The Dynamics of Socio-Economic Development

An Introduction

Why are poor countries poor and rich countries rich? How are wealth and poverty related to changes in nutrition, health, life expectancy, education, population growth and politics? This modern, non-technical introduction to development studies explores the dynamics of socio-economic development and stagnation in developing countries. Taking a quantitative and comparative approach to contemporary debates within their broader context, Szirmai examines historical, institutional, demographic, sociological, political and cultural factors. Key chapters focus on economic growth, technological change, industrialisation and agricultural development, and consider social dimensions such as population growth, health and education. Each chapter contains comparative statistics on trends from a sample of twenty-nine developing countries. This rich statistical database allows students to strengthen their understanding of comparative development experiences. Assuming no prior knowledge of economics, the book is suited for use in interdisciplinary development studies programmes as well as economics courses, and will also interest practitioners pursuing careers in developing countries.

ADAM SZIRMAI is Professor of Technology and Development Studies at Eindhoven University of Technology, the Netherlands, and one of the founders of the Eindhoven Centre for Innovation Studies.
First published by Cambridge University Press 2005 as The Dynamics of Socio-Economic Development: an Introduction

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Printed in the United Kingdom at the University Press, Cambridge

Typeset in Swift 9.5/12.5 pt and Formata System \LaTeXe

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

Library of Congress Cataloging-in-publication Data

Szirmai, Adam, 1946-
Dynamics of socio-economic development: an introduction/by Adam Szirmai--2nd ed. p. cm.
Includes bibliographical references and index.
1. Economic development. 2. Social change. I. Szirmai, Adam, 1946- Economic and social development. II. Title.
HD75.S97 2004 2004058281
338.9-dc22

ISBN 0 521 81763 3 hardback
ISBN 0 521 52084 3 paperback

Accompanying website: http://www.dynamicsofdevelopment.com

The publisher has used its best endeavours to ensure that the URLs for external websites referred to in this book are correct and active at the time of going to press. However, the publisher has no responsibility for the websites and can make no guarantee that a site will remain live or that the content is or will remain appropriate.
Contents

List of figures xvii
List of tables xix
List of boxes xxiii
Preface xxv
List of abbreviations xxix
Acknowledgements xxxii

Chapter 1 Developing countries and the concept of development 1
1.1 Approaches to development 2
1.2 The development debate 4
1.3 Growth and development 6
1.4 Are growth and development desirable? 9
1.5 Development and Westernisation 11
1.6 Indicators of growth and development 12
1.7 Does the 'third world' exist? 16
1.8 What do developing countries have in common? 28

Chapter 2 Development of the international economic order, 1450–2000 35
2.1 International economic order 36
2.2 Economic breakthrough and external expansion from Western Europe 36
2.3 Why expansion from Europe instead of from China? 39
2.4 European expansion in the world 43
2.4.1 Types of international economic orders 45
2.4.2 The first wave of expansion, 1400–1815 47
2.4.3 The first wave of decolonisation 50
2.4.4 The second phase of European expansion, 1815–1913 51
2.4.5 The period 1870–1913 53
2.4.6 Migration flows 54
2.4.7 Non-colonised areas 59
2.4.8 Latecomers in the process of economic development 60
2.4.9 The period 1913–1950 60
2.4.10 The period after World War II 61
## Contents

2.5 Two perspectives on developments in the world economy; 1500--2000 63

2.6 Key issues in development 64

### Chapter 3 Growth and stagnation: theories and experiences 68

3.1 What are the basic sources of growth?

How do economies grow and societies become more prosperous? 69

3.2 Classical thinking about growth, development and stagnation 70

3.2.1 Adam Smith 71

3.2.2 The classical economists Ricardo, Malthus and Mill 71

3.2.3 Friedrich List 72

3.2.4 Classical sociologists: Spencer, Tönnies and Durkheim 72

3.2.5 Karl Marx 74

3.2.6 Imperialism 75

3.2.7 Max Weber and Joseph Schumpeter 76

3.3 Internal and external approaches 78

3.4 Explanations of economic backwardness 79

3.4.1 Rostow's theory of the stages of economic growth 79

3.4.2 Kuznets's preconditions for industrialisation 81

3.4.3 Advantages of backwardness 82

3.4.4 Neoclassical theories of growth 83

3.4.5 Evolutionary theories of economic change 87

3.4.6 North and Thomas: efficient institutions 88

3.4.7 Myrdal: Institutional reforms 89

3.5 Explanations of underdevelopment 90

3.5.1 Neo-Marxist theories of underdevelopment 91

3.5.2 Structuralism and theories of unequal exchange 94

3.5.3 Underdevelopment theories: a preliminary evaluation 96

3.6 Empirical study of development experiences 97

3.6.1 Growth of income per capita: can developing countries grow? 98

3.6.2 Investment: how important is capital? 102

3.6.3 Export performance 104

3.6.4 External finance: does money flow from poor to rich countries? 106

3.6.5 Are developing countries capable of structural change? 109

3.6.6 How unequal is the income distribution? 112
Chapter 4 Technology and development  117
  4.1 The role of technology  117
  4.2 The technology race  118
  4.3 Technological change and increases in productive capacity  121
    4.3.1 How to increase labour productivity?  121
    4.3.2 Investing in technological change  123
    4.3.3 Diffusion of technology and technological and social capabilities  124
    4.3.4 Technology, productivity and competitiveness  125
  4.4 Economic theories about the role of technological change  126
    4.4.1 Solow  126
    4.4.2 Advantages of backwardness  127
    4.4.3 Endogenous and evolutionary growth theories  127
  4.5 Consequences of the acceleration of technological development for developing countries  129
    4.5.1 Acceleration of global technological change  129
    4.5.2 Knowledge gaps  130
    4.5.3 New opportunities offered by technological development  131
    4.5.4 New threats  132
  4.6 International technology transfer and technology diffusion  133
    4.6.1 Intellectual property rights  134
    4.6.2 Technological capabilities  135
    4.6.3 National innovation systems  136
  4.7 Biotechnology  137
  4.8 Information and communication technology  137
  4.9 National and international policy  138

