

TABLE OF CONTENTS

ABSTRACT	II
TABLE OF CONTENTS.....	III
LIST OF TABLES	V
LIST OF FIGURES	VI
ACRONYMS AND ABBREVIATIONS	VII
1 INTRODUCTION.....	8
2 STANDARDS	10
2.1 CONCEPT AND CLASSIFICATION OF STANDARDS	10
2.2 STANDARDS IN THE AGRI-FOOD SECTOR.....	10
2.2.1 <i>Evolution of agri-food standards.....</i>	10
2.2.2 <i>Potential advantages and disadvantages of standards.....</i>	12
2.3 ORGANIC STANDARDS AND CERTIFICATION	13
2.3.1 <i>Characteristics and some practical issues of organic standards.....</i>	13
2.3.2 <i>The organic certification issue</i>	14
2.3.3 <i>Organic standards worldwide</i>	15
2.3.4 <i>Organic standards in Colombia</i>	18
3 THE ORGANIC SECTOR	19
3.1 THE ORGANIC MARKET WORLDWIDE.....	19
3.1.1 <i>Supply</i>	20
3.1.2 <i>Demand</i>	20
3.2 THE ORGANIC SECTOR IN LATIN AMERICA.....	21
3.2.1 <i>Supply</i>	22
3.2.2 <i>Demand</i>	23
3.2.3 <i>Strengths and opportunities of the organic sector.....</i>	24
3.2.4 <i>Weaknesses and problems of the organic sector.....</i>	24
3.2.5 <i>Challenges of the organic sector.....</i>	25
3.3 THE ORGANIC SECTOR IN COLOMBIA	26
3.3.1 <i>Main characteristics of the organic sector.....</i>	26
3.3.2 <i>Supply</i>	27
3.3.3 <i>Demand</i>	27
4 RELIABILITY OF THE ORGANIC CERTIFICATION	29
4.1 ORGANIC CERTIFICATION AS MARKET INSTRUMENT.....	29
4.2 OPPORTUNISTIC BEHAVIOR AND FRAUD IN THE ORGANIC SECTOR	30
4.3 RELIABILITY OF THE ORGANIC CERTIFICATION: THE DEMAND VIEWPOINT	31
4.4 RELIABILITY OF THE ORGANIC CERTIFICATION: THE PRODUCTION VIEWPOINT	31
5 CONCEPTUAL FRAMEWORK	33
5.1 THE RESEARCH MODEL	33
5.1.1 <i>Definition of concepts.....</i>	33
5.1.2 <i>Hypotheses.....</i>	36
5.2 SAMPLING AND DATA COLLECTION	37
5.3 METHODS OF DATA ANALYSIS	39
5.3.1 <i>Descriptive statistics.....</i>	39
5.3.2 <i>Factor analysis.....</i>	39
5.3.3 <i>Regression analysis</i>	40

6 RESULTS AND ANALYSIS.....	41
6.1 DESCRIPTIVE STATISTICS	41
6.1.1 <i>Farm/company characteristics</i>	41
6.1.2 <i>Producers characteristics</i>	43
6.1.3 <i>Strengths and weaknesses of the organic sector</i>	44
6.2 VARIABLES ASSESSMENT	45
6.2.1 <i>Independent variables</i>	46
6.2.2 <i>Dependent variables</i>	52
6.2.3 <i>Target variables</i>	53
6.3 FACTOR AND RELIABILITY ANALYSES.....	54
6.3.1 <i>Independent variables</i>	55
6.3.2 <i>Dependent variables</i>	55
6.3.3 <i>Target variables</i>	55
6.4 REGRESSION AND CORRELATION ANALYSES.....	55
6.4.1 <i>Relationship between independent and dependent variables</i>	57
6.4.2 <i>Relationship between dependent and target variables</i>	59
6.5 HYPOTHESES TESTING	60
6.6 MODIFIED MODEL FOR THE ASSESSMENT OF THE RELIABILITY OF ORGANIC CERTIFICATION	62
6.7 THE RELIABILITY OF ORGANIC CERTIFICATION IN BRAZIL, COSTA RICA AND COLOMBIA	64
7 CONCLUSIONS	67
REFERENCES.....	69
APPENDICES	74
APPENDIX 1. COLOMBIA. DISTRIBUTION OF CERTIFIED ORGANIC LAND AND NUMBER OF OBSERVATIONS BY DEPARTMENT	75
APPENDIX 2. ANSWERED QUESTIONNAIRE USED IN THE SURVEY.....	76
APPENDIX 3. REGRESSION MODELS	84
APPENDIX 4. PEARSON'S CORRELATIONS	88

