Seed Trade in Rural Markets

Implications for Crop Diversity and Agricultural Development

Edited by
Leslie Lipper, C. Leigh Anderson and Timothy J. Dalton

Published by
The Food and Agriculture Organization of the United Nations and Earthscan
Contents

List of figures, tables and boxes ix
Foreword xiii
List of contributors xv
List of acronyms and abbreviations xxi

PART I — SETTING THE STAGE

1 Agricultural Markets and the Sustainable Utilization of Crop Genetic Resources 3
Leslie Lipper, Timothy J. Dalton, C. Leigh Anderson and Alder Keleman
Introduction 3
The benefits of managing crop genetic resources 7
Accessibility to seeds and crop genetic resources 9
Allocating crop genetic resources through markets 10
Using markets to promote the sustainable utilization of crop genetic resources: An interdisciplinary and cross-country study 11

2 Markets and Access to Crop Genetic Resources 15
Timothy J. Dalton, C. Leigh Anderson, Leslie Lipper and Alder Keleman
Introduction 15
The importance of local markets 16
Incentives and institutions in exchange 17
Formal and informal systems of seed exchange 19
Access to crop genetic resources (CGR) 21
Conclusions 27

3 Project Methodology: Using Markets to Promote the Sustainable Utilization of Crop Genetic Resources 31
PART II — COUNTRY CASE STUDIES

4  When Grain Markets Supply Seed: Village Markets for Millet and Sorghum in the Malian Sahel  53
Melinda Smale, Lamissa Diakité and Mikkel Grum
Introduction 53
Background 54
Institutional features 54
Market-sheds 57
Market analysis 58
Conclusions 72

5  Potato Seed Supply and Diversity: Dynamics of Local Markets of Cochabamba Province, Bolivia — A Case Study  75
Connie Almekinders, Romina Cavatassi, Fabio Terceros, Rene Pereira Romero and Lina Salazar
Introduction 75
Market analysis 78
Access to crop genetic resources 83
Discussion 90
Conclusions 92

6  Pigeonpea Seed Supply and Diversity: A Case Study of Local Seed Markets in Makueni District, Eastern Kenya  95
Patrick Audi, Latha Nagarajan, Richard Jones and Mohamed Somo Ibrahim
Introduction 95
Policy-setting 97
Market analysis 100
Causes for variation of pigeonpea seed supply in local markets 117
Summary and conclusions 121

7  Access to Minor Millet Genetic Resources in Rural Market Towns of Dharmapuri District, Tamil Nadu, India  125
Latha Nagarajan, E. D. I. Oliver King, Melinda Smale and Timothy J. Dalton
Introduction 125
Sampling and data 127
Market physical characteristics 129
Vendor characteristics 131
Access to minor millet genetic resources 134
Conclusions 145

8 Mexico: Maize and Chiapas Case Study 151
Jon Hellin, Alder Keleman, Mauricio R. Bellon, and Joost van Heerwaarden
Introduction 151
Background: Study site and institutional context 153
Methodology 156
Access to crop genetic diversity in markets: Empirical evidence 159
Diversity impacts of the formal seed sector 179
Conclusions 181

PART III — SYNTHESIS AND CONCLUSIONS

9 Synthesis: Markets, Seed Systems and Crop Diversity 189
Mauricio R. Bellon, C. Leigh Anderson, Leslie Lipper, Timothy J. Dalton,
Alder Keleman and Mikkel Grum
Introduction 189
Summary case observations across thematic questions 191
Synthesis of findings on the factors affecting access to crop genetic
resources (CGR) 203
Conclusions 207

10 Conclusions and Policy Implications 209
Leslie Lipper, C. Leigh Anderson, Timothy J. Dalton and Alder Keleman
Introduction 209
Factors underlying the variation in access to CGR in local markets 210
How effective are local markets in providing access to CGR? 212
Is seed trade in local markets likely to provoke genetic erosion and
vulnerability? 214
Formal and informal linkages 216
What are the implications of these findings for policy/programmes? 218

Index 223