Chapter 5 Population and development  141
  5.1 Introduction  142
  5.2 Perspectives on population growth  142
  5.3 Growth of world population  143
  5.4 The demographic transition  145
  5.5 Demographic developments in developing countries  147
  5.6 Socio-economic consequences of population growth  151
    5.6.1 Pessimistic and optimistic perspectives  151
    5.6.2 Malthusian analyses  152
    5.6.3 The neo-Malthusian trap  152
    5.6.4 Growth of national income, growth of per capita income and the dependency ratio  154
    5.6.5 Dependency ratio and savings  154
| 5.6.6 | Population growth and investment | 155 |
| 5.6.7 | Population growth, education and health care | 156 |
| 5.6.8 | Employment, income distribution and poverty | 156 |
| 5.6.9 | Population growth and the environment | 159 |
| 5.6.10 | Population growth and technological progress | 163 |
| 5.6.11 | Consequences of population growth: concluding remarks | 165 |
| 5.7 | Why do people in developing countries have so many children? | 165 |
| 5.7.1 | Introduction | 165 |
| 5.7.2 | Intermediate determinants of fertility: the Bongaarts model | 166 |
| 5.7.3 | Economic explanations of fertility | 168 |
| 5.7.4 | Cultural and institutional explanations of fertility | 169 |
| 5.8 | Policy | 171 |

**Chapter 6 Health, health care and development** 177

6.1 The state of health in developing countries 178
6.1.1 Quantitative indicators of the state of health 178
6.1.2 Infant and child mortality 179
6.1.3 Life expectancy 181
6.1.4 Patterns of disease and health 183
6.1.5 Common infectious and parasitic diseases in developing countries 186
6.1.6 Epidemiological transition 190

6.2 Theoretical explanations of changes in health and morbidity 192
6.2.1 Factors affecting the state of health 192
6.2.2 Preston: per capita income and life expectancy 193
6.2.3 McKeown: the importance of nutrition 194
6.2.4 Preston and McKeown 195
6.2.5 The Mosley model and the importance of education 196
6.2.6 Caldwell: the importance of health-care policy 199
6.2.7 Standards of living, education, medical technology and health-care systems: a synthesis 202

6.3 Health and economic development 204
6.4 Health-care policy 206

**Chapter 7 Education and development** 213

7.1 Theories of the contribution of education to economic development 214
7.1.1 'Human capital' theory 214
7.1.2 Criticisms of human capital theory 218
7.1.3 Screening theory 219
7.1.4 Criticisms of screening theory 220
7.1.5 An evaluation of the human capital debate 220
7.1.6 Education as a necessary but not sufficient condition for development 222

7.2 Indicators of educational development 225
7.2.1 Indicators of educational enrolment 225
7.2.2 Educational Attainments 226
7.2.3 Financial indicators 227
7.2.4 Physical indicators 227
7.2.5 Literacy 227

7.3 Educational performance in developing countries 228
7.3.1 The initial situation after World War II 228
7.3.2 Increases in educational enrolment 229
7.3.3 Education completed 232
7.3.4 Years of education per member of the labour force 233
7.3.5 Educational expenditures 234
7.3.6 Non-formal and informal education 237
7.3.7 Summary: comparison with developments in more developed countries 238

7.4 Problems 239
7.4.1 Discrepancies between educational needs and financial resources 239
7.4.2 The quality of education 240
7.4.3 Lack of relevance 241
7.4.4 Unequal access to education 242
7.4.5 Mismatch between education and the labour market 243

7.5 Literacy 245
7.6 Nation building 248
7.7 Policy 250

Chapter 8 Economic development, structural transformation and primary exports 255
8.1 Capital accumulation and industrialisation 256
8.2 Economic development and structural transformation 258
8.2.1 Definitions of economic sectors 258
8.2.2 Structural change 260
8.2.3 Arguments in favour of industrialisation 262
8.2.4 The prestige of industrialisation 266
8.3 Accumulation of industrial capital in open and closed models of the economy 266
8.3.1 Open and closed models of the economy: early and late stages of development 266
8.3.2 Is the agricultural sector a stagnant or a dynamic sector? 269
8.3.3 What about the service sector? 271
8.4 The development of agriculture as a prerequisite for industrialisation 272
  8.4.1 The role of agriculture in early stages of development 272
  8.4.2 Historical examples of relationships between agriculture and industry 274
  8.4.3 Conclusion 275
8.5 Open model: are primary exports an engine of growth and structural transformation? 276
  8.5.1 Introduction 276
  8.5.2 Comparative advantage and the role of trade in development 276
  8.5.3 Primary exports as an engine of growth between 1817 and 1913: vent for surplus 278
  8.5.4 Why disappointing industrialisation? 280
  8.5.5 Can primary exports function as the engine of growth? 281
  8.5.6 Export pessimism 283
  8.5.7 Export pessimism and policy 288
  8.5.8 Finding an appropriate balance between primary exports and industrialisation 288
8.6 Closed model: interactions between agriculture and industry in later stages of development and structural change 294
  8.6.1 Introduction: import-substituting industrialisation in the closed model 294
  8.6.2 Transfer mechanisms 295
  8.6.3 Towards a balance between agriculture and industry 295
  8.6.4 The mix of negative and positive incentives in a balanced growth path 298
8.7 Closed and open models and industrialisation 301

