



THE ROYAL INSTITUTE OF
INTERNATIONAL AFFAIRS

Sustainable Development
Programme

The Cartagena
Protocol on
Biosafety
Reconciling Trade
in Biotechnology
with Environment
& Development?

Edited by
Christoph Bail,
Robert Falkner &
Helen Marquard



The Cartagena Protocol on Biosafety

The Sustainable Development Programme is the new name (from February 2002) for the Energy and Environment Programme of the Royal Institute of International Affairs at Chatham House. The Programme works with business, government, and academic and NGO experts to carry out and publish research and stimulate debate across a wide variety of energy, environment and business topics with international implications, particularly those just emerging into the consciousness of policy-makers. Research by the Programme is supported by generous contributions of finance and technical advice from the following organizations:

- Amerada Hess Ltd
- Anglo American plc
 - BG Group
 - BP Amoco plc
 - British Energy plc
- British Nuclear Fuels plc
- Department for Environment, Food and Rural Affairs (UK)
 - Department of Trade & Industry (UK)
 - ExxonMobil
- Foreign & Commonwealth Office (UK)
 - Osaka Gas Co. Ltd
 - Powergen plc
- Saudi Petroleum Overseas Ltd
 - Shell UK
 - Statoil
- Tokyo Electric Power Co. Inc.
 - TotalFinaElf
- TXU Europe Group plc

The Cartagena Protocol on Biosafety

Reconciling Trade in Biotechnology
with Environment and Development?

*Edited by Christoph Bail,
Robert Falkner and Helen Marquard*



THE ROYAL INSTITUTE OF
INTERNATIONAL AFFAIRS

| Sustainable Development
Programme

EARTHSCAN

Earthscan Publications Ltd, London

First published in the UK in 2002 by
The Royal Institute of International Affairs, 10 St James's Square, London SW1Y 4LE
(Charity Registration No. 208223)
and
Earthscan Publications Ltd, 120 Pentonville Road, London N1 9JN

Distributed in North America by
The Brookings Institution, 1775 Massachusetts Avenue NW,
Washington, DC 20036-2188

Copyright © The Royal Institute of International Affairs, 2002

All rights reserved

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

ISBN 1 85383 840 3 paperback
1 85383 836 5 hardback

The Royal Institute of International Affairs is an independent body that promotes the rigorous study of international questions and does not express opinions of its own. The opinions expressed in this publication are the responsibility of the authors.

Earthscan Publications Ltd is an editorially independent subsidiary of Kogan Page Ltd and publishes in association with the WWF-UK and the International Institute of Environment and Development.

Typeset by Composition & Design Services, Minsk, Belarus, www.cdsca.com
Printed and bound by Creative Print and Design Wales, Ebbw Vale
Original cover design by Visible Edge
Cover by Yvonne Booth

Contents

<i>Foreword by Klaus Töpfer</i>	<i>ix</i>
<i>Preface</i>	<i>xiii</i>
<i>Acknowledgments</i>	<i>xvii</i>
<i>About the authors</i>	<i>xviii</i>
<i>Chronology of events</i>	<i>xxviii</i>
<i>Acronyms and abbreviations</i>	<i>xxix</i>

Part I: Background: the road to the Cartagena Protocol and beyond

1	Negotiating the biosafety protocol: the international process <i>Robert Falkner</i>	3
2	The road to the biosafety protocol <i>Hamdallah Zedan</i>	23
3	A mandate for a biosafety protocol: the Jakarta negotiations <i>Antonio G. M. La Vina</i>	34
4	The Biosafety Working Group (BSWG) process: a personal account from the chair <i>Veit Köster</i>	44
5	The extraordinary meeting of the Conference of the Parties (ExCOP) <i>Christián Samper</i>	62
6	The follow-up process and the Intergovernmental Committee for the Cartagena Protocol (ICCP) <i>Philemon Yang</i>	76
7	Scientific aspects of the biosafety debate <i>Helmut Gaugitsch</i> ...	83

Part II: The making of the protocol: actors' perspectives on the negotiations

Miami Group

8	United States <i>Cathleen A. Enright</i>	95
9	Canada <i>Richard Ballhorn</i>	105

Like-Minded Group

10	Ethiopia <i>Tewolde B. G. Egziabher</i>	115
11	Jamaica <i>Elaine Fisher</i>	124
12	Brazil <i>Arthur H. Villanova Nogueira</i>	129

