

WBI DEVELOPMENT STUDIES

# Knowledge, Technology, and Cluster-Based Growth in Africa

*Edited by*

Douglas Zhihua Zeng

The World Bank  
Washington, D.C.

# Contents

Foreword vii

Acknowledgments ix

1. Knowledge, Technology, and Cluster-Based Growth in Africa:  
Findings from 11 Case Studies of Enterprise Clusters in Africa 1  
*Douglas Zhihua Zeng*
  - The Selected Clusters 1
  - Cluster Origins 2
  - How Do the Clusters Develop and Succeed? 4
  - Are Africa's Clusters Sustainable and Susceptible to Scaling Up? 10
  - Some Policy Implications 12
  - References 13
2. The Suame Manufacturing Cluster in Ghana 15  
*Catherine Nyaki Adeya*
  - Economic Context 16
  - External Economies 17
  - Joint Action 18
  - Knowledge and Technology within the Cluster 19
  - Policy Incentives 21
  - Key Success Factors 22
  - Lessons Learned and Policy Implications 23
  - References 24
3. The Kamukunji Metalwork Cluster in Kenya 25  
*Njeri Kinyanjui*
  - Cluster Origins 26
  - Growth Strategies 27
  - Cluster Composition 28
  - Knowledge and Technology in the Kamukunji *Jua Kali* Cluster 29
  - Key Success Factors 32
  - Lessons Learned and Policy Implications 34
  - Challenges Facing the Cluster 34
  - Recommendations 35
  - References 35
4. The Lake Naivasha Cut Flower Cluster in Kenya 37  
*Maurice Ochieng Bolo*
  - Industry Profile 38
  - The Lake Naivasha Cluster 40
  - Knowledge, Technology, and Networking  
in the Lake Naivasha Cluster 41
  - Policies and Incentives 45
  - Key Success Factors 47

|    |  |    |
|----|--|----|
|    | Challenges Facing the Cluster  | 48 |
|    | Key Lessons and Policy Implications  | 49 |
|    | Conclusion   | 49 |
|    | References   | 50 |
| 5. | The Nnewi Automotive Components Cluster in Nigeria                           | 53 |
|    | <i>Boladale Oluyomi Abiola</i>   |    |
|    | Cluster Profile  | 54 |
|    | The Firms of the Nnewi Cluster   | 55 |
|    | Interfirm Learning and Collaboration   | 58 |
|    | Knowledge and Technology in the Cluster                                      | 60 |
|    | Policy and Incentives  | 61 |
|    | Creating an Enabling Environment—An Unmet Policy Challenge                   | 63 |
|    | Liberalization, Government, and the Competitive Challenge                    | 64 |
|    | References   | 64 |
| 6. | The Otigba Computer Village Cluster in Nigeria                               | 65 |
|    | <i>Boladale Oluyomi Abiola</i>   |    |
|    | Scope and Method of Research   | 66 |
|    | Cluster Profile  | 66 |
|    | Knowledge and Technology Aspects of the Cluster:                             |    |
|    | Interfirm Learning and Collaboration   | 71 |
|    | Export Activities  | 74 |
|    | Policy and Incentives  | 74 |
|    | Key Success Factors  | 75 |
|    | Lessons Learned and Policy Implications                                      | 75 |
|    | References   | 76 |
| 7. | Handicraft and Furniture Clusters in Tanzania                                | 77 |
|    | <i>Flora Musonda, with Catherine Nyaki Adeya and Boladale Oluyomi Abiola</i> |    |
|    | Cluster Profiles   | 78 |
|    | Knowledge and Technology Aspects of the Mwenge<br>and Keko Clusters          | 80 |
|    | Policy and Incentives  | 82 |
|    | Informal and Professional Associations                                       | 83 |
|    | Key Success Factors  | 84 |
|    | Lessons Learned and Policy Implications                                      | 84 |
|    | Sources Consulted  | 85 |
| 8. | The Lake Victoria Fishing Cluster in Uganda                                  | 87 |
|    | <i>Rose Kiggundu</i>   |    |
|    | Profile and Organization of the Clusters                                     | 87 |
|    | Knowledge and Technology in the Clusters                                     | 89 |
|    | Policy and Incentives  | 90 |
|    | Key Success Factors behind the Improvements in Fish Processing               | 93 |
|    | Lessons Learned and Policy Implications                                      | 94 |
|    | References   | 95 |

9. The Textile and Clothing Cluster in Mauritius 97  
*Rojit Sawkut*
  - Profile and Organization of the Sector 97
  - Knowledge and Technology Aspects of the Industry 100
  - Policy and Incentives 102
  - Roles and Activities of Industrial and Commercial Institutions 104
  - Key Success Factors 104
  - Lessons Learned and Policy Implications 106
  - References 108
10. The Wine Cluster in South Africa 109  
*Eric Wood and David Kaplan*
  - Organization of the Cluster 110
  - Knowledge and Technology Aspects of the Cluster 111
  - Policy and Incentives 113
  - Key Success Factors 114
  - Lessons Learned and Policy Implications 117
  - References 118
11. The Western Cape Textile and Clothing Cluster in South Africa 119  
*Rojit Sawkut*
  - Profile and Organization of the Cluster/Sector 120
  - Knowledge and Technology Aspects of the Industry/Cluster 124
  - Policy and Incentives 126
  - Key Success Factors 128
  - Lessons Learned and Policy Implications 129
  - References 130