

International Food Law

Energy and Environmental Law and Policy Series

VOLUME 40

Editor

General Editor: Professor Kurt Deketelaere, Professor of Law, University of Leuven, Belgium; Honorary Professor of Law, University of Dundee, UK; Honorary Chief of Staff, Flemish Government; Secretary-General, League of European Research Universities (LERU), Belgium. Kurt's CV – see www.kurtdeketelaere/en/kurt.

Introduction

Environmental protection and energy efficiency/security are important societal challenges. In order to tackle them, policy and legal frameworks are developed at national, regional and global level. Through study and best practices development, the challenges will prove to be solvable.

Contents/Subjects

Environment/Nature/Energy/Climate.

Objective

The aim of this series is to publish works of excellent quality that focus on the study of energy and environmental policy. Through this series the editors:

- contribute to the improvement of the quality of energy/environmental law and policy in general and environmental quality and energy efficiency in particular; increase the access to environmental and energy information for academics, non-governmental organizations, government institutions, and business; and
- facilitate cooperation between academic and non-academic communities in the field of energy and environmental law and policy throughout the world.

Readership

Academics and practitioners in environmental and energy matters.

The titles published in this series are listed at the end of this volume.

International Food Law

How Food Law Can Balance Health,
Environment and Animal Welfare

Edited by

Cinzia Caporale

Ilja Richard Pavone

Maria Pia Ragionieri



Wolters Kluwer

Published by:

Kluwer Law International B.V.
PO Box 316
2400 AH Alphen aan den Rijn
The Netherlands
E-mail: international-sales@wolterskluwer.com
Website: lrus.wolterskluwer.com

Sold and distributed by:

Wolters Kluwer Legal & Regulatory U.S.
7201 McKinney Circle
Frederick, MD 21704
United States of America
Email: customer.service@wolterskluwer.com

Printed on acid-free paper.

ISBN 978-94-035-1761-2

e-Book: ISBN 978-94-035-1812-1
web-PDF: ISBN 978-94-035-1860-2

© 2021 Kluwer Law International BV, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

Permission to use this content must be obtained from the copyright owner. More information can be found at: lrus.wolterskluwer.com/policies/permissions-reprints-and-licensing

Printed in the United Kingdom.

Editors

Cinzia Caporale is head of the Interdepartmental Center for Research Ethics and Integrity at the National Research Council of Italy (CNR). She is also the coordinator of the CNR Research Ethics and Bioethics Committee and represents CNR on these topics at the international level. She is Adjunct Professor of Bioethics at Sapienza University of Rome and since 2002 she has been a member of the Italian Bioethics Committee (appointed by the President of the Council of Ministers). She is the President of the Ethics Committee of L. Spallanzani National Institute for Infectious Diseases (Institute of Hospitalization and Care with a scientific character) and of the Italian Ethics Committee for COVID-19 studies and clinical trials; she is also a member of the government's Technical-Scientific Committee on the pandemic emergency (advisory board). She is a member of the Scientific Committee of the Courtyard of the Gentiles (Pontifical Council for Culture, Vatican), of the Italian Veterinary and Agri-Food Bioethics Committee, of the Research Integrity Committees of Sapienza University of Rome and of the University of Bologna, and Honorary President of the Umberto Veronesi Foundation Ethics Committee. She has been the Chairperson of UNESCO's Intergovernmental Bioethics Committee for two mandates. Under her presidency, the Universal Declaration on Bioethics and Human Rights was elaborated and adopted. She is the founder and Co-Director of the scientific journal *The Future of Science and Ethics* (ISSN 2421-3039) and a member of the Editorial Advisory Board of the *Journal of Medicine and Philosophy* (ISSN 0360-5310) and of *BioLaw Journal – Rivista di BioDiritto* (ISSN 2284-4503). She was the Scientific Editor of the volume *Europe and Scientific Research* edited by Treccani (2018).

Ilja Richard Pavone National Research Council of Italy, Researcher at the Interdepartmental Center for Research Ethics and Integrity, Rome, and Professor of European Law and Biotechnologies, Catholic University of the Sacred Heart, Rome.

Ilja Richard Pavone gained his PhD in International Law and Human Rights at Sapienza University of Rome. He is a researcher of International Law at the National

Research Council of Italy, Rome, where he coordinates the research unit in International, European and National Biolaw. He is a member of the Bioethics Veterinary and Agri-Food Bioethics Committee. He is also a member of the Coordinating Committees of the European Society of International Law (ESIL) Interest Groups on Peace & Security and International Bio Law. In the past, he has taught at the universities the Sapienza University of Rome, Venice (Venice International University), Macerata, Siena and Viterbo. He has been a visiting professor at Queensland University, Bochum University and Max Planck Institute for Comparative Public Law and International Law (Heidelberg). He is the author of over fifty publications, essays and articles in International Law and European Union Law, with a particular focus on Bioethics, Human Rights, Animal Law, International Health Law and Environmental Protection. He is also a member of the Scientific Board of the journal *The Future of Science and Ethics*, published by the Fondazione Umberto Veronesi, and a member of the Editorial Team of *Biolaw Journal – Rivista di Biodiritto*.

Maria Pia Ragionieri is Full Professor of Environmental Law at University La Tuscia, Viterbo; Adjunct Professor of Food and Agricultural Law at LUISS University; Director of the LLM in Food Law, LUISS; European Professor J Monnet.

Maria Pia Ragionieri holds a degree in Law, Sapienza University of Rome, 1978, with final mark 110/110 cum laude; she was Solicitor at the Appeal Court in Rome, 1981 and Lawyer since 1987 registered in the Registry of Lawyers of Roma, qualified to practise in the Supreme Court of Cassation. She has a PhD in Italian and Comparative Agrarian Law, 1989. She is the winner of the European competition for the assignment of the Jean Monnet teaching posts in 2004, holder of the European Jean Monnet teaching post in 'European law of biotechnology', Università della Tuscia, Viterbo. She has been the first level full professor (professore straordinario) in Agrarian Law at Università degli Studi della Tuscia since 2006, Confirmed Full Professor (professore ordinario) in Agrarian Law at Università degli Studi della Tuscia since 2010. She also teaches agri-food law at LUISS School of Law (Rome) and she is co-director of the LLM in Food Law, LUISS School of Law.

Contributors

Francesco Alicino is Professor of Constitutional Law, Public Comparative Law, Ecclesiastical Law and Canon Law at the University of LUM ‘Jean Monnet’, Casamassima, Bari, Italy. He is also Professor at the MISLAM (Academic Master) of the School of Government (LUISS ‘Guido Carli’, Rome). He is a member of the academic staff of the Institute of S. Pio V., Rome. In 2008 he took his PhD at the ‘école doctorale en droit’, University Aix-Marseille III, Paul Cézanne, France. In 2008, he took his degree in ‘formation doctorale européenne en droit canonique et droit des relations religions Etats’, University of Paris-Sud 11 and Catholic Institute of Paris, France. In 2004 he obtained a post in a PhD course in Institutions and Comparative Politics at the University of Bari, Italy, resulting first in the relating competitive examination. He is a reviewer for international journals and has been involved in several international conferences and in international and national research projects. He is the author of several books and articles in English, Italian and French.

Francesca Allocco is a lawyer based in Italy. She earned a Master’s in Environmental and Land Law from Ca’ Foscari University in Venice. She is an associate of Ambientalex, an Italian law firm providing legal advice in environmental law.

Francesca counsels on environmental litigation, environmental compliance, including authorization procedures, focusing on agriculture and food.

Daria Boklan works at National Research University Higher School of Economics, Moscow, Russia, at International Public and Private Law Department, Faculty of Law and teaches Environmental Law, World Trade Organization (WTO) Law, Law of the Eurasian Economic Union and General International Law. She is part-time Professor at MGIMO University (Moscow State University of International Relations) teaching WTO Law. She has previously taught WTO Law and General International Law at Russian Foreign Trade Academy, International Economic Law at Moscow State University, Moscow and WTO Law at Russian State University of Justice. Professor Boklan is an expert in WTO law, international environmental law and law of the Eurasian Economic

Union (EAEU) with a special focus on interaction of international trade law and international environmental law.

Margherita Brunori is a post-doctoral research fellow at the Department of Sociology and Social Research at the University of Trento, Italy. She is a specialist in agri-food law and policy, and she worked on equitable access to natural resources, corporate responsibility and economic, cultural and social rights. She is the operational focal point of the working group on food of the Italian University Network for Sustainability.

Daniela Corona is currently a lecturer at the LUISS School of Law in Rome where she is also the scientific coordinator of LLM in Food Law. Before joining the LUISS School of Law, she was a senior lecturer at the College of Europe in Bruges. A former researcher of the Robert Schuman Center at the European University Institute in Florence, where she completed her PhD in Law in 2011, she also worked as a legal adviser at the European Parliament. She is the author of articles and contributions dealing with European institutions and policies, and she teaches as visiting professor in Italian and European Universities.

