

Appendix 1:

Selected international agreements on the environment¹

Early agreements

- 1911** Convention for the Protection and Preservation of Fur Seals
- 1923** Convention for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and the Bering Sea
- 1931** Convention on the Regulation of Whaling
- 1940** Convention on the Nature Protection and Wildlife Preservation in the Western Hemisphere
- 1951** International Plant Protection Convention
- 1954** Convention for the Prevention of Pollution of the Sea by Oil
- 1958** Convention on Fishing and Conservation of the Living Resources of the High Seas
- 1959** Antarctic Treaty
- 1963** Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water
- 1964** Agreed Measures on the Conservation of Antarctic Fauna and Flora
- 1967** Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies

Species and habitat

- 1971** Convention on Wetlands of International Strategic Importance Especially as Waterfowl Habitat (Ramsar Convention) – managed by IUCN/IWRB
- 1972** Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) – managed by UNESCO

- 1973** Convention on Endangered Species (formerly known as Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES))
- 1979** Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) – managed by UNEP
- 1980** Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) – managed by CCAMLR secretariat
- 1991** Protocol to the Antarctic Treaty on Conservation
- 1993** Convention on Biological Diversity
- 1996** Convention to Combat Desertification in those Countries Experiencing Drought and/or Desertification Particularly in Africa (opened for signature October 1994 and entered into force December 1996)

Marine pollution and conservation

- 1972** Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter (London Dumping Convention)
- 1973** International Convention for the Prevention of Pollution from Ships and the Protocol of 1978 Relating Thereto with Annex (MARPOL 73/78) – managed by IMO
- 1982** Convention on the Law of the Sea (entered into force in 1994) – managed by United Nations Office of Ocean Affairs and Law of the Sea (OALOS)
- 1991** International Convention on Oil Pollution Preparedness, Response and Co-operation – managed by IMO
- 1992** Convention on the Protection and Use of Transboundary Watercourses and International Lakes
- 1994** Buenos Aires Convention on the Protection of Underwater Cultural Heritage
- 1995** Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea Relating to the Conservation and Management of Fishing Stocks and High Migratory Fish Stocks

Hazardous substances

- 1986** Convention on Early Notification of a Nuclear Accident
- 1986** Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency
- 1989** Convention on the Control of Transboundary Movement of Hazardous Wastes (Basel Convention)

- 1991** Ban on the Import within Africa and the Control of Transboundary Movement and Management of Hazardous Waste within Africa (Bamako Convention)
- 1996** Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous Noxious Substances by Sea
- 1996** Comprehensive Test Ban Treaty

Pollution of the atmosphere

- 1979** Convention on Long-Range Transboundary Air Pollution (LRTAP) – managed by UN/ECE
- 1985** Helsinki Protocol on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by at least 30 Per Cent
- 1985** Vienna Convention for the Protection of the Ozone Layer
- 1987** Montreal Protocol on Substances that Deplete the Ozone Layer
- 1988** Sofia Protocol Concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes
- 1992** Framework Convention on Climate Change
- 1997** Conference of Parties to the Framework Convention on Climate Change (resulting in the Kyoto Protocol)
- 1998** Draft Protocol to the Convention of Long-Range Transboundary Air Pollution on Resistant Organic Pollutants

Environment and development: general

- 1991** Convention on Environmental Impact Assessment in a Transboundary Context
- 1992** Draft Declaration on the Rights of Indigenous Peoples
- 1993** Convention on Civil Liberty for Damage Resulting from Activities Dangerous to the Environment
- 1994** Draft Declaration of Principles on Human Rights and the Environment

Global conferences

- 1972** United Nations Conference on the Human Environment (UNHCE) (Stockholm)
- 1976** Human Settlements Conference, Habitat I (Vancouver)
- 1987** IUCN Ottawa Conference on Conservation and Development
- 1992** United Nations Conference on Environment and Development (UNCED), the Earth Summit (Rio de Janeiro)
- 1994** International Conference on Population and Development (Cairo)

Environments and Livelihoods: Strategies for Sustainability

- 1994** International Conference on Chemical Safety (Stockholm)
- 1995** The World Summit for Social Development (Copenhagen)
- 1995** Fourth World Conference on Women (Beijing)
- 1996** Habitat II (Istanbul)
- 1996** World Food Summit (Rome)
- 1997** Earth Summit II, United Nations General Assembly Special Session (UNGASS, New York)
- 1997** Conference of the Parties of the Climate Change Convention (COP 3, Kyoto)
- 2000** Five Year Review of the 1995 Copenhagen Summit for Social Development
- 2002** Earth Summit III

Appendix 2: Sources of information on environment and development

National environmental data and other data are now in part available in a user-friendly way in publications produced by the UNDP, World Bank, UNEP, and other organisations. Specific data that inform (or should inform) national environmental strategies and descriptive documents tend to be bulky, difficult to access, and – if accessible – technical. Less specific data are not always useful, given the fact that national and regional policy by its very nature needs to be based on aggregated data; but they inform policy making.

The internet is an extremely useful source of information. The UN agencies and some of the development banks have set up websites for specific country programmes. Private organisations, including NGOs and networks of municipalities, research organisations, and bilateral development agencies, tend to provide documentation on a range of subjects, apart from an overview of their own programmes and policies. It is possible to give only a small selection of websites here, but most of them provide links to others.

Multilateral organisations

Website	Name	Type of information available
http://www.unep.org http://www.unep.ch	United Nations Environment Programme (Nairobi, with an important sub-office in Geneva)	<ul style="list-style-type: none">• Global and regional environmental data, reports, and literature references, including the annual <i>World Resources</i> report with comprehensive data.• Information on international environment conventions.

Website	Name	Type of information available
http://www.fao.org	United Nations Food and Agriculture Organisation (Rome)	<ul style="list-style-type: none"> • Information on food security and agriculture, including national and international food stocks, prices, production, and 'undernourishment'. • Also information on nutrition, fisheries, land tenure, sustainable development, etc. • Text of FAO reports.
http://www.undp.org	United Nations Development Programme (UNDP; New York)	<ul style="list-style-type: none"> • The UNDP's <i>Human Development Report</i> is published annually and is thematic; for example in 1998 it was concerned with consumption, and in 1999 with globalisation. It always contains data that enable conclusions on environmental pressures and changes. • Many other reports can be downloaded too.
http://www3.undp.org/	UNDP	<ul style="list-style-type: none"> • Information from the UNDP sustainable-development networking programme, which helps to develop electronic networks in many countries.
http://www.undp.org/sl/	UNDP	<ul style="list-style-type: none"> • Information from the UNDP sustainable-livelihoods programme, as part of the UNDP's poverty-eradication strategy.
http://www.undp.org/popin/	UNDP	<ul style="list-style-type: none"> • All sorts of population statistics available in graphic form.
http://www.worldbank.org	International Bank for Reconstruction and Development (IBRD; Washington DC)	<ul style="list-style-type: none"> • The annual <i>World Development Report</i> provides global statistics based on national aggregates; the version for 2000/01 focuses on poverty. • Many other reports and publications can be downloaded or ordered.
http://www.worldbank.org/poverty/	World Bank	<ul style="list-style-type: none"> • A site specifically focused on poverty alleviation, with an increasing amount of information.

