

Contents

<i>List of Contributors</i>	page viii
<i>Foreword</i>	xiii
Marc Van Montagu	

1	Introduction	1
	Ademola A. Adenle, E. Jane Morris and Denis J. Murphy	

Part I Risk Analysis Methodology and Decision-Making

2	Recent Scientific Developments in Genetic Technologies: Implications for Future Regulation of GMOs in Developing Countries	13
	Denis J. Murphy	
3	A Strategy for Integrating Science into Regulatory Decision-Making for GMOs	26
	Wendy Craig, Dennis Obonyo Ndolo and Mark Tepfer	
4	Governance of Benefits and Risks of GMOs in Developing Countries	39
	E. Jane Morris	
5	The Canadian Experience with the Creation and Implementation of Regulatory Frameworks for the Environmental Release of GM Crops as a Model for Developing Countries	53
	Phil Macdonald	
6	Labelling of Food from GMOs: Options to Consider by Developing Countries	64
	Wilna Jansen van Rijssen and Wynand J. van der Walt	
7	Building Human Capacity and Skills in Biosafety: Lessons Learned and Emerging Best Practices	75
	John Komen and Muffy Koch	

Part II Diversification of Expertise

- | | | |
|----|---|-----|
| 8 | Regulation of GMOs in Developing Countries: Why Socio-Economic Considerations Matter for Decision-Making
José Falck-Zepeda and Mamus Gouse | 91 |
| 9 | Food Safety Assessment of Genetically Modified Crops in Developing Countries: The Experience in Africa
Godwin Lemgo, Narender Nehra and Hector Quemada | 103 |
| 10 | Being Scientific about Socio-Economics in GMO Decision-Making in Developing Countries
Monica Racovita | 115 |
| 11 | The Sharing of Information in Risk Assessment: How National Authorities Cooperate
Peter Kearns, Bertrand Dagallier and Takahiko Nikaido | 128 |
| 12 | Should GM Rice with Nutrition Benefits Be Deployed? Findings from Biotech and Socio-Economic Research
Hans De Steur, Dieter Blanquaert, Christophe Stove, Willy Lambert, Dominique Van Der Straeten and Xavier Gellynck | 139 |

Part III Risk-Analysis-Based Regulatory Systems

- | | | |
|----|--|-----|
| 13 | The Risk Analysis Framework and Biosafety Policy
Peter W. B. Phillips and Stuart J. Smyth | 153 |
| 14 | The Precautionary Principle as a Barrier to GMO Risk Analysis: Elicitation of Experts' Viewpoints
Ademola A. Adenle | 162 |
| 15 | How Do Socio-Political Disputes Concerning GMOs Influence Decision-Making in Developing Countries?
Hossein Azadi, Ademola A. Adenle and Klaus Ammann | 175 |
| 16 | Biosafety Communication: Beyond Risk Communication
Andrea Sonnino and Sandra Sharry | 187 |
| 17 | The Role of Mass Media and Lobbies in the Formulation of GMO Regulations
Mauro Vigani | 200 |

Part IV Case Studies from Developing Countries

18	Risk Regulation of Agricultural GMOs in China: Challenges and Prospects Wen Xiang	215
19	Commercial Use and Governance of Bt cotton in China Yunhe Li, Yanhui Lu, Eric M. Hallerman, Yufa Peng and Kongming Wu	225
20	The Regulatory Regime for Genetically Modified Crops in India Krishna Ravi Srinivas	236
21	The Argentinian GMO Biosafety System: An Evolving Perspective Carmen Vicién and Eduardo Trigo	247
22	The Brazilian GMO Regulatory System: A Historical View and Perspective Edivaldo Domingues Velini, Maria Lúcia Zaidan Dagli, Gutemberg Delfino de Souza, Rubens José Nascimento, Tassiana Fronza Pinho, Paulo Paes de Andrade and Helaine Carrer	258
23	An Effective Regulatory Regime Supported by Research and Development Is Key to Adoption of GM Technology in West Africa: Burkina Faso and Nigeria as Case Studies Olaekan Akinbo, Ademola A. Adenle and Diran Makinde	271
24	A Pathway for Biosafety Regulation of GMOs in Sub-Saharan Africa Julius Ecuru	283
25	Conclusions and Recommendations E. Jane Morris, Ademola A. Adenle and Denis J. Murphy	294
	Index	301