Justo Corti Varela is a faculty member of the Public International Law Department at Spanish National Open University (Universidad Nacional de Educacion a Distancia). He holds the official accreditation as Associate Professor by the Ministry Agency. He was a post-doctoral research fellow at the Centre National de la Recherche Scientifique (2008), a visiting scholar at University College London (2007), a visiting professor at Université de Nanterre – Paris X (2013-2016), and a visiting scholar at Scuola Superiore Sant’Anna – Pisa (2016). He is a member of the Editorial Board of the Journal *Revista de Derecho Comunitario Europeo* (Social Sciences Citation Index) and of the Review ‘Ius et Scientia’, and a member of the board of the Interest Group on International Bio Law at the ESIL.

Dr Khaled Eltaweel is an Egyptian diplomat and the former chair of the United Nations Committee on Food Security (CFS) Open Ended Group on Nutrition. During his chairmanship (2015-2018), he led the negotiations for the development of the CFS Policy on Nutrition, the CFS contribution to the UN Decade of Action on Nutrition as well as the Terms of Reference for the Policy convergence work on Nutrition and Food Systems. Dr Eltaweel has been elected for several positions in the UN organizations, including chairing Committee on Commodity Problems (CCP) (2016-2018) and being elected as Vice-President of the group of G77 and China in 2017. He has a PhD in International Law from the University of Pretoria, South Africa and a Master’s in International Business Administration from ESLSA Business school in Paris.

Luchino Ferraris graduated from the University of Milan, School of Law, Italy, in 2014 with a dissertation on the Relationship Between Human Rights and the Environment. He holds an LLM in ‘Global Environment and Climate Change Law’ at the University of Edinburgh, School of Law, United Kingdom. After several collaborations with law firms and NGOs in the field of food and agricultural law, particularly from a European legal

perspective, he obtained a PhD at the Sant'Anna School of Advanced Studies of Pisa with a dissertation on sustainable agriculture in European Union free trade agreements in 2020. He is also Legal Officer at the Directorate General 'Agriculture and Rural Development' (DG AGRI) of the European Commission. He has made many publications in the field of European and national agriculture, food and environmental law.

Alberto Germanò is a Former Judge of the Court of Cassation (Chief Prosecutor at Minors Court in Florence) and Former Full Professor of Comparative Agricultural Law at Sapienza University of Rome. He was a member of: the Government Commission on milk quotas; the milk quota guarantee Commission; the administrative enquiry Commission to verify the correctness of the milk-fat estimation method. He was also a member of: the ministerial study group on reorganization and simplification of agricultural legal regulation; ministerial working group for the modification of the 2001 national decrees on agricultural farming; the ministerial working group on the implementation of national rules on Common Agricultural Policy medium-term reform. He was a ministerial coordinator for drawing up schemes on: a complete (ten books) 'Agricultural Code' (2004); the rearrangement of the agricultural farming discipline (2010); a short (134 articles) 'Agricultural Code' (2009-2011). He was also a legal advisor to the Department of Agriculture of the Tuscany Region for the drafting of a proposal for the reorganization and simplification of the rules for a new Agricultural Code (2017). He was Secretary General of the International and Comparative Agricultural Institute of Florence (IDAIC) from 7 March 1998 to 2 March 2017.

Pier Filippo Giuggioli is Associate Professor of Private Comparative Law at the University of Milan, Italy, specialized in consumer protection, Responsible for the assignation of the UNESCO Chair on 'Food: Access and Law' at the University of Milan, Director of the Specialization course on 'Nutrition: Health, Law and Market' at the University of Milan, Editor-in-chief of the Series 'Comparative Commercial Law' edited by CEDAM.

Tom Heilandt is a UN Diplomat with twenty-four years of experience in different fields of international legislation. He is now responsible for the UN organization dealing with food standards: Codex Alimentarius and skilled in leading a team of highly skilled senior professionals; facilitating international meetings and negotiating solutions for international food trade. He is experienced in building international networks of government and private sector representatives to work on common goals.

Dr Jill E. Hobbs is Professor in the Department of Agricultural and Resource Economics at the University of Saskatchewan, Canada. Her research focuses on food policy, consumer behaviour, and supply chain economics. Her work has examined a range of issues, including the regulation of healthy foods, consumer trust, food safety and quality, and traceability in agri-food supply chains. She is a co-author of the book *Regulating Health Foods: Policy Challenges and Consumer Conundrums* (Edward Elgar Publishing Ltd.) and has authored a number of papers on various aspects of food regulation, including labelling, biotechnology, food safety, and traceability. Professor

Hobbs is a former president of the Canadian Agricultural Economics Society. She served as co-editor of the *Canadian Journal of Agricultural Economics* from 2013 to 2016 and currently serves on the board of directors of several academic journals. She was appointed to an honorary chair in the School of Business and Management at Aberystwyth University (2014-2019) and became a Fellow of the Canadian Agricultural Economics Society in 2017. Dr Hobbs holds a PhD in Agricultural Economics from the University of Aberdeen in Scotland.

Gijs A. Kleter has been with Wageningen Food Safety Research since 1999. This institute is part of Wageningen University & Research Centre in the Netherlands. His particular field of expertise within food safety science is the safety of genetically modified food and feed. Besides advising national authorities on the safety of genetic modification applied to foods and animal feed, he has served, for example, on the European Food Safety Authority's Expert Panel on Genetically Modified Organisms (EFSA GMO Panel) as a member and vice-chair. Other committee and extension activities include work on the biosafety of GMOs within organizations such as the Organisation for Economic Co-operation and Development (OECD) and the United Nations Industrial Development Organization (UNIDO). He also leads and takes part in various projects on safety of biotechnology applied to food production, such as for the International Union for Pure and Applied Chemistry (IUPAC).

Harry A. Kuiper is a retired principal scientist and former department head at Wageningen Food Safety Research, part of Wageningen University & Research Centre in the Netherlands. Following an MSc in Food Science, he completed a PhD in biochemistry in 1976, and subsequently pursued a post-doctoral fellowship in Rome, before continuing his career at the Dutch Ministry of Agriculture and Wageningen Food Safety Research, from which he retired in 2006. This way he was able to build strong and wide-ranging background expertise in food toxicology, biochemistry, molecular biology, and food and feed safety assessment, among others, and he has led various large national and EU-funded research projects on food safety and chaired various international expert consultations. He served on the EU Scientific Committee on Plants for six years before moving over the European Food Safety Authority's Panel of Experts on Genetically Modified Organisms in 2003, which he chaired for three consecutive terms, until 2012. As such, he has built ample experience with the safety assessment of biotechnology and its regulatory and policy context.

Dr Stavroula Malla is Associate Professor in the Department of Economics at the University of Lethbridge, Canada. She holds a PhD in Agricultural Economics from the University of Saskatchewan, Canada. Her work has won several published research awards, including awards from the Canadian Agricultural Economics Society for outstanding PhD dissertation and outstanding journal articles. Her research interests include: the economics of health foods; regulations and health claims; public policy in agriculture and health; economics of R&D and technical change/innovation; economics of biotechnology; and agricultural productivity growth.

Alexia Brunet Marks joined the University of Colorado Law Faculty as Associate Professor of Law in the fall of 2009, after serving as Visiting Assistant Professor of Law at Northwestern Law School. She teaches and writes about food law and policy, international business transactions, international trade law and torts. Her approach is often empirical. Her articles have appeared in the *Journal of Empirical Legal Studies*, the *North Carolina Law Review*, the *Harvard Journal on Regulation*, among others, and she has presented globally and received numerous awards for her research.

A graduate of Northwestern Law School (cum laude), Brunet Marks also holds a PhD and an MS in Agricultural Economics from Purdue University, Indiana and a BA from Colgate University, New York. She has received competitive fellowships from the U.S. Department of Agriculture and the National Science Foundation, and the American Bar Foundation. In 2018, Professor Brunet Marks was a fellow at the University of Copenhagen, Center of Excellence for International Courts, iCourts. Prior to teaching, Professor Brunet Marks worked as a risk analyst for the U.S. Department of Homeland Security and Argonne National Laboratory and as a founding partner in an international trade venture. She has experience working in Japan, Guinea, Poland and Denmark. Professor Brunet Marks is a member of the American Bar Association, the Society for Empirical Legal Studies, the American and European Societies of International Law, and a founding member of the Academy of Food Law and Policy.

Uché Ewelukwa Ofodile is the E.J. Ball Professor of Law at the University of Arkansas School of Law. She was previously the Arkansas Bar Foundation Professor (2014-2016) at the Law School. Professor Ewelukwa Ofodile's expertise is in the areas of international economic law, food law and intellectual property law. Professor Uché Ewelukwa Ofodile has authored numerous book chapters and more than one-hundred articles and essays. Professor Uché Ewelukwa Ofodile has served as visiting professor/guest lecturer at numerous universities around the world, including Columbia University, the University of Oklahoma Law Center (Crowe and Dunlevy Visiting International Law Professor), University of Puerto Rico School of Law, Tufts University, the University of Armenia Faculty of Law, and the Nigerian Institute of Advanced Legal Studies. Professor Uché Ewelukwa Ofodile is the recipient of numerous fellowships and awards, including a fellowship award from the Carnegie Council on Ethics and International Affairs. Professor Uche Ewelukwa has law degrees from Harvard Law School, the University College London, and the University of Nigeria Nsukka.