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Website	Name	Type of information available
http://www.worldbank.org/html/pic/ENVIR.html	World Bank	<ul style="list-style-type: none"> • Focus on research and policy for environmentally and socially sustainable development; most documents can be downloaded.
http://www.un.org/esa/sustdev/csd.htm	UN Commission for Sustainable Development (CSD, New York)	<ul style="list-style-type: none"> • The CSD was set up in Rio (UNCED, 1992) at ministerial level. It has annual meetings. The secretariat is central to the implementation of Agenda 21 and helps to organise follow-up meetings to UNCED, such as 'Earth-Summit+10' in 2002. The website provides information about the current topics of concern.
http://www.unchc.org/	United Nations Centre For Human Settlements (Habitat, Nairobi)	<ul style="list-style-type: none"> • This UN agency leads on urban development, provides access to publications, and runs campaigns, for example on tenure and urban governance. It has many programmes, including its sustainable-cities programme. It has six regional offices.
http://www.unhcr.ch/	United Nations High Commissioner for Refugees (UNHCR), responsible for the protection and welfare of refugees.	<ul style="list-style-type: none"> • The UNHCR has a policy and operational guidelines to minimise the impact of refugees on the environment; the guidelines can be downloaded.
http://www.cgiar.org/	Consultative Group on International Agricultural Research (CGIAR)	<ul style="list-style-type: none"> • A collective of publicly funded agricultural research organisations that work on crops, crop biodiversity conservation, and biotechnology. Through this website and the links to member organisations, many reports and publications are accessible.
http://www.gefweb.org/	Global Environment Facility	<ul style="list-style-type: none"> • A fund for large projects with (global) environmental benefits, particularly concerned with energy (climate) and biodiversity.

Website	Name	Type of information available
http://www.wmo.ch/	World Meteorological Organisation (Geneva)	<ul style="list-style-type: none">• Much information and links available, for example on the El Niño effect.
http://www.ipcc.ch/	Intergovernmental Panel on Climate Change (IPCC, of WMO/UNEO)	<ul style="list-style-type: none">• This panel of experts compiles international research on climate change and provides much relevant information.
http://www.unfccc.de/	UN Framework Convention on Climate Change	<ul style="list-style-type: none">• Information on progress in the negotiations to reduce greenhouse-gas pollution and climate change.

Research and information on environment and development

Website	Name	Type of information available
http://www.wcmc.org.uk	World Conservation Monitoring Centre (Cambridge, UK)	<ul style="list-style-type: none">• Established by UNEP, WWF, and IUCN, with a focus on providing information about bio-diversity information, but also on climate change.
http://www.wri.org	World Resources Institute (Washington DC)	<ul style="list-style-type: none">• Many publications and reports accessible, on a range of environmental subjects.• Provides links.
http://iisd1.iisd.ca/	IISD (Canada)	<ul style="list-style-type: none">• Publishes on the Web a very large number of documents from international negotiations on environmental issues and provides access to academic research and publications.• Provides links.
http://www.iied.org/	International Institute for Environment and Development (IIED, London)	<ul style="list-style-type: none">• Many publications and reports may be ordered, on a range of environmental subjects.
http://www.worldwatch.org/	The Worldwatch Institute	<ul style="list-style-type: none">• Publishes the annual <i>State of the World</i> reports.

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Website	Name	Type of information available
http://www.odi.org.uk/	Overseas Development Institute (ODI; London)	<ul style="list-style-type: none"> • Publishes on many subjects related to natural-resource management, and particularly on sustainable livelihoods.
http://www.ids.ac.uk/ids	Institute of Development Studies at the University of Sussex, UK, including the Rural Sustainable Livelihoods Programme	<ul style="list-style-type: none"> • Access to the Development Studies library database, IDS publications, and to ELDIS, a gateway to development organisations. • IDS is at the forefront of research, with publications on participatory methodologies and sustainable livelihoods.
http://www.oneworld.org/panos/	Panos Institute (London, with regional centres)	<ul style="list-style-type: none"> • Information on sustainable development, with a global outlook.
http://sdgateway.net/webring/default.htm	Sustainability web-ring	<ul style="list-style-type: none"> • Provides access to many websites on sustainable development.

NGOs working on environment and development

Website	Name	Type of information available
http://www.oneworld.org	Oneworld	<ul style="list-style-type: none"> • An internet community of hundreds of development organisations and also environment NGOs.
http://www.iucn.org	World Conservation Union (Gland, Switzerland)	<ul style="list-style-type: none"> • Offers on-line publications on a range of environmental subjects. • With regional or national centres.
http://www.panda.org/	World Wide Fund for Nature (WWF-global)	<ul style="list-style-type: none"> • Network of 27 national organisations. • Research and project information available from around the world, including <i>The Living Planet Report</i>, 1999.
http://www.greenpeace.org/	Greenpeace – International	<ul style="list-style-type: none"> • Campaigns on climate change, genetic engineering, forest conservation, etc. • Many national affiliates.

Website	Name	Type of information available
http://www.foei.org/ http://www.foe.co.uk/	Friends of the Earth (FoE) – International, and FoE-UK	<ul style="list-style-type: none"> • FOE-International has 61 groups in as many countries. • Campaigns and information on climate change, trade and environment, mining, and sustainable agriculture, etc.
http://www.climatenetwork.org	Climate Action Network	<ul style="list-style-type: none"> • With 269 members and a focus on lobbying the parties to the Climate Convention.
http://www.twinside.org.sg/	Third World Network (TWN)	<ul style="list-style-type: none"> • Networks with various organisations, particularly in the South. • Publishes on biotechnology, environment and trade issues, etc.
http://www.rafi.org/	Rural Advancement Foundation International (RAFI; Winnipeg, Canada)	<ul style="list-style-type: none"> • Campaigns on agricultural biodiversity, and concerned about the impact of intellectual property rules and practices on agriculture and world food security. • Many papers available on-line.
http://www.ukfg.org.uk http://ds.dial.pipex.com/ukfg/ukabc.htm	UK Food Group, with UKabc (agricultural biodiversity, conservation)	<ul style="list-style-type: none"> • Documents and links on food security, agriculture, and agricultural biodiversity.
http://www.grain.org/	Genetic Resources Action International (GRAIN; based in Spain, the Philippines, and Uruguay)	<ul style="list-style-type: none"> • Campaigns on the loss of biological diversity. • Many papers available on-line.
http://www.bluekey.co.uk gcuk	Green Cross UK aims to prevent and respond to environmental disasters and raise public awareness.	<ul style="list-style-type: none"> • Information on the Environmental Response Network (ERN), which provides information, responds to queries, and has a database of environmental specialists.
http://www.oneworld.org/cse/	Centre for Science and Environment (New Delhi)	<ul style="list-style-type: none"> • Campaigns and provides information on a range of subjects, including biodiversity and climate change.

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Website	Name	Type of information available
http://oxfam.org.uk	Oxfam GB (member of Oxfam international)	<ul style="list-style-type: none"> • Provides policy papers on trade, debt, education, and other campaigning issues, including genetically modified crops.
http://www.oxfam.org.hk	Oxfam Hong Kong (member of Oxfam International)	<ul style="list-style-type: none"> • Information on campaigns, addressing food security and sustainable agriculture.
http://www.novib.nl/	Novib (Dutch member of Oxfam International)	<ul style="list-style-type: none"> • Information for partners in several languages.
http://www.actionaid.org	ActionAid (UK-based international development NGO)	<ul style="list-style-type: none"> • Information on a range of policy issues, including biodiversity and biotechnology.
Http://www.oneworld.org/itdg/	Intermediate Technology Development Group (ITDG, UK)	<ul style="list-style-type: none"> • Operates research, project management, and publishing programmes.
and http://www.itdg.org.pe	Specialises in appropriate-technology transfer. The ITDG-Peru website is partly in Spanish	<ul style="list-style-type: none"> • Runs Intermediate Technology Consultants (ITC), providing technical and business support for small-scale enterprises in Africa, Asia, and Latin America. • Intermediate Technology Publications publishes a wide range of books on environment and other development issues.
http://www.ifrc.org	International Federation of the Red Cross and Red Crescent	<ul style="list-style-type: none"> • Information on environmental health in emergency situations.
http://www.iclei.org	The International Council for Local Environmental Initiatives (ICLEI)	<ul style="list-style-type: none"> • Gives information on local initiatives and provides links to various partners.