13	Philippines <i>Bernarditas C. Muller</i>	138
14	Seychelles <i>John Nevill</i>	146
15	Iran <i>Mohammad Reza Salamat</i>	155
16	China <i>Cai Lijie</i>	160

European Union

17	European Union <i>Christoph Bail, Jean Paul Decaestecker and Matthias Jørgensen</i>	166
----	---	-----

Compromise Group

18	Switzerland <i>Beat Nobs</i>	186
19	Norway <i>Birthe Ivars</i>	193
20	Japan <i>Kiyo Akasaka</i>	200
21	Mexico <i>Amanda Gálvez</i>	207

Central and Eastern Europe

22	Central and Eastern Europe <i>Gábor Nechay</i>	212
----	--	-----

Environment ministers: political perspectives on the final negotiations

23	Colombia <i>Juan Mayr</i>	218
24	United Kingdom <i>Michael Meacher</i>	230
25	Canada <i>David Anderson</i>	237
26	European Commission <i>Margot Wallström</i>	244

Environmental NGOs

27	Greenpeace International <i>Louise Gale</i>	251
28	Third World Network <i>Gurdial Singh Nijar</i>	263
29	Environment Business & Development Group <i>Richard Tapper</i>	268

Industry

30	Global Industry Coalition <i>Laura M. Reifschneider</i>	273
----	---	-----

Part III: Key elements of the protocol

31	Definitions <i>Piet van der Meer</i>	281
32	Scope <i>Helen Marquard</i>	289

33	Advance informed agreement procedures <i>Eric Schoonejans</i> ...	299
34	Commodities <i>François Pythoud</i>	321
35	Risk assessment <i>Robert Andr�en and Bill Parish</i>	329
36	Documentation <i>Johan Bodegard</i>	338
37	Capacity-building and the Biosafety Clearing-House <i>John Herity</i>	344
38	Non-parties <i>Kate Cook</i>	351
39	Socio-economic considerations <i>Rajen Habib Khwaja</i>	361
40	Liability and redress <i>Worku Damena</i>	366
41	Liability: ‘No Liability, No Protocol’ <i>Kate Cook</i>	371
42	The financial mechanism <i>John W. Ashe</i>	385
43	Legal and institutional issues <i>Katharina Kummer</i>	394
44	Annexes <i>Gert Willemse</i>	402
45	The precautionary principle <i>Laurence Graff</i>	410
46	The relationship with other international agreements: an EU perspective <i>Margarida Afonso</i>	423
47	The relationship with other agreements: much ado about a savings clause <i>Sabrina Safrin</i>	438

Part IV: Implications for environment, trade and development: an assessment

48	Prospects for international environmental law <i>Ruth Mackenzie and Philippe Sands</i>	457
49	Implications for trade law and policy: towards convergence and integration <i>Thomas Cottier</i>	467
50	The significance of the protocol for WTO dispute settlement <i>Robert Howse and Joshua Meltzer</i>	482
51	A developing-country perspective <i>Amarjeet Ahuja</i>	497
52	The Global Environment Facility and the protocol <i>Avani Vaish</i>	506
53	Conclusion <i>Christoph Bail, Robert Falkner and Helen Marquard</i>	512

Part V: Appendices

A1	Cartagena Protocol on Biosafety to the Convention on Biological Diversity: full text	523
----	---	-----

A2 Protocol on biosafety: draft negotiation text (excerpts) 550

A3 Article 19 of the Convention on Biological Diversity (1992):
handling of biotechnology and distribution of its benefits 553

A4 The ‘Jakarta mandate’ (1995): decision II/5 of the
Conference of the Parties..... 554

A5 Further reading on international biosafety 558

Glossary 559

Index..... 564

Foreword

Klaus Töpfer

A new generation of environmental threats to national and global security includes not only climate change and ozone depletion, but also such issues of global consequence as the destruction of forest cover, loss of biological diversity, spread of desertification, pollution of seas and proliferation of hazardous chemicals and wastes. These issues challenge both traditional science and diplomacy.

