## CONTENTS

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>ix</td>
</tr>
<tr>
<td>List of Tables</td>
<td>x</td>
</tr>
<tr>
<td>List of Acronyms</td>
<td></td>
</tr>
<tr>
<td>Chapter 1 – Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1. Overview</td>
<td>1</td>
</tr>
<tr>
<td>2. Scope and Structure of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Chapter 2 – Trade and Environment: Issues and Concerns</td>
<td>12</td>
</tr>
<tr>
<td>1. Emergence and Evolution of the Debate</td>
<td>13</td>
</tr>
<tr>
<td>2. International Trade and Environment</td>
<td>19</td>
</tr>
<tr>
<td>2.1. Causes of Environmental Degradation</td>
<td>21</td>
</tr>
<tr>
<td>2.2. Effects of Trade on the Environment</td>
<td>22</td>
</tr>
<tr>
<td>2.2.1. Direct Effects of Trade</td>
<td>22</td>
</tr>
<tr>
<td>2.2.2. Indirect Effects of Trade</td>
<td>23</td>
</tr>
<tr>
<td>2.3. Perceptions of the Environmentalists</td>
<td>25</td>
</tr>
<tr>
<td>2.4. Perceptions of the Free Traders</td>
<td>26</td>
</tr>
<tr>
<td>2.5. Lack of Consensus</td>
<td>27</td>
</tr>
<tr>
<td>3. Trade and Environment Policy Interaction</td>
<td>28</td>
</tr>
<tr>
<td>3.1. Free Trade and Environmental Policy: The Inherent Contradiction</td>
<td>29</td>
</tr>
<tr>
<td>3.2. Trade Related Environmental Measures</td>
<td>30</td>
</tr>
<tr>
<td>3.2.1. Green Protectionism</td>
<td>31</td>
</tr>
<tr>
<td>3.2.2. Unilateralism</td>
<td>32</td>
</tr>
<tr>
<td>3.2.3. Extrajurisdictionality</td>
<td>35</td>
</tr>
<tr>
<td>3.3. Product-related Issues</td>
<td>36</td>
</tr>
<tr>
<td>3.3.1. ‘Like’ Products</td>
<td>37</td>
</tr>
<tr>
<td>3.3.2. Process and Production Methods</td>
<td>37</td>
</tr>
<tr>
<td>3.3.3. Product Regulations and Standards</td>
<td>39</td>
</tr>
<tr>
<td>3.3.4. Domestically Prohibited Goods</td>
<td>40</td>
</tr>
<tr>
<td>3.4. Competitiveness</td>
<td>40</td>
</tr>
<tr>
<td>3.4.1. Industrial Flight</td>
<td>42</td>
</tr>
<tr>
<td>3.4.2. Race-to-the-bottom</td>
<td>43</td>
</tr>
<tr>
<td>3.4.3. Regulatory Chill</td>
<td>44</td>
</tr>
</tbody>
</table>
3.5. Tools for Addressing Environmental Concerns
   3.5.1. Harmonization
   3.5.2. Balancing
   3.5.3. Economic Instruments
3.6. Environmental Principles in the Trade-environment Debate
   3.6.1. Precautionary Principle
   3.6.2. Polluter Pays Principle
3.7. Multilateral Environmental Agreements
3.8. Dispute Settlement
3.9. Nature of the Multilateral Trading System
   3.9.1. Participation
   3.9.2. Openness
   3.9.3. Transparency
4. The North-South Divide over Trade-environment Issues
   4.1. Reasons behind the North-South Divide
      4.1.1. Environment versus Development
      4.1.2. Past Experience
      4.1.3. Lack of Progress on Issues of the South
   4.2. Issues of Concern
      4.2.1. Green Protectionism
      4.2.2. Unilateralism
      4.2.3. Process and Production Methods
      4.2.4. Harmonization
      4.2.5. Voluntary Standards
   4.3. Elements of a Consensus
      4.3.1. Addressing Market Access Concerns
      4.3.2. Enabling Measures
      4.3.3. Protection from Protectionism
      4.3.4. Enhancing MEAs
   4.4. A New Political Divide
5. Concluding Observations

Chapter 3 – GATT/WTO and the Environment

1. Emergence of Environmental Component within the GATT/WTO Framework
   1.1. Setting Up of EMIT Group
   1.2. Environmental Issues Discussed in MTNs
   1.3. Issue of Domestically Prohibited Goods
   1.4. Environment-related Trade Disputes
   1.5. Activation of EMIT Group
   1.6. GATT and UNCED
   1.7. Decision on Trade and Environment
   1.8. Committee on Trade and Environment

5. Concluding Observations
1.9. Singapore Ministerial Conference 71
1.10. The Seattle Debacle 71
1.11. Doha Ministerial Declaration 72