Dr Domenico Pignone is presently the Scientific Director of the Veterinary and Agri-Food Bioethics Institute. He has been working for more than forty years in plant genetics at the Italian National Research Council. He has long been engaged in managing and exploiting plant genetic resources, especially of main Mediterranean crops. During his career he has often worked on pioneering research areas of plant genetic diversity assessment and exploitation, from molecular cytogenetics approaches for crop improvement, to the present use of high throughput plant phenotyping to identify wheat genotypes resilient to drought. He has coordinated many research projects in the agri-food sector and has been representing the National Research Council in national and international committees and organizations. He also acts with

the expert role in supporting the Italian Ministry of Agriculture in the plant genetic resources management area. He has had a leading and expert role in international cooperation projects in Mediterranean and Sub-Saharan Africa. He has also served as director of two institutes of the National Research Council and as departmental director of the Agri-food Department of the same CNR.

Denise Prévost, PhD, is Associate Professor of International Economic Law at Maastricht University, the Netherlands. She was the Academic Coordinator of the Institute for Globalisation and International Regulation (IGIR) until 1 August 2009, when she was appointed as Deputy Academic Director of IGIR until 2011. Denise is the associate editor of the *Journal of World Trade* and is on the Editorial Boards of the *Netherlands Yearbook of International Law*, the *International Journal of Law and Public Policy*, the *Journal of the Colombian Institutes of Tax Law and Customs Law*, the *Maastricht Law Series* and the *Maastricht Law Faculty Working Paper Series*. Previously (2004-2007), she worked as Assistant Professor of International Economic Law at Utrecht University, the Netherlands, where she coordinated and lectured courses in this field on Bachelor's and Master's level and conducted research on WTO law issues. From 1998 to 2004, she worked as a research associate in the Department of International and European Law at Maastricht University. Her doctoral thesis is entitled: *Balancing Trade and Health in the SPS Agreement: The Development Dimension* (2009, Wolf Legal Publishers). In 2001, Denise interned at the Legal Affairs Division of the Secretariat of the WTO. She has also done consulting and capacity building work for various international organizations, the European Commission and Parliament, national bodies and industry groups, and has been a visiting lecturer in several international programmes, including the China Europe School of Law in Beijing, China; the Institut des Hautes Études Internationales at the University of Paris II, France; the International Trade and Investment course at the University of Padova, Italy; and the Joint CWS-WTI Academy in New Delhi, India. Denise studied Law at the University of Pretoria, South Africa (BLC cum laude 1992, LLB cum laude, 1994), the University of South Africa (LLM, 2001) and Maastricht University (LLM summa cum laude, 1998; PhD 2009). She was admitted as an advocate of the High Court of South Africa in December 1996.

Eva Rook Basile is Former Full Professor of Agricultural Law, Faculty of Law, University of Siena, Italy; Former Director of the department of 'Private-law Science', University of Siena; Former Secretary General of the International and Comparative Agricultural Law Institute of Florence (IDAIC) (ICALI) from 1985 to 1998 and Former Representative of the MiUR in board of IDAIC from 1998 to 2003, date of IDAIC unification in CNR. She was a member of the Committee for solicitor examination in Florence district in 1991/1992, Director of postgraduate course for experts on Environmental Law at Chamber of Commerce of Siena (1999-2012) and Director of the professional refresher course in agro-food fulfilment (food safety, traceability, quality labels, voluntary certifications for export). She is a member of the Scientific Committee of the journal *Agricultural, Food and Environmental Law and Jurisprudence* and *Sieneze Studies*, editing board of the *Journal of Agricultural Law*.

David Röttgen is the founding partner of Ambientalex law firm. Prior to setting up Ambientalex in 2008, David worked with Freshfields Bruckhaus Deringer (Milan). Subsequently he held a managerial role in a leading Italian multinational company (Pirelli Group).

David is specialized in environmental law, providing extrajudicial assistance to multinational companies and trade associations as well as to other law firms.

He is a member of the Commission for Integrated Environmental Authorisation (IPPC) within the Italian Ministry for Environment. Furthermore, he is a representative within the Permanent Observatory relating to ILVA-Steel-Works, set up according to DPCM 29 September 2017. David has been a member of the ministerial expert commission nominated for the transposition, into Italian law, of the circular economy package, adopted by the EU in 2018.

In 2012/2013, he was part of the Minister for Environment's Technical Secretariat.

David is the author of many articles and publications on his specialized topics and frequently takes part as a speaker in conferences, workshops and training courses on environmental law.

May T. Yeung is a Professional Affiliate with the University of Saskatchewan's Johnson Shoyama Graduate School of Public Policy. She has an MBA focusing on International Marketing from the University of Wales and a BA in Economics from the University of Calgary. In her twenty-five-plus years of experience in research, study and writing about international trade, she has worked extensively on issues affecting international trade, including marketing environment, global trade policy, technical regulations affecting agri-food trade, global food safety trends, international food labelling regulations, and geographic indications. Much of her work has been in the agricultural and agri-food sector and involved the development of practical marketing and business development within these contexts.

Summary of Contents

Editors	v
Contributors	vii
Foreword	xxix
Preface	xxxii
Part I	
Setting the Scene: International Food Law	1
CHAPTER 1	
International Food Law: History and Evolution	
<i>Uché Ewelukwa Ofodile</i>	3
CHAPTER 2	
Right to Food in International Law	
<i>Margherita Brunori & Pier Filippo Giuggioli</i>	41
CHAPTER 3	
The UN Decade of Action on Nutrition: Opportunities and Challenges in a Time of a Pandemic	
<i>Khaled Eltaweel</i>	57
CHAPTER 4	
The International Treaty on Plant Genetic Resources for Food and Agriculture and the 2050 Food Challenge	
<i>Domenico Pignone</i>	81

Summary of Contents

CHAPTER 5 Codex Alimentarius: Safe, Good Food for Everyone <i>Tom Heilandt</i>	91
CHAPTER 6 Food Safety under WTO Law <i>Daria Boklan</i>	113
CHAPTER 7 Checking Compliance with Food Law: Control, Inspection and Approval Procedures under the WTO SPS Agreement <i>Denise Prévost</i>	125
CHAPTER 8 Food Production and Animal Welfare: An International Law Perspective <i>Ilja Richard Pavone</i>	147
Part II Selected Cases and Legislations and European Food Law	167
CHAPTER 9 Right to Food and Food Security: A Comparative Perspective <i>Francesco Alicino</i>	169
CHAPTER 10 Regulating Health Claims: An International Comparison <i>Jill E. Hobbs, Stavroula Malla & May T. Yeung</i>	187
CHAPTER 11 Food Safety in the United States <i>Alexia Brunet Marks</i>	213
CHAPTER 12 CAFOs: Climate Change, Livestock Production and the Law <i>Justo Corti Varela</i>	233
CHAPTER 13 An Overview of EU Food Law <i>Luchino Ferraris</i>	253
CHAPTER 14 EU Agricultural Law and the Common Agricultural Policy <i>Alberto Germanò & Eva Rook Basile</i>	263

CHAPTER 15	
Food Safety System in the EU	
<i>Maria Pia Ragionieri</i>	295
CHAPTER 16	
Food Waste in EU Food Law	
<i>David Röttgen & Francesca Allocco</i>	305
CHAPTER 17	
The EU Policy to Protect Bees: The Restrictions onto the Use of Neonicotinoids and the Emergency Authorizations Granted by MS – In Search of a Long-Term Strategy on Pesticides	
<i>Daniela Corona</i>	339
CHAPTER 18	
Biotechnology and Food and Feed Safety Assessment	
<i>Gijs A. Kleter & Harry A. Kuiper</i>	353
Index	367

Table of Contents

Editors	v
Contributors	vii
Foreword	xxix
Preface	xxxii
Part I	
Setting the Scene: International Food Law	1
CHAPTER 1	
International Food Law: History and Evolution	
<i>Uché Ewelukwa Ofodile</i>	3
§1.01 Introduction	4
§1.02 Food Insecurity: Past and Present	5
[A] Introduction	5
[B] Global Food Security: Normative Developments	6
[C] Global Food Security: Institutional Developments	8
[D] Global Food Security: Progress and Challenges	10
§1.03 International Law's Fragmented and Incoherent Approach to Global Food Security	11
[A] Food Insecurity and International Trade Law	11
[1] Normative Developments	11
[2] Institutional Developments	13
[3] Progress and Challenges	15
[B] Food Security and International Human Rights Law	17
[1] Introduction	17
[2] Normative Developments	17
[3] Institutional Developments	20

