The most popularised concept in the economics of innovation literature has been the national system of innovation (NSI). It was in the late 1980s that the concept that Frederik List coined as the ‘National Political Economy of Production’ took off again with different thinkers writing about the peculiarities and distinctions of the Japanese, American, British, German, East Asian Tigers and other varieties of system construction. Freeman defines National System of Innovation as ‘the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies.’ Richard Nelson defines it as ‘a set of institutions whose interactions determine the innovative performance of national firms. Lundvall defines the system of innovation as the ‘elements and relationships which interact in the production, diffusion and use of new and economically useful knowledge and are either located within or rooted inside the borders of a nation state.’ The normative
assumption is that those nations that succeeded in building economic strength relied on the science, engineering, technology and innovation capability that made them to achieve an innovation advantage to put them ahead in the world, acquiring national or regional economic leadership as the case may be depending on what level of analyses is selected to look at particular failure, success or progress they made.

CONTENTS

Preface
Contributing authors
Introduction

Mammo Muchie and Agathevar Baskaran

Chapter 1

Research Typology and Knowledge Needs for Development in Africa

Robert Joumard and Ménouèr Boughedaoui

Introduction
Different types of research
The knowledge economy
Research system and its connection with development
Producing knowledge locally
Programme to strengthen research developing capabilities in Africa
Conclusion
Notes and references
Chapter 2

Ghana’s Innovation System: What’s wrong with it, and why?

Jo Lorentzen

Introduction

Context

Methodology and data

National innovation system in Ghana

Conclusions and recommendations

Notes and references

Chapter 3

Labour Productivity, Exports and Skills Formation: Comparing Foreign and Local Firms in Kenyan Manufacturing

Geoffrey Gachino

Introduction

Comparing foreign and local firms

Data and methodological approach

Determinants of labour productivity

Determinants of exports

Determinants of skilled labour

Conclusions

Notes and references
Chapter 4

Innovative Approaches to Industrial Utilisation of Cassava in a Developing Economy

Abolaji D. Dada, Godwin A. Ali, Oladele O. Afolabi, and Williams O. Siyanbola

Introduction

Science and technology in agriculture

Cassava production in Nigeria: the trend

Cassava processing and marketing opportunities

Constraints facing the cassava sub-sector in Nigeria

Conclusions and policy recommendations

References

Chapter 5

Enhancing Innovation in Developing Country Systems: A Synthesis of Case Studies and Lessons from Uganda

Kiggundu Rose

Introduction

Theoretical background and analytical framework

Case studies

Comparative overview, concluding observations and policy inferences

Notes and references

Chapter 6

Innovation Financing, Industrial production and the Growth of Nigeria’s Non-oil Exports

Emmanuel Sebastian Akpan, Hodo Bassey Rimam, and Helen Walter Mbot

Introduction

Theoretical background and review of literature
Cross-country innovation strategy and technology acquisition

Methodology

Presentation of empirical result

Conclusions and policy recommendations

References

Chapter 7

**A Firm-Level Analysis of Technological Externality of Foreign Direct Investment in South Africa**

*Abdelrasaq Al-Suyuti Na-Allah and Mammo Muchie*

Introduction

Skill constraints, agglomeration economies and technological externality of FDI debate

Main hypotheses

Model specification, data and variable construction

Results

Conclusions

Notes and references

Chapter 8

**A Consensual Approach to Domain-Partitioning of a Cancer Data Sample Space: Lessons from Tanzania**

*Kassim S. Mwitondi and Khamza K. Maunda*

Introduction

Literature review

Research methodology

Analyses, results and interpretations

Discussions, concluding remarks and potential directions
Chapter 9

Remote Sensing and Geological Investigation of Okemesi Area, Southwestern Nigeria

Olusiji Samuel Ayodele

Introduction
Regional geologic setting
Local geology of the study area
Method of study
Results and discussion
Conclusions

References

Conclusion