

Innovation and Economic Development

Edited by

Lynn K. Mytelka

*Professorial Fellow, United Nations University, Maastricht Economic
Research Institute on Innovation and Technology (UNU-MERIT),
The Netherlands*

THE INTERNATIONAL LIBRARY OF CRITICAL WRITINGS IN ECONOMICS

An Elgar Reference Collection
Cheltenham, UK • Northampton, MA, USA

Contents

<i>Acknowledgements</i>	ix
<i>Introduction</i> Lynn K. Mytelka	xi

PART I LEARNING, CAPACITY BUILDING AND DEVELOPMENT

1. Francisco R. Sagasti (1973), 'Underdevelopment, Science and Technology: The Point of View of the Underdeveloped Countries', *Science Studies*, 3(1), January, 47-59 3
2. Carlota Perez (1988), 'New Technologies and Development', in Christopher Freeman and Bengt-Ake Lundvall (eds), *Small Countries Facing the Technological Revolution*, London, UK and New York, NY: Pinter Publishers, 85-97 16
3. Sanjaya Lall (1992), 'Technological Capabilities and Industrialization', *World Development*, 20 (2), February, 165-86 29
4. Martin Bell and Keith Pavitt (1993), 'Technological Accumulation and Industrial Growth: Contrasts Between Developed and Developing Countries', *Industrial and Corporate Change*, 2 (2), 157-210 51
5. Lynn K. Mytelka (2004), 'Catching Up in New Wave Technologies', *Oxford Development Studies*, 32 (3), September, 389-405 105

PART II INNOVATION SYSTEMS

6. Christopher Freeman (1988), 'Japan: A New National System of Innovation?', in Giovanni Dosi, Christopher Freeman, Richard Nelson, Gerald Silverberg and Luc Soete (eds), *Technical Change and Economic Theory*, London, UK and New York, NY: Pinter Publishers, 330-48 125
7. Bengt-Ake Lundvall, Bjorn Johnson, Esben Sloth Andersen and Bent Dalum (2002), 'National Systems of Production, Innovation and Competence Building', *Research Policy*, 31 (2), February, 213-31 144
8. Lynn K. Mytelka (2000), 'Local Systems of Innovation in a Globalized World Economy', *Industry and Innovation*, 7 (1), June, 15-32 163
9. Norman Clark (2002), 'Innovation Systems, Institutional Change and the New Knowledge Market: Implications for Third World Agricultural Development', *Economics of Innovation and New Technology*, 11 (4-5), 353-68 181

PART III INSTITUTIONS, POLICIES AND INNOVATION

10. Amilcar Herrera (1973), 'Social Determinants of Science Policy in Latin America: Explicit Science Policy and Implicit Science Policy', in Charles Cooper (ed.), *Science, Technology and Development: The Political Economy of Technical Advance in Underdeveloped Countries*, London, UK: Frank Cass, 19-37 [originally published in *Journal of Development Studies* (1972), 9 (1)] 199
11. Stan Metcalfe (1997), 'Technology Systems and Technology Policy in an Evolutionary Framework', in Daniele Archibugi and Jonathan Michie (eds), *Technology, Globalisation and Economic Performance*, Cambridge, UK: Cambridge University Press, 268-96 218
12. Ha-Joon Chang and Ali Cheema (2002), 'Conditions for Successful Technology Policy in Developing Countries - Learning Rents, State Structures, and Institutions', *Economics of Innovation and New Technology*, 11 (4-5), 369-98 247
13. Mario Cimoli and Jorge Katz (2003), 'Structural Reforms, Technological Gaps and Economic Development: A Latin American Perspective', *Industrial and Corporate Change*, 12 (2), April, 387-411 277
14. Meng-Chun Liu (2002), 'Determinants of Taiwan's Trade Liberalization: The Case of a Newly Industrialized Country', *World Development*, 30 (6), June, 975-89 302

PART IV KNOWLEDGE NETWORKS, INNOVATION AND INDUSTRIAL DEVELOPMENT

15. Trevor M.A. Farrell (1979), 'A Tale of Two Issues: Nationalization, the Transfer of Technology and the Petroleum Multinationals in Trinidad-Tobago', *Social and Economic Studies*, 28 (1), March, 234-81 319
16. Gary Gereffi (1999), 'international Trade and Industrial Upgrading in the Apparel Commodity Chain', *Journal of International Economics*, 48 (1), June, 37-70 367
17. Martin Bell and Michael Albu (1999), 'Knowledge Systems and Technological Dynamism in Industrial Clusters in Developing Countries', *World Development*, 27 (9), September, 1715-34 401
18. Banji Oyelaran-Oyeyinka (2003), 'Knowledge Networks and Technological Capabilities in the African Manufacturing Cluster', *Science, Technology and Society*, 8 (1), January-June, 1-23 421
19. Rajah Rasiah (1996), 'innovation and Institutions: Moving Towards the Technological Frontier in the Electronics Industry in Malaysia', *Journal of Industry Studies*, 3 (2), December, 79-102 444

PART V AGRICULTURAL INNOVATION AND SUSTAINABLE DEVELOPMENT

20. Rene Kemp and Luc Soete (1992), 'The Greening of Technological Progress. An Evolutionary Perspective', *Futures*, 24 (5), June, 437-57 471
 21. Robin Cowan and Philip Gunby (1996), 'Sprayed to Death: Path Dependence, Lock-in and Pest Control Strategies', *Economic Journal*, **106** (436), May, 521-42 492
 22. Kevin C. Urama and Ian Hodge (2004), irrigation Externalities and Agricultural Sustainability in South-eastern Nigeria', *Journal of Agricultural Economics*, 55 (3), November, 479-501 514
 23. Kojo Sebastian Amanor (1994), 'Ecological Knowledge and the Regional Economy: Environmental Management in the Asewewa District of Ghana', *Development and Change*, 25 (1), January, 41-67 537
 24. Andrew Hall, Geoffrey Bockett, Sarah Taylor, M.V.K. Sivamohan and Norman Clark (2001), 'Why Research Partnerships Really Matter: Innovation Theory, Institutional Arrangements and Implications for Developing New Technology for the Poor', *World Development*, 29 (5), 783-97 564
- Name Index* 579