Chapter 9  Industrial development 303
  9.1 Introduction 304
  9.2 Large-scale industrialisation and balanced growth strategies 306
    9.2.1 Economic development with unlimited supplies of labour 306
    9.2.2 Capital–output ratio 309
    9.2.3 Shortage of capital as the key bottleneck in economic development 310
9.2.4 Does economic development result in increasing income inequality? 310
9.2.5 The two-gap model of foreign finance: the role of financial flows from abroad 312
9.2.6 Big is beautiful: large-scale investment, government planning and import substitution 313
9.3 Criticisms of orthodox industrialisation strategies 318
  9.3.1 Shortcomings of the Lewis model 319
  9.3.2 Is capital really so important? 321
  9.3.3 How important is the scale of investment? 321
  9.3.4 Protection breeds inefficiency 323
  9.3.5 Urban industrial bias 324
  9.3.6 Alternative industrialisation strategies 326
9.4 Unbalanced growth 326
  9.4.1 The function of dynamic imbalances 326
  9.4.2 Backward and forward linkages 327
  9.4.3 Shift to the market 329
9.5 Balanced growth path 330
9.6 Medium and small-scale enterprises and the urban informal sector 331
9.7 Export-oriented industrialisation 334
  9.7.1 The shift from import substitution to export orientation 334
  9.7.2 Globalisation, foreign direct investment and the role of multinational companies in development 340
9.8 Liberalisation, deregulation and the debate on industrial policy: neoliberals versus interventionists 343
9.9 Outcomes of industrialisation strategies 345
9.10 Conclusion 351

Chapter 10 Agricultural development and rural development 354
10.1 Is there enough food to feed the world population? 355
10.2 What are the sources of growth of agricultural production? 361
  10.2.1 How much land is still left for cultivation? 361
  10.2.2 Intensification of land use 367
  10.2.3 Increasing yields per harvest 372
  10.2.4 Models of agricultural development 375
  10.2.5 The green revolution: increase in yields per harvest 380
  10.2.6 The green revolution continued: biotechnology and genetically modified crops 386
  10.2.7 Summary and prospects 388
10.3 Food consumption and nutrition  390
10.4 Rural development versus agricultural development  396
  10.4.1 Changes in rural societies  399
  10.4.2 Three perspectives on rural development  400
  10.4.3 The peasant economy and peasant households  404
  10.4.4 Rationality, risk and survival strategies in peasant societies  409
10.5 Land reform  414
10.6 Collectivisation and decollectivisation  419
10.7 Non-agrarian activities and integrated rural development  421

Chapter 11 State formation and political aspects of development  426
  11.1 Concepts  427
  11.2 Marxist and Weberian perspectives on the state  431
  11.3 Processes of state formation in Europe  433
  11.4 State formation in developing countries  438
    11.4.1 The importance of external penetration in processes of state formation  439
    11.4.2 Internal political instability  443
    11.4.3 External political interference as a destabilising factor  445
    11.4.4 The role of the military in politics  451
    11.4.5 One-party states  455
    11.4.6 Is there a resurgence of democracy in developing countries?  457
    11.4.7 Rapid growth of the public sector since 1945  459
    11.4.8 ‘Soft states’ and the political economy of rent seeking  459
  11.5 The role of government in economic development  462
    11.5.1 The role of the state in economic development: five examples  463
  11.6 Interactions between political and economic developments  472
    11.6.1 Political instability as a source of economic stagnation  472
    11.6.2 Economic development and political stability  474
    11.6.3 Is there a relationship between democracy and economic development?  476
    11.6.4 Good governance and economic development  478
  11.7 The predatory state as an obstacle to economic development in Sub-Saharan Africa  480
  11.8 Concluding remarks  483
### Chapter 12 Cultural dimensions of development 486

12.1 Introduction 487
   12.1.1 Concepts 487
   12.1.2 How important is culture? 487
12.2 The Protestant ethic and the rise of capitalism 489
12.3 Efficient institutions 491
12.4 Traditional versus modern cultures 493
   12.4.1 Modernisation theory 493
   12.4.2 Towards a more differentiated approach to the opposition between traditional and modern 495
12.5 Are there cultural obstacles to economic development? 497
   12.5.1 The caste system 498
   12.5.2 The low status of physical work and effort 499
   12.5.3 Social obligations in African cultures 500
   12.5.4 Gender discrimination 501
   12.5.5 The importance of trust in market relationships 501
   12.5.6 The mysterious role of ethnic minorities in economic development 502
   12.5.7 Cultural differences between North and Latin America 502
   12.5.8 The Soviet legacy 503
   12.5.9 Asian values and the Confucian ethic 503
12.6 Civic culture 506
12.7 Cultural consequences of and reactions to Western penetration 507
   12.7.1 Cultural consequences 507
   12.7.2 Reactions to Western penetration and cultural disruption 508
12.8 Interactions between culture, technology and economics at micro-level 511

