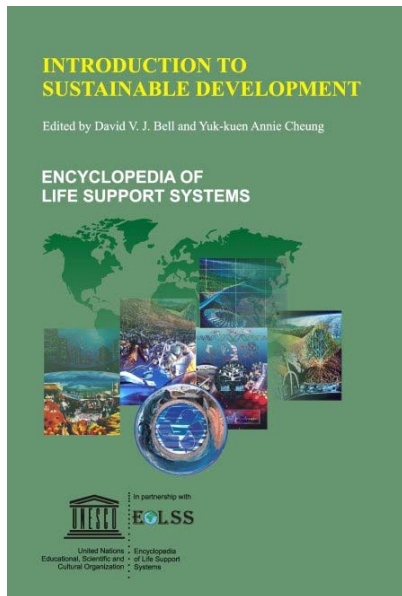


CONTENTS

INTRODUCTION TO SUSTAINABLE DEVELOPMENT



Introduction to Sustainable Development - Volume 1

No. of Pages: 545

ISBN: 978-1-84826-222-5 (eBook)

ISBN: 978-1-84826-672-8 (Print Volume)

For more information of e-book and Print
Volume(s) order, please [click here](#)

Or [contact : eolssunesco@gmail.com](mailto:eolssunesco@gmail.com)

CONTENTS

Introduction to Sustainable Development

1

David V. J. Bell, *York University, Canada*

Yuk-kuen Annie Cheung, *University of Toronto - York University Joint Centre for Asia Pacific Studies (JCAPS), Canada*

1. What is Sustainable Development?
2. When did it Emerge?
3. What are its Implications for Governments?
4. What are its Implications for Business and Industry?
5. What are its Implications for Farming and Agriculture?
6. What are its Implications for Civil Society, NGOS, and Individuals: Education and Awareness?
7. What Progress has been made?

Early Localized Issues Affecting Regional Sustainability - The Case of Ontario, Canada's Niagara Escarpment

55

Len Gertler, *University of Waterloo, Canada*

1. The Niagara Escarpment Study - Precursor of Sustainability
2. The Niagara Escarpment - A Strategic and Vulnerable Environment
3. A Sustainable Development Strategy for the Niagara Escarpment
4. Forces Leading to the Strategy for the Niagara Escarpment
5. The On-going Struggle for Sustainability

Malthus' Essay on the Principle of Population

71

John Avery, *University of Copenhagen, Denmark*

1. The Education of Malthus
2. Debate on the Views of Godwin and Condorcet
3. Publication of the First Essay in 1798
4. The Second Essay, Published in 1803
5. Systems of Equality
6. The Poor Laws
7. Replies to Malthus
8. Ricardo's Iron Law of Wages; the Corn Laws
9. Acceptance of Birth Control in England
10. The Irish Potato Famine of 1845
11. The Impact of Malthus on Biology
12. The Importance of Malthus Today
13. Limits to the Carrying Capacity of the Global Environment
14. Conclusion

"The Tragedy of the Commons" by Garrett Hardin, 1968

98

P. Alexander Latta, *York University, Canada*

1. Introduction
2. The Tragedy in Review
 - 2.1. The Population Problem
 - 2.2. The Inexorable Logic of Tragedy
 - 2.3. Preventing the Tragedy: Mutual Coercion, Mutually Agreed Upon
3. Research and Policy: Hardin's Legacy
 - 3.1. Proponents of Hardin's Logic
 - 3.2. Hardin's Critics

- 3.3. Resource Systems
- 3.4. Property Regimes
- 3.5. Refuting Hardin: The Empirical Case for Common Property
- 4. Looking Back, Looking Ahead
 - 4.1. Hardin's Contribution
 - 4.2. The Future of the Commons: From Local Tradition to Global Cooperation?

Beyond Brundtland: The Evolution of Sustainable Development in the 1990s **111**
 Robert Lauri Newman, *York Centre for Applied Sustainability, Canada*

- 1. Introduction
 - 1.1. Precursors to "Our Common Future"
 - 1.2. The Brundtland Report
- 2. Building on Our Common Future
 - 2.1. *The Ecology of Commerce*
 - 2.2. Natural Capitalism
- 3. Measuring Sustainable Development
 - 3.1. The Ecological Footprint
 - 3.2. The Natural Step: From Prediction to Backcasting
- 4. Future Trends in Sustainable Development

Moving Towards Sustainable Development: the Chinese Conundrum **126**
 Yuk-kuen Annie Cheung, *University of Toronto - York University Joint Centre for Asia Pacific Studies (JCAPS), Canada*

