

A photograph of a person, likely a farmer, wearing a traditional conical hat and gloves, working in a rice field. The person is bent over, handling a bundle of rice plants. The background is a blurred green field.

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Intellectual Property, Agriculture and Global Food Security

The Privatization of Crop Diversity

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Acknowledgements

My most sincere thanks are due to my PhD supervisors, Duncan Matthews and Graham Dutfield, for their unfailing support, encouragement, inspiration and fairness throughout the entire course of my doctoral studies. I am also grateful to Niels P. Louwaars and Philippe Cullet for their feedback, constructive criticisms and comments on earlier versions of this manuscript and for examining my PhD thesis.

Between 2004 and 2006, the research project that led up to this book was funded by a grant from the University of Milan (*Università Statale*), Italy. In particular, I am indebted to Antonio Gambaro and Nerina Boschiero for inspiring me to pursue an active involvement in international law-making as well as in legal research. I am also obliged to the Herchel Smith bequest for funding my research at Queen Mary, University of London between 2006 and 2008, and to the Centre for Commercial Law Studies for allowing me to attend numerous conferences. The help provided by Malcolm Langley, Queen Mary Intellectual Property Archive, has been invaluable.

In connection with the research undertaken on the FAO International Treaty between 2005 and 2006, I have benefited from working closely with Daniele Manzella, Marta Pardo, Stefano Burchi, Clive Stannard, Martin Eric Smith, Dan Leskien, Irene Hoffman, Gerald Moore and many others at the FAO Legal Office. I am particularly thankful to Luis Bombín, former FAO Legal Advisor, for allowing me to assist his work during the Second Meeting of the Contact Group for the Drafting of the Standard Material Transfer Agreement (April 2006) and the First Session of the Governing Body of the FAO International Treaty (June 2006).

In October 2006, I was delighted to accept a Fellowship at the United Nations University—Institute of Advanced Study (Yokohama, Japan). This experience influenced the development of this book by helping me to bridge the gap between legal and policy research, and broadened my knowledge on issues of access to genetic resources and benefits sharing, traditional knowledge and capacity-building for national implementation of biodiversity-related treaties. My research has benefited from many interesting conversations with Balakrishna Pisupati, Sam Johnston, Brendan Tobin and all the staff and fellows of the UNU-IAS, whom I thank for their comments and considerable inspiration.

As regards the country study of Viet Nam, I would like to express my gratitude, *inter alia*, to Michael Halewood for inviting me to participate in

a workshop on promoting Farmers' Rights (Hanoi, Viet Nam, October 2006), to Andrew Speedy (FAO Representative in Viet Nam), to Patricia Moore and Laura Cunial (IUCN), and to several officials, researchers and staff of the Ministries of Agriculture and Rural Development and of Natural Resources and the Environment of Viet Nam.

The Reporting Service of the International Institute for Sustainable Development has allowed me to participate in relevant international negotiations between 2007 and 2010. I learned a great deal from this experience as a member of the *Earth Negotiations Bulletin* team. I am thankful to my friends and colleagues at IISD with whom I have shared the pleasure and the burden of long nights and remote travels at all times. Besides, I would like to thank François Meienberg and Bell Batta Torheim for their inputs and feedback throughout the preparation of a background study paper on *Outstanding Issues on Access and Benefit Sharing under the FAO Multilateral System* (2011), and to Stefan Jungcurt, who co-authored the above study. In relation to this book, the background study paper is important because it has provided the opportunity to fine tune some of its most important findings and conclusions.

Finally, I am grateful to my colleagues at the *Institut du développement durable et des relations internationales*, especially to the Biodiversity Programme team, for their supportiveness, friendship and critical perspectives on the many challenges ahead.

This book is dedicated to Aziza, Anna and Mario for being the most important part of all my journeys.

Paris, 17 March 2011

Abbreviations

ABS	Access to genetic resources and benefit sharing
AgGDP	Agricultural gross domestic product
AnGRs	Animal genetic resources for food and agriculture
ASEAN	Association of Southeast Asian Nations
ASSINSEL	International Association of Plant Breeders
BIOS	Biological Innovation for Open Society
BITs	Bilateral investment treaties
BMZ	Bundesministerium Für Wirtschaftliche Zusammenarbeit (German Federal Ministry for Economic Development Cooperation)
CAMBIA	Centre for the Application for Molecular Biology to International Agriculture
CAS-IP	CGIAR Central Advisory Service on Intellectual Property
CBD	Convention of Biological Diversity
CIEL	Center for International Environmental Law
CIP	Centro Internacional de la Papa (International Potato Center)
CGIAR	Consultative Group on International Agricultural Research
CGRFA	Commission on Genetic Resources for Food and Agriculture
COP	Conference of the Parties
CPC	Community Patent Convention
CPVO	Community Plant Variety Office
CPVR	Community plant variety right
DBL	Draft Biodiversity Law
DUS	Distinctness, uniformity and stability test
EC	European Commission
ECAP II	EC-ASEAN Intellectual Property Rights Cooperation Programme
FAO	Food and Agriculture Organization of the United Nations