Policy-makers face a dilemma in attempting to deal with new environmental challenges. Premature actions or regulations based on incorrect data can incur costs that turn out to be unnecessary. But postponing a decision also may have its own costs. Waiting for more complete evidence can run the risk of acting too late to prevent major and possibly irreversible damage. In this regard, future economic, social and environmental costs may be even higher than anticipated. In this regard, the international community took an important step early on the morning of 29 January 2000 when it reached an agreement to adopt the Cartagena Protocol on Biosafety.

Clearly, international protocols are never easy to broker. They require tremendous hard work, hours of painstaking and meticulous negotiation and above all else commitment to participate, achieve a consensus and not give in. The negotiations on the Cartagena Protocol were a roller coaster ride. The process brought together industry and nation states to discuss an emerging yet rapidly growing area of technology and scientific progress upon which there had not previously been international legislation.

Many had written off the negotiations and put the various versions of the draft protocol text in the 'mission impossible' tray. To me, the protocol offered a vision that was impossible to ignore. I have to admit, however, that there were times when the negotiation process appeared to have stalled. The days after the biosafety protocol collapsed in Cartagena in 1999 were among the most worrying for me as the Executive Director of the United Nations Environment Programme (UNEP). I did begin to wonder whether the 'tried and tested' route of internationally brokered

legally binding protocols had reached a dead end. However, I was never pessimistic. I was always confident that ultimately we would reach an acceptable compromise and come up with a viable and credible agreement. The Cartagena Protocol is a story of human will. It is a story of common sense prevailing over all else, to achieve an outcome that was just. For a moment in Montreal in January 2000, we gazed into the future, and the desirability and inevitability of the adoption of the protocol became crystal clear in our minds. Modern biotechnology was here – it was not going to go away. The time was now or never to address the questions, challenges and opportunities that the planet faces from this sector. We needed an instrument, a global framework not only for the present, but more importantly, for future generations as well.

The last-minute difficulties should not, however, take the limelight away from the overall historic achievement – the adoption of a fairly comprehensive, internationally binding set of ground rules for the transboundary movement of living modified organisms (LMOs) destined for intentional introduction into the environment. In addition, the negotiation process scored a major success on two other fronts. The protocol offered a solution for the special treatment of commodities – i.e. LMOs destined for food, feed and processing, and enshrined the precautionary approach not only as a guiding principle but also as a tool for decision-making by importing states.

Many of the key players at the negotiating table have contributed to this book. I cannot fail to mention the unique and indelible legacy left by the incredible efforts of Hon. Minister Juan Mayr of Colombia and Mr Veit Köster of Denmark. Many other participants will carry with them the deep satisfaction of a job well done. International protocols may not be perfect. They are not easy to implement. Their effective implementation requires goodwill, hard work and commitment from all sides. Nevertheless, they are the most important tool the global community has for securing the integrity of the complex web of life on our planet. Let us persist in this endeavour and give the protocol our best effort.

The provisions agreed upon in the protocol should continually remind us that sustainable economic use of genetic assets (and other natural resources) depends on, or may indeed demand, fundamental changes in the way we as humans choose to interact with each other and with other species cohabiting the planet. Implementation of the

protocol calls for a major recasting of political as well as socio-economic principles and covenants/contracts governing international cooperation, production and consumption patterns, the exchange of commodities and information, as well as the transfer of technologies including biotechnology.

Indeed, the protocol calls for an effective implementation strategy. Appropriate conditions must be nurtured and capacities installed, particularly in developing countries, so that science and technology can be fully harnessed to further the objectives of the protocol, especially in terms of economic and social well-being, in ways that would directly benefit rather than impoverish local/indigenous people, and minimize further biological and genetic erosion of ecosystems.

As the negotiations on the precautionary principle and the advance informed agreement (AIA) provision were taking place, I could not help recalling debates in other fora regarding the potential (and in some cases already adverse) impact of the unsustainable exploitation of genetic resources, unregulated introduction of alien/invasive species, the pollution of water-courses and the atmosphere, and LMOs. All these activities are interlinked and are likely to cause undesirable impacts upon the human environment. Accordingly, they must be approached with due caution.