### Chapter 13 The international economic and political order since 1945 515

13.1 Characteristics of international relations since 1945 516
   13.1.1 Economic aspects 516
   13.1.2 Political aspects 521
13.2 Institutions and institutional change since 1945: a chronological overview 526
   13.2.1 Free trade versus international regulation 531
   13.2.2 The financial institutions 531
   13.2.3 The UN family of institutions and the call for a new international economic order 534
   13.2.4 Responses to the new international economic order 535
13.2.5 The debt crisis and the rise of the Washington consensus 536
13.2.6 The Asian crisis and the debate on the architecture of the international order 538
13.2.7 Environment 539
13.3 The call for a new international order in the 1960s and 1970s 539
13.3.1 Criticisms of the liberal international order 539
13.3.2 Lomé agreements 542
13.3.3 Criticisms of the new international order 542
13.4 The debt crisis 546
13.4.1 What is wrong with debt? 546
13.4.2 What caused the 1982 debt crisis? 547
13.4.3 Quantitative data on debt and financial flows in developing countries 549
13.4.4 How to deal with debt? 558
13.5 Structural adjustment policies 563
13.5.1 Neoliberalism versus structuralism 563
13.5.2 Structural adjustment, IMF and the World Bank 564
13.5.3 Stabilisation and structural adjustment 565
13.5.4 The effectiveness of structural adjustment programmes 568
13.6 The Asian crisis and the renewed debate on globalisation 573

Chapter 14 Foreign aid and development 580
14.1 Why foreign aid? 581
14.2 The emergence of foreign aid 585
14.3 Development aid: sources and categories 588
14.4 Quantitative data on aid flows 591
14.4.1 Long-term trends in the magnitude and geographical distribution of aid flows 591
14.4.2 Development aid in proportion to total resource flows 594
14.4.3 Net development assistance as a percentage of gross domestic product 598
14.4.4 Reduction of the real value of aid by tying 600
14.4.5 Conclusion: the volume of aid is not negligible 601
14.5 Theories of development and objectives of aid 601
14.5.1 Aid as a source of investment, capital accumulation and growth 601
14.5.2 Aid, growth and poverty reduction 604
14.5.3 Technical assistance, human capital theory and growth 606
14.5.4 Policy dialogue and programme aid: policy reform and improvements in governance and institutions 607

14.6 Does aid work? Different perspectives on the effectiveness of development aid 609
14.6.1 Does aid contribute to welfare and socio-economic dynamism? 609
14.6.2 Radical criticisms of development aid 611
14.6.3 Neoliberal criticism of development aid 614
14.6.4 Criticism of development projects 617
14.6.5 Empirical debates about aid effectiveness and proposals for reform 618
14.6.6 Epilogue: an attempt at evaluation 628

Bibliography 633
Author index 688
Subject index 698
## Figures

5.1 Population growth, 1950–2050  
5.2 The demographic transition  
5.3 The neo-Malthusian trap  
5.4 Determinants of fertility  
6.1 Life expectancy at birth, 1900, 1930 and 1960  
6.2 Intermediate factors influencing child mortality  
9.1 Economic development with unlimited supplies of labour  
10.1 Cereals production per capita, 1961–2001
## Tables

1.1 Population, GNP per head and growth in the world economy  
   page 17
1.2 Inequality in the world economy  
   27
1.3 World poverty: population living below poverty lines,  
   1987 and 1998  
   30
2.1 Slave imports into the Americas, 1451–1870  
   55
2.2 Slave exports from Africa to the Americas, by region of  
   origin, 1500–1870  
   56
3.1 Growth of GDP per capita, 1870–2000  
   99
3.2 Growth of GDP per capita, 1973–2000  
   101
3.3 Gross domestic investment as percentage of GDP  
   103
3.4 Export performance, 1870–1998  
   104
3.5 Manufactured exports as percentage of total merchandise exports  
   105
3.6 External finance as percentage of GDP, 1950–2000  
   106
3.7 Gross value of foreign capital in developing countries, 1870–1998  
   108
3.8 Structure of employment by sector 1950–2000  
   110
3.9 Structure of production, 1950–2000  
   111
3.10 Distribution of income or consumption, 1980–2000  
   114
4.1 US patent activity, 1870–2001  
   129
4.2 R&D efforts  
   131
4.3 ICT indicators  
   131
5.1 Growth of world population  
   144
5.2 Population growth in selected developing countries 1820–2000  
   148
5.3 Indicators of demographic changes, 1950–2000, by region  
   149
5.4 Unemployment and informal employment in selected  
   countries 1990–2000  
   157
5.5 Government policies and birth control  
   173
   180
6.2 Life expectancy at birth in selected developing countries,  
   1920–2000  
   182
6.3 Life expectancy at birth per region, 1950–2005  
   183
6.4 Causes of death by region, 1980–2000  
   185
6.5 Prevalence of HIV/AIDS in developing countries, 2001  
   188
6.6 Comparisons of levels of per capita income, infant mortality  
   and life expectancy at birth in 2000  
   201
7.1 Gross enrolment ratios by educational level, country and region,  
   1960–2000  
   230
List of tables