FTAs	Free trade agreements
FTAA	Free Trade Area of Americas
GMOs	Genetically modified organisms
GRAIN	Genetic Resources Action International
GSP	Generalised System of Preferences
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (German Society for Technical Cooperation)
IARCs	International agricultural research centres
ICIS	International Crop Information System
ICSID	International Centre for the Settlement of Investment Disputes
ICTSD	International Centre for Trade and Sustainable Development
IFPRI	International Food Policy Research Institute
IGC	Intergovernmental Committee on Intellectual Property, Genetic Resources, Traditional Knowledge and Folklore
IISD	International Institute for Sustainable Development
IPGRI	International Plant Genetic Resources Institute (now Bioversity International)
ISF	International Seed Federation
IUCN	International Union for the Conservation of Nature
IUPGR	International Undertaking on Plant Genetic Resources
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
IPRs	Intellectual property rights
LDCs	Least developed countries
LIFDCs	Low-Income Food-Deficit Countries
MARD	Ministry of Agriculture and Rural Development
MAS	Marker assisted selection
MAT	Mutually agreed terms
MDGs	Millennium Development Goals
MFN	Most favoured nation
MiGRs	Microbial Genetic Resources
MLS	Multilateral System of Access and Benefit Sharing
MoNRE	Ministry of Natural Resources and the Environment

MTA	Material transfer agreement
NA	National Assembly
NARIs	National agricultural research institutes
OECD	Organisation for Economic Co-operation and Development
PBRs	Plant breeders' rights
PGR	Plant genetic resources
PGRFA	Plant genetic resources for food and agriculture
PIC	Prior informed consent
PIPRA	Public Sector Intellectual Property Resource for Agriculture
PRSP	Poverty Reduction Strategy Paper
PVP	Plant variety protection
PVPO	Plant Variety Protection Office
R&D	Research and development
SGRP	System-wide Genetic Resources Programme
SMEs	Small and medium enterprises
SMTA	Standard Material Transfer Agreement
SPLT	Substantive Patent Law Treaty
S&T	Science and technology
TA	Technical assistance
TK	Traditional knowledge
TNCs	Trans-national corporations
TRIPs	Trade-Related Aspects of Intellectual Property Rights
UN	United Nations
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNIDROIT	International Institute for the Unification of Private Law
UPOV	Union Internationale pour la Protection des Obtentions Végétales (Union for the Protection of New Varieties of Plants)
US	United States
USD	United States Dollar

USDA	United States Department of Agriculture
USPTO	United States Patent and Trademark Office
USTR	United States Trade Representative
VND	Vietnamese Dong
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

Treaties, international, national and non-national legal instruments

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1. Introduction and overview

1.1 GENERAL AND SPECIFIC OBJECTIVES

This book considers the proposition that global institutional reforms that govern the present and future allocation of rights on, and wealth from, crop diversity are insufficient—and in some respects inappropriate—to achieve international equity in terms of the way plant genetic resources are transferred, how agricultural research is conducted, and its benefits are shared. Its focus on ownership regulation derives from the paramount importance that both the design and allocation of rights in plant genetic resources might have for global food security due to their implications in terms of wealth and resource allocation within the agriculture sector. Thus, the subject matter under consideration is the study of normative aspects of global institutional reforms that concern agricultural innovation systems and the commodification of crop diversity.

The commodification of crop diversity can be defined as the adoption, harmonization and implementation of laws and international law instruments, which determine the allocation of legal entitlements to manage and control plant genetic resources, their derivatives and the benefits thereof. On the other hand, ‘the concept of ‘innovation’ refers to the search for, development, adaptation, imitation and adoption of technologies that are new to a specific context’.¹ Within the above subject matter, this book has three specific objectives:

- 1) to analyse the limitations and systemic weaknesses of global institutional reforms that concern agricultural innovation systems and the commodification of crop diversity;
- 2) to assess the developmental implications of changes in the legal status of plant genetic resources for food and agriculture (PGRFA),

¹ ‘The “system of innovation” approach and its relevance to developing countries’ (2005), SciDevNet available at: www.scidev.net/en/policy-briefs/the-system-of-innovation-approach-and-its-relevanc.html (accessed October 2006). Definition based on G. Dosi (1988), ‘The Nature of the Innovative Process’, in L. Soete (ed.), *Technical Change and Economic Theory*, London, UK: Pinter Publishers, p. 222.