Website	Name	Type of information available
www.care.org	CARE (a federation of 10 international development NGOs)	<ul style="list-style-type: none">• Supplies project examples and brief reports on responses to natural disasters, sustainable livelihoods, etc. CARE's work on sustainable livelihoods is particularly developed in Southern Africa.
www.scfuk.org.uk	Save the Children Fund UK (a member of a network of similar international development organisations)	<ul style="list-style-type: none">• Publishes various manuals on project planning and on what is known as 'the household economy approach', which is somewhat similar to the concept of sustainable livelihoods.
http://www.dfid.gov.uk	DFID (UK government's Department for International Development)	<ul style="list-style-type: none">• Has a special site on sustainable livelihoods: go to 'Strategies for Achieving International Development Targets' from the home page.

Publishers who specialise in environment and other development issues

Routledge: <http://www.routledge.com>

Earthscan: <http://www.earthscan.co.uk>

Oxford University Press: <http://www.oup.co.uk>

Island Press: <http://www.islandpress.com>

IT Publications: <http://www.oneworld.org/itdg/publications.html>

Oxfam Publishing: <http://www.oxfam.org.uk/publications.html>

Notes

Chapter 1

- 1 From an exchange meeting under the South-South Environment Linking project of Oxfam (UK & Ireland), Thursday 10.9.92 and Friday, 11.9.92. Translated from the original Spanish text.
- 2 As far as Oxfam goes, see for example Bull (1982), Jackson with Eade (1982), Davidson and Myers, with Chakraborty (1992). Eade and Williams (1995), *The Oxfam Handbook of Development and Relief*, contains sections on urban and rural environmental change, agriculture, 'ecofeminism', and methodological approaches to finding out about environmental change – all within the conceptual framework of 'sustainable livelihoods'. See also Caroline LeQuesne, 'Ecological footprints', in Watkins (1995a). Oxfam GB (formerly UK & Ireland) has published a range of practical books about agriculture, pastoralism and livestock keeping, seeds and tools distribution for rehabilitation following disasters, and many other topics. Furthermore, a large number of project evaluation reports, commissioned research, and 'unofficial' internal publications form an important body of experience on which this book is based – see bibliography. Also important to mention are four editions of 'Exchanging Livelihoods', collections of case studies written by staff and sometimes partner staff for institutional learning purposes, several of which are referred to in this book. Particularly relevant publications from DFID are ODA (1996), Carney (1998), DFID (1999a, b) and CRDT/DFID (1998). Publications from ITDG and IT Publishing relevant to this book are Hubbard (1995), ITDG-Bangladesh / REMS (1999), Scott (1998), Hall *et al.* (1996), and other books from IT Publishing, mentioned in the bibliography.
- 3 See e.g. Davidson and Myers (1992) and Borrini-Feyerabend (1997).
- 4 That there remain important questions concerned with the 'why?' of environment is concluded from, for example, work with national NGOs in Uganda who are partners of Novib (Neeffes and Nakacwa, 1996) and wider assessments internal to Novib; a survey conducted in 1998-99 of Oxfam staff and partners in national

programmes around the world on achievements in learning about sustainable development (Neeffes and Woldegiorgis, 1999); and interviews with higher-level managers in Oxfam in 1999. Learning needs were also exposed in two earlier assessments by student-volunteers of the practice of environmental assessment in ITDG and Oxfam: Pasteur (1994) and Moorehead (1992).

- 5 In Oxfam GB there is evidence of a marked improvement in attempts to relate poverty to environmental changes as part of this kind of planning during the 1990s.
- 6 These discussions were with 'Regional Managers' of Oxfam in particular: Neeffes (May 1999), 'On Sustainable Livelihoods, Poverty and Environment, interviews with Regional Managers', unpublished mimeo, Oxfam GB. Gaps were also confirmed in a large number of informal discussions with Oxfam 'Country Representatives' and a number of Novib and ITDG managers over the last few years.
- 7 The same is true for most other international development NGOs; see Pasteur (1994) about ITDG and also other NGOs; and Moorehead (1992), Neeffes and Woldegiorgis (1999) about Oxfam GB. Training of hundreds of staff and also Oxfam partners in 'sustainable livelihoods', environmental impact, and participatory approaches intensified from 1992 but did not take place in all countries where Oxfam has a programme. A one-page guideline with key questions / issues that need to be addressed during the grant-approval process was forwarded in early 1995 to all staff (David and Neeffes, 1995); and more detailed suggestions are offered in Eade and Williams (1995). See chapter 4 of this book for practical suggestions to improve the appraisal of project grants from the perspective of environmental sustainability.
- 8 See Oxfam (1996, 1999) 'Exchanging Livelihoods', editions on urban development and natural-resource management; see also Hall *et al.* (1996), which shows examples of urban work of ITDG, Oxfam GB, and other development NGOs based in the UK.
- 9 Many reports are available in Oxfam, ITDG, and other international NGOs regarding such training workshops, with evidence of positive immediate feedback but no assessment of impacts some time after the training. Neeffes and Woldegiorgis (1999) report a brief impact-study of training in sustainable livelihoods and participatory project approaches, conducted for Oxfam GB. The first Oxfam GB workshop for staff in which the sustainable livelihoods framework was used for analysis of relationships between people and environmental change took place in Cambodia in 1992 for field staff and partners, and for higher-level managers in Thailand, 1993 (Neeffes, 1993a and 1993b). Oxfam adopted sustainable livelihoods as a 'strategic aim' for its international programme in 1993; CARE has also developed similar policies in the early 1990s under the label 'household livelihood security framework', as have UNDP and (later) DFID. Progress with and comparisons between more recent adaptations of the framework are reported by Carney *et al.* (1999) and Ashley and Carney (1999).
- 10 See for example Chambers and Conway (1992), Scoones (1998), Carney (1998).
- 11 See Estrella and Gaventa (1997), Abbot and Guijt (1998), and Roche (1999).

Chapter 2

- 1 P. Lal (1965), p. 54.
- 2 M.K. Gandhi (1980), p. 181.
- 3 Guha and Martinez-Alier (1997).
- 4 Ian Harris, 'Buddhism', in Holm (1994), p.26.
- 5 *Yang* stands for light, movement, life, masculine, fire, heaven, and 'positive'; and *yin* stands for dark, rest, matter, feminine, water, earth, and 'negative'.
- 6 See Xinzhong Yao, 'Chinese religions', in Holm (1994).
- 7 See Martin Forward and Mohamed Alam, 'Islam', in Holm (1994).
- 8 Quoted in Hayward (1994), p. 30.
- 9 Ponting (1991), pp. 141-6.
- 10 Quoted in Davidson and Myers (1992), p.184.
- 11 Meadows *et al.* (1972).
- 12 WCED (1987), p. 43; see also sections 2.2 and 2.4.
- 13 See also A. Gupta and M. Asher (1998) *Environment and the Developing World: Principles, Policy and Management* (Wiley).
- 14 See Gupta and Asher (1998).
- 15 For analysis of the Earth Summit II, see D. Osborn and T. Bigg (1998) *Earth Summit II Outcomes and Analysis*, Earthscan, London.
- 16 Guha and Martinez-Alier (1997), pp. 16-17.
- 17 Naess (1973).
- 18 Guha and Martinez-Alier (1997), pp. 92-108.
- 19 Conservation-based organisations such as the World Wide Fund for Nature and the World Conservation Union (WWF and IUCN) have policies that echo the ideas of John Muir, although they have increasingly become sympathetic to the interests and strengths of local people as wildlife managers. WWF and IUCN have become actual implementers of projects for the conservation of nature, while Greenpeace International is an organisation with national affiliates whose campaigns focus on particular issues of environmental destruction and pollution. Friends of the Earth is a politically more radical international grouping of national organisations, the first of which was a breakaway group from John Muir's Sierra Club, in 1969. Many within this network are concerned about social justice in general, and not exclusively with the preservation of particular environments. Deep ecology and also ideas such as the Gaia hypothesis of Lovelock have found sympathisers among very radical 'eco-warriors' in groups like Earth First in the USA and the UK. Some of those groups have internationalised – they have set up organisations and projects in the East and South, and they have broadened their views and support base. See for example Pepper (1984).
- 20 Guha and Martinez-Alier (1997), p. 100.
- 21 Hayward (1994), p. 195.

