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1. (2004), 'FAO Declares War on Farmers Not on Hunger', Open letter to Mr Jacques Diouf, Director General of FAO, 16 June 3
2. Jaques Diouf (2004), 'Biotechnology: FAO Response to Open Letter from NGOs', 16 June 6
3. International Consortium on Agricultural Biotechnology Research (ICABR), Open Letter to FAO Director General in Support of SOFA 2003-04 Biotechnology Report 9
4. Robert L. Paarlberg, Raymond F. Hopkins and Lisa Ladewski (2004), 'Regulation of GM Crops: Shaping an International Regime', in R.E. Evenson and V. Santaniello (eds), *The Regulation of Agricultural Biotechnology*, Chapter 1, Wallingford, UK: CABI Publishing, 1–24 23

PART II THE TECHNOLOGY

5. Vernon W. Ruttan (2000), 'The Biotechnology Industries', in *Technology, Growth and Development: An Induced Innovation Perspective*, Chapter 10, New York, NY: Oxford University Press, 368–418 49
6. Christian Jung (2000), 'Molecular Tools for Plant Breeding', in Matin Qaim, Anatole F. Krattiger and Joachim von Braun (eds), *Agricultural Biotechnology in Developing Countries: Towards Optimizing the Benefits for the Poor*, Chapter 3, Boston, MA: Kluwer Academic Publishers, 25–37 100
7. Kate Dreher, Michael Morris, Mireille Khairallah, Jean Marcel Ribaut, Shivaji Pandey and Ganesan Srinivasan (2002), 'Is Marker-Assisted Selection Cost-Effective Compared with Conventional Plant Breeding Methods? The Case of Quality Protein Maize', in R.E. Evenson, V. Santaniello and D. Zilberman (eds), *Economic and Social Issues in Agricultural Biotechnology*, Chapter 12, Wallingford, UK: CABI Publishing, 203–36 113

PART III THE INDUSTRY

8. Robert E. Evenson (2002), 'Agricultural Biotechnology', in Benn Steil, David G. Victor and Richard R. Nelson (eds), *Technological Innovation and Economic Performance*, Chapter 15, Princeton, NJ: Princeton University Press, 367–384, references 149
9. Carl E. Pray and Anwar Naseem (2003), 'The Economics of Agricultural Biotechnology Research', *ESA Working Paper 03-07*, June, Rome: Food and Agriculture Organization of the United Nations, 1–22 168

PART IV FARMER ADOPTION

10. Food and Agriculture Organization (2004), 'From the Green Revolution to the Gene Revolution', in *The State of Food and Agriculture*, Chapter 3, Rome: Food and Agriculture Organization of the United Nations, 25–39, references 193

PART V CONSUMER ACCEPTANCE

11. Joe L. Parcell and Nicholas G. Kalaitzandonakes (2004), 'Do Agricultural Commodity Prices Respond to GMO Bans?', in Robert E. Evenson and Vittorio Santaniello (eds), *Consumer Acceptance of Genetically Modified Foods*, Chapter 1, Wallingford, UK: CABI Publishing, 1–8 211
12. Wallace E. Huffman, Matthew Rousu, Jason F. Shogren and Abebayehu Tegene (2004), 'The Welfare Effects of Implementing Mandatory GM Labelling in the USA', in Robert E. Evenson and Vittorio Santaniello (eds), *Consumer Acceptance of Genetically Modified Foods*, Chapter 4, Wallingford, UK: CABI Publishing, 41–51 219
13. Marianne McGarry Wolf, Paola Bertolini and Jacob Parker-Garcia (2004), 'A Comparison of Consumer Attitudes Towards GM Food in Italy and the USA', in Robert E. Evenson and Vittorio Santaniello (eds), *Consumer Acceptance of Genetically Modified Foods*, Chapter 12, 131–41, Wallingford, UK: CABI Publishing 230
14. Sylvie Bonny (2004), 'Factors Explaining Opposition to GMOs in France and the Rest of Europe', in Robert E. Evenson and Vittorio Santaniello (eds), *Consumer Acceptance of Genetically Modified Foods*, Chapter 16, Wallingford, UK: CABI Publishing, 169–87 241

PART VI HEALTH AND THE ENVIRONMENTAL EFFECTS

15. Food and Agriculture Organization (2004), 'Health and Environmental Impacts of Transgenic Crops', in *The State of Food and Agriculture*, Chapter 5, Rome: Food and Agriculture Organization of the United Nations, 58–76, references 263