- 1. Introduction
- 2. Symptoms of Systemic Malfunction
- 3. Towards a Greater Understanding of the Key Forces at Work -- Who is Responsible?
- 4. Sustainable Development - Integrating Social Equity, the Economy and the Environment
 - 4.1. Sustainable Development as a Goal
 - 4.2. Sustainable Development as an Objective: The Chinese Conundrum
 - 4.2.1. Population growth under natural constraints
 - 4.2.2. Infrastructure development to meet economic needs
 - 4.2.3. Environment as a living resource for economic growth
 - 4.3. Sustainable Development as a Process

World Conservation Strategy of the International Union for the Conservation of Nature and Natural Resources (IUCN) **146**
 Rodger D. Schwass, *York University, Canada*

- 1. Background to the World Conservation Strategy
- 2. The World Conservation Strategy
 - 2.1. Priorities for National Action
 - 2.2. Priorities for International Action
- 3. Case Study: The Pakistan National Conservation Strategy
 - 3.1. The Development of Consensus
 - 3.2. The Search For Solutions
 - 3.3. Conservation Goals to the Year 2000
 - 3.4. Forming A High-Level Action Group
 - 3.5. Follow-up Conferences
 - 3.6. Provincial Conservation Strategies
 - 3.7. Role Of The Search Conference To Develop Consensus
 - 3.8. Continuity
 - 3.9. Conclusions
- 4. Case Study: Northwest Frontier Province Conservation Strategy

5. Caring for the Earth: the World Conservation Strategy Revisited
6. Conclusions

Urbanization 172
 Mark L. Seasons, *University of Waterloo, Canada*

1. Introduction
2. Urban Centres and Urbanization
3. Urbanization - North and South
4. Macro Trends, Urban Impacts
 - 4.1. Economic Change
 - 4.2. Demographic Change
 - 4.3. Technology
 - 4.4. Political/Institutional Capacity
5. Consequences of Traditional Urbanization
6. Towards Sustainable Urbanization
 - 6.1. Economic Sustainability
 - 6.2. Social Sustainability
 - 6.3. Environmental Sustainability
 - 6.4. Governance
7. A Vision of the Sustainable Urban Centre

Globalization, Interdependence and Sustainability 187
 Robert Paehlke, *Trent University, Canada*

1. The Roots of Globalization
2. Globalization and Interdependence
 - 2.1. Economic Interdependence
 - 2.2. Social Interdependence
 - 2.3. Environmental Interdependence
3. Sustainability
4. Globalization and the Challenges to Sustainability
5. Some Potential Environmental and Sustainability Benefits of Global Interdependence
6. Environmental Sustainability and the Structures of Globalization
7. Guiding the Global Economy: Toward More Democratic Global Governance

Natural Resource Perspectives on Sustainability 209
 L. Anders Sandberg, *York University, Canada*
 Christopher Midgley, *University of British Columbia, Canada*

1. Introduction
2. Renewability, Non-Renewability, and Sustainability
3. "Capture" and Sustained Yield in Modern Resource Management
4. Maximum Sustained Yield
5. Optimum Sustained Yield
6. Towards a New Paradigm
7. Adaptive Ecosystem Management
8. A Glance Back in Time
9. Conclusion

Sustainability, Knowledge Management and the Internet 225
 Robert K. Logan, *University of Toronto, Canada*

1. Introduction

2. Language = Communications + Informatics
3. Social Class and Media
4. Electric and Electronic Media
5. The Sixth Language: The Internet
6. Knowledge Networking
7. Conclusion

The Politics of Sustainable Development

236

Ann Dale, *Royal Roads University, Canada*

1. The Problematique
2. Current Context
3. Barriers to a Politics
4. A Canadian Experiment
 - 4.1. Round Table Process
 - 4.2. Operating Structure
 - 4.3. Open or Closed Process
 - 4.4. Sphere of Influence
5. Retrospective
 - 5.1. Lessons Learned
 - 5.2. The Importance of Values
 - 5.3. Issues of Standing
 - 5.4. Appointment Process
 - 5.5. Decision-making
 - 5.6. Modus Operandi
6. Building on the Canadian Experience