Table of Contents

	[4] Progress and Challenges	21
[C]	Food Security and International Investment Law	21
	[1] Introduction	21
	[2] Normative Developments	23
	[a] Bilateral Investment Treaties	24
	[b] Principles of Responsible Investments	25
	[3] Institutional Developments	27
	[4] Problems and Challenges	28
§1.04	The Global Food System and International Law: The Past, The Present, The Road Ahead	29
	[A] An Impressive Legal Landscape	30
	[B] Persisting Debates	30
	[C] Persisting Challenges	32
	[1] Sovereignty Concerns	32
	[2] Democratic Deficit	33
	[3] Monitoring and Enforcement Challenges	34
	[4] Fragmentation and Lack of Coordination	35
§1.05	Conclusions	36
CHAPTER 2		
Right to Food in International Law		
<i>Margherita Brunori & Pier Filippo Giuggioli</i>		
§2.01	Introduction	41
§2.02	Affirming the Rights to Food: Travaux Préparatoires	42
§2.03	The Successive Interpretation of the Right to Food	46
§2.04	Links Between Food and Health in International Law	48
§2.05	Expansion of the Right to Food	50
§2.06	Present and Future Challenges for the Right to Food: The COVID-19 Pandemic	52
§2.07	Conclusions	55
CHAPTER 3		
The UN Decade of Action on Nutrition: Opportunities and Challenges in a Time of a Pandemic		
<i>Khaled Eltaweel</i>		
§3.01	Introduction	57
§3.02	Nutrition: A Global Priority	58
§3.03	Nutrition: The Key Players	59
§3.04	Different Forms of Malnutrition	60
	[A] Undernutrition	60
	[B] Overweight	61
	[C] Micronutrient Deficiencies	61
§3.05	A Recent Deterioration of the World Nutrition Status	61
§3.06	COVID-19 and Nutrition	63

	[A] The Supply-Side Impacts	64
	[B] The Demand-Side Impacts	65
§3.07	The Multi-Sectorial Nature of Nutrition	66
	[A] Nutrition and Food Systems	66
	[B] Nutrition and Health Systems	68
	[C] Nutrition and Social Protection	69
	[D] Nutrition and International Trade	69
	[E] Nutrition and Supportive Environment	71
	[F] Nutrition and Governance	71
§3.08	Nutrition Across Agenda 2030	72
	[A] Nutrition and Infrastructure	72
	[B] Nutrition, Equity, Gender Equality and Inclusion	72
	[C] Nutrition, Peace and Stability	74
	[D] Nutrition, Poverty and the Economy	74
	[E] Nutrition and Climate Change	75
	[F] Nutrition and Education	76
§3.09	Stocktaking of the Implementation of the Decade of Action on Nutrition	76
§3.10	Dealing with the Dual Challenge of Malnutrition and COVID-19	78
§3.11	Conclusions	80
CHAPTER 4		
The International Treaty on Plant Genetic Resources for Food and Agriculture and the 2050 Food Challenge		
	<i>Domenico Pignone</i>	81
§4.01	Introduction	82
§4.02	How Did We Get to This Point	82
§4.03	The ‘Genetic Resources Movement’	83
§4.04	Towards a New Consciousness	84
§4.05	The Convention of Biological Diversity	85
§4.06	The International Treaty on Plant Genetic Resources for Food and Agriculture	86
§4.07	A Sight to the Future	89
CHAPTER 5		
Codex Alimentarius: Safe, Good Food for Everyone		
	<i>Tom Heilandt</i>	91
§5.01	Food Is a Commodity Like No Other	92
	[A] We All Need Food	92
	[B] Food Is Fragile	92
§5.02	History of Standards and Codes	93
	[A] From Prehistory to the Greek	93
	[B] Codex Austriacus	93
	[C] Joint Expert Committee on Contaminants and Food Additives	93
	[D] The Codex Alimentarius Commission	94

Table of Contents

	[1] The Mandate	94
	[2] The Status of Codex Standards	94
§5.03	Structure and Work Methods	95
	[A] An Open Forum: Achievement Through Cooperation	95
	[B] Committee Structure	95
	[C] Work Process and Scientific Basis	96
	[D] Based on Science: Adopted by Consensus	97
	[E] Achievements: A World Full of Standards	98
	[1] An Impressive Score Card	98
	[2] Expectations Require Continued Work	98
	[3] From Farm to Fork: HACCP – A Codex Signature Achievement	99
§5.04	SDGs and Codex Strategic Plan 2020-2025	100
	[A] Codex and SDGs	100
	[B] Codex Strategic Plan 2020-2025	102
§5.05	Food and Trade	102
	[A] Vision of Harmonization and Challenges to Implementation	102
	[B] Codex Standards Facilitating Trade	103
	[C] Not Only for Food Safety: What Is a Sardine?	104
§5.06	The Future	104
	[A] A Lot Has Been Done	104
	[B] Overcoming Issues	105
	[C] Past and Present Challenges	105
	[D] Kava: An Important Food for Small Islands	106
	[E] Makgeolli and the Challenge of Dealing with Alcoholic Beverages	106
	[F] Challenges to Consensus	107
	[G] Change Is a Thing We Can Count On	108
	[1] From Farm to Fork: Opportunities for Fraud	108
	[2] A Never-Ending Task	109
§5.07	Conclusions	109
§5.08	Afterword	110
CHAPTER 6		
Food Safety under WTO Law		
<i>Daria Boklan</i>		
§6.01	Introduction	113
§6.02	Scope of the Agreement on Sanitary and Phytosanitary Measures	116
§6.03	Scientific Basis	118
§6.04	International Standards	120
§6.05	Risk Assessment and Appropriate Level of Sanitary and Phytosanitary Protection	121
§6.06	Conclusions	122

CHAPTER 7	
Checking Compliance with Food Law: Control, Inspection and Approval Procedures under the WTO SPS Agreement	
<i>Denise Prévost</i>	125
§7.01 Introduction	126
§7.02 Legal Framework for Control, Inspection and Approval Procedures	128
§7.03 Scope of Application	129
§7.04 Rules on Control, Inspection and Approval Procedures	130
[A] Undue Delay	131
[B] Non-discrimination	133
[C] Equitable Fees	139
[D] Systems of Prior Approval and Tolerance Determination for Food or Feed	140
§7.05 Conclusions	145
CHAPTER 8	
Food Production and Animal Welfare: An International Law Perspective	
<i>Ilja Richard Pavone</i>	147
§8.01 Introduction	147
§8.02 Animal Protection and the Legal Gap	150
§8.03 The Current Legal Framework	153
§8.04 Looking for International Standards	156
§8.05 In Search of International Standards	158
§8.06 The Terrestrial Code and the Welfare of Farmed Animals	162
§8.07 Conclusions	164
Part II	
Selected Cases and Legislations and European Food Law	167
CHAPTER 9	
Right to Food and Food Security: A Comparative Perspective	
<i>Francesco Alicino</i>	169
§9.01 Introduction	169
§9.02 The International Human Rights to Food	171
§9.03 The Sectorial, Regional and Constitutional Rights to Food	174
§9.04 Framework Laws and Monitoring Mechanisms	176
§9.05 The Judiciary	179
§9.06 Conclusions	184
CHAPTER 10	
Regulating Health Claims: An International Comparison	
<i>Jill E. Hobbs, Stavroula Malla & May T. Yeung</i>	187
§10.01 Introduction	187
§10.02 Regulatory Objectives and Pitfalls	189
§10.03 Regulation of Health Claims in Selected Countries	191

Table of Contents

[A]	United States	191
[B]	Canada	195
[C]	The European Union	198
[D]	Japan	200
[E]	Australia (and New Zealand)	202
§10.04	Conclusions	207
§10.05	Appendix	209
CHAPTER 11		
Food Safety in the United States		
	<i>Alexia Brunet Marks</i>	213
§11.01	Introduction	213
§11.02	A Cooperative New Governance Approach to Regulating Food Safety	214
§11.03	Direct Regulation	216
[A]	Federal Regulation: Agencies and Legislation	216
[1]	Challenges with Food-Borne Illness	218
[2]	Challenges with International Trade	220
[3]	New Legislation to Address These Challenges	222
[B]	State and Local Agencies	223
§11.04	Indirect Regulation: Legal Liability	223
§11.05	Private Regulation	225
[A]	Examples of a Modern, Co-regulation, New Governance Approach	229
§11.06	Examining Future Challenges and Conclusions	231
CHAPTER 12		
CAFOs: Climate Change, Livestock Production and the Law		
	<i>Justo Corti Varela</i>	233
§12.01	Introduction	234
§12.02	Direct Impacts of an Animal Protein Diet	235
[A]	On the Environment	236
[1]	GHG Emissions	237
[2]	Intensity in the Use of Land and Water	238
[3]	Waste and Biodiversity Loss	238
[B]	On Health	239
[1]	Carcinogenic Impact	239
[2]	Chemicals in Meat Production	240
[3]	Fat and Obesity	241
[4]	Zoonotic Infections	241
§12.03	The Hidden Side: Feedstuffs Trade	242
[A]	Protein Deficit	242
[B]	On the Environment	243
[1]	Delocalization of Environmental Costs	243
[2]	International Transport Costs	243
[C]	On Health	244