7.2 Net enrolment ratios by region, 1960–2000 231
7.3 Highest diploma obtained in selected countries, 1980–2000 232
7.4 Mean years of schooling per member of the labour force in fourteen developing countries between 1960 and 1980 234
7.5 Government expenditure per pupil in selected countries, 1965–1996 235
7.6 Government expenditure as a percentage of gross national product, 1960–2000 236
7.7 Illiterates as a percentage of the population of 15 years and over 248
8.1 Sectoral distinctions 259
8.2 Industrialisation and per capita gross national product in 2000 264
8.3 Advantages of international trade 277
8.4 Net barter terms of trade, selected countries, 1950–2000 291
8.5 Income terms of trade, selected countries, 1950–2000 292
9.1 Capital-output ratios 310
9.3 Manufactured exports as percentage of GDP, 1960–2000 336
9.4 FDI as percentage of GDP and total fixed capital formation, selected countries, 1960–2000 341
9.6 Aggregate growth in industry and manufacturing, 1960–2000 347
9.7 Share of developing countries in world manufacturing value added 1960–1996 348
9.8 Share of developing countries in world manufactured exports, 1963–2000 349
10.1 Indices of agricultural production, 1934–2002 356
10.2 Cultivated area, potential agricultural land, pastures, woodlands 362
10.3 Arable land in use as percentage of potential arable land (1979–1999) 363
10.4 Deforestation, 1980–2000, regional aggregates and selected developing countries 365
10.5 Systems of supply for vegetable food 366
10.6 Cropping intensity in developing countries, 1974–2030 372
10.7 Irrigated area in developing countries 373
10.8 Sources of growth of crop production, 1961–2030 389
10.9 Average availability of calories, 1964–2015 392
10.10 Undernourishment in developing countries, 1969–2000 393
10.11 Share of rural population, agricultural labour force and agricultural production, 1950–2000 397
11.1 Wars and war casualties, 1945–2003 448
11.2 Political regime in developing countries 452
11.3 Successful coups in developing countries, 1945–2002 455
13.1 Growth rate of world exports 517
13.2 Developing countries with heavy debt burdens, 1982–2001 550
List of tables

13.3 Debts, foreign investment and financial flows in developing countries, 1970–2002 553
13.4 Net transfers with respect to foreign debt and foreign investment selected countries, 1970–2001 554
14.1 Net receipts of development assistance by income level and region, 1960–2001 592
14.2 Distribution of net official development assistance from OECD countries by region 593
14.3 Country contributions to aid, 1985–2001 593
14.4 Net development aid as a percentage of the total net inflow of financial resources by income and region, 1960–2001 595
14.5 Net official development assistance and net total resource flows in selected countries, 1960–2001 597
14.6 Net official development assistance as a percentage of net total resource flows in selected developing countries, 1960–2001 598
14.7 Net development assistance as a percentage of gross domestic product in selected developing countries, 1960–2000 599
### Boxes

1.1 Untenable generalisations about development  page 5  
1.2 Modernisation ideals  
1.3 Technical problems in the measurement of economic growth  13  
1.4 Differences between developing countries  25  
1.5 Common characteristics of developing countries  29  
2.1 Characteristics of international economic orders  36  
2.2 Western expansion and contraction  44  
2.3 Types of international economic orders  45  
3.1 Sources of growth of GDP per capita  69  
3.2 Characteristics of dependent development  91  
4.1 Sources of increase in labour productivity  122  
4.2 Mechanisms of technology transfer  133  
5.1 Relationships between population change and economic development  142  
5.2 Demographic characteristics of developing countries  151  
7.1 Education, productivity and economic development  217  
7.2 Criticisms of human capital theory  218  
7.3 Key elements of screening theory  221  
7.4 Shortcomings of indicators of educational enrolment  226  
7.5 Lessons of the experimental world literacy programme  246  
8.1 Arguments for industrialisation  263  
8.2 Primary exports as an engine of growth  282  
8.3 Export pessimist arguments  283  
9.1 Aims of industrial protection  318  
9.2 Shortcomings of import substitution  323  
9.3 Urban industrial bias  325  
10.1 Three ways to expand agricultural production  361  
10.2 Functions of fallowing  368  
10.3 Lessons from the Boserupian analysis  370  
10.4 Characteristics of the green revolution  381  
10.5 Varieties of land reform  415  
11.1 State formation and external political interference  445  
11.2 Explanations for the emergence of One-Party Rule in Africa  456  
11.3 Characteristics of personal rule  481  
12.1 Characteristics of the Protestant ethic  490
12.2 Modernisation theory: dichotomies between modern and traditional societies 493
12.3 Changes affecting traditional communities and cultures 509
13.1 Characteristics of the post-war economic order 516
13.2 Important international organisations, treaties and conferences, 1944–2003 527
13.3 GATT principles 532
13.4 Principal organs of the United Nations 534
13.5 Criticisms of the liberal international order in the 1960s 540
13.6 Elements of the new international economic order 540
13.7 Objectives of structural adjustment policies 563
13.8 Stabilisation measures 566
13.9 Structural adjustment policy measures 567
14.1 The case for foreign aid 584
14.2 Sources of development aid 588
14.3 Examples of project shortcomings 617
Preface

The aim of this book is to provide a general introduction to the dynamics of socio-economic development and to the study of the problems of developing countries. It is a reflection of multidisciplinary courses on ‘development’, which I have been teaching since 1987 at the University of Groningen and the Eindhoven University of Technology. The book was written for students of universities and other institutions of higher education, who encounter the problems of developing countries in the course of their own disciplinary studies and who are in need of a general introduction to this field. It is also intended for people pursuing a professional career in developing countries and readers with a general interest in development. The text can be read as an introduction by students with no prior knowledge of development. It also can be used at a more advanced level as a handbook, providing an overview of current theoretical and empirical debates and controversies in the field of development studies. The book provides non-economists with a non-technical introduction to economic perspectives on development, while introducing economists to a broader socio-economic view of development.