LIST OF TABLES

Table 1. Latin America. Main organic products	23
Table 2. Colombia. Main organic products.....	28
Table 3. Farms/companies main characteristics.....	42
Table 4. Producers main characteristics.....	43
Table 5. Strengths of organic farming.....	44
Table 6. Weaknesses of organic farming	45
Table 7. Results of the statements assessing perceived usefulness.....	47
Table 8. Results of the statements assessing perceived certification costs	48
Table 9. Results of the statements assessing motivations	49
Table 10. Results of the statements assessing sources of control	50
Table 11. Results of the statements assessing attitudes towards risk.....	51
Table 12. Results of the statements assessing attitudes towards the CB.....	51
Table 13. Results of the statements assessing attitudes towards the auditor.....	52
Table 14. Results of the statements assessing perceived reliability of organic farming	53
Table 15. Results of the statements assessing reliability at the farmer level	53
Table 16. Results of the statements assessing reliability of the certification process	53
Table 17. Results of the statements assessing satisfaction.....	54
Table 18. Results of the statements assessing credibility.....	54
Table 19. Results of the statements assessing good reputation.....	54
Table 20. Extracted factors of independent variables	56
Table 21. Extracted factors of dependent variables	57
Table 22. Reformulated and tested hypotheses for independent and dependent variables	61
Table 23. Descriptive statistics: Brazil, Costa Rica and Colombia.....	65
Table 24. Model to assess the reliability of organic certification: Brazil, Costa Rica and Colombia.....	66

LIST OF FIGURES

Figure 1. Basic structure of the organic certification system	15
Figure 2. World. The ten countries with more organic land. 2006	20
Figure 3. World. The ten developing countries with more organic land. 2006.....	22
Figure 4. Colombia. Evolution of certified organic land. 2001-2008	27
Figure 5. Research model to study the reliability of the organic standard.....	34
Figure 6. Relations between independent variables and “perceived reliability”.....	58
Figure 7. Relations between independent variables and “reliability at the farmer level”	58
Figure 8. Relations between perceived reliability and target variables.....	60
Figure 9. Relations between reliability at the farmer level and target variables	60
Figure 10. Modified model for the assessment of reliability of organic certification.....	63

ACRONYMS AND ABBREVIATIONS

AGROBAN	Baby banana famers association of Pueblo Rico
APECAFEQ	Small coffee growers association of Quinchía
CARs	Colombian Regional Autonomous Corporations
CARDER	Risaralda Regional Autonomous Corporation
CB	Certification Body
CVC	Valle del Cauca Regional Autonomous Corporation
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GLOBALGAP	Global Partnership for Good Agricultural Practice
GMO	Genetically Modified Organism
Ha	Hectare
IAP	IFOAM Accreditation Program
IFOAM	International Federation of Organic Agriculture Movements
ISO	International Organization for Standardization
JAS	Food labeling & Japanese Agricultural Standard
KMO	Kaiser-Meyer-Olkin statistics
MADR	Colombian Ministry of Agriculture and Rural Development
NGO	Non-Governmental Organization
NOP	US National Organic Program
PGS	Participatory guarantee systems
PNAE	Colombian Organic Agriculture National Program
SIC	Colombian Superintendence of Industry and Commerce
TAM	Technology Acceptance Model
TBT	Technical barriers to trade
TPC	Third-party certification
UNCTAD	United Nations Conference on Trade and Development
US	United States
WHO	World Health Organization
WTO	World Trade Organization