- 22 Guha and Martinez-Alier (1997), p.76.
- 23 Davidson and Myers (1992).
- 24 Ken Saro-Wiwa, cited in Watts (1998).
- 25 Watts (1998), p. 257; see also Guha and Martinez-Alier (1997), pp. xviii–xx.
- 26 Many examples, and lessons on process management of 'alternatives', are articulated by Chambers (1997) and Gibson (1996), Pye-Smith *et al.* (1994), Davidson and Myers (1992), and Guijt and Shah (1998), concerning the South and the North. Schumacher (1973) developed some of the socio-economic rationale for developing 'intermediate technologies'; based on his ideas, the New Economics Foundation (NEF) in the UK is promoting alternative economic models. Schumacher himself set up the Intermediate Technology Development Group (ITDG) in the UK, with branches and sister organisations in several countries.
- 27 An important development approach that fits this category of 'intermediate alternatives' is PTG, Participatory Technology Development, which aims in particular to develop forms of sustainable agriculture; see for example Reijntjes, Haverkort and Waters-Bayer (1992). See also Neeffjes *et al.* (1997); Conway (1997).
- 28 See also Moore-Lappé *et al.* (1998), who highlight lessons from the Green Revolution and challenge the idea that 'nature' is a main cause of poverty and famine, and that feeding the world's poor would necessarily be environmentally problematic.
- 29 See Magsanoc Ferrer *et al.* (eds) (1996).
- 30 Neeffjes, Hart, and Dem, in Hall *et al.* (1996); also Davidson and Myers (1992).
- 31 Davidson and Myers (1992), pp. 115-17.
- 32 Gibson (1996), pp. 159-65.
- 33 See Peet and Watts (1996), chapters 1 and 12 in particular; see also Scoones (ed.) (1995).
- 34 Data are compiled by UNDP and UNEP, FAO, the World Bank, and a number of government or private organisations such as the World Resources Institute (WRI) and the Worldwatch Institute in Washington D.C., USA, and the World Conservation Monitoring Centre, Cambridge, UK.
- 35 Lovelock in Myers (ed.) (1994) *The Gaia Atlas of Planet Management*, London: Gaia Books, p. 94. This publication also contains a chapter by Oxfam: 'People as planet managers'.
- 36 Blaikie and Brookfield (1987), p.6.
- 37 *Ibid.*, p.8.
- 38 See also chapter 8 and Macrae and Zwi (eds) (1994).
- 39 Blaikie and Brookfield (1987), p.16.
- 40 It should be noted that philosophers like Hayward (1994) and political economists gathered by Keil *et al.*, all writing on political ecology, do not even

refer to Blaikie and Brookfield. Keil *et al.* write about global political ecology and are also concerned with including ecological theories as a central feature in neo-Marxist thinking, in particular in response to the failure of neo-classical economics to capture the dependency of the economy on the environment. Their focus is in particular on global issues and political concerns in industrialised, Western nations; the rural Third World land manager of Blaikie and Brookfield does not feature.

- 41 See Shiva (1988), Agarwal (1998), Rangan (1996).
- 42 Agarwal (1998), p. 198.
- 43 Oxfam (1993).
- 44 Leach, Joekes, and Green (1995), 'editorial', in Joekes *et al.* (1995).
- 45 *Ibid.*
- 46 Schumacher (1973), p. 48.
- 47 WCED (1987), p. 43.
- 48 Gupta and Asher (1998), p. 42.
- 49 Pearce *et al.* (1989), pp. 29-30.
- 50 *Ibid.* p. 32.
- 52 Pearce (1991), p. 5.
- 53 Walker (1989), p. 3.
- 54 See also section 2.4. Also Holt (1999), Maskrey (1989), WFP (1999). Urban vulnerability is particularly enhanced by low income (opportunity), deficiencies in services and infrastructure, bad housing, a lack of provision for earthquake impacts, and a lack of flood protection.
- 55 McIntosh and Thom (1978) explain as follows. Hurricanes appear in the western Atlantic ocean, and typhoons in the western Pacific, but they are essentially the same, and both are called tropical cyclones – in other words these three words are synonymous. They develop over the western parts of these oceans where the winds of the Northern and Southern hemispheres meet (i.e. in the tropics) and when the surface-water temperatures are at their highest, which is usually in the late summer or autumn (at both sides of the Equator). The air 'inside' the hurricane/typhoon spins extremely fast, inwards, and upwards and causes torrential rains and thunderstorm. At the core of a hurricane is the 'central eye', typically about 40 km in diameter, in which there are just light winds and no rain. They normally move slowly westwards, but when they reach higher latitudes and weaken in force they move eastwards. When they are inland, they rapidly decline in force. Tornadoes are very different, but also involve spinning air and can occasionally be extremely destructive. They develop overland, last rarely more than 15 minutes, and do not usually measure more than 100 metres across. They occur all over the world and particularly in central areas of the USA.
- 56 Nearly every major flood in Bangladesh has this effect, besides death and destruction.

- 57 See for example Penning-Rowsell (1998), who also makes the point of slowly emerging impacts on flora and fauna.
- 58 A highly publicised example of oil spills associated with political violence happened in Ogoni land in Nigeria; several political leaders were killed, including Ken Saro-Wiwa, who was executed by the Nigerian government; see also section 2.3.
- 59 See for example Dinham (1993).
- 60 UNEP/OCHA stands for UN Environment Programme, and Office for the Co-ordination of Humanitarian Affairs, accessible through the UNEP website www.unep.ch. The organisation Green Cross UK runs a website with information on disasters, provides access to expertise, and links to other websites: www.bluekey.co.uk/gcuk/ - see also Appendix 2 for websites and data sources.
- 61 See for example Shestakov (1998), and note also what happened to the Aral Sea to the south of Kazakhstan, where water from rivers was diverted for irrigation, the sea water salinised, and levels reduced to the point that fish died, fishers lost their livelihoods, and transport is now no longer viable; this is a good example of a 'slow-onset' disaster on a large scale.
- 62 See for example Kennedy (1998).
- 63 Sen (1981) explains famine as a result of 'entitlement failure', and Leach *et al.* (1997a) build on his theory with application to 'environmental entitlements'.
- 64 See for example Walker (1989) and especially Hubbard (1995).
- 65 An excellent and accessible publication on risk management is Periperi (1999).
- 66 See Baechler (1999), Kennedy (1998), and Neefjes (1999b) for similar characterisations of the diverse linkages between environmental change and conflict.
- 67 See Brazier (1992).
- 68 See for example a public statement by M. Gorbachev on 24 April 1999, 'Environmental Implications of the Hostilities in Yugoslavia', Green Cross International, Geneva; and also George Monbiot, 'Consigning their future to death: bombing Belgrade's chemical plants will poison the unborn', *The Guardian*, 22 April 1999.
- 69 See Macrae, Zwi and Duffield (1994); Neefjes (1999b), also Baechler (1999).
- 70 This taxonomy and my use of it are taken from Beachler (1999).
- 71 For a more elaborate version of this case history, see Neefjes (1999b); also Gasana (1995), and André and Platteau (1996).
- 72 These cases are short versions of what is reported in Neefjes (1999b); see also Richards (1996) on Sierra Leone; Spooner and Walsh (1991), and Neefjes (1998c) on Sudan case history; and Scoones *et al.* (1992) on wild foods.
- 73 Richards (1996), p.164.
- 74 From a case history by Douglas Johnson, presented in Oxfam UK&I (1997a): 'Exchanging Livelihoods – food-security edition'.
- 75 See Spooner and Walsh (1991).
- 76 Neefjes (1998c).

