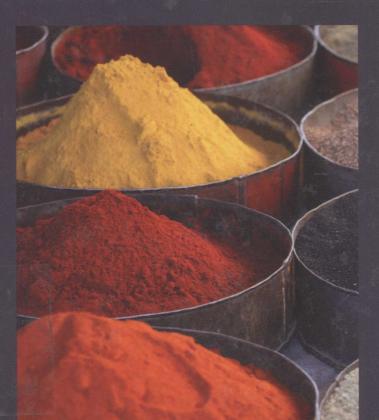
EDITED BY
ROSEMARY RAYFUSE
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THE CHALLENGE OF FOOD SECURITY

International Policy and Regulatory Frameworks



The Challenge of Food Security

International Policy and Regulatory Frameworks

Edited by

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Cheltenham, UK • Northampton, MA, USA

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Published by Edward Elgar Publishing Limited The Lypiatts 15 Lansdown Road Cheltenham Glos GL50 2JA UK

Edward Elgar Publishing, Inc. William Pratt House 9 Dewey Court Northampton Massachusetts 01060 USA

A catalogue record for this book is available from the British Library

Library of Congress Control Number: 2012939104



ISBN 978 0 85793 937 1

Typeset by Columns Design XML Ltd, Reading Printed and bound by MPG Books Group, UK

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Preface

A quick perusal of scientific and economic literature reveals a plethora of studies dealing with various topics related to food security. Surprisingly, however, there is a dearth of literature analysing and elaborating on the international policy and regulatory challenges that arise in attempting to ensure long-term global food security. The aim of this book is to fill, at least in some small part, that lacuna.

This book owes its genesis to one person, Mr James Ingram AO, former Executive Director of the United Nations World Food Programme. In 2005, Mr Ingram established the Ingram Fund for Law and Development in the Faculty of Law at the University of New South Wales in Sydney, Australia, to promote the study, teaching and dissemination of international law and to foster the understanding of the impact of international law on the interests of developing countries. A significant activity of the Fund is the Biennial Ingram Colloquium on International Law and Development, which was established to provide an interdisciplinary forum for the exchange of ideas and to sharpen debate and enhance research on current issues of international law and development, having special regard to the concerns of developing countries.

This book builds on papers that were presented at the 3rd Biennial Ingram Colloquium, which was held at the Faculty of Law at the University of New South Wales in December 2010. While previous *colloquia* have focused on development issues relating to the Asia Pacific region, in 2010 the topic chosen was Food Security. After the Colloquium, speakers were invited to revise their papers for submission as chapters in this book and a number of other contributions having a policy or governance focus were specifically commissioned from authors in various disciplines. The book is structured around five themes all having a central focus on policy and regulatory issues. Part I provides an introductory overview of the challenges identified by the authors. In Part II policy frameworks relating to access to food and food insecurity are examined. The chapters in Part III examine the theme of sustainability and food security while the theme of Part IV is food, trade and investment. The chapters in Part V conclude the book with an examination of the theme of food governance.

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We are deeply indebted to Mr Ingram for his generous gift to the UNSW Law Faculty, which has made both the Colloquium and this book possible. However, this project would not have been possible without the contributions of our many authors who have engaged so assiduously with the issues and from whom we have learned so much about the challenge of food security. We are, of course, also grateful to our colleagues at the University of New South Wales who assisted in various ways with the planning and running of the Colloquium. In addition to her support at UNSW, the Faculty of Law at Lund University has provided Rosemary with an immensely enriching environment in which to work on the manuscript during her sojourn there as Conjoint Professor of International Environmental Law, while Nicole's personal thanks go to her partner Trevor for his patience and ongoing support. Finally, we would like to thank Ben Booth at Edward Elgar for his recognition of the importance of the topic and for his support during the course of this book's realization.

Rosemary Rayfuse Nicole Weisfelt

Abbreviations

ACP Africa, Caribbean, Pacific ADB Asian Development Bank

AFSI L'Aquila Food Security Initiative

AFSIS ASEAN Food Security Information System

AFSRB ASEANFood Security Reserve Board

AIFS ASEAN Integrated Food Security Framework

AMS Aggregate Measure of Support
AoA Agreement on Agriculture

AoA Agreement on Agriculture

APEC Asia-Pacific Economic Cooperation

ASEAN Association of Southeast Asian Nations
ASPC ASEAN Political—Security Community
ATIGA ASEAN Trade in Goods Agreement

BITs bilateral investment treaties
CAP Common Agricultural Policy

CARP Comprehensive Agrarian Reform Program
CBD 1992 Convention on Biological Diversity
CCRF Code of Conduct for Responsible Fisheries