	[1] Lack of Controls on Herbicides and Pesticides: Impact on Consumers and Foreign Farmers	244
	[2] No Traceability of Imported Foodstuffs	245
§12.04	Climate Change and International Trade Law: Limitations and Obstacles	246
	[A] Process and Production Methods and Likeness under GATT/WTO Law	246
	[B] Labelling and Other Consumer Information Measures	247
§12.05	Towards an Integration of Environmental and Health Targets in a Common Climate Change Strategy?	248
	[A] Equalize Animal Protein Consumption Through Feed Carbon-Pricing	249
	[B] Empowering Consumers on Health and Environmental Costs of Animal Protein	250
§12.06	Conclusions	250
CHAPTER 13		
An Overview of EU Food Law		
	<i>Luchino Ferraris</i>	253
§13.01	EU Food Law: Origin and Definition of a Policy Domain	253
§13.02	The Sources and Coverage of EU Food Law	255
§13.03	The Search for an Essence of EU Food Law	257
§13.04	Looking Backwards and Forwards: COVID-19 Pandemic Crisis as an Earthquake for EU Food Law?	259
CHAPTER 14		
EU Agricultural Law and the Common Agricultural Policy		
	<i>Alberto Germanò & Eva Rook Basile</i>	263
§14.01	European Agriculture in the CAP and Non-exclusive Areas of Union Competence	263
§14.02	Objectives of the CAP	265
§14.03	On ‘Shared Competence’ Regarding Agriculture and Nutrition	266
§14.04	The Definition of Agriculture in EU Law	269
§14.05	Annex I of the Treaty	270
§14.06	The Special Features of EU Agricultural Law	272
	[A] Competition Law: General Rules	273
	[B] Competition Law: The Agricultural Derogation	275
	[C] The Prohibition of Public Aid: General European Legislation	277
	[D] The Prohibition of Public Aid: The Agricultural Derogation	279
§14.07	The CAP: Premise	280
	[A] Price Policy	280
	[B] Structure Policy	283
§14.08	Trends in Agricultural Law in the EU in the Last Years	290

Table of Contents

CHAPTER 15

Food Safety System in the EU

Maria Pia Ragionieri 295

CHAPTER 16

Food Waste in EU Food Law

David Röttgen & Francesca Allocco 305

§16.01 General Overview 305

§16.02 Monitoring: Quantitative Estimates 307

§16.03 The First (Soft) Regulatory Actions in Europe 310

§16.04 WFD 2008/98/EC and ‘Green Paper’ 311

§16.05 ‘Sustainable Development Goals’ and ‘Circular Economy Package’ 315

§16.06 Legally Defining Food Waste: First Attempts 317

§16.07 The ‘Circular Economy Package’ 321

§16.08 Measures Taken after 2018/851 Directive 325

§16.09 The European Green Deal 328

§16.10 Food Waste and BAT Conclusions 330

§16.11 Most Significant Legal Developments in Member States 331

§16.12 The Pandemic’s Effects on Food Waste Production and Management 334

§16.13 Concluding Remarks 336

CHAPTER 17

The EU Policy to Protect Bees: The Restrictions on the Use of Neonicotinoids and the Emergency Authorizations Granted by MS – In Search of a Long-Term Strategy on Pesticides

Daniela Corona 339

§17.01 Introduction 340

§17.02 The EU Actions to Combat the Loss of Honeybee Populations 342

§17.03 The Restrictions on the Use of Neonicotinoids in the EU 344

§17.04 The Emergency Authorizations Granted by MS 347

§17.05 Concluding Remarks 349

CHAPTER 18

Biotechnology and Food and Feed Safety Assessment

Gijs A. Kleter & Harry A. Kuiper 353

§18.01 Introduction 353

[A] Background 353

§18.02 Safety Assessment 355

[A] Food and Feed Safety in General 355

[B] Safety Assessment of Biotechnology 356

§18.03 Implications of New Developments for the Safety Assessment 363

[A] Specific Safety Features of RNA Interference 363

Table of Contents

[B] Specific Safety Features of Gene Editing	365
§18.04 Concluding Remarks	366
Index	367

Foreword

The phenomenon of globalization together with the growth of the world population has implied a significant increase in the demand for food products. It entails new challenges under the profile of international and European law as to the necessity to harmonize rules and standards on animal welfare, environmental protection and food safety, especially in the optics of the crucial debate on the long-term sustainability of food production.

The volume *International Food Law* edited by Cinzia Caporale, Ilja Richard Pavone and Maria Pia Ragionieri examines the global and European landscape of food governance. Empirically, this book investigates the main legal issues related to food regulation in a global context. The underlying idea behind this book is that food law must be global (both in its transnational and multi-level dimension) in order to meet the challenges related to the process of globalization. In current times, all aspects of the food chain (from processing, distribution to consumer purchase and consumer use) have a transboundary dimension. Food has become, therefore, a global good that requires common and agreed standards ensuring at the same time food safety and sustainable production.

In detail, this book will evaluate whether the current legal landscape is able to guarantee high standards of protection to human health, environment and animal welfare, or whether further reforms are requested. As witnessed by the COVID-19 pandemic and its probable transmission within the Wuhan wet market, environmental law, health law and food law need probably to be more interconnected through a holistic approach built around the One Health Approach.

Indeed, it seems obvious that higher animal welfare standards imply food safety and a minor risk of zoonosis. But, at the same time, environmental law should be reformed in order to embrace an ecosystemic approach that attaches particular attention to the potential sources of threats to human health (such as deforestation and habitat destruction and their impact on the food chain and human health).

Importantly, the book also explores the public policy responses to the main challenging issues related to the food chain under the international and European perspective.

Against this empirical backdrop, the contributors provide insights into broader analytical issues.

This comprehensive book will be of great value to those interested in gaining an interdisciplinary understanding of the empirical area of food governance and the analytical issues of regulatory governance.

The book in addition deals with traditional issues such as food security and food safety, right to food, free trade, GMOs, organic food, animal welfare and food naming and labelling.

International Food Law gathers essays from the world's leading scholars in the field of food and environmental law to explore emerging legal issues linked to food production. It, thus, focuses on the current challenges of global food law from a transnational perspective. A global food law is the response to yet an almost exclusively domestic food production-related legislation on the one hand, and the global dimension of food production on the other hand.

The volume is divided into two parts. Part I ('Setting the Scene') is devoted to a reconstruction of international norms addressing various aspects of the food chain.

It begins with a reconstruction of the history and evolution of food law (Chapter 1) and then continues with a deep analysis of the efforts by the main intergovernmental organizations (United Nations, Food and Agricultural Organization, World Organization for Animal Health, World Trade Organization) to promote the right to food, food safety and food security, and sustainable development.

It finally focuses on the main legal issues related to meat production, with a focus on its impact on the environment and climate change and on animal welfare.

Part II is then addressed on the European Union (EU) legal framework on food production. Indeed, the EU has the highest world standard concerning food safety, food security, animal welfare. The highest attainable level of health protection is the main goal of the EU legislation that covers animal welfare, agriculture and the entire food chain production, as well as goods imported from third countries.

Against this backdrop, the problem arises in understanding whether the current 'global food law' is fit for the purpose to answer the new challenges related to COVID-19, to the over-population, to habitat destruction and to the necessity to guarantee a sustainable food production.

This is definitively the central issue posed by different contributors who have participated in this volume and whose task is to provide an answer to these core topics.

Marco Valletta
International Policy Officer
Former member of Cabinet of the Health and Food Safety Commissioner
European Commission

Preface

By 2050, the world's population is expected to reach 9.7 billion. In light of this steady population growth and the urbanization process, the demand for food will continue to soar, putting under pressure natural habitats, the environment, human health and animal welfare. Despite the huge production of food (intensive agriculture, farmed animals, fishing), a large segment of the population in developing countries – especially children – do not yet have access to adequate nutrition.

As clearly stated by Goal 2 of the 2030 UN Agenda on Sustainable Development, states should engage themselves towards the objective of ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture. To this aim, a more equitable and sustainable food system is necessary and global food law should address this need.

This task has acquired a new sense of urgency due to the COVID-19 pandemic. Even though COVID-19 is not a food-borne disease, it has significantly impacted the production and access to food, adding new challenges for the food system and the promotion of the right to food.

In particular, the pandemic has shown how a health crisis may quickly turn into a food crisis, and thus have an impact on the right to food. The FAO has underscored that the COVID-19 pandemic has struck at the time when global hunger and malnourishment were already on the rise. As a consequence of the economic recession following the pandemic, in the incoming years, millions of people are expected to face new hurdles in accessing quality and nutritious food. At the same time, the pandemic has also directly contributed to increased food waste.

Furthermore, the effects of the COVID-19 pandemic have had, and will have, the greatest impact on these population that are already carrying a significant burden of health and socio-economical inequalities, increasing their food insecurity.

On a different scale, the COVID-19 crisis has also highlighted the need to rethink the model through which our food is currently produced. In this respect, the necessity of avoiding and controlling for future zoonoses has shown the entanglement between the right to food for humans and the need to enhance the welfare of animals as well as to protect the environment. The pandemic has therefore taught us that respecting the

welfare of animals within the food system and preserving ecosystems are two essential pre-conditions for respecting human health and wellbeing.