PART VII THE EVOLVING REGULATORY STRUCTURE

16. Lydia Zepeda (2004), 'Genetically Engineered Food Labelling: Global Policy Polarization', in R.E. Evenson and V. Santaniello (eds), *The Regulation of Agricultural Biotechnology*, Chapter 4, Wallingford, UK: CABI Publishing, 53–8 287
17. Jill E. Hobbs, William A. Kerr, J.D. Gaisford, Grant Isaac and Kurt K. Klein (2004), 'Conflict and Consensus-Building: International Commercial Policy and Agricultural Biotechnology', in R.E. Evenson and V. Santaniello (eds), *The Regulation of Agricultural Biotechnology*, Chapter 5, Wallingford, UK: CABI Publishing, 59–65 293
18. Dirk Heumueller and Tim Josling (2004), 'Trade Restrictions on Genetically Engineered Foods: The Application of the TBT Agreement', in R.E. Evenson and V. Santaniello (eds), *The Regulation of Agricultural Biotechnology*, Chapter 7, Wallingford, UK: CABI Publishing, 79–88 300

PART VIII THE EMERGENCE OF GM FREE MARKETS

19. Michael Burton, Sallie James, Bob Lindner and Jo Pluske (2002), 'A Way Forward for Frankenstein Foods', in Vittorio Santaniello, Robert E. Evenson and David Zilberman (eds), *Market Development for Genetically Modified Foods*, Chapter 1, Wallingford, UK: CABI Publishing, 7–23 313
20. Troy G. Schmitz, Charles B. Moss and Andrew Schmitz (2004), 'Segmentation of GMO and Non-GMO Soybean Markets Under Identity Preservation Costs and Government Price Supports', in R.E. Evenson and V. Santaniello, (eds), *The Regulation of Agricultural Biotechnology*, Chapter 19, Wallingford, UK: CABI Publishing, 201–209 330
21. Tirtha Dhar and Jeremy D. Foltz (2005), 'Milk by Any Other Name ... Consumer Benefits from Labeled Milk', *American Journal of Agricultural Economics*, **87** (1), February, 214–28 339

PART IX ECONOMIC IMPACTS

22. Food and Agriculture Organization (2004), 'Economic Impacts of Transgenic Crops', in *The State of Food and Agriculture*, Chapter 4, Rome: Food and Agriculture Organization of the United Nations, 41–57, references 357
23. Lovell S. Jarvis (2002), 'The Potential Effect of Recombinant Bovine Somatotropin on World Dairying', in Vittorio Santaniello, Robert E. Evenson and David Zilberman (eds), *Market Development for Genetically Modified Foods*, Chapter 9, Wallingford, UK: CABI Publishing, 101–11 376

24. Stuart Smyth and Peter W.B. Phillips (2002), 'Science and Regulation: Assessing the Impacts of Incomplete Institutions and Information in the Global Agricultural Biotechnology Industry', in Vittorio Santaniello, Robert E. Evenson and David Zilberman (eds), *Market Development for Genetically Modified Foods*, Chapter 16, Wallingford, UK: CABI Publishing, 191–203 387
25. Monika Tothova and James F. Oehmke (2006), 'Biotechnology and the Emergence of Club Behaviour in Agricultural Trade', in R.E. Evenson and V. Santaniello (eds), *International Trade and Policies for Genetically Modified Products*, Chapter 3, Wallingford, UK: CABI Publishing, 22–33 400
26. Kym Anderson, Chantal Pohl Nielsen and Sherman Robinson (2002), 'Estimating the Economic Effects of GMOs: The Importance of Policy Choices and Preferences', in R.E. Evenson, V. Santaniello and D. Zilberman (eds), *Economic and Social Issues in Agricultural Biotechnology*, Chapter 20, Wallingford, UK: CABI Publishing, 359–91 412

PART X GM PRODUCTS FOR DEVELOPING COUNTRIES

27. Robert E. Evenson (2004), 'GMOs: Prospects for Productivity Increases in Developing Countries', *Journal of Agricultural and Food Industrial Organization*, **2** (2), Abstract, 1–14 447
28. Food and Agriculture Organization (2004), 'Research and Research Policy for the Poor', *The State of Food and Agriculture*, Chapter 7, Rome: Food and Agriculture Organization of the United Nations, 87–98, references 462
29. Food and Agriculture Organization (2004), 'Capacity Building for Biotechnology in Food and Agriculture', *The State of Food and Agriculture*, Chapter 8, Rome: Food and Agriculture Organization of the United Nations, 99–103 475

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