The importance of activities envisaged under the provisions of the protocol cannot be over-emphasized. Mobilizing adequate financial resources and putting in place the relevant capacities to implement the activities at national, sub-regional, regional and global levels is a veritable challenge. The fully-fledged implementation of these activities would naturally depend on the availability of the requisite financial, technical, human and other resources. This calls for international cooperation and collaboration. It is vital that all relevant UN entities, intergovernmental and non-governmental organizations, civil society as well as industry contribute to this endeavour in a well-coordinated manner.

The Cartagena Protocol on Biosafety has been hailed as a significant step forward, a major millennial milestone that provides an international regulatory framework to reconcile the respective needs of trade on the one hand and environmental protection on the other, with respect to one of the fastest-growing global industries – biotechnology. The protocol thus creates an enabling environment for the environmentally sound application of biotechnology. It makes it possible for

humanity to derive maximum benefit from the potential that biotechnology has to offer, while minimizing the possible risks to the environment and to human health.

*Klaus Töpfer
United Nations Under-Secretary General
Executive Director, United Nations Environment Programme*

Preface

It has long been recognized that any successful sustainable development strategy has to strike a balance between the interests of trade, the environment and development. However, these sometimes conflicting imperatives have been, and remain, a potential source of discord in international relations.

Biotechnology is one area in which environmental concerns have recently clashed with the trading interests of states and corporations. The burgeoning trade in genetically modified organisms (GMOs) has been met with growing consumer and regulatory resistance in a number of countries, most notably in Europe, where stringent rules on the release of GMOs into the environment have led to accusations of unfair trade restrictions. Furthermore, developing countries have expressed a fear of becoming dumping grounds for what they perceive as untested northern technologies in the field of agricultural biotechnology, and are concerned about the impact of genetically modified crops on social and economic structures in agriculture.

In the light of these conflicts, the adoption of the Cartagena Protocol on Biosafety in January 2000, after nearly four years of intensive and at times hard-fought negotiations, is a remarkable achievement of international diplomacy. The biosafety protocol is a landmark international treaty that provides a framework for assessing and managing the risks to the environment and human health from the international movement of and trade in GMOs. Over 100 states so far, including some of those that export GMOs, have signed the protocol, which is to enter into force after 50 signatories have ratified it. The agreement marks an important step in the direction of reconciling international trade, environment and development interests in biotechnology. But whether it will succeed in this remains to be seen.

Reaching an international agreement on biosafety is in itself a noteworthy achievement, because in the past several international organizations (e.g. the OECD and UNEP) had developed biosafety guidelines, but these had no legal bite. They were drawn on selectively and by no means used by all countries. The Cartagena Protocol, however, is set to become the centrepiece of the emerging international regulatory regime for biosafety.

The origins of the effort to create a biosafety agreement lie in the Convention on Biological Diversity (CBD) that was adopted at the 'Earth Summit' in Rio de Janeiro in 1992.¹ Having failed to include substantive biosafety provisions in the convention, the parties to the CBD agreed to consider the need for a separate biosafety protocol at a later stage. After charged discussions at the first meeting of the Conference of Parties (COP-1) and difficult negotiations at COP-2 on the mandate for creating a biosafety agreement, the biosafety talks got off to a relatively low-key start in 1996, focusing on establishing the protocol's principal terms, concepts and regulatory options. The biosafety talks entered their final phase in 1999, when the conflict among different negotiating groups broke out into the open, resulting in the collapse of the conference in Cartagena, Colombia that was meant to adopt the protocol. But within 12 months, the major negotiating groups were able to overcome their differences and devise a formula for finding common ground that would allow the adoption of the biosafety protocol in January 2000.

About this book

This book brings together in one volume contributions from over 50 participants and analysts of the international biosafety talks – negotiators and environment ministers, campaigners and lobbyists as well as academics – who provide first-hand insights into the negotiation process and authoritative analyses of its outcome. Their contributions explore the main events, initiatives and decisions that led to the adoption of the Cartagena Protocol, examine its key elements and reflect on its implications for international environmental law, trade law and development cooperation. The book provides a unique insight into the dynamics of international environmental diplomacy and, it is hoped, will serve as a basis for interpretation and implementation of the agreement.