Against this backdrop, the time has come to enrich the global literature on international and European law with an in-depth scholarly analysis of these most pressing challenges related to the topics ‘food’, ‘nutrition’, ‘animals’, ‘health’ and ‘environment’.

This is precisely the purpose of this volume, which offers the opportunity to consider that the way we produce food has a deep impact in terms of environmental degradation.

The collection of essays presented as chapters in this volume, all written by eminent scholars and leading experts at FAO, offers an original and insightful analysis of the main challenges of modern food law.

In this framework, the volume will address the interplay between different layers of regulation and the main principles of international and European food law.

The authors – from different legal backgrounds and countries – address the common core issue that is how international and European law can address the impact of COVID-19 on global food systems.

This volume has been conceived and prepared by the Interdepartmental Center for Research Ethics and Integrity of the National Research Council (CNR) in collaboration with the Tuscia University of Viterbo, with the participation of Rifosal (Consortium on Research and Education on Food Safety), bringing together international scholars with specific expertise in the main ethical and legal issues of food and nutrition. This volume could have not been published without the staff support of CNR colleagues Paola Grisanti (who coordinated all the activities), Ludovica Durst, Emiliano Liberatori and Marco Arizza, as well as Mariangela Barletta and Valentina Tafuni as student assistants, and Rifosal of Paolo Felice and Marcello Di Francesco Torregrossa.

Cinzia Caporale, Ilja Richard Pavone & Maria Pia Ragonieri

CHAPTER 6

Food Safety under WTO Law

Daria Boklan

Food safety is subject to World Trade Organization (WTO) sanitary and phytosanitary (SPS) disciplines. Establishing discrimination under WTO food safety provisions requires comparison not between the products at issue but between the risks at issue. Therefore food-borne risk is a central element of the food safety regime under the WTO law. To protect human, animal or plant life or health from such risk, WTO members have the right to apply SPS measures with certain discretion. This discretion could be inferred, first, from the fact that food-borne risks may include both territorial conditions relevant to the risks (environmental or geographical, for instance) and at the same time, risks found in products. Moreover the analysis may not be limited exclusively to the present risk; the potential risk should be taken into account as well. Second, the discretion to apply food safety SPS measures could be inferred from broad interpretation of the notion of ‘directly related to food safety’, not limited by an exhaustive list of possible food-borne risks. Third, WTO members have the right to rely on the precautionary principle as a basis for application of SPS food safety measures and finally they may set their appropriate level of protection basing on both quantitative and qualitative aspects.

§6.01 INTRODUCTION

International food trade has existed for thousands of years, but until not too long ago food was mainly produced, sold and consumed locally. Over the last century, the amount of food traded internationally has grown exponentially, and a quantity and variety of food never before possible travels the globe today.¹

Food safety is the absence, or safe, acceptable levels, of hazards in food that may harm the health of consumers. Food-borne hazards can be microbiological, chemical or

1. <http://www.fao.org/fao-who-codexalimentarius/about-codex/jp/>.

physical in nature and are often invisible to the plain eye: bacteria, viruses or pesticide residues are some examples.² On the one hand, food safety, nutrition and food security are closely linked;³ on the other hand they are subject to different World Trade Organization (WTO) agreements. For instance, nutrition labelling and other good-quality measures are within the scope of the Technical Barriers to Trade Agreement (TBT Agreement) and food security issues may fall under the General Agreement on Tariffs and Trade (GATT). According to Article 1.5 of the TBT Agreement, its provisions ‘do not apply to sanitary and phytosanitary measures as defined in Annex A of the Agreement on Sanitary and Phytosanitary Measures’ (SPS Agreement).

Therefore both SPS and TBT Agreements strike a balance between, on the one hand, members’ rights to regulate for legitimate objectives, such as food safety or consumer protection, and on the other hand, ensuring that such regulations do not become unnecessary or discriminatory barriers to trade.⁴

When a measure is an ‘SPS measure’, as defined in Annex A(1) of the SPS Agreement, the SPS Agreement applies to the exclusion of the TBT Agreement, even if the measure would otherwise be considered a ‘technical regulation or standard ... for purposes of the TBT Agreement’. The relationship between the SPS Agreement and TBT Agreement can thus be described as one of the mutual exclusivity.⁵

However we should take into account the position of the panel in *EC – Approval and Marketing of Biotech Products*, according to which ‘the requirement at issue, and which would have an autonomous *raison d’être*, i.e., a different purpose which would provide an independent basis for imposing the requirement’.⁶ Therefore one and the same measure could be simultaneously covered by both SPS and TBT Agreements. If the requirement falls within the definition of a ‘technical regulation’ as defined in Annex 1.1 of the TBT Agreement, it is to be assessed under the TBT Agreement ‘to the extent it embodies a non-SPS measure’.⁷

As for the compatibility between SPS Agreement and Article XX(b) GATT,⁸ it is worth noting that according to Article 2.4 of the SPS Agreement, SPS measures ‘which confirm to the relevant provisions of this Agreement shall be presumed to be in accordance with the obligations of the Members under the provision of GATT 1996 which relate to use of SPS measures, in particular the provisions of Article XX (b)’.

2. <http://www.fao.org/food-safety/en/>.

3. <https://www.who.int/health-topics/food-safety/>.

4. Trade and Food Standards, published by the FAO and WTO, 2017, p. 13.

5. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge University Press, 2017), 1077, at 943.

6. Panel Report, *EC – Approval and Marketing of Biotech Products*, WT/DS293/R, 29 September 2006, para. 7.165.

7. *Ibid.*, para. 7.167.

8. According to Article XX (b) of the GATT: ‘Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures (b) necessary to protect human, animal or plant life or health.’

However the opposite is not the case. Measures that are in conformity with the GATT 1994 cannot be presumed to be consistent with the SPS Agreement, as the latter agreement also provides for obligations that clearly do not exist under the GATT 1994.⁹

As far as requirements directly related to food safety are concerned, they are covered by the SPS Agreement.¹⁰

At Berlin Agriculture Ministers' Conference on the occasion of the Global Forum for Food and Agriculture, held on 18 January 2020, the Communiqué titled 'Food for All! Trade for Secure, Diverse and Sustainable Nutrition' was issued, where ministers representing seventy-one nations acknowledged that international food safety standards, based on the SPS Agreement, are essential for reaping the benefits of agricultural trade and for avoiding potential risks to human, animal and plant health. They agreed to facilitate trade in agriculture and in safe and nutritious food products by taking appropriate measures in accordance with the WTO Agreement on the Application of Sanitary and Phytosanitary Measures.¹¹

Over ten-thousand food safety, plant and animal health requirements have been notified to the WTO, and a growing number of countries are actively providing the information.¹²

Forty-five per cent of all SPS trade concerns are food safety concerns. This shows on the one hand the necessity of food safety regulations under the WTO, but on the other hand difficulty to reach an agreement on such regulations among WTO members.

For instance, Brazil raised concerns about the European Union's (EU's) restrictions on poultry meat and poultry meat preparations. The restrictions affect exporters of meat of domestic ungulates (hooved animals), meat from poultry and rabbits, as well as minced meat, meat preparations and mechanically separated meat, who have been under judicial investigation on alleged charges of non-compliance with food safety standards. Brazil asked the EU to withdraw these measures on the grounds that they are not science-based and responded to the EU's perception that certain export companies cannot be trusted to comply with sanitary requisites for the presence of pathogens.

Brazil also raised concerns regarding the Russian Federation's restrictions on beef and swine meat. According to Russia, this measure was introduced due to numerous detections of the veterinary drug ractopamine in meat products imported from Brazil. As a result, Brazilian exports from sixty establishments were suspended in December 2017. Brazil said it has opened an investigative process in order to assess possible irregularities and stated its commitment to establishing control systems and processes that guarantee compliance with, and fulfilment of, the sanitary requirements of Brazilian meat products exported to the Russian market.¹³

This problem was reflected in the last Review of the Operation and Implementation of the SPS Agreement of 2014. The adoption of this document has taken over three

9. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge University Press, 2013), 1045, at 903.

10. https://www.wto.org/english/tratop_e/sps_e/sps_issues_e.htm#definitions.

11. <https://www.gffa-berlin.de/wp-content/uploads/2020/01/2020-GFFA-Communique.pdf>.

12. https://www.wto.org/english/tratop_e/sps_e/sps_issues_e.htm#definitions.

13. https://www.wto.org/english/news_e/news18_e/sps_12jul18_e.htm.

years due to members' disagreement over standards on food safety. Members finally reached a compromise by introducing wording suggesting that members are unable to agree on that recommendation.¹⁴

Nevertheless the SPS Agreement covers all types of measures aimed at the protection of human or animal life or health from food-borne risks. Such measures may concern requirements for final products, process and production, inspection and certification, packaging and labelling.