The central issue in development, as approached in this book, lies in low levels of per capita income and low standards of living among the mass of the population in the so-called developing countries. The key elements in the book are trends in per capita income and changes in standards of living and welfare, and the factors that affect economic development or economic stagnation in the long term. The core of development is thus defined in economic terms. However, the explanatory factors are not limited to economic ones. Historical, institutional, cultural, demographic, political, social and ecological factors are all of great importance for the analysis of economic development. They will receive ample attention in the book.

It needs to be emphasised that the concept of development is much broader than that of economic development alone. Development involves a wide range of changes in a variety of social indicators such as health, education, technology or life expectancy, which are directly or indirectly linked to economic changes, but which need to be studied in their own right. This is reflected in the title of the book, which refers to socio-economic development.

The structure of the book takes the key factors distinguished in economic theories of growth – labour, capital and land and technological change – as its main point of departure. However, in line with the interdisciplinary nature of the book, these factors are interpreted in broad fashion. Technological change
lies at the heart of growth and economic development. Two main issues discussed in chapter 4 are the role of technological change in development, and the consequences of accelerating technological change for developing countries. The treatment of the primary production factor ‘labour’ is couched in terms of a more general discussion of demographic and human factors in development. These include population growth and the interrelationships between population growth and economic development (Chapter 5), topics such as health, disease, mortality and life expectancy (Chapter 6) and education, human capital and literacy (Chapter 7). I argue that health and education are important as independent aspects of development in their own right. But the state of health and levels of education also influence the quality of the labour force, the productivity of labour and the socio-economic dynamics of a country.

Modern economic growth is historically associated with massive capital accumulation in the industrial sector and a structural transformation of agrarian societies into societies in which industry and services become more and more important. Structural change and the shift to industry are discussed in Chapter 8, which also deals with the role of primary exports in these transformations. Capital accumulation is discussed in Chapter 9 in the context of the overall process of industrialisation. This chapter also pays attention to the different industrialisation strategies that developing countries have followed over time, including import substitution, balanced growth, labour intensive export orientation, promotion of the informal sector and technological upgrading.

The discussion of the production factor ‘land’ is broadened to include the whole issue of agricultural and rural development. The role of the agricultural sector in the wider process of development is examined in Chapter 8, which makes a case for the continued importance of agriculture in developing countries. In Chapter 10, the development of agricultural production and productivity is discussed against the background of social changes in rural communities and rural areas. This chapter also presents data on trends in food consumption and an overview of the recent debates on modern biotechnology.

The discussion of economic development in Chapters 4 to 10, is preceded and followed by chapters which place development in an historical and international perspective. Chapter 2 focuses on the development of the international economic and political order since the fifteenth century. Chapter 3 deals with the theories and empirics of growth and stagnation. The approach in these chapters is historical and comparative. Chapter 11 focuses on the political aspects of development and the interrelations between state formation, democratic rule and economic growth. Chapter 12 introduces the cultural context of development and discusses the dynamic relationships between cultural change and economic development. Changes in the international political and economic order since World War II are reviewed in Chapter 13. In this chapter, attention is paid to the evolution of international institutions and organisations on the one hand, and the implications of the international division of labour and free trade for developing countries on the other. This chapter includes a discussion of developing country debt, the emergence of structural
adjustment policies and the recent debates on globalisation and the architecture of the international financial system. The final chapter (Chapter 14) focuses on the role of foreign aid in development. Foreign aid is seen as part of international resource flows. It is discussed in the context of theories of development and the many different factors influencing development in the long run. Every chapter ends with questions for review and suggestions for further readings.

Empirical data have an important place in this book. It is my conviction that a serious debate of development issues should be grounded in sound empirical information. Throughout the book, I present empirical data on long-run economic, social and political trends for a sample of twenty-nine developing countries, representing Asia, Latin America and Africa. These twenty-nine countries represent more than three-quarters of the total population of developing countries in the year 2000. The same set of countries is used throughout the book, providing an empirical basis for the discussion of theories, patterns and trends in development. The book contains over seventy tables, usually covering the period from 1950 to the present and sometimes going back to the pre-war period. The country data are supplemented by aggregate statistics for different regions and continents.

This book is accompanied by a website, which presents the detailed worksheets underlying the tables in the book. These worksheets show how the tables in the book have been put together from a variety of sources. The address of this website is: http://www.dynamicsofdevelopment.com. We hope this website will serve as an important didactic tool for the empirical study of development. It will introduce students to the increasing wealth of international comparative statistics on all dimensions of development. More and more data are accessible in electronic form on websites of research institutions and international organisations. Our website will provide links and references to the most important international sources of data on development, serving as a structured portal for statistics on development. Statistical tables are constructs, which depend on assumptions, models, concepts, decisions about what data to use, how to combine data from different sources, what years to compare, how to link data for different years in a consistent fashion and so forth. It is important to be clear about how the data have been collected and organised, what assumptions and choices have been made and what sources have been used. If such information is not provided – as is too often the case – the statistics cannot be trusted. Examination of the worksheets on the website will help readers to formulate their own conclusions, which may well differ from those of this author. They will come to understand that tables should be seen as working hypotheses, rather than final statements. Finally, the website allows us to provide more detail than is possible in the tables in the book. It will also allow for updating on a continuous basis, so the statistics remain up to date.

