

Table of Contents

Preface

xi

Part I:

Treaties Relating to Food and Protection of Biotechnology

1

1 Introduction

3

1.1 General Outline

3

1.2 Structure of the Study

9

1.3 Delimitations

10

2 Food, Biotechnology and Intellectual Property

13

2.1 Food

13

2.1.1 Food in a Human Rights Context

15

2.1.2 Increased Emphasis on Access to Food

18

2.2 Biotechnology

19

2.2.1 Three Phases of Biotechnology

19

2.2.2 Different Actors in Biotechnology and their Attitude towards Intellectual Property Protection

21

2.2.3 Traditional Breeders and Modern Breeders

24

2.2.4 Strong Disagreements Regarding New Biotechnology

26

2.3 The Expansion of the Intellectual Property Protection System

27

2.3.1 A General Outline of Patent and Plant Variety Protection

28

2.3.2 Intellectual Property Protection in Various Phases

32

2.3.3 Metaperspectives on Patent and Plant Variety Rights

35

2.3.4 Justifications for Intellectual Property Protection

39

2.3.5 Alternatives to Patent and Plant Variety Protection on Plant Genetic Resources for Food and Agriculture: Protection through Biological or Technical Means

45

3 Methodology: Principles and Sources under International Law

51

3.1 Interpreting Treaties

51

3.3.1 International Law in Interpretative Material

51

3.3.1	Interpretation and Application of Treaties	52
3.3.2	Interpreting the Terms in Light of a Treaty's Object and Purpose	57
3.3.3	Principles for Identifying Balance between Treaties	60
3.2	Interpretative Material under Human Rights Conventions	63
3.2.1	In General Concerning the UN Human Rights Instruments	63
3.2.2	The Relevant Interpretative Material from the UN Human Rights Instruments	64
3.3	Interpretative Material under the WTO	73
3.3.1	In General Concerning the WTO	73
3.3.2	The Relevant WTO Interpretative Material	74
3.4	Interpretative Material under the UPOV Convention	84
3.4.1	In General Concerning UPOV	84
3.4.2	The Relevant UPOV Interpretative Material	85
Part II:		
Relevant Provisions from the International Covenant on Economic, Social and Cultural Rights		87
4	<i>Specifying the Nature of the Obligations and the Approach for Understanding Economic, Social and Cultural Human Rights</i>	89
4.1	General Obligations of the Covenant	89
4.1.1	Article 2.1	89
4.1.2	Articles 2.2 and 3	100
4.2	Basic Approaches for Understanding the Rights and Obligations of the Covenant	102
4.2.1	Rights and Corresponding Obligations	103
4.2.2	Arguments Concerning the Nature of the Rights in the Covenant	104
4.2.3	Interpretation and Implementation of Economic, Social and Cultural Rights: 'Progressive Realization' and 'Violations'	108
5	<i>The Right to Food as Recognized in the International Covenant on Economic, Social and Cultural Rights</i>	115
5.1	The Origins and the Content of the Right to Food	116
5.1.1	Emerging Recognition of the Right to Food	116
5.1.2	Introduction to the Analysis of Article 11	118
5.1.3	Article 11.1	119
5.1.4	Article 11.2	125
5.1.5	Article 11.2(a)	130
5.2	Clarifying Relevant Relationships	142
5.2.1	The Relationship between Improved Methods of Food Production and Improved Methods of Food Distribution	142
5.2.2	The Relationship between Technology and the Environment	146
5.2.3	The Relationship between the Provisions of the Covenant and the Universal Declaration of Human Rights as well as Other Instruments	151
5.3	'International Cooperation'	155

5.3.1	International Cooperation in the Covenant	156
5.3.2	The Consultative Group on International Agricultural Research	158
5.3.3	The Relationship between FAO and CGIAR	162
6	<i>The Right to Benefit from the Moral and Material Interests of Scientific Production and the Right to Enjoy Benefits from Scientific Progress and Its Applications</i>	169
6.1	Article 15.1(c)	172
6.1.1	Authors' Rights as Human Rights?	173
6.1.2	The Content of Article 15.1(c): Under Which Conditions Are Authors' Rights Human Rights?	177
6.1.3	Understanding Article 15.1(c) based on the Three Levels of State Obligations	184
6.1.4	Application of Article 15.1(c)	190
6.2	The Right to Benefit from Scientific Progress and its Applications	192
6.2.1	The Content of Article 15.1(b)	193
6.2.2	Understanding Article 15.1(b) based on the Three Levels of State Obligations	194
6.2.3	Private Research and State Obligations	198
6.3	Balancing Approaches between Paragraphs 15.1(b) and 15.1(c)	201
7	<i>The Justifiable Limitations to the Recognized Rights</i>	205
7.1	Article 4	205
7.2	Article 5	208
	Part III:	
	TRIPS and TRIPS-Compatible Protection	213
8	<i>The TRIPS Agreement, Particularly Patent Protection</i>	215
8.1	The TRIPS Agreement as Part of the WTO Agreement	215
8.1.1	Introduction	215
8.1.2	The Particularities of TRIPS	216
8.1.3	Principles and Procedures Regarding Developing Countries in the Dispute Settlement System	218
8.1.4	Application of the Dispute Settlement System and National Application of TRIPS Provisions	219
8.1.5	A Brief Drafting History of TRIPS	221
8.2	Patent Protection in the TRIPS Agreement	223
8.2.1	Introduction	223
8.2.2	Patent Eligibility	224
8.2.3	Exclusions from Patentability	232
8.2.4	Exclusive Rights	239
8.2.5	Exceptions and Limitations	241
8.2.6	Summary of the Material Provisions on Patent Protection in TRIPS	251
8.3	Enforcement	251

