kids, “Top Combined State-Local Cigarette Tax Rates”, (Washington, DC, Campaign for Tobacco Free Kids, 1 luglio 2007); Campaign for Tobacco-Free Kids, “Raising Cigarette Taxes Reduces Smoking, Especially Among Kids (And the Cigarette Companies Know It)”, (Washington, DC, Campaign for Tobacco Free Kids, 11 giugno 2007).
- 8.** Oak Ridge National Laboratory (ORNL), Bioenergy Conversion Factors, pubblicato su [bioenergy.ornl.gov/papers/misc/energy\\_conv.html](http://bioenergy.ornl.gov/papers/misc/energy_conv.html), visionato il 15 ottobre 2007.
- 9.** International Center for Technology Assessment (ICTA), *The Real Price of Gasoline*, Report 3 (Washington, DC, 1998), p. 34; ICTA, *Gasoline Cost Externalities Associated with Global Climate Change: An Update to CTA's Real Price of Gasoline Report* (Washington, DC, settembre 2004), ICTA, *Gasoline Cost Externalities: Security and Protection Services: An Update to CTA's Real Price of Gasoline Report* (Washington, DC, gennaio 2005), Terry Tamminen, *Lives Per Gallon: The True Cost of Our Oil Addiction*, Island Press, Washington, DC, 2006, p. 60; Bureau for Economic Analysis, “Table 3 – Price Indices for Gross Domestic Product and Gross Domestic Purchases”, *GDP and Other Major Series, 1929-2007* (Washington, DC, agosto 2007); U.S. Department of Energy (DOE), Energy Information Administration (EIA), *This Week in Petroleum* (Washington, DC, various issues).
- 10.** American Petroleum Institute, *State Gasoline Tax Report* (Washington DC, agosto 2007); DOE, EIA, “Weekly (Monday) Retail Premium Gasoline Prices, Selected Countries”, pubblicato su [www.eia.doe.gov/emeu](http://www.eia.doe.gov/emeu), 9 luglio 2007;

Gerhard Metschies, "Pain at the Pump", *Foreign Policy*, luglio/agosto 2007.

11. U.S. Department of Agriculture, Economic Research Service, "Cigarette Price Increase Follows Tobacco Pact", *Agricultural Outlook*, gennaio-febbraio 1999.
12. DOE, op. cit. nota 10; DOE, EIA, *Emissions of Greenhouse Gasses in the United States 2001* (Washington, DC, 2002), p. B-1; DOE EIA, *Annual Energy Review 2006* (Washington, DC, 2007), p. 359.
13. Markus Knigge, Benjamin Gorch, *Effects of Germany's Ecological Tax Reforms on the Environment, Employment and Technological Innovation: Summary of the Final Report of the Project* (Berlin, Ecologic Institute for International and European Environmental Policy, agosto 2005); German Wind Energy Association, *A Clean Issue – Wind Energy in Germany* (Berlin: maggio 2006), p. 4; Donald W. Aitken, "Germany Launches its Transition: How One of the Most Advanced Industrial Nations is Moving to 100 Percent Energy from Renewable Sources", *Solar Today*, marzo/aprile 2005, pp. 26-29.
14. Paul Ekins, Stefan Speck, "Environmental Tax Reform in Europe: Energy Tax Rates and Competitiveness", 2007; Ministry of Finance, Sweden, "Taxation and the Environment", press release (Stockholm, 25 maggio 2005); Target Group Index, "Household Size", Global TGI Barometer (Miami: 2005); U.N. Population Division, *World Population Prospects: The 2006 Revision Population Database*, pubblicato su esa.un.org/unpp, 2007; Andrew Hoerner and Benoît Bosquet, *Environmental Tax Reform: The European Experience* (Washington, DC, Center for a Sustainable Economy, 2001); European Environment Agency, *Environmental Taxes: Recent Developments in Tools for Integration*, Environmental Issues Series 18 (Copenhagen, 2000); David Malin Roodman, *The Natural Wealth of Nations* (W.W. Norton & Company, New York, 1998), p. 243.