Despite its considerable length this book has no pretensions to completeness. The attempt to synthesise a very wide range of subjects in a single book will
inevitably leave specialists on different topics unsatisfied. Also, the book is written as an introduction to the ongoing debate on development, rather than a final summary of our knowledge of all different aspects of it. In the choice of subjects, the emphasis has been on the long-run dynamics of development and the factors that play a role in these dynamics.

This book has a long history. A first version was published in Dutch in 1993. An English translation was published in 1997 by Prentice Hall under the title Social and Economic Development: Trends. Problems Policies. However, both the real world and our thinking about development are changing so rapidly that a mere revision was not sufficient. All chapters have been fundamentally rewritten and expanded, the analysis has changed in the light of new insights, new chapters have been added on technology and culture, and new statistics and materials have been incorporated. This has resulted in what amounts to a new textbook, under a new title and with a new publisher. I am grateful to Cambridge University Press for allowing me to undertake this task.

I could not have written this book without the support of numerous colleagues and ex-colleagues. They generously let me profit from their knowledge of and insights into the various aspects of development. I have made extensive use of their advice, their publications, and their empirical research. I have both learned from and enjoyed years of fruitful and intensive discussions with them. I would like to thank the following persons for their advice and stimulating comments on previous drafts of the manuscript: Bart van Ark, Carolina Castaldi, Peter Druijven, Pierre van der Eng, Jacob de Haan, Hal Hill, Niels Hermes, Jojo Jacob, Hans-Paul Klijnsma, Jos Koetsier, Remco Kouwenhoven, Paul Lapperre, Robert Lensink, Angus Maddison, Kees van der Meer, Nanno Mulder, Allessandro Nuvolari, Howard Pack, Dirk Pilat, Gé Prince, Henny Romijn, Johan Schot, Jan Stel, Ida Terluin, Marcel Timmer, Harry van Vianen, Geert Verbong and Bart Verspagen. As always, the responsibility for the book and its shortcomings rests with the author alone. A special word of thanks is due to Paul Lapperre for his help designing the cover and selecting the illustrations.

In preparing the tables, I have been fortunate to enjoy the support of a series of enthusiastic and talented student assistants. At the Eindhoven University of Technology, Dennis Bours, Rick van der Kamp, Herjan Siegers and Rik Luiten have helped collect and organise the statistical materials incorporated in the book. During the last year-and-a-half, Souli Nnafie has provided invaluable help in updating and revising all the tables. I am also thankful for the generous support and encouragement provided by Chris Harrison, Pat Maurice and their colleagues at Cambridge University Press. I gratefully dedicate this book, as previous ones, to my wife Veronika.