- 77 From John Buttery (1995) 'Displacement, relocation and the rights of the urban poor: a Sudan perspective', in Oxfam UK&I (1995a) 'Exchanging Livelihoods – urban edition'.
- 78 This is taken from Neefjes (1999b) and Neefjes (1997a); see also Black (1998).
- 79 Hoerz (1995) gives an overview of refugees and environmental change, which corroborates these points and several others.
- 80 This paragraph is strongly based on Black (1998).
- 81 See also Neefjes (1999b).
- 82 WCED (1987), p. 8.
- 83 Peet and Watts (1996), p. 7 (*italics in the original*); see also Blaikie and Brookfield (1987).
- 84 See Wackernagel and Rees (1996); Caroline LeQuesne, 'Ecological footprints', chapter 5 in Watkins (1995).
- 86 See for example Neefjes, Hart and Dem, in Hall *et al.* (eds.) (1996).
- 87 Chambers (1997), p. 7.
- 88 UNDP (1994), pp.23–4.
- 89 See also UNDP (1998); UNDP (1999).
- 90 'Environment', W. Sachs, in Sachs (ed.) (1992), p. 29.
- 91 Pearce *et al.* (1989).
- 92 'Making development sustainable', Paul Ekins, in Sachs (ed.) (1993).
- 93 Caroline LeQuesne, 'Ecological footprints', chapter 5 in Watkins (1995); see also sections 2.2.4 and 4.2.
- 94 Merril, quoted by Sarupria (1994).
- 95 'Technology', Otto Ullrich (1992), in Sachs (ed.) (1992), p. 280.
- 96 Wilson (1995), who discusses NGOs in Zimbabwe, including Oxfam GB.
- 97 See also section 2.1 on alternatives developed by environmentalists and other activists and development agencies; Schumacher (1973), Chambers (1997).
- 98 Chambers (1997), pp. 24–29, cites many more examples that challenge this neo-Malthusian myth.
- 99 Reported by Fairhead and Leach (1996).
- 100 Neefjes (1998b), p. 29.
- 101 Davidson and Myers (1992), see also Pretty and Guijt (1992).
- 102 Dobson (1998), p. 15.
- 103 See for example Worster (1993).
- 104 Worster (1993).
- 105 See for example Scoones (ed.) (1995).
- 106 FAO (1999). There is a vast literature on the Green Revolution and alternatives to it. See Bull (1982) and Conway and Pretty (1991) on pesticides; Shepherd (1998), Moore Lappé *et al.* (1998) and Conway (1997) for general critiques.

- 107 'Terminator genes' is a reference to a genetic trait bred into some experimental crops that render seeds sterile and thus offer patent holders or breeders the opportunity to force farmers to buy new seeds annually (even if a patent is not awarded!). This genetic trait has not been released for commercial crop-growing yet, and some limited trials in the USA have been discontinued. However in the USA and some other countries, government support for biotechnology is very strong.
- 108 Also known as conservation farming, low-external-input sustainable agriculture (LEISA), ecological farming, or organic farming.
- 109 The alternative future scenario for agriculture has been dubbed 'The Doubly Green Revolution' by Gordon Conway, now President of the Rockefeller Foundation.
- 110 A report that refers to many of the most recent developments and achievements is CIIFAD (1999).
- 111 Rabinovitch (1998): 90 per cent of the poor of Latin America, 45 per cent of the poor of Asia, and 40 per cent of the poor of Africa, or on average 50 per cent of the poor in developing countries will live in cities around the year 2000.

Chapter 3

- 1 Tacoli and Satterthwaite (1999).
- 2 This case history is based on Caccia Bava (1999); Oxfam has been an important donor of SCJP over several years.
- 3 Nine UK-based international development NGOs brought together some of their (and their national partners') experience in urban poverty alleviation in Hall, Hart, and Mitlin (eds.) (1996).
- 4 Based on Hall, Hart, and Mitlin (eds.) (1996); also Oxfam (1995): 'Exchanging Livelihoods' – urban edition.
- 5 See Neefjes and Sabri (1996). Recent publications have also paid considerable attention to 'environmental victimology' with a particular focus on health risks from pollution in urban centres; see C. Williams (1997) and C. Williams (ed.) (1998).
- 6 ITDG-Bangladesh REMS (1999).
- 7 See also Scott (1998).
- 8 This is based on an analysis of key lessons from a range of urban-poverty projects under various conditions, as documented by Hall, Hart, and Mitlin (eds.) (1996).
- 9 The two case histories presented here are documented in Neefjes (1998a,b).
- 10 See also section 5.3.2 on climate change. Analysis of rainfall data, combined with some crude assumptions of soil-moisture retention and crop-water needs in different stages of crop development led to the analysis that the worst seasons in Niassa were 1979/80, 1993/94, and 1994/95, and also bad in terms of drought stress were 1980/81, 1981/82, 1987/88, and 1991/92 (Neefjes, 1998a). It seems an

extreme coincidence that all but the first two overlap fully with the 'El Niño years' (considered in section 4.3.2): 1982/83, 1987/88, 1991/92, and less strongly 1993 and 1994. Also interesting to note is that, whereas governments and development agencies prepared for drought in Southern Africa during 1997/98 – an 'unusually strong' 'El Niño year' – that drought did not happen.

- 11 Carney *et al.* (1999).
- 12 The early forms of the sustainable livelihoods framework were all based on Chambers and Conway (1992).
- 13 See for example section I.4.3.4 on EIA in Eade and Williams (1995); Maesson (1992); Borriini-Feyerabend (ed.) (1997); IUCN (1997); Donnelly (1998); and Goudie (1997). The latter is an anthology of papers about human impacts on environments, presented in five groups: (1) geomorphological and surface impacts, (2) soil impacts, (3) water impacts, (4) climatic and atmospheric impacts, and (5) biological impacts.
- 14 See for example Pickering and Owen (1994).
- 15 This definition is similar to (but not the same as) Carney (1998), which in turn is based on Chambers and Conway (1992). Internal debates in Oxfam in 1993 and 1994 led to the definition of a livelihood as '*a means of living, not just of production*', and sustainability as '*the ability to maintain and improve livelihoods while maintaining or enhancing the global assets and capabilities on which livelihoods depend*'. Oxfam (18.2.1994), 'Discussion Paper on Sustainable Livelihoods', Oxfam, Policy Department. Comparable definitions appear in Scoones (1998) and in Leach, Mearns, and Scoones (1997b).
- 16 This diagram is based strongly on Carney (1998), but important subtle differences make this version less obviously rural and opens possibilities for urban livelihoods and livelihoods based on non-natural resources to be addressed. The diagram of Carney (1998) is in turn based on Chambers and Conway (1992), Scoones (1998), and the work of a committee on sustainable rural livelihoods set up by DFID in 1998. The rest of section 3.2 is (also) based on Carney (1998); and Scoones (1998), Chambers and Conway (1992), Eade and Williams (1995), DFID (1999).
- 17 Roche (1999).
- 18 Scoones (1998) quotes Lipton, who explains that 'capital' is conventionally seen as the stock of productive resources built up by human action by investing current income streams, and so increasing future benefits from a given input of labour or raw material. Such capital may depreciate, be consumed, or be sold off. Under such a definition, it can be argued that natural and social 'capital' are not always appropriately termed 'capital' resources.
- 19 The definitions are based on Carney (1998) and DFID (1999), but are not the same.
- 20 Holland (1999) defines it as 'knowledge, skills, virtues and habits needed to realise natural and human made capital'.
- 21 From Leach *et al.* (1997a,b) and Scoones (1998).