15. "New Hampshire Town Boosts Recycling with Pay-As-You-Throw", *Environment News Service*, 21 marzo 2007; Tom Miles, "London Drivers to Pay UK's First Congestion Tax", *Reuters*, 28 febbraio 2002; Energy Council, *Energy Efficiency Policies and Indicators* (London: 2001), Annex 1; Howard W. French, "A City's Traffic Plans Are Snarled by China's Car Culture", *New York Times*, 12 luglio 2005.
16. N. Gregory Mankiw, "Gas Tax Now!" *Fortune*, 24 maggio 1999, pp. 60-64.
17. John Tierney, "A Tale of Two Fisheries", *New York Times Magazine*, 27 agosto 2000; South Australian Southern Zone Rock Lobster Fishery Management Committee, *Southern Zone Rock Lobster Annual Report 2005-2006* (Adelaide, South Australia: ottobre 2006), p. 2.
18. Edwin Clark, lettera all'autore, 25 luglio 2001.
19. André de Moor, Peter Calamai, *Subsidizing Unsustainable Development* (San José, Costa Rica: Earth Council, 1997); Barbara Crossette, "Subsidies Hurt Environment, Critics Say Before Talks", *New York Times*, 23 giugno 1997.
20. World Bank, *World Development Report 2003* (Oxford University Press, New York, 2003), pp. 30, 142; International Energy Agency (IEA), *World Energy Outlook 2006* (Paris: 2006), p. 279.
21. Seth Dunn, "King Coal's Weakening Grip on Power", *World Watch*, settembre/ottobre 1999, pp. 10-19; Robin Pomeroy, "EU Ministers Clear German Coal Subsidies", *Reuters*, 10 giugno 2002; DOE, EIA, *International Energy Annual 2005* (Washington, DC, giugno-ottobre 2007), Table E.4; Craig Whitlock, "German Hard-Coal Production to Cease by 2018", *Washington Post*, 30 luglio 2007; GTZ Transport Policy Advisory Service, *International Fuel Prices 2007* (Eschborn, Germany, aprile 2007), p. 3.
22. John Whitelegg and Spencer Fitz-Gibbon, *Aviation's Economic Downside*, 3rd ed. (London, Green Party of England & Wales, 2003); International Monetary Fund, "Representative Exchange Rates for Selected Currencies in agosto 2007", *Exchange Rate Archives by Month*, pubblicato su www.imf.org/external, visionato il 16 agosto 2007; U.N. Population Division, op. cit. nota 14.
23. Doug Koplow, *Subsidies in the U.S. Energy Sector: Magnitude, Causes, and Options for Reform* (Earth Track, Cambridge, MA, novembre 2006).
24. Fisheries Center, University of British Columbia, *Catching More Bait: A Bottom-Up Re-Estimation of Global Fisheries Subsidies* (2nd Version) (The Fisheries Center, Vancouver, BC, 2006), p. 21.
25. Tabella 13.1 composta usando dati IEA, op. cit. nota 20, p. 493; IEA, *Tracking Industrial Energy Efficiency and CO<sub>2</sub> Emissions* (Paris, IEA, 2007); Vattenfall, op. cit. nota 1, Rattan Lal, "Soil Carbon Sequestration Impacts on Global Climate Change and Food Security", *Science*, vol. 304 (11 giugno 2004), pp. 1623-27; World Health Organization, "Air Pollution", 187 (Geneva, settembre 2000).
26. IEA, op. cit. nota 20, p. 493.

27. Vattenfall, op. cit. nota 1.
28. Ibid.
29. Lal, op. cit. nota 25.
30. G. Marland et al., "Global, Regional, and National CO<sub>2</sub> Emissions", in *Trends: A Compendium of Data on Global Change* (Oak Ridge, TN: Carbon Dioxide Information and Analysis Center (CDIAC), ORNL, 2007), R.A. Houghton, J.L. Hackler, "Carbon Flux to the atmosphere from Land-Use Changes", in *Trends: A Compendium of Data on Global Change* (Oak Ridge, TN, CDIAC, ORNL, 2002), J. Hansen et al., "Dangerous Human-Made Interference with Climate: A GISS ModelE Study", *Atmospheric Chemistry and Physics*, vol. 7 (2007), pp. 2287-312.
31. "Ditch the Tie Japan Tells Workers as 'Cool Biz' Drive Begins", *Agence France-Presse*, 1 giugno 2006; U.N. Population Division, op. cit. nota 14.