Cultural Perspectives and Sustainability

257

Peter Harries-Jones, *York University, Canada*

1. Conceptual Framework for Analysis
2. Cultural Monism and Spiritual Balance
 - 2.1. North American Hunter-Gatherers
 - 2.2. Australian Aborigines
 - 2.3. Practical Effects of Hunter-Gatherer Conservation
 - 2.4. Sacred Sites and Conservation
3. Traditional Ecological Knowledge
 - 3.1. The Collapse of the Cod Fishery
 - 3.2. Cultural Effects of the Collapse
 - 3.3. TEK and New Ecological Thinking
4. Slash and Burn Cultivation: Miombo Woodland
 - 4.1. Traditional Forest Practices
 - 4.2. Charcoal Burning
 - 4.3. Cross-Scaling in Ecosystems
 - 4.4. Structural Adjustment and Building Resilience: Effect and Counter-Effect
5. Institutional Development of TEK and Resilience in EVI
6. Conclusion: Fit and the Balance of Nature

Sustainability in International Law

283

Stepan Wood, *York University, Canada*

1. Introduction
 - 1.1. Overview of the Subject
 - 1.2. Scope of the Article
 - 1.3. What is International Law?

- 1.3.1. What Counts as “Law”?
- 1.3.2. Who Are the “Members of the International Community”?
2. Origins of Sustainability in International Law
3. Sustainability as Optimal Exploitation of Living Resources
 - 3.1. Introduction
 - 3.2. Sustainability as Maximum Sustainable Yield (MSY)
 - 3.3. The MSY Era in International Law
 - 3.3.1. MSY’s Rise to Prominence
 - 3.3.2. Early Results and Controversies
 - 3.4. The UN Law of the Sea Convention and the Displacement of MSY
 - 3.5. Recent Trends
 - 3.5.1. The Greening of International Fisheries Law
 - 3.5.2. The Ascendancy of the "Sustainable Utilization" Paradigm
 - 3.6. Conclusion
4. Sustainability as Respect for Ecological Limits
 - 4.1. Sustainability as a General Concern with Human-Nature Interaction
 - 4.2. Emergence of Sustainability as "Limits to Growth"
 - 4.2.1. The 1972 Stockholm Conference
 - 4.2.2. The 1982 World Charter for Nature
 - 4.3. Contemporary Manifestations
 - 4.4. Conclusion
5. Sustainability as Sustainable Development
 - 5.1. Introduction
 - 5.2. Emergence of Sustainable Development as the Dominant Vision of Sustainability in International Law
 - 5.2.1. The Brundtland Commission and the 1992 Earth Summit
 - 5.2.2. The Institutionalization of Sustainable Development
 - 5.2.3. Widespread Acceptance of Sustainable Development
 - 5.3. Fleshing Out the Meaning of Sustainable Development
 - 5.3.1. Basic Legal Elements
 - 5.3.2. A Proliferation of Legal Principles
 - 5.4. Conclusion
6. The Future of Sustainability in International Law

Law and Sustainability: The Canadian Case

332

D.S. McRobert, *Environmental Commissioner of Ontario, Ontario, Canada*
 Geoff Ruby, *Barrister and Solicitor, Toronto, Ontario, Canada*

1. Introduction
 - 1.1. Law and Sustainability
2. The Canadian Legal System and Sustainability
 - 2.1. Principles Underlying the Canadian Legal System
 - 2.2. Key Actors in Achieving Sustainability in Canada
 - 2.2.1. Courts and Tribunals in Canada
 - 2.3. Private Law and the Environment in Canada
 - 2.3.1. Public Nuisance
 - 2.3.2. Private Actions
 - 2.3.3. Private Prosecutions of Public Laws
 - 2.4. Public Law and the Environment in Canada, 1900-1994
 - 2.4.1. Public Welfare Laws
 - 2.4.2. Regulation as a Mechanism to Limit Private Court Actions
 - 2.4.3. Permitting: Evolution of the Public Law Regulatory System in the 1970s
 - 2.5. Environmental Assessment
 - 2.6. Intervenor and Participant Funding
 - 2.7. Improving Access to Information
 - 2.8. Environmental Class Actions
 - 2.9. Environmental Rights Laws