9	<i>Effective Sui Generis Systems for the Protection of New Varieties of Plants</i>	255
9.1	Plant Varieties Protection as Defined by UPOV	256
9.1.1	Eligibility Criteria	256
9.1.2	Exclusions from Plant Variety Protection	259
9.1.3	Exclusive Rights	260
9.1.4	Exceptions and Limitations	261
9.2	Requirements of an Effective <i>Sui Generis</i> System	265
9.2.1	Introduction	265
9.2.2	Considerations for Developing States	266
9.2.3	What is 'Effective <i>Sui Generis</i> ' Understood to Imply?	268
9.2.4	Eligibility Criteria	270
9.2.5	Exclusions from Plant Variety Protection	275
9.2.6	Exclusive Rights	278
9.2.7	Exceptions and Limitations	281
9.2.8	Summary: Requirements of an 'Effective <i>Sui Generis</i> ' System	285
	Part IV:	
	Comparison between Measures to Realize the Right to Food and Measures to Strengthen Patent and Plant Variety Protection	287
10	<i>Jurisdictional and Jurisprudential Issues under the International Covenant on Economic, Social and Cultural Rights and the TRIPS Agreement</i>	289
10.1	The Jurisdiction and Practice of Human Rights, Particularly the Committee on Economic, Social and Cultural Rights	291
10.1.1	The Jurisdiction of the Committee	291
10.1.2	The Practice of the Committee	295
10.1.3	Other Human Rights Bodies	299
10.2	The Jurisdiction and Jurisprudence of the Dispute Settlement System, and the Practice of the WTO's Political Bodies	303
10.2.1	The Dispute Settlement System of the WTO: Clarifying the Provisions of the Covered Agreements by Taking into Account Relevant Rules of International Law	304
10.2.2	Which Rules of International Law Can Be Taken into Account in the Dispute Settlement System – and How?	305
10.2.3	Jurisprudence of the WTO Dispute Settlement System, Including Analysis of the Extent to Which This Jurisprudence is Relevant for TRIPS and Human Rights Disputes	312
10.2.4	The Doha Declaration on TRIPS and Public Health	322
10.2.5	Potential Taking into Account the Right to Food in the WTO – Particularly in the Council on TRIPS, the Trade Policy Review Body and the Committee on Agriculture	326
10.3	Could the International Court of Justice Solve a Dispute Relating to Patent Protection and the Right to Food?	330

11	<i>Principles for Identifying and Solving Conflicts between Treaties, as well as Identifying the Nature of Treaties, Applied to TRIPS and the Covenant</i>	335
11.1	Conflict between Treaties	336
11.1.1	The Terms	336
11.1.2	Principles for Determining Conflict between Treaties	338
11.1.3	Conflict between Treaties on the Level of Taking Measures	340
11.2	Established Principles for Determining which Treaty Prevails in Situations of Conflict Between Treaties	343
11.2.1	Introduction	343
11.2.2	Same Subject Matter?	344
11.2.3	Solving Conflict between Treaties if Harmonious Interpretation Is Not Possible	345
11.3	Nature of Treaties	351
11.3.1	Introduction	351
11.3.2	Obligations <i>Erga Omnes</i>	352
11.3.3	The Concept of Multilateral Obligations	360
11.3.4	The Weight of Human Rights Obligations in International Economic Law Interpretation	370
12	<i>Conflict or Compatibility between Human Rights and Patent and Plant Variety Protection?</i>	371
12.1	Approaches for Examining the Relationship between the Right to Food and Patent and Plant Variety Protection	372
12.2	The Treaty Provisions and the Measures to be Taken under the Treaties	373
12.2.1	Prohibitions – The Treaty Obligations Cannot Be Complied with Simultaneously	374
12.2.2	TRIPS-Prescribed Measures and the Compliance with the Covenant	377
12.2.3	Adopting Measures as Prescribed by the Covenant and the Compliance with TRIPS	393
12.2.4	No Direct Conflict, but Several Concerns Relating to the Implementation of the Two Treaties, Seen in Light of the Different Object and Purpose of the Treaties	402
12.3	Human Rights Considerations when Adopting Strengthened Protection of Patents and Plant Varieties	407
12.3.1	Obligations Relating to Available Resources and Distribution	409
12.3.2	Obligations Relating to Undertaking Research	417
12.3.3	Summary	431

Part V:	
Conclusions	437
Acronyms	445
Symbols	447
Definitions	449
Table of Cases	451
Literature	455
Index	503

สำหรับการศึกษาระดับปริญญาโทและปริญญาเอก
For educational use and reference only