- 22 'Human-made capital' is however defined by Holland (1999) as 'artefacts and physical infrastructure, and also including human capital'.
- 23 In fact a pasture thus described is a mixed form of natural and human-made capital, described by Holland (1999) as 'cultivated capital'.
- 24 The language of endowments and entitlements is borrowed from Sen (1981), who discussed the causation of famines. See in particular Leach, Mearns and Scoones (1997a,b) and Scoones (1998).
- 25 'Institutions' can be understood as 'the rules of the game' (formal or informal rules) and thus include markets, land tenure, and also for example conjugal arrangements (various types of marriage and relationships in a society). They will normally include organisations (for example central banks or village councils) but are not equated with organisations.
- 26 See e.g. Eade (1998).
- 27 This description of trends, seasonality, and shocks draws strongly on DFID (1999).
- 28 Sen (1981), Hubbard (1995) and Oxfam UK&I (1997a) elaborate on food security and food insecurity; Macrae *et al.* (1994) are excellent on complex emergencies.
- 29 See in particular Leach and Mearns (eds.) (1996).
- 30 Scoones (1998) says in an endnote: '[reflections on] the term sustainable rural livelihoods ... [are] largely rurally based. However, rural and urban livelihoods are clearly intertwined and the rural-urban distinction is somewhat artificial'. Evidence that ideas about livelihoods are very relevant in urban situations can also be found in Rakodi (1999); DFID commissioned some research in 1999 that appears to suggest that there is little particularly rural or urban in the framework – in different situations, different capitals are important to different livelihoods. Nevertheless, the framework has not been used much in analysis of urban problems or planning and review of urban poverty programmes.
- 31 Based on Brock (1999); see also Neefjes (1998a,b); see also chapter 4 and literature on PRA and other methodology, for example Chambers (1997) and Thomas, Chataway and Wuyts (1998).
- 32 Neefjes (1999c); Neefjes and Woldegiorgis (1999).
- 33 Adnan *et al.* (1992), p. 28.
- 34 From Rangan (1996), p. 206 (italics in original). The Chipko movement became widely known for its non-violent protest against tree logging in the Himalayan forests, in part through 'embracing' or hugging trees; see also Davidson and Myers. It is a common experience of NGOs working with poor people in participatory ways that they are first and foremost interested in moving out of poverty through economic improvements in productivity as well as sustainability – see for example Neefjes (1998a, 1998b).
- 35 Based on Nelson and Wright (1995).
- 36 *Ibid.*
- 37 Long (1992), p.21.

- 38 Alberto Arce and Norman Long, 'The dynamics of knowledge: interfaces between bureaucrats and peasants', in Long and Long (eds) (1992).
- 39 Neefjes *et al.* (1997), Oxfam (1999a).
- 40 See Chambers (1997), who gives a very large number of references; Pretty *et al.* (1995) for discussions of tools and training in particular; and Neefjes (1997c) for some specific Oxfam learning and advice for trainers.
- 41 See e.g. Chambers (1997).
- 42 As documented in training, project appraisal, and evaluation reports of Oxfam, for example in Neefjes (1993, 1995, 1998a, 1998b), Oxfam (1994).
- 43 This is based in part on the above and on Neefjes (1997c); see also chapter 5.
- 44 Action research can be understood as a form of research in which the researchers and local people work together for some kind of political, environmental, or socio-economic change. This happens mainly through experiential learning, i.e. trying things out. The situation or people that are described by researchers are influenced by them; this means that there is no longer a clear sense of objectivity, and one is considering not a static situation but a dynamic one.
- 45 This is based on Chambers (1997) and other publications by the same author.
- 46 See for example Chambers (1997); contributors to Guijt and Shah (eds) (1998); Feeney (1998); Mosse (1995).
- 47 See for example Neefjes (1998a).
- 48 This is from Guijt and Kaul Shah (1998), who list even more constraints. Mosse (1995) describes 'social constraints' in the context of women's culturally sanctioned access to certain public places, for example, and constraints inherent in PLA/PRA methods: certain diagrams can depict certain parts of realities and knowledges, but much remains untold. Since work with groups or individual women may produce less (and less diagrammatic) output than those with men, the representations of women may become marginalised in the later stages of learning processes, when information and analysis are summarised and retold by others.
- 49 Cornwall (1998), p.55.
- 50 Neefjes *et al.* (1997), Oxfam (1999).
- 51 Neefjes (1998b).
- 52 Neefjes (1998c).
- 53 See Neefjes and Sabri (1996); see also Neefjes, Hart and Dem (1996).
- 54 ITDG-Bangladesh / REMS (1999).
- 55 This 'negative' approach of governments in the North and also in the South to the environment may be best expressed by the setting of standards that limit pollution, and also by the requirement of doing Environmental Impact Assessment as an important part of planning procedures, which are exercises that usually produce a range of scenarios of (more or less negative) environmental impact from which decision makers choose, weighing their decisions in particular against projections of economic gains and also potential impacts on health – see also chapter 4.

Chapter 4

- 1 The quote is from Chambers' Dictionary; see also Oxfam (1997b).
- 2 It is important to note that when agencies such as Oxfam talk of 'appraisal' they usually mean something that takes place after the design (and planning) stage, and they see it as part of the process of approving a grant: 'the appraisal stage involves a critical assessment of the project, the counterpart's capacity, and how well the project and the counterpart fit each other' (Oxfam, 1997). In practical usage in projects and by local NGOs, however, 'appraisal' – as in PRA (participatory rural appraisal) – is most often part of earlier stages: needs and problem assessment, baseline-data gathering, and project identification. Appraisal may then 'spill over' into the design stage, but is essentially a process *with* project beneficiaries and other stakeholders and not an internal assessment exercise.
- 3 This section draws in particular on chapter 12 of Gupta and Asher (1998) and various chapters in Donnelly *et al.* (1998); see also ODA (1996) and DFID (1999b).
- 4 Several additional steps are distinguished in literature with regard to the EIA-project cycle, most of which are compressed in steps 1 and 2 in the figure.
- 5 From Modak and Biswas (1999).
- 6 Bryan Spooner, 'Review of the quality of EIA Guidelines, their use and circumnavigation', in Donnelly *et al.* (1998).
- 7 This is reported by Mwalyosi and Hughes (1998); see also Ross Hughes: 'Environmental Impact Assessment and stakeholder involvement', chapter 3 in Donnelly *et al.* (1998).
- 8 DFID (1999b).
- 9 This sub-section draws heavily on Hughes in Donnelly *et al.* (1998); see also Mwalyosi and Hughes (1998) and ODA (1996).
- 10 See Adnan *et al.* (1992).
- 11 See for example Shepherd (1998).
- 12 See for example Pallen (1996).
- 13 See for example Eade and Williams (1995), vol.1 section 4.3.4, in which a basic checklist is presented.
- 14 Maesson (1992), who produced these guidelines for the CCIC, Canadian Council for International Co-operation.
- 15 The manual was developed by consultants (Mouchel & Partners, 1996) and funded by the UK Overseas Development Administration, now DFID.
- 16 Particularly useful are: IUCN (1997), Borrini-Feyerabend (ed.) (1997), Guijt (1996), and Defoer *et al.* (1998).
- 17 See for example Pretty *et al.* (1995); also sections 3.3.2 and 4.3.
- 18 See for example Conway (1985; 1997) and Conway, McCracken and Pretty (1987).