3. Legal Mechanisms and Reforms for Promoting Sustainability, 1995-2007
 - 3.1. Federal Law Reform
 - 3.2. Laws to Enhance Public Participation
 - 3.2.1. International Participation
 - 3.3. Environmental Registries and Databases
 - 3.4. Statements of Environmental Values
 - 3.5. Sustainable Development Strategies
 - 3.6. Establishment of Government Auditors and Watchdogs
4. Other Sustainability Initiatives
 - 4.1. Efforts to Green Government
 - 4.2. The Standing Committee on Environment and Sustainable Development
 - 4.3. The Canadian Council of Ministers of the Environment (CCME)
 - 4.4. Other Federal-Provincial Institutions
 - 4.5. Indicators and Other Tools to Aid Decision-Makers in Achieving Sustainability
 - 4.6. Royal Commissions and Other Inquiries
 - 4.7. Roundtables
 - 4.8. Environmental Codes and Policies
 - 4.9. Expansions of Protected Areas
5. Current Sustainability Challenges Facing Canada
 - 5.1. Implementation and Administration
 - 5.2. Enforcement and Monitoring
 - 5.3. Market Distortions, Subsidies and Tax Law Reform
 - 5.3.1. Specific Federal Tax and Grant Incentives to Encourage Investments in Energy Efficiency and Renewable Energy Projects
 - 5.3.2. Provincial Carbon Taxes
 - 5.4. Role of Other Innovations and Flexible Regulation
 - 5.5. Municipal and Local Initiatives
 - 5.5.1. Municipal Green Funds
 - 5.6. Modest Progress on Climate Change
 - 5.7. Ongoing Problems with Canada's System of Environmental Law
6. Sustainability on an International Level
 - 6.1. Treaties and Agreements to Promote Globalization and Trade
 - 6.2. The World Trade Organization
 - 6.3. Environmental Treaties and Multilateral Environmental Agreements
7. Conclusion

Carrying Capacity and Sustainability: Waking Malthus' Ghost

393

William E. Rees, *University of British Columbia, Canada*

1. Introducing Carrying Capacity
 - 1.1. Why Do Population – and Carrying Capacity – Matter?
 - 1.2. Defining Sustainable Development
2. Dueling Paradigms: The Debate Goes On
 - 2.1. The Expansionist Paradigm
 - 2.1.1. "Carrying Capacity Has No Useful Meaning"
 - 2.1.2. But Are The Arguments Sound?
 - 2.2. The Ecological Perspective
 - 2.2.1. Carrying Capacity Resurrected
 - 2.2.2. Carrying Capacity as 'Maximum Human Load'
3. The Biological Roots of the Problem: Humans as Patch Disturbers
4. Why Cultures Collapse: The Revenge of Carrying Capacity
 - 4.1. Energy: The Achilles' Heel of Industrial Society?
 - 4.1.1. A Disquieting Note on Liebig's Law
5. Is Carrying Capacity Relevant to Humans?
6. Epilogue: On Becoming Truly Human

Egalitarian Perspectives on Sustainability	423
<i>Robert Paehlke, Trent University, Canada</i>	

1. Introduction
2. Sustainability and Equity Linkages
 - 2.1. Social Class and Sustainability
 - 2.1.1. Jobs and the Environment
 - 2.1.2. A Short History of Labor-Environmentalist Cooperation
 - 2.2. North-South: Environment and Development
 - 2.3. Sustainability and the Poor Regions in Rich Nations
 - 2.4. Environmental Justice
 - 2.5. Sustainability and Gender
3. Toward Fair Shares of 'Environmental Space'
4. The Politics of Equity and Sustainability

Bioregion, Eco-polis, and Eco(nomic)-Federation: Left - Libertarian Models of Sustainability	445
<i>Regina Cochrane, University of Calgary, Canada</i>	

1. Introduction: Left-Libertarian Ecopolitics and the Issue of Ecological Sustainability
2. The Anarcho-individualist Bioregionalism of Kirkpatrick Sale
3. The Anarchocommunist Libertarian Municipalism of Murray Bookchin
4. The Anarchosyndicalist Ecoregionalism of Graham Purchase
5. Conclusion: The Relevance of Left-Libertarian Ecopolitics in an Era of Post-Fordist Capitalism

Feminist Perspectives on Sustainability	467
<i>Sherilyn MacGregor, Lancaster University, UK</i>	

1. Introduction
2. Why Should Feminists Have Anything to Say About Sustainability?
3. Connecting Feminism and Environmentalism
 - 3.1. Historical Background
 - 3.2. Common Themes and Concerns
4. Feminist Approaches to Sustainability
 - 4.1. Feminism and Sustainable Development Policy
 - 4.2. Ecofeminist Ethics and Sustainability
 - 4.3. The Caring Economy
 - 4.4. Women, Politics, and Sustainable Communities
 - 4.5. Toward a Non-sexist Sustainable City

Index	493
--------------	------------

About EOLSS	503
--------------------	------------