§6.02 SCOPE OF THE AGREEMENT ON SANITARY AND PHYTOSANITARY MEASURES

The Preamble of the SPS Agreement enshrines that no member should be prevented from adopting or enforcing measures necessary to protect human, animal or plant life or health and at the same time SPS measures are not to be applied in a manner that constitutes: a means of arbitrary or unjustifiable discrimination between members or a disguised restriction on international trade. Further, the right to apply SPS measures is enshrined in Article 2.1 of the SPS Agreement, according to which 'members have the right to take sanitary and phytosanitary measures necessary for protection of human, animal or plant life or health [...]'. However, the rights to apply SPS measures are limited by obligation of not to arbitrarily or unjustifiably discriminate between WTO Members, enshrined in Article 2.3 of the SPS Agreement.

The panel elaborated three cumulative elements which are required for a violation of Article 2.3 of the SPS Agreement: (1) the measure should discriminate between the territories of members other than the member imposing the measure, or between the territory of the member imposing the measure and that of another member; (2) the discrimination should be arbitrary or unjustifiable; and (3) identical or similar conditions prevail in the territory of the members compared.¹⁵

According to the Appellate Body, these conditions should 'relate to the particular objective pursued and risks addressed by the SPS measure in question'.¹⁶ They may include both territorial conditions, like ecological or environmental relevant to the risks addressed by an SPS measure and at the same time, 'those found in products and not just the territory of an exporting or importing Member'.¹⁷ Moreover, the analysis under Article 2.3 entails consideration of all relevant conditions that may not yet have manifested in products but are relevant in light of the regulatory objective and specific SPS risks at issue.¹⁸ The analysis may not be limited exclusively to the risk present on the products.¹⁹ The potential risk should be taken into account as well.

14. https://www.wto.org/english/news_e/news18_e/sps_06mar18_e.htm.

15. Panel Report, *Australia – Measures Affecting Importation of Salmon – Recourse to Article 21.5 by Canada*, WT/DS18/RW, 18 February 2000, para. 7.111.

16. Appellate Body Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/AB/R, 11 April 2019, para. 5.59.

17. *Ibid.*, 5.63.

18. *Ibid.*, para. 5.64.

19. *Ibid.*, para. 5.65.

Therefore discrimination under Article 2.3 requires a comparison not between products at issue like under the GATT or TBT Agreement but between risks at issue. The panel in *Australia – Measures Affecting Importation of Salmon – Recourse to Article 21.5 by Canada* underlined that ‘discrimination in the sense of Article 2.3, may also include discrimination between *different* products, e.g. not only discrimination between Canadian salmon and New Zealand salmon, or Canadian salmon and Australian salmon; but also discrimination between Canadian salmon and Australian fish including non-salmonids, as referred to by Canada in this case’.²⁰ When dissimilar products pose the same or similar health risks, they should be treated in the same way.²¹ This approach to discriminatory treatment is connected with the specific nature of the SPS measures and food safety.

SPS measures include those which have the purpose of protecting human, animal or plant life or health from particular risks. Namely risks arising from the entry, establishment or spread of pests, diseases, disease-carrying or disease-causing organisms; additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs; diseases carried by animals, plants or products thereof.

The SPS measures include all relevant laws, decrees, regulations, requirements and procedures including, *inter alia*, labelling requirements directly related to food safety.

Interpretation of ‘directly related to food safety’ was made in *EC – Approval and Marketing of Biotech Products*, where the Panel noted that ‘[t]he term “food safety” as it is used in the Agreement encompasses the safety of such substances as food additives, contaminants (including pesticide residues), etc.’ and ruled that GMO can be covered by the SPS Agreement.²²

Further this approach was developed in a recent case *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides* where the panel did not disagree with position of Korea, where it described the measures at issue as covered by the SPS Agreement and referred to ‘two incidents in May 2016 in Tochigi where a food stand had accepted mislabelled wild edible plants that had actually been sourced from a restricted area that exceeded the reference level (100 Bq/kg) by up to 2,100 Bq and bamboo shoots served for lunch at a local elementary school were found to contain 234 Bq/kg of caesium. The mislabelling was discovered through a purchase survey by MHLW.’²³

Therefore the panel interpreted ‘directly related to food safety’ broadly, not only relying on wording of Article 1 of Annex A of the SPS which contains pests, diseases, disease-carrying organisms, additives, contaminants, toxins or disease-causing organisms in food. This means that Article 1 of Annex A of the SPS agreement does not

20. Panel Report, *Australia – Measures Affecting Importation of Salmon – Recourse to Article 21.5 by Canada*, WT/DS18/RW, 18 February 2000, para. 7.112.

21. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge University Press, 2017), 1077, at 951.

22. Panel Report, *EC – Approval and Marketing of Biotech Products*, WT/DS293/R, 29 September 2006, paras 7.410, 7.387-7.388.

23. Panel Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/R, 22 February 2018, para. 7.286.

contain an exhaustive list of potential food-borne risks and panels may enlarge it on a case-by-case basis.

§6.03 SCIENTIFIC BASIS

Scientific certainty and confidence in scientific evidence relate to the principle of prevention and not to precaution. Preventive measures are well recognized in WTO law and can be invoked by party to justify an import ban on products whose hazardous or dangerous nature is established.²⁴

Article 2.2 of the SPS Agreement enshrines that SPS measures should be ‘based on scientific principles and is not maintained without sufficient scientific evidence [...]’. The Appellate Body ruled in this respect that ‘the obligation in Article 2.2 that an SPS measure not be maintained without sufficient scientific evidence requires that there be a rational or objective relationship between the SPS measure and the scientific evidence. Whether there is a rational relationship between an SPS measure and the scientific evidence is to be determined on a case-by-case basis and will depend upon the particular circumstances of the case, including the characteristics of the measure at issue and the quality and quantity of the scientific evidence’.²⁵ Further this approach was developed by the panel in *US – Certain Measures Affecting Imports of Poultry from China*, where it was stated that ‘the scientific evidence must bear a rational relationship to the measure, be sufficient to demonstrate the existence of the risk which the measure is supposed to address, and be of the kind necessary for a risk assessment’.²⁶ At the same time, Article 2.2 of the SPS Agreement stipulates an exception from this scientific-based rule. This exception is foreseen by Article 5.7 of the SPS Agreement, which according to the Appellate Body ‘operates as a qualified exemption from the obligation under Article 2.2 not to maintain SPS measures without sufficient scientific evidence’.²⁷

The Appellate Body held that Article 5.7 of the SPS Agreement must be interpreted keeping in mind that the precautionary principle finds reflection in this provision.²⁸ That is the case when precautionary principle of international environmental law enshrined in a treaty on international trade.

The obligation to act consistently with the precautionary principle is crystallizing as a rule of customary international law.

24. Makane Moise Mbengue and Urs P. Thomas. ‘The Precautionary Principle: Torn Between Biodiversity, Environment-Related Food Safety and the WTO’ (2005) 5(5) *Global Environmental Issues* 41.

25. Appellate Body Report, *Japan – Measures Affecting Agricultural Products*, WT/DS76/AB/R, adopted 22 February 1999, para. 84.

26. Panel Report, *US – Certain Measures Affecting Imports of Poultry from China*, WT/DS392/R, adopted 29 September 2010, para. 7.200.

27. Appellate Body Report, *Japan – Measures Affecting Agricultural Products*, WT/DS76/AB/R, adopted 22 February 1999, para. 80.

28. Appellate Body Reports, *Canada – Continued Suspension of Obligations in the EC – Hormones Dispute*, WT/DS321/AB/R, adopted 16 October 2008, para. 680.

There is certainly sufficient evidence of state practice to support the conclusion that this principle has now received sufficiently broad support to allow a strong argument to be made that it reflects a principle of customary law.²⁹

The concrete substance of precautionary principle is still disputable; however, it is clear that it includes obligation to prevent SPS risks when there is lack of full scientific certainty.

Precaution contributes to the interpretation of international instruments in a manner that will enhance the protection of the environment in cases of scientific uncertainty as to the impact of a particular activity.³⁰

The Appellate Body noted that it is ‘perfectly legitimate for a Member to seek to halt the spread of a highly risky product while allowing the use of a less risky product in its place’.³¹ Such interpretation could be regarded as interpretation in light of the precautionary principle.

The Appellate Body recognized that members had the right to establish their own level of sanitary protection, which may be higher than implied in existing international standards, guidelines and recommendations.³²

According to Article 5.7 of the SPS Agreement, ‘in cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information [...]’.

The Appellate Body elaborated a special test to interpret and apply Article 5.7 of the SPS, according to which the measure to fall under the mentioned article should satisfy four cumulative criteria, namely the measure must (1) be imposed in respect of a situation where relevant scientific evidence is insufficient, (2) be adopted on the basis of available pertinent information, (3) not be maintained unless the member seeks to obtain the additional information necessary for a more objective assessment of risk and (4) be reviewed accordingly within a reasonable period of time. The latter two requirements highlight the provisional nature of measures adopted pursuant to Article 5.7.³³ As for the first criterion, the panel underlined that Article 5.7 refers to ‘relevant scientific evidence’ which implies that the body of material that might be considered includes not only evidence supporting Japan’s position but also evidence supporting other views.³⁴ Article 5.7 was obviously designed to be invoked in situations where little, or no, reliable evidence was available on the subject matter at issue.³⁵ It is triggered not by the existence of scientific uncertainty but rather by the insufficiency of

29. Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge, 2018), 239.

