

Table of Contents

Acknowledgements	5
Editor's preface	7
Abbreviations	13
List of Figures	17
List of Tables	21
List of Boxes	23
1. Introduction	25
1.1 Current state of research	26
1.2 Research objectives and scope of the study	27
1.3 Methodology and data availability	28
1.4 Structure of thesis	29
Part I: Theory and Concept	31
2. Food and nutrition security – theoretical conceptualization	33
2.1 Food and Nutrition Security: Theoretical foundations	34
2.1.1 Fundamental theoretical approaches to Food and Nutrition Security	34
2.1.2 Relationship between food, nutrition and human development	40
2.2 Food and Nutrition Security definition(s)	43
2.2.1 Food security and nutrition security – definitions and concepts	44
2.2.2 Food and Nutrition Security in a global context	53
2.3 The conceptual framework of Food and Nutrition Security	55
2.3.1 The four dimensions of Food and Nutrition Security	56
2.3.2 Food and Nutrition Security on socio-organizational levels	61
2.3.3 Measuring Food and Nutrition Security: A review of indicators and indices	63

Table of Contents

2.4	Conclusion: The multidimensional concept of Food and Nutrition Security	68
Part II:	Setting of the Research Object and Methodology	71
3.	A socio-economic development analysis of the Caribbean	73
3.1	History of the Caribbean and Caribbean development theories	74
3.1.1	History of the Caribbean: From colonization to independence	74
3.1.2	Caribbean development theories and strategies	78
3.2	Regional mapping and different classifications of the Caribbean	82
3.2.1	Regional mapping and a geographical definition of the Caribbean	82
3.2.2	Different international development classifications of the Caribbean	84
3.3	Economic, social and demographic structure of the Caribbean	88
3.3.1	A social and demographic overview	89
3.3.2	Structure of the economies and economic vulnerability	97
3.4	Conclusion: Commonality and diversity in the Caribbean	110
4.	A cluster analysis on vulnerability and Food and Nutrition Security in the Caribbean	113
4.1	Vulnerability and Food and Nutrition (In-)Security in the Caribbean	113
4.1.1	Vulnerability in the context of Food and Nutrition Security in the Caribbean	114
4.1.2	The four dimensions of Food and Nutrition (In-)Security in the Caribbean	116
4.1.3	Measuring Food and Nutrition (In-)Security in the Caribbean	127
4.2	A cluster analysis of Food and Nutrition Security in the Caribbean	129
4.2.1	Selected Caribbean countries	130
4.2.2	Underlying data and indicators	131

4.2.3	Methodology	133
4.2.4	Results and discussion	134
4.2.5	Final results and conclusion	143
4.3	Conclusion: The Caribbean Food and Nutrition Security situation revealed	145
Part III:	Problem Analysis and Implications	147
5.	Implications of food imports on Food and Nutrition Security in the Caribbean	149
5.1	The causes of food import dependency in the Caribbean	150
5.1.1	Agricultural trade and domestic food production in the Caribbean	151
5.1.2	Food import structure and food balances	162
5.1.3	Food Self-Sufficiency, Food Import Capacity, and Food Import Dependency	170
5.2	Implications of food imports in the Caribbean countries	178
5.2.1	Implications of agricultural trade liberalization in the Caribbean	179
5.2.2	Implications of food imports and food import dependency	181
5.3	The burden of the Caribbean Food Import Bill	184
5.3.1	The high costs of food imports	184
5.3.2	Financial and economic concern related to the Caribbean food import bill	194
5.4	Conclusion: The high burden of food imports in the Caribbean	197
6.	Economic and social burden of nutrition related diseases in the Caribbean	201
6.1	Food consumption and nutrition related diseases in the Caribbean	202
6.1.1	Caribbean consumption patterns	202
6.1.2	Risk factors and nutrition related diseases in the Caribbean	210
6.2	The growing concern of Non-communicable Diseases in the Caribbean	217

Table of Contents

6.3	Economic, social and health burden of Non-communicable Diseases in the Caribbean	225
6.3.1	Public health situation in the Caribbean	226
6.3.2	The economic and social burden of Non-communicable Diseases in the Caribbean	230
6.4	Conclusion: Health investments are crucial to address Non-communicable Diseases in the Caribbean	236
7.	Final conclusion: The double burden creates a twin challenge in the Caribbean	239
	Bibliography	249
	APPENDICES	269
	Appendix A: FAO's suite of Food Security Indicators	271
	Appendix B: Net per capita production index (2004-2006=100), Caribbean countries, 1990-2011	272
	Appendix C: Final data of the three selected indicators for the cluster analysis, mean value, 2000-2011	273
	Appendix D: Cluster membership of Caribbean countries	274
	Appendix E: Standard International Trade Classification (SITC) Revision 3, UNCTAD, 12 June 2013	275
	Appendix F: Gross National Savings (GNS), (in % of country's GDP), Caribbean countries, 2002, 2006, 2008, 2010	278
	Appendix G: Prevalence of hypertension and diabetes rates, (in % of total population), Caribbean countries, 2011/2013	279
	Appendix H: Prevalence of overweight and obesity (BMI \geq 25), (in % of population), adults (>30 years) females and males, Caribbean countries, 2002-2015*	280
	Appendix I: Selected health indicators, Caribbean countries, 2000 and 2011	281
	Appendix J: Public health expenditure, private health expenditure, and out-of-pocket expenditure, Caribbean countries, 2011	282