32. Richard Register, e-mail all'autore, 16 ottobre 2007.
33. Gidon Eshel, Pamela A. Martin, "Diet, Energy, and Global Warming", *Earth Interactions*, vol. 10, 9 (2006); USDA, *Production Supply and Distribution*, database elettronico, pubblicato su [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), 12 ottobre 2007; U.N. Population Division, op. cit. nota 14.
34. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, *Renewable Energy-Employment Effects: Impact of the Expansion of Renewable Energy on the German Labor Market* (Berlin, giugno 2006); "German Plan to Close Coal Mines", *BBC News*, 29 gennaio 2007; Michael Levitin, "Germany Says Auf Wiedersehen to Nuclear Power, Guten Tag to Renewables", *Grist.com*, 12 agosto 2005.
35. Commission on Weak States and U.S. National Security, *On the Brink: Weak States and U.S. National Security* (Washington, DC, Center for Global Development, 2004), p. 27.
36. The U.S. Commission on National Security in the 21st Century, *Road Map for National Security: Imperative for Change* (Washington, DC, febbraio 2001), p. 53.
37. Commission on Weak States and U.S. National Security, op. cit. nota 35, pp. 30-32.
38. "Roosevelt's Tree Army: A History of the Civilian Conservation Corps", pubblicato su [www.cccalumni.org/history1.html](http://www.cccalumni.org/history1.html), visionato il 18 ottobre 2007.
39. Francis Walton, *Miracle of World War II: How American Industry Made Victory Possible* (Macmillan, New York, 1956).
40. Franklin Roosevelt, "State of the Union Address", 6 gennaio 1942, pubblicato su [www.ibiblio.org/pha/7-2-188/188-35.html](http://www.ibiblio.org/pha/7-2-188/188-35.html).
41. Harold G. Vatter, *The US Economy in World War II* (Columbia University Press, New York, 1985), p. 13; Alan L. Gropman, *Mobilizing U.S. Industry in World War II* (National Defense University Press, Washington, DC, agosto 1996).
42. Doris Kearns Goodwin, *No Ordinary Time – Franklin and Eleanor Roosevelt: The Home Front in World War II* (Simon & Schuster, New York, 1994), p. 316; "Point Rationing Comes of Age", *Business Week*, 19 febbraio 1944.
43. "War Production – The Job 'That Couldn't Be Done'", *Business Week*, 5 maggio 1945; Donald M. Nelsen, *Arsenal of Democracy: The Story of American War Production* (Harcourt, Brace and Co., New York, 1946), p. 243.
44. Goodwin, op. cit. nota 42.
45. Sir Edward Grey cit. in Walton, op. cit. nota 39.
46. Jeffrey Sachs, "One Tenth of 1 Percent to Make the World Safer", *Washington Post*, 21 novembre 2001.
47. Tabella 13.2 composta con i dati delle tabelle 7.1 e 8.1.
48. Vedi tabella 7.1.
49. Vedi tabella 8.1.
50. Tabella 13.3 composta con dati da: Stockholm International Peace Research Institute (SIPRI), *Military Expenditure Database*, pubblicato su [www.sipri.org](http://www.sipri.org), giugno 2007; Center for Arms Control and Non-Proliferation, "Analysis of the Pentagon's Fiscal Year 2006 Supplemental Funding Request", pubblicato su [www.armscontrolcenter.org](http://www.armscontrolcenter.org), visionato il 14 settembre 2007.
51. SIPRI, op. cit. nota 50.
52. Amy Belasco, *The Cost of Iraq, Afghanistan, and Other War on Terror Operations Since 9/11* (Congressional Research Service, Washington, DC, 16 luglio 2007); Linda Biles, Joseph Stiglitz, *The Economic Costs of the Iraq War: An Appraisal Three Years After the Beginning of the Conflict* (National Bureau of Economic Research, Cambridge, MA, febbraio 2006).
53. Vedi il capitolo 12.
54. SIPRI, op. cit. nota 50.
55. Jared Diamond, *Collasso* (Einaudi, Torino, 2005); Ronald Wright, *Breve storia del progresso* (Mondadori, Milano, 2006).