A few words are perhaps appropriate about how this book was conceived and what its main purpose is. The editors asked key participants to write about their personal experience of the biosafety negotiations. Contributors were encouraged to reflect on the process and identify,

¹ For the full texts of the convention, the protocol and the decisions of the COP from 1994 to 2000, see Secretariat of the Convention on Biological Diversity, *Handbook of the Convention on Biological Diversity* (London: Earthscan, 2001).

from their perspective as negotiators and lobbyists, the factors that contributed to the final outcome. We also invited observers and analysts of the biosafety talks to examine the potential implications of what was agreed in Montreal for the future international agenda in the fields of environment, trade and development. The book thus combines a great variety of contributions, ranging from personal accounts of the negotiations to more 'detached' analyses of the protocol's main provisions. While striving for some degree of consistency, we wanted to keep a wide diversity in the way in which the individual chapters were written.

Readers will find in this book a rich source of first-hand information about an important negotiation process that spanned the fields of environmental protection, trade policy and development cooperation. We have not attempted to produce an 'objective' history of the biosafety talks. Indeed, it is far from clear whether such a history can ever be written. What we have sought to do instead is to capture the atmosphere of the meetings through the eyes of negotiators and observers by asking them to write while their memories of the chief events were still fresh. Even so, the experience of putting this book together has shown just how difficult it is even for those at the heart of the negotiations always to recall the exact sequence of events as well as the content and outcome of the myriad meetings that took place between 1996 and 2000. We have tried to make sure that there are no factual errors in these pages. However, the reader will be able to find many different, and at times conflicting, interpretations of events and aspects of the biosafety talks. This diversity of perspectives is, of course, the stuff of international diplomacy.

The contributions in this book will not be the last word on the Cartagena Protocol. We hope that they will spark off further debate about the biosafety negotiations and their outcome, particularly as the parties move towards ratification and entry into force and negotiate further on issues that were only partially resolved.

A guide for readers

This book will be of interest to a wide range of people, from practitioners and students of international biosafety politics to those interested in international diplomacy, trade policy and sustainable development more generally. The book will most probably not be read from beginning to end. Instead, we expect that readers will go directly to individual

chapters, or sections, be they key negotiators' reflections, analyses of the major protocol provisions or the legal and political analyses that conclude the volume. For this reason, we have sought to ensure that each contribution can be read on its own.

The book offers assistance to readers who are not too familiar with the biosafety talks. First, readers wishing to familiarize themselves with the history of the talks may wish to consult Chapter 1 by Robert Falkner, which provides a chronological overview of the negotiations and introduces the main issues at stake. Second, the scientific developments and debates that played a prominent role in the biosafety talks are introduced in Chapter 7 by Helmut Gaugitsch. Third, the glossary lists and explains, in brief terms, acronyms and concepts used throughout. Many of these concepts are discussed further in Part Three, on 'Key Elements' of the protocol. Fourth, we provide a short chronology of key events leading up to the adoption of the Cartagena Protocol. Fifth, for ease of reference the entire text of the Cartagena Protocol, as well as important sections of relevant documents and negotiating texts, are reproduced in the Appendix. For the sake of clarity, articles from the draft negotiating text have a 'D' suffix when referred to in the various chapters.

The contributions to this volume are divided into four parts. The 'Background' chapters, in Part I, review the origins and the entire process of the biosafety talks from the 1980s to the year 2000. Part II contains reflections on the crucial events of the negotiations. The chapters by the leading negotiators are grouped into the five negotiating groups that emerged at the Cartagena conference in 1999, and are followed by contributions from environment ministers and NGO and industry representatives. The contributions to Part III trace the evolution of the negotiations on the key elements of the biosafety protocol and examine their relevance and meaning in the context of international biosafety protection. Part IV combines legal and political analyses of the ways in which the protocol impacts on international environmental law, trade law and policy and also development cooperation.

*London and Brussels
December 2001*

*Christoph Bail, Robert Falkner
and Helen Marquard*

Acknowledgments

The editors wish to thank all those who have participated in this exciting project and written about their personal involvement with the Cartagena Protocol process. This book would not have been possible without their support and enthusiasm, and we thank them wholeheartedly. Although many of the authors were involved in the biosafety negotiations in an official capacity, their contributions to this book are personal reflections, and do not necessarily reflect the opinion of the government or institution that they are, or have been, affiliated with.