- 19 Moorehead (1992) analysed some NGO approaches and case studies, in particular those of Oxfam. On the basis of early experiences, Arrowsmith (1996) developed a proposal for guidelines with particular reference to ITDG work in Asia, and making use of some Oxfam work in Asia too.
- 20 David and Neefjes (1995); this was later incorporated in the Oxfam Procedures Manual (appendix PM7-A) (Oxfam, 1997b) and is based on Guijt (1996).
- 21 Oxfam (1999b): 'Exchanging Livelihoods' – natural-resources edition.
- 22 UNDP (1992) (available in English, French and Spanish).
- 23 Neefjes (1998a).
- 24 Neefjes (1996).
- 25 This sub-section is based in particular on Scott (1998).
- 26 ITDG-Bangladesh / REMS (1999).
- 27 See UNHCR (1996) and UNHCR (1998a,b,c,d). Black (1998) includes an interesting chapter entitled 'Towards an environmental toolkit', and Kelly (1999) presents a simple method for 'rapid assessment' of environmental impact associated with disasters, which is however not much tested in practice. See also Hoerz (1995).
- 28 See Black (1998) and Green Cross UK (1998), which reports discussions in a workshop about EIA and disasters.
- 29 Black (1998).
- 30 This is summarised from UNHCR (1996); Black (1998) presents more or less the same summary.
- 31 Summarised from UNHCR (1996); see further UNHCR (1998a,b, c); this table is also virtually the same summary as presented by Black (1998).
- 32 See in particular Neefjes (1999a); also Hallam (1998) and Black (1998).
- 33 Some literature also describes 'hybrids', for example in Shepherd (1998): a mix of sustainable agriculture, EIA, and PRA.
- 34 From: Sphere Project (1998) *Humanitarian Charter and Minimum Standards in Disaster Response*, first edition. See also: <http://www.ifrc.org/pubs/sphere>.
- 35 See for example Neefjes (1993a; 2000b); Eade and Williams (1995); and Arrowsmith (1996). The experience on which this section draws is mainly from Oxfam GB, and also ITDG, Novib, and other international NGOs and several of their national partner organisations.
- 36 Such processes have been conducted with Oxfam staff and partners in project appraisals and reviews in (for example) Cambodia, Sudan, Vietnam, Mozambique, Angola, and Rwanda, which are all well documented. Similar work in Uganda was done with counterparts of Novib: Neefjes and Nakacwa (1996). In all those cases an earlier incarnation of the sustainable livelihoods framework was used: see Chambers and Conway (1992).
- 37 Chambers (1997) summarises some of this debate and gives many references.
- 38 See for example Estrella and Gaventa (1997), and Abbot and Guijt (1998); *PLA-Notes* no. 31 on Participatory Monitoring and Learning, IIED (1998).

- 39 Smith (1997); Neeffjes (1997c).
- 40 See Long and Long (1992) for some of the theory; also section 3.3; and CRDT/DFID (1998) for a practical training exercise about participation and stakeholder analysis.
- 41 Pretty (1994); Thomas *et al.* (1998).
- 42 Mosse (1995); Guijt (1996).
- 43 See in particular Abbot and Guijt (1998).
- 44 Roche (1999).
- 45 Compare Roche (1999), pp. 45-8.
- 46 Oxfam UK&I (1998).
- 47 Neeffjes *et al.* (1997); Oxfam (1999); Neeffjes (1999a); Neeffjes (1999b).
- 48 Adnan *et al.* (1992); Nelson and Wright (1995); Chambers (1997); Abbot and Guijt (1998); Long and Long (1992).
- 49 See also discussion on 'ecological footprints' in Watkins (1995a).
- 50 From: Oxfam-PDT (1995): 'Cambodia: Programmes In Transition, An Oxfam Workshop, May 23, 1995'.
- 51 PREDES received funding from Oxfam and the ODA (now DFID) for several years from 1984. Local NGOs and others addressed the problem of river pollution with support from CIIR/ICD. See Maskrey (1989) and also Davidson and Myers (1992) on floods. A very interesting initiative is also ITDG-Peru's network on disaster prevention and its sustainable-development information centre, called SIG-DES: <http://www.itdg.org.pe>.
- 52 Johnson (1998).
- 53 See Neeffjes (1998a).
- 54 In the literature on restocking, Oxby (1994) is very practical, Markakis (ed.) presents several case studies of pastoralism in decline as a result of war (in Africa), Prior (1994) outlines strategic choices in pastoral development, and Scoones (ed.) (1995) gives several papers on new ways and paradigms in range management and pastoral development.

Chapter 5

- 1 See Appendix 2 for details of several of those organisations, including their websites.
- 2 This draws on Barry Dalal-Clayton and Barry Sadler (1998): 'Strategic Environmental Assessment: a rapidly evolving approach', in Donnelly *et al.* (1998).
- 3 From Eade and Williams (1995).
- 4 Based on Dalal-Clayton and Sadler, in Donnelly *et al.* (1998).
- 5 From Dalal-Clayton and Sadler, in Donnelly *et al.* (1998).

- 6 This includes NGOs who contributed in some way to the project that led to the writing of this book, i.e. Oxfam GB, ITDG, and also Novib and ActionAid. ITDG's general policy is strongly rooted in the thinking of Schumacher, whose work is briefly touched upon in section 2.2.4. ActionAid promotes working *with* poor people to understand how they care for their environments, and addresses environmental issues for example through education, community-based land reform, and the development of low-external-input farming. Novib has sustainable development at the core of its mission statement, and it aims to increase the capacity of local organisations to raise living standards sustainably and to empower them to overcome social and economic oppression. Novib sees environmental degradation as a cause of poverty and also as a result of it, i.e. it believes that there is a vicious circle that needs to be broken by, for example, improving land rights and promoting sustainable land-use practices. It also believes that environmental degradation has strong implications for North–South relations, because much of it is caused by Northern lifestyles.
- 7 This is true for Oxfam GB, and also for the other members of Oxfam International, which include Novib in The Netherlands.
- 8 See in particular Ashley and Carney (1999), who show the various ways of using 'sustainable livelihoods', i.e. as an analytical tool, for setting organisational or operational objectives, and also as an approach to development that combines various tools and principles.
- 9 This is witnessed by a range of 'case histories', for example those published in Oxfam UK&I (1997a): 'Exchanging Livelihoods – food-security edition', and Oxfam GB (1999b) 'Exchanging Livelihoods – natural-resources edition'.
- 10 By Caroline LeQuesne, in Watkins (1995a). This report was developed by Oxfam GB in collaboration with a number of other members of the Oxfam International family, notably Oxfam America, Oxfam Canada, and Oxfam New Zealand. The campaign alluded to in the text was popularly known as the Basic Rights Campaign. On ecological footprints, see also Wackernagel and Rees (1996).
- 11 In section 2.2.4, three broad courses of action to this effect are suggested, namely government regulation, market-based policies (including taxation), and 'persuasion' in order to change behaviour.
- 12 A programme is conceived of as a cluster of inter-related projects, campaigning, and emergency responses, most of which happen with or are done by counterparts, working towards a common aim in a country or in a region consisting of several countries.
- 13 Based on Oxfam (1995b); the sustainable-livelihoods contribution to those guidelines obviously concerns an earlier incarnation of the framework, but the features are not essentially different from what is presented in this book. Earlier advice has been interpreted and adapted here in the light of more recent language expressing what 'sustainable livelihoods' are all about – see also chapter 3.
- 14 From Oxfam (1999c).

- 15 See also Pye-Smith and Borrini-Feyerabend, with Sandbrook (1994).
- 16 See Neeffjes (1998a) on Vietnam; Neeffjes *et al.* (1997) and Oxfam GB (1999) on Kenya.
- 17 See UNDP (1992); also Gupta and Asher (1998), who describe the environmental overview of the country programme not as EOC but as EOP.
- 18 The framework shows links and flow, for example increased income can lead to investments in maintaining or regenerating natural capital, but only if the investor expects to have long-term access to the resource (which depends strongly on policies and regulations). Whether an indicator in the table is listed with *outcomes*, *capitals*, or *policies* is often debatable.
- 19 Based on Holmberg *et al.* (1992); IUCN (1991); Scoones (1998); and *Human Development Reports* including UNDP (1998).
- 20 Various forms of environmentalism can be related to campaigns on issues such as those discussed here. Excellent, discursive books that analyse environmentalisms and ecological movements in developing countries include Guha and Martinez-Alier (1997) and Peet and Watts (1996). See also chapter 2.
- 21 Oxfam GB, Novib, and Oxfam Hong Kong.
- 22 See Hansungule, Feeney and Palmer (1998), and Cynthia Mwase and Sophie Bond, 'Land tenure insecurity in the Zambian Copperbelt', in Oxfam (1999b): 'Exchanging Livelihoods – natural-resources edition'.
- 23 This is taken mainly from an excellent case history reported by Böge (1999); see also Gillespie (1998).
- 24 Gaspar *et al.* (1998); SEAMEO (1997); Linda Stephen, 'Treading on ancestral domains', in: Oxfam UK&I (1997a): 'Exchanging Livelihoods – food-security edition'.
- 25 MST began in 1982 as a land-rights campaign and now claims to have supported up to 400,000 families all over Brazil in their successful efforts to acquire land through squatting and demonstrations, and more generally through demanding their rights to a livelihood, in particular through land titles and other support for small-scale agriculture. Brazil is vast; it has millions of dispossessed and a small minority of elite landowners who own most of the country's productive land. The latter often leave it fallow and own land for speculative purposes, or they use it for ranching or for large-scale plantations.
- 26 Feeney (1998), p. 45.
- 27 Feeney (1998), p. 54.
- 28 See for example Borrini-Feyerabend (1997); see also IIED (1994) and Panos (1997a) for discussion of community-based wildlife conservation and a large number of case studies.
- 29 See for example Oxfam UK&I (1996a); and Ric Goodman, 'Pastoral livelihoods in Tanzania: can the Maasai benefit from community based tourism?', in Oxfam GB (1999b): 'Exchanging Livelihoods – natural-resources edition'.