2. The Environment-related Provisions in WTO Agreements 73
   2.1. Agreement Establishing the World Trade Organization: Preamble 73
   2.2. General Agreement on Tariffs and Trade: Article XX 75
   2.3. Agreement on Technical Barriers to Trade 77
   2.4. Agreement on the Application of Sanitary and Phytosanitary Measures 81
   2.5. Agreement on Agriculture 84
   2.6. Agreement on Subsidies and Countervailing Measures 86
   2.7. Agreement on Trade Related Aspects of Intellectual Property Rights 88
   2.8. General Agreement on Trade in Services 89

3. Committee on Trade and Environment 90
   3.1. Mandate and Functioning 90
   3.2. CTE Report on Trade and Environment 92
   3.3. What Did the CTE Achieve? 96
   3.4. Since Singapore 98

4. Issues at the WTO 98
   4.1. The Linkage Issue 98
      4.1.1. Types of Linkage 100
      4.1.2. Objections to Linkage 103
      4.1.3. Advantages of Linkage 104
      4.1.4. Identifying the Correct Mission of the WTO 104
      4.1.5. Allocation of Jurisdiction 106
      4.1.6. Concerns of the South 107
      4.1.7. Suggestions for Effective Linkage 108
   4.2. Openness of the WTO 109
      4.2.1. Participation 110
      4.2.2. Transparency 115
   4.3. Reform Agenda for the WTO 117
      4.3.1. Mainstreaming Environmental Issues 118
      4.3.2. Amendment of GATT Environmental Provisions 119
      4.3.3. The Waiver Provision 119
      4.3.4. Code or Agreement 120
      4.3.5. Procedural Changes 120
      4.3.6. Addressing Equity Concerns 120

5. Concluding Observations 121
# Chapter 4 – GATT/WTO Dispute Settlement System and Sustainable Development

1. The WTO Dispute Settlement System

2. Environment-related Cases in the GATT/WTO DSS
   2.1. Review of GATT Article XX Cases
      2.1.1. Tuna, 1982
      2.1.2. Herring Salmon, 1987
      2.1.3. Cigarettes, 1990
      2.1.4. Tuna Dolphin I, 1991
      2.1.5. Tuna Dolphin II, 1994
      2.1.6. Automobiles, 1994
      2.1.7. Gasoline, 1996
      2.1.8. Shrimp Turtle, 1998
      2.1.9. Asbestos, 2000
   2.2. Review of Cases under the SPS Agreement
      2.2.1. Hormones, 1998
      2.2.2. Salmon, 1998
      2.2.3. Agricultural Measures Case, 1999

3. Judicial Interpretation of GATT/WTO Environmental Provisions and Related Issues
   3.1. Status of GATT/WTO Panel and AB Reports
   3.2. Preamble to the WTO Agreement
   3.3. GATT Violation
      3.3.1. 'Like' Products
   3.4. Article XX (General Exceptions) of GATT
      3.4.1. Narrow Interpretation
      3.4.2. Two-tier Test
      3.4.3. Article XX(b)
      3.4.4. Article XX(g)
      3.4.5. Some Cross-cutting Issues
      3.4.6. Article XX Chapeau
      3.4.7. Burden of Proof
      3.4.8. New Interpretations of the DSS
   3.5. SPS Agreement
      3.5.1. Temporal Application of SPS Agreement
      3.5.2. Relationship of SPS Agreement with GATT
      3.5.3. Burden of Proof
      3.5.4. Article 2.2
      3.5.5. Article 3.1
      3.5.6. Article 3.3
      3.5.7. Relationship between Articles 3.1 and 3.3
      3.5.8. Article 5.1
### Chapter 5 – Compatibility of MEAs with WTO Rules

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship between GATT and International Environmental Law under International Treaty Law</td>
<td>239</td>
</tr>
<tr>
<td>2. Trade-related Provisions of MEAs and their Compatibility with International Trade Rules</td>
<td>243</td>
</tr>
<tr>
<td>2.1. The Use of TREMs in MEAs</td>
<td>243</td>
</tr>
<tr>
<td>2.2. Why MEAs Use Trade Provisions</td>
<td>247</td>
</tr>
<tr>
<td>2.3. Analysis of TREMs in Certain MEAs</td>
<td>247</td>
</tr>
<tr>
<td>2.3.1. <em>CITES, 1973</em></td>
<td>248</td>
</tr>
<tr>
<td>2.3.2. <em>Montreal Protocol, 1987</em></td>
<td>255</td>
</tr>
<tr>
<td>2.3.3. <em>Basel Convention, 1989</em></td>
<td>266</td>
</tr>
<tr>
<td>2.3.4. <em>Kyoto Protocol, 1997</em></td>
<td>278</td>
</tr>
<tr>
<td>2.3.5. <em>Cartagena Protocol, 2000</em></td>
<td>287</td>
</tr>
<tr>
<td>2.4. Some Lessons</td>
<td>295</td>
</tr>
<tr>
<td>3. The Debate in the CTE</td>
<td>298</td>
</tr>
<tr>
<td>4. A Review of Some Suggested Solutions</td>
<td>300</td>
</tr>
<tr>
<td>4.1. The Waiver Provision</td>
<td>301</td>
</tr>
<tr>
<td>4.2. Amendment to the WTO</td>
<td>301</td>
</tr>
<tr>
<td>4.3. Other Approaches</td>
<td>304</td>
</tr>
<tr>
<td>4.4. Global Environmental Organization</td>
<td>305</td>
</tr>
<tr>
<td>5. Concluding Observations</td>
<td>305</td>
</tr>
</tbody>
</table>
Chapter 6 – Models of Regional Cooperation for Reconciling Trade and Environmental Concerns