Thanks are also due to all those who helped in the production of the book. Duncan Brack, Françoise Burhenne-Guilmin, Kate Cook, Aarti Gupta, Veit Köster, Ruth Mackenzie and Richard Tapper took part in the external review process and provided invaluable critical feedback. Our copy-editors, Margaret May and Kim Mitchell, worked tirelessly to make the often obscure language of biotechnology and diplomacy more accessible to a wider readership. Finally, special thanks go to the Rockefeller Foundation for providing us with essential financial support, without which we would not have been able to carry out a project of this magnitude.

About the authors

Margarida Afonso, LL.M., is a member of the Legal Service of the European Commission, specializing in legal aspects of international conventions. She advised the Commission delegation during the final stages of the negotiations leading to the adoption of the biosafety protocol in January 2000.

Amarjeet Kaur Ahuja is chairman of the Tax Board, Government of Rajasthan, India. As former Joint Secretary at India's Ministry of Environment, she led the Indian delegation to the biosafety negotiations from 1995 to 1998. She co-chaired Sub-Working Group 2 of the Biosafety Working Group from 1997 to 1998 and has been a member of the Steering Committee of the UNEP/GEF Pilot Project on Biosafety Capacity Building since 1998.

Kiyotaka Akasaka is Consul General for Japan in São Paulo, Brazil. Previously he was Ambassador at the Japanese Mission to the United Nations since April 2000 and Deputy Director-General of the Multilateral Cooperation Department in the Ministry of Foreign Affairs. He headed the Japanese delegation to the biosafety negotiations from 1999 to 2000.

David Anderson is Canada's Minister of the Environment, and led the Canadian delegation in the final stage of negotiations for the biosafety protocol. In addition to his long service as a member of the Canadian Parliament, he has been minister of a number of portfolios including Fisheries and Oceans, and has been a faculty member of the University of Victoria and taught at its School of Public Administration. Mr Anderson is currently President of the Governing Council of the United Nations Environment Programme (UNEP).

Dr Robert Andrén is Head of Section, Division of Ecomanagement Strategies and Industrial Cooperation, Ministry of Environment, Sweden. He previously worked as Senior Advisory Officer at the Swedish Board of Agriculture, and has been involved in the biosafety talks from autumn 1996 onwards.

John William Ashe is Ambassador and Deputy Permanent Representative of Antigua and Barbuda to the United Nations. From October 1997 to January 1999, he served as chairman, and later as co-chairman, of Contact Group 2 (on legal and institutional matters). At the Cartagena meeting in February 1999 and at the Montreal meeting in January 2000 he chaired the Drafting Group that produced the draft decision for the adoption of the Cartagena Protocol.

Christoph Bail, LL.M., led the European Commission delegation in the biosafety negotiations and was the EU's main spokesman. He has been a European Commission official since 1976 and is currently Head of Unit, Environment & Development, Directorate-General Environment. Earlier responsibilities in the European Commission include policy adviser on global issues and legal adviser to the Geneva delegation during the Uruguay Round trade negotiations.

Richard (Dick) Douglas Ballhorn is Director General of the International Environmental Affairs Bureau at the Department of Foreign Affairs and International Trade (DFAIT), Canada. As Director of the environment division and later Director General of the International Environmental Affairs Bureau in DFAIT, he held joint responsibility with Environment Canada for leading the Canadian delegation to the biosafety negotiations from 1998 to 2000. He was chair of the Miami Group from its inception and co-headed Canada's delegation after the 1999 Cartagena conference and was lead negotiator for the Miami Group for most of the final negotiating session in Montreal in January 2000.

Johan I. Bodegard is Head of Section at the Swedish Environmental Protection Agency and was previously Assistant Under-Secretary at the Swedish Ministry of Environment. He has participated in the biosafety talks from 1990 onwards, starting with the second negotiation meeting of the CBD.

Kate (Helen) Cook is a barrister at Matrix Chambers. Formerly Legal Adviser at the UK's Department of Environment, Transport and the Regions (DETR), she was a member of the UK delegation to the biosafety talks from 1997 to 1999 and chair of the working group on liability and redress.