- 30 See for example Oxfam(UK&I) (1996a); Silas Likasi, 'Minority land rights in Tanzania', in Oxfam (1999b): 'Exchanging Livelihoods – natural-resources edition'; and various sources summarised in Palmer (1997).
- 31 There is a vast literature on the Green Revolution and alternatives to it. See Bull (1982) and Conway & Pretty (1991) on pesticides; Shepherd (1998), Moore Lappé *et al.* (1998) and Conway (1997) for general critiques.
- 32 See Sen (1981), Drèze, Sen and Hussain (eds) (1995), and also Hubbard (1995) and Moore Lappé (1998).
- 33 See for example Altieri (1987), Reijntjes *et al.* (1992), Shepherd (1998), Conway (1997), and Pretty (1995).
- 34 According to a genetic scientist, Dr Ricarda Steinbrecher (1998).
- 35 FAO data, autumn 1999, available through the FAO website.
- 36 See, for example, GRAIN (1998), Kelly (1999a,b), Spinney (1998), Steinbrecher (1998), Mae-Wan Ho (1998), Berlan and Lewontin (1999); Nuffield Council on Bioethics (1999).
- 37 Alternatives with regard to sustainable agriculture and permaculture have been documented in Altieri (1987), Reijntjes *et al.* (1992), Shepherd (1998), Conway (1997), Pretty (1995), Pretty (1999), and most recently in CIIFAD (1999). See also Oxfam UK&I (1997a), Oxfam GB (1999b), Bunch (1982); Conway and Pretty (1991).
- 38 See for example Bunch (1990) and Holt Gimenez (1999).
- 39 Rosset (1994).
- 40 Majlinda Prikus and Teofik Fugarini (1997): 'Permaculture in Albania: securing livelihoods through innovations in agriculture techniques', in 'Exchanging Livelihoods – food-security edition', Oxford: Oxfam GB.
- 41 See Neefjes, Mafongoya and Mwangi with Ngunjiri and Mugure (1997) and Oxfam GB (1999a).
- 42 Francis McDonagh (1997): 'The Brazil Hunger Campaign', in Oxfam UK&I (1997a).
- 43 This is confirmed by the Kenya and Vietnam case studies referred to in several parts of this book and in Neefjes *et al.* (1997), Oxfam GB (1999a), Neefjes (1998b).
- 44 From John Gittings, 'Great Yangtze Dam in trouble: Beijing has finally admitted that the Three Gorges project poses a risk to people and the environment', *The Guardian*, 25 May 1999.
- 45 From Arundhati Roy, 'Lies, dam lies and statistics', *The Guardian*, 5 June 1999. Regarding the Narmada scheme much has been published; see for example Guha and Martinez-Alier (1997) and also Davidson and Myers (1992).
- 46 Smyth (1997).
- 47 See several contributors to Williams (ed.) 1998; see also Panos (1997b), which gives a more global or Northern outlook on industrial 'greening'.
- 48 Williams (1998), p. 13.

- 49 See Gupta and Asher (1998) and especially Sarangi (1998).
- 50 Satterthwaite (1996).
- 51 See for example several contributions to Oxfam UK&I (1994b): 'Exchanging Livelihoods – pilot edition', Oxfam UK&I (1995a): 'Exchanging Livelihoods – urban edition', and Oxfam GB (1999b): 'Exchanging Livelihoods – natural-resources edition'.
- 52 From Caccia Bava (1999); see also section 3.1.1. Oxfam GB is an important source of funds for SCJF.
- 53 See Davidson and Myers (1992); Neefjes, Hart and Dem (1996); Neefjes and Sabri (1996).
- 54 For some details on the history of environmental treaties and conferences, see section 2.1.2 and Appendix 1. For more on the UNCED and its sequels, see for example Gupta and Asher (1997), Sachs (1993); NGLS (1997); Keating (1993); Osborn and Bigg (1998); and the websites of UNEP and UNDP.
- 55 An important actor and source of information in this field is ICLEI, the International Council for Local Environmental Initiatives – see Appendix 2 for website address.
- 56 This is taken in particular from Gupta and Asher (1998), and Pickering and Owen (1994); it is also based on information from several Internet searches.
- 57 From Stephan Singer (WWF), in *ECO Newsletter on Climate Negotiations*, June 2, 1999, issue no. 2
- 58 See for example Kennedy (1998).
- 59 As explained by Kennedy (1998).
- 60 See Wackernagel and Rees (1996); Watkins (1995).
- 61 From Rayner and Malone (1998).
- 62 The 'Uruguay Round' or GATT, the General Agreement on Tariffs and Trade, was concluded in 1994 and incorporated in the WTO, the World Trade Organisation, which came into effect on 1 January 1995.
- 63 See Ahmed and Lipton (1997); also Reed (1992) for the possible effects of SAPs.
- 64 They were a number of policy-oriented Nicaraguan NGOs, Oxfam GB, and SNV, a Dutch development organisation. From GNC/Oxfam/SNV (1996).
- 65 Coote (1992).
- 66 Stillwell and Arden-Clark (1998).
- 67 From GRAIN (1998), Kelly (1999a,b), and Spinney (1998); important international NGOs who collect much information on these topics and play a key role in the lobby are RAFI and GRAIN, and also the UK Food Group – see Appendix 2 for website addresses.
- 68 For more on the IU and CBD, see for example the website of UK-ABC: <http://dSPACE.dial.pipex.com/ukfg/ukabc.htm>.
- 69 These negotiations are difficult, mainly because of the objections of the so-called Miami group of agro-exporting countries, which includes Argentina, Australia,

Canada, Chile, Uruguay, and the USA. Even though the USA is not a signatory of the CBD, it plays a dominant role in the Bio-safety Protocol negotiations; the USA, Argentina, and Canada are the largest producers of GM crops.

- 70 CGIAR stands for the Consultative Group of International Agricultural Research.
- 71 See for example Kelly (ed.) (1999a).
- 72 Kevin Watkins and Michael Windfuhr in 'The effect of the Uruguay Round on food security', in *Third World Resurgence*, no.67 (1995), argued that in the Uruguay Round tariff restrictions were far more severe than subsidy limitations, effectively putting greater limits on the policy options of developing countries than on those of developed countries.
- 73 This paragraph is based on Konandreas, Sharma, and Greenfield (1999); see also the regular updates of world market prices on the FAO website.
- 74 See for example Watkins and Windfuhr (1995).
- 75 Neeffjes (1998b).
- 76 Watkins (1995b).
- 77 On bananas and coffee, and Oxfam GB's role, see contributions to Oxfam UK&I (1997a): 'Exchanging Livelihoods – food-security edition', and Oxfam GB (1999b): 'Exchanging Livelihoods – natural-resources edition'.

Appendix 1

- 1 The information in Appendix 1 was obtained from Tolba and El-Kholy *et al.* (1992). A comprehensive list of multilateral agreements is also given at <http://www.tufts/fletcher/multilaterals.htm>.

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