1. European Union

1.1. Environmental Law in the EU

1.2. Salient Environment-related Provisions of the EC Treaty

1.2.1. Goals and Objectives

1.2.2. Free Trade Provisions

1.2.3. Environmental Exception

1.2.4. Rule of Reason

1.2.5. Environmental Rule-making

1.2.6. Environmental Policy-making

1.3. Environment-related Case Law of the ECJ

1.3.1. Dassonville, 1974

1.3.2. Cassis de Dijon, 1979

1.3.3. Italy Detergents/Sulphur Content of Fuels, 1980

1.3.4. Plant Protection Products, 1981

1.3.5. Italy Directives, 1981


1.3.7. Pesticides, 1984

1.3.8. Wild Birds I, II and III, 1987


1.3.10. German Beer, 1987

1.3.11. Danish Bottles, 1988

1.3.12. Plastic Bags, 1989

1.3.13. Leybucht Dikes, 1989


1.3.15. Titanium Dioxide, 1991

1.3.16. Imports of Waste, 1992

1.3.17. Crayfish, 1994

1.4. Salient features of ECJ Jurisprudence

1.5. Salient Features of EC Environmental Policy

1.5.1. Judicial Bounding

1.5.2. Harmonization of Product Standards

1.5.3. Competitiveness

2. North American Free Trade Agreement

2.1. Negotiation Process of NAFTA

2.1.1. Procedural Issues

2.2. Salient Environment-related Provisions of the NAFTA

2.2.1. Preamble

2.2.2. International Environmental Agreements

2.2.3. Investment

2.2.4. Standards Provisions
2.2.5. Dispute Resolution 345
2.2.6. Other Environment-related Provisions 346
2.3. North American Agreement on Environmental Cooperation 347
   2.3.1. Goals and objectives 347
   2.3.2. General Obligations 348
   2.3.3. Dispute Resolution 349
   2.3.4. Institutional Mechanism 352

3. EU and NAFTA Compared 353

4. Some Lessons for Trade-Environment Reconciliation 355
   4.1. Lessons from EU 355
      4.1.1. Deep Revision 355
      4.1.2. Integrated Approach 355
      4.1.3. Recognition of Environmental Principles 356
      4.1.4. Judicial Bounding 356
      4.1.5. Harmonization 356
      4.1.6. Role of International Organizations in Standard Setting 357
      4.1.7. Mutual Recognition 357
      4.1.8. Capacity-building for Less Developed Countries 357
      4.1.9. Dispute Settlement 358
      4.1.10. Principles from ECJ Jurisprudence 358
   4.2. Lessons from NAFTA 359
      4.2.1. Multistakeholder Participation 359
      4.2.2. Public Participation 359
      4.2.3. Environmental Assessments 359
      4.2.4. Parallel Track Approach 360
      4.2.5. Negotiation of Environment-related Provisions 360
      4.2.6. Enforcing National Environmental Laws 360
      4.2.7. Relationship with MEAs 361
      4.2.8. Trade Sanctions for Failure to Enforce National Environmental Law 361
      4.2.9. Funding Package 361

5. Concluding Observations 362
Chapter 7 – Conclusions and Recommendations

1. The Underlying Debate
   1.1. Joint Discussion and Open Debate
   1.2. Research and Analysis
   1.3. Balancing the Debate

2. WTO and Environment
   2.1. The Issue of Linkage
   2.2. Evolving Mandate of the MTS
   2.3. Concerns of the South
   2.4. Development of Environmental Component in the WTO
      2.4.1. Amendment through Negotiation
      2.4.2. Amendment through Interpretation
   2.5. Appropriate Forum for the Settlement of Disputes
   2.6. Committee on Trade and Environment

3. International Environmental Legal Regime and Trade
   3.1. MEAs and Trade Rules
   3.2. Global Environmental Organization

4. Learning from Regional Experiences
   4.1. Learning from the EC Experience
   4.2. Learning from NAFTA

5. Policy Recommendations for India

6. Concluding Observations

Appendices

Appendix I – Marrakesh Decision on Trade and Environment
Appendix II – Relevant Portions of the Doha Ministerial Declaration
Appendix III – Timeline: Evolution of Environmental Concerns in the GATT/WTO
Appendix IV – Fact Sheets on Environment-related Cases of the GATT/WTO DSS.

Select Bibliography