Adam Szirmai
Eindhoven
January 2004
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACER</td>
<td>age-specific enrolment rate</td>
</tr>
<tr>
<td>ACP</td>
<td>Asian, Caribbean and Pacific Countries</td>
</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of South East Asian Nations</td>
</tr>
<tr>
<td>BMR</td>
<td>basal metabolic rate</td>
</tr>
<tr>
<td>CFCs</td>
<td>chlorofluorocarbons</td>
</tr>
<tr>
<td>CGIAR</td>
<td>Consultative Group on International Agricultural Research</td>
</tr>
<tr>
<td>CIF</td>
<td>cost, insurance and freight included</td>
</tr>
<tr>
<td>CIMMYT</td>
<td>Centro Internacional de Mejoramiento de Maiz y Trigo (International Maize and Wheat Improvement Centre)</td>
</tr>
<tr>
<td>CMEA</td>
<td>Council for Mutual Economic Assistance</td>
</tr>
<tr>
<td>CPI</td>
<td>Corruption Perceptions Index</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee (OECD)</td>
</tr>
<tr>
<td>DALYs</td>
<td>disability-adjusted life years</td>
</tr>
<tr>
<td>DRS</td>
<td>Debt Reporting System (World Bank)</td>
</tr>
<tr>
<td>ECLA</td>
<td>United Nations Economic Commission for Latin America</td>
</tr>
<tr>
<td>ECOSOC</td>
<td>Economic and Social Council of the UN</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Community</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>ECLA</td>
<td>United Nations Commission for Latin America</td>
</tr>
<tr>
<td>ESAF</td>
<td>Enhanced Structural Fund Facility (IMF)</td>
</tr>
<tr>
<td>ESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EWLP</td>
<td>Experimental World Literacy Programme</td>
</tr>
<tr>
<td>FAO</td>
<td>United Nations Food and Agriculture Organisation</td>
</tr>
<tr>
<td>FDI</td>
<td>foreign direct investment</td>
</tr>
<tr>
<td>FLN</td>
<td>Front de la libération nationale (national liberation front, Algeria)</td>
</tr>
<tr>
<td>fob</td>
<td>free on board</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GDFF</td>
<td>Geographical Distribution of Financial Flows to Developing Countries</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GFCC</td>
<td>gross fixed capital formation</td>
</tr>
<tr>
<td>GGDC</td>
<td>Groningen Growth and Development Centre</td>
</tr>
<tr>
<td>GNP</td>
<td>gross national product</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>--------------</td>
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<tr>
<td>GSP</td>
<td>Generalised System of Preferences</td>
</tr>
<tr>
<td>HALE</td>
<td>healthy life expectancy</td>
</tr>
<tr>
<td>HDR</td>
<td>Human Development Report</td>
</tr>
<tr>
<td>HIPCs</td>
<td>heavily indebted poor countries</td>
</tr>
<tr>
<td>IADB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IBPGR</td>
<td>International Board for Plant Genetic Resources</td>
</tr>
<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development (World Bank)</td>
</tr>
<tr>
<td>ICC</td>
<td>International Criminal Court</td>
</tr>
<tr>
<td>ICRASAT</td>
<td>Research Institute for Crops in the Semi-arid Tropics</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IDA</td>
<td>International Development Association</td>
</tr>
<tr>
<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IPPC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>IRRI</td>
<td>International Rice Research Institute</td>
</tr>
<tr>
<td>ISI</td>
<td>import-substituting industrialisation</td>
</tr>
<tr>
<td>ISIC</td>
<td>International Standard Industrial Classification</td>
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<tr>
<td>ITO</td>
<td>International Trade Organisation</td>
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<tr>
<td>LAFTA</td>
<td>Latin American Free Trade Association</td>
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<tr>
<td>LDCs</td>
<td>least developed countries</td>
</tr>
<tr>
<td>LEISA</td>
<td>low external input and sustainable agriculture</td>
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<tr>
<td>LMICs</td>
<td>lower-middle-income countries</td>
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<tr>
<td>MICs</td>
<td>moderately indebted countries/middle-income countries</td>
</tr>
<tr>
<td>MITI</td>
<td>Ministry of Industry and Trade (Japan)</td>
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<tr>
<td>MNCs</td>
<td>multinational companies</td>
</tr>
<tr>
<td>MPS</td>
<td>material product system</td>
</tr>
<tr>
<td>N ach</td>
<td>need for achievement</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Association</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organisation</td>
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<tr>
<td>NFDI</td>
<td>net foreign direct investment</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organisation</td>
</tr>
<tr>
<td>NICs</td>
<td>newly industrialising countries</td>
</tr>
<tr>
<td>NIEO</td>
<td>New International Economic Order</td>
</tr>
<tr>
<td>NToD</td>
<td>net transfers on debt</td>
</tr>
<tr>
<td>OA</td>
<td>Other Assistance</td>
</tr>
<tr>
<td>OAU</td>
<td>Organisation of African Unity</td>
</tr>
<tr>
<td>OAS</td>
<td>Organisation of American States</td>
</tr>
<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OEM</td>
<td>original equipment manufacturing</td>
</tr>
<tr>
<td>OFID</td>
<td>OPEC Fund for International Development</td>
</tr>
<tr>
<td>OFEC</td>
<td>Organisation of Petroleum Exporting Countries</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
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</tr>
<tr>
<td>PPPs</td>
<td>purchasing power parities</td>
</tr>
<tr>
<td>PRI</td>
<td>Institutional Revolutionary Party</td>
</tr>
<tr>
<td>PRS</td>
<td>poverty reduction strategy</td>
</tr>
<tr>
<td>QUALYs</td>
<td>quality-adjusted life years</td>
</tr>
<tr>
<td>RAUI</td>
<td>‘risk aversion causes underinvestment’</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>research and development</td>
</tr>
<tr>
<td>SAL</td>
<td>Structural Adjustment Loan (World Bank)</td>
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<tr>
<td>SAF</td>
<td>Structural Adjustment Facility (IMF)</td>
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<tr>
<td>SECAL</td>
<td>Sectoral Adjustment Loan (World Bank)</td>
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<tr>
<td>SICs</td>
<td>semi-industrialised countries: or severely indebted countries</td>
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<tr>
<td>SNA</td>
<td>System of National Accounts</td>
</tr>
<tr>
<td>TNCs</td>
<td>transnational companies</td>
</tr>
<tr>
<td>TRIPS</td>
<td>Agreement on Trade-Related Aspects of Intellectual Property Rights</td>
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<tr>
<td>TVEs</td>
<td>township and village enterprises</td>
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<tr>
<td>UIA</td>
<td>Union of International Associations</td>
</tr>
<tr>
<td>UMICs</td>
<td>upper-middle-income-countries</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
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<tr>
<td>UNEPTA</td>
<td>United Nations Extended Program of Technical Assistance</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
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<td>UNICEF</td>
<td>United Nations Children Fund</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organisation</td>
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<td>UNITAR</td>
<td>United Nations Institute for Training and Research</td>
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<tr>
<td>UNPF</td>
<td>United Nations Population Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>USSR</td>
<td>Union of Socialist Soviet Republics</td>
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<td>WB</td>
<td>World Bank (see IBRD)</td>
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<td>WDI</td>
<td>World Development Indicators (World Bank)</td>
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<td>WDR</td>
<td>World Development Report (World Bank)</td>
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<td>WDT</td>
<td>World Debt Tables (World Bank)</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>World Health Organization</td>
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<td>WIPO</td>
<td>World Intellectual Property Organisation</td>
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<td>World Resources Institute</td>
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<td>World Tables (World Bank)</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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<td>WWI</td>
<td>World Watch Institute</td>
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