30. *Ibid.*, 240.

31. Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, WT/DS135/AB/R, adopted 12 March 2001, para. 168.

32. Abdul Hasseb Ansari and Sri Wartini, ‘Application of Precautionary Principle in International Trade Law and International Environmental Law: A Comparative Assessment’ 2014 13(1) *Journal of International Trade Law and Policy* 22.

33. Appellate Body Reports, *Canada – Continued Suspension of Obligations in the EC – Hormones Dispute*, WT/DS321/AB/R, adopted 16 October 2008, para. 676.

34. Appellate Body Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/AB/R, adopted 11 April 2019, para. 5.107.

35. *Ibid.*, para. 8.219.

scientific evidence.³⁶ That means the concept of insufficiency of scientific evidence and the concept of scientific uncertainty are not interchangeable³⁷ and the panel and the Appellate Body used narrow interpretation of Article 5.7 of the SPS Agreement. In addition the Appellate Body underlined that ‘insufficient’ within the meaning of Article 5.7 does not allow, in qualitative or quantitative terms, the performance of an adequate assessment of risks as required under Article 5.1 (of the SPS Agreement).³⁸ Thus the trigger for applicability of Article 5.7 is the insufficiency of the scientific evidence, not the provisional nature of the measure at issue.³⁹ Alongside that the Appellate Body ruled that WTO Members should be permitted to take a provisional measure where new evidence from a qualified and respected source puts into question the relationship between the pre-existing body of scientific evidence and the conclusions regarding the risks.⁴⁰

As for the second criterion, it works when there is some evidentiary basis indicating the possible existence of a risk, but not enough to permit the performance of a risk assessment. Rational and objective relationship between the information concerning a risk and the provisional SPS measure is required.⁴¹

The third criterion contains three requirements: the WTO member must make best efforts to remedy the insufficiency, seek to obtain additional information and such information should be appropriate to conduct a risk assessment within the meaning of Article 5.1 of the SPS Agreement.⁴²

And finally with respect to the last criterion the Appellate Body stated that ‘reasonable period of time’ depends on the specific circumstances of each case, including the difficulty of obtaining the additional information necessary for the review and the characteristics of the provisional SPS measure.⁴³

§6.04 INTERNATIONAL STANDARDS

International food standards contribute to public health and make trade more transparent. However, at the same time, food safety requirements may constitute barriers to international trade for protectionist purposes.

Article 3 of the SPS Agreement reflecting objective of the Preamble enshrines three alternative obligations regarding international standards. First option is to base

36. Appellate Body Report, *Japan – Measures Affecting the Importation of Apples*, WT/DS245/AB/R, adopted 26 November 2003, para. 184.

37. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge, 2017), 969.

38. Appellate Body Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/AB/R, adopted 11 April 2019, para. 5.106.

39. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge, 2017), 970.

40. Appellate Body Reports, *Canada – Continued Suspension of Obligations in the EC – Hormones Dispute*, WT/DS321/AB/R, adopted 16 October 2008, para. 703.

41. *Ibid.*, para. 678.

42. *Ibid.*, para. 679.

43. Appellate Body Report, *Japan – Measures Affecting Agricultural Products*, WT/DS76/AB/R, adopted 22 February 1999, para. 93.

SPS measures on international standards (Article 3.1), second option is to conform to international standards (Article 3.2) and third option is to introduce higher level of SPS protection. Article 3.4 directly refers to Codex Alimentarius Commission as one of the relevant international standards, which is the main international food safety standard.

Codex is an intergovernmental body created in 1963 by the Food and Agricultural Organization (FAO) and the World Health Organization (WHO) under the Joint FAO/WHO Food Standards Programme to develop food standards, guidelines and recommendations. Codex is recognized in Annex A(3) of the SPS Agreement as the source for international standards, guidelines and recommendations for food safety in respect of contaminants.⁴⁴ Codex standards contain requirements for food aimed at ensuring for the consumer a safe, wholesome food product free from adulteration, correctly labelled and presented.⁴⁵ However, the non-binding standards set by international standard-setting organizations do not become binding by virtue of the SPS Agreement. It suffices that some of the elements of the standard are adopted and that the measure does not contradict the standard.⁴⁶

§6.05 RISK ASSESSMENT AND APPROPRIATE LEVEL OF SANITARY AND PHYTOSANITARY PROTECTION

The term ‘risk assessment’ refers to the scientific process of identifying the existence of a risk and establishment the likelihood that the risk may actually materialize according to the measures that could be applied to address the risk.⁴⁷ Risk assessment is one of the key issues in proving food safety. Article 5 of the SPS Agreement contains provisions on the risk assessment and enshrines obligation to ensure that SPS measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations (Article 5.1). With respect to food safety, according to paragraph 4 of Annex A to the SPS Agreement, the ‘risk assessment’ includes the evaluation of the potential for adverse effects on human or animal health arising from the presence of additives, contaminants, toxins or disease-causing organisms in food, beverages or feedstuffs.

The right to apply SPS measures, including food safety measures, is limited by obligation provided in Article 5.6 of the SPS Agreement not to apply more trade-restrictive measures than required to achieve their appropriate level of sanitary or phytosanitary protection. According to this article a measure is not more trade

44. Specifically, Annex A(3)(a) states ‘for food safety, the standards, guidelines and recommendations established by the Codex Alimentarius Commission relating to food additives, veterinary drug and pesticide residues, contaminants, methods of analysis and sampling, and codes and guidelines of hygienic practice’ are considered ‘international standards, guidelines and recommendations’. Panel Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/R, 22 February 2018, para. 2.22.

45. <http://www.fao.org/fao-who-codexalimentarius/about-codex/jp/>.

46. Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization* (Cambridge, 2017), 953.

47. *Ibid.*, 955.

restrictive than required unless there is another measure, reasonably available taking into account technical and economic feasibility, that achieves the appropriate level of sanitary or phytosanitary protection (ALOP)⁴⁸ and significantly less trade restrictive.

A complainant must establish that an alternative measure: (i) is reasonably available taking into account technical and economic feasibility; (ii) achieves the member's ALOP; and (iii) is significantly less restrictive to trade than the contested SPS measure. These cumulative elements entail an assessment of a proposed alternative measure that serves as a conceptual tool to be used for the analysis under Article 5.6.⁴⁹ The Appellate Body has said that a member's ALOP is an 'objective' and that an SPS measure is the instrument chosen to attain or implement that objective. It is the 'prerogative' of a member to set the level of protection that it deems appropriate. At the same time, members adopting SPS measures must determine their ALOP with sufficient precision to enable the application of the relevant provisions of the SPS Agreement. While a member is not required to set the ALOP in quantitative terms, a member may not establish its level of protection with such vagueness or equivocation as to render impossible the application of the relevant disciplines of the SPS Agreement, including the obligation set out in Article 5.6.⁵⁰ A panel must ascertain the respondent's ALOP on the basis of the totality of the arguments and evidence on the record, which may include the level of protection reflected in the SPS measure actually applied.⁵¹ A panel examining a claim under Article 5.6 of the SPS Agreement is charged with, *inter alia*, ascertaining the respondent's ALOP on the basis of the totality of the arguments and evidence on the panel record. A panel is also required to identify the level of protection that would be achieved by the alternative measure proposed by the complainant.⁵²

§6.06 CONCLUSIONS

Discrimination under WTO food safety provisions requires a comparison not between products at issue but rather between risks at issue. Therefore food-borne risk is a central element of the food safety regime under the WTO law. To protect human, animal or plant life or health from such risk WTO members have the right to apply SPS measures with certain discretion. This discretion could be inferred, first, from the fact that food-borne risks may include both territorial conditions, like ecological or environmental relevant to the risks and at the same time, risks found in products. Moreover such food-borne risks may not yet have been manifested in products but are relevant in light of the regulatory objective of the SPS measure. In addition the analysis may not

48. Appropriate level of sanitary and phytosanitary protection – The level of protection deemed appropriate by the member establishing a sanitary or phytosanitary measure to protect human, animal or plant life or health within its territory (SPS Agreement, Annex A, paragraph 5).

49. Appellate Body Report, *Korea – Import Bans, and Testing and Certification Requirements for Radionuclides*, WT/DS495/AB/R, adopted 11 April 2019, para. 5.21.

50. *Ibid.*, para. 5.23.

51. *Ibid.*, para. 5.24.

52. *Ibid.*, para. 5.38.

be limited exclusively to the risk present on the products; the potential risk should be taken into account as well.

Second, the discretion to apply food safety SPS measures could be inferred from broad interpretation of the notion of 'directly related to food safety', not limited by an exhaustive list of possible food-borne risks.

Third confirmation of the discretion is right to rely on precautionary principle as a basis for application of SPS food safety measures. And finally the right of WTO members to set their ALOP is taken into consideration not only in quantitative terms but also in qualitative aspects.