GDP gross domestic product

CEB UN Chief Executives Board

CEDAW 1979 Convention on the Elimination of All Forms of

Discrimination Against Women

CESCR Committee on Economic, Social and Cultural Rights

CFA Comprehensive Frame for Action
CFS Committee on World Food Security

CGIAR Consultative Group on International Agricultural

Research

CMV Cassava Mosaic Virus

CNIP Cambodian Nutrition Investment Plan

CO2 carbon dioxide

COT Commitments of Traders

CSIRO Commonwealth Science and Industry Research

Organisation

DDA Doha Development Agenda

EC European Community

ECOSOC Economic and Social Council

ECOWAS Economic Community of West African States
EMIR European Market Infrastructure Regulation

EPA Economic Partnership Agreements
ERM ecological rodent management

EU European Union

EUREP Euro-Retailers Produce Working Group

FAC Food Aid Committee

FAO Food and Agriculture Organization

FDI foreign direct investment

FOGS Functioning of the GATT System

FOM farmer ownership model

FOWTOS Functioning of the World Trade Organization

System

FSCF APEC Food Safety Cooperation Forum

G8 Group of Eight
G20 Group of Twenty

GAFSP Global Agriculture and Food Security Program

GAPs Good Agricultural Practices

GATS General Agreement on Trade in Services
GATT General Agreement on Tariffs and Trade

GECAFS Global Environmental Change and Food Systems
GIZ German Society for International Cooperation

GM genetically modified

GMO genetically modified organism

HLPDAB APEC High Level Policy Dialogue on Agricultural

Biotechnology

HLPE High Level Panel Committee of Experts

HLTF UN High Level Task Force on the Global Food

Security

ICESCR 1976 International Covenant on Economic, Social

and Cultural Rights

ICSID International Centre for Settlement of Investment

Disputes

IFAD International Fund for Agricultural Development

IFC International Finance Corporation

IIED International Institute for Environment and

Development

ILO International Labour Organization

IMF International Monetary Fund

INGO international non-governmental organisation
IOSCO International Organization of Securities

International Organization of Securities
Commissions

IPM integrated pest management

IPOA-Capacity International Plan of Action for the Management of

Fishing Capacity

IPOA-IUU International Plan of Action to Eliminate Illegal,

Unregulated and Unreported Fishing

IPR intellectual property rights

ITPGRFA 2001 International Treaty on Plant Genetic

Resources for Food and Agriculture

IUU illegal, unregulated and unreported

LDC least developed countries

MARD Ministry of Agriculture and Rural Development

MDB Murray Darling Basin

MiFID Markets in Financial Instruments Directive

2004/39/EC

NAFTA North American Free Trade Agreement NFICDs net food-importing developing countries

NGO	non-governmental organisations
NPFS	Food Safety Cooperation Forum
ODA	overseas development assistance

OECD Organisation for Economic Co-operation and

Development

OPK Operasi Pasar Khusus

OTC over-the-counter

P Phosphorus

PBAS Performance-based Allocation System

PFID Partnership for Food Industry Development

PRSV Papaya Ringspot Virus

PPMs process and production methods

R&D research and development
RED Renewable Energy Directive
RGC Royal Government of Cambodia

RPFS Regional Programs for Food Security
SAPs structural adjustment programmes

SCM Agreement WTO Agreement on Subsidies and Countervailing

Measures

SCN Standing Committee on Nutrition

SCSC APEC Sub-Committee on Standards and

Conformance

S&D special and differential treatment

SFFSN Strategic Framework for Food Security and

Nutrition in Cambodia 2008–2012

SP Special Products

SPA-FS Plan of Action on Food Security in the ASEAN

Region

SPFS Special Program for Food Security

SPS Agreement 1994 WTO Agreement on the

Application of Sanitary and Phytosanitary Measures

SSG security sector governance
SSM Special Safeguard Mechanism

TRQ tariff-rate quota

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UBS Union Bank of Switzerland

UCFA Updated Comprehensive Frame for Action
UFTC Commodity Futures Trading Commission

UN United Nations

UNCLOS United Nations Convention on the Law of the Sea

UNCTAD United National Conference on Trade and

Development

UNFCCC 1992 United Nations Framework Convention on

Climate Change

USAID United States Agency for International Development

WFC World Food Council
WFP World Food Programme
WHO World Health Organization
WTO World Trade Organization

Treaties

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- 1996 Convention on the Protection of the Alps, OJ L 61 of 12.3.1996 **84**
- 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change, 2303 UNTS 148 **83**
- 1998 Protocol to the African Charter on Human and Peoples' Rights on the Establishment of an African Court on Human and

- Peoples' Rights, OAU/LEG/ MIN/AFCHPR/PROT.1 rev.2 (1997) 225
- 2000 Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2226 UNTS 208 84
- 2001 International Treaty on Plant Genetic Resources for Food and Agriculture, 2400 UNTS 303 83
- 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions, 2440 UNTS 311 82
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