

# Contents

1. Introduction .....	1
2. Sustainability .....	3
2.1 The Evolution of the Concept.....	5
2.1.1 The Limits to Growth .....	5
2.1.2 The Stockholm Conference and the Brundtland Commission .....	8
2.1.3 The Rio Summit in 1992 .....	10
2.1.4 After Rio 1992.....	12
2.2 Definition.....	13
2.2.1 General Definition .....	14
2.2.2 Sustainability as a Concept.....	15
2.3 Intra- and Intergenerational Justice.....	18
2.3.1 Justice and Fairness .....	19
2.3.2 Calculation .....	21
2.4 Institutions to Further Sustainable Development .....	23
2.5 Characteristics of Sustainability .....	28
2.6 Sustainability Models .....	31
2.6.1 The Pillar Models .....	32
2.6.2 Sustainability Triangle.....	35
2.6.3 Sustainability Circles.....	37
2.6.4 The HGF Sustainability Model.....	39
2.7 The Dimensions of Sustainability .....	40
2.7.1 The Ecological Dimension .....	41
2.7.2 The Economic Dimension .....	47
2.7.2.1 Politics .....	48
2.7.2.2 Consumers .....	49
2.7.2.3 Companies .....	51

- 2.7.3 The Social Dimension ..... 54
- 2.8 Summary ..... 58
  
- 3. Realizing Sustainable Development ..... 59
  - 3.1 Past Achievements ..... 60
    - 3.1.1 Citizens ..... 60
    - 3.1.2 Companies ..... 64
    - 3.1.3 Politicians and Scientific Assessment ..... 65
  - 3.2 Strategies for Sustainable Development ..... 69
    - 3.2.1 Overview ..... 69
    - 3.2.2 Strategies ..... 70
    - 3.2.3 Sustainable Development Strategies ..... 71
    - 3.2.4 Sustainable Development Rules ..... 73
    - 3.2.5 Sustainability Management in Germany ..... 77
  - 3.3 Challenges in Implementing Sustainable Development ..... 80
    - 3.3.1 Communicational Challenges ..... 81
    - 3.3.2 Challenges in Society ..... 82
    - 3.3.3 Scientific Challenges ..... 88
      - 3.3.3.1 The Concept of Sustainability ..... 88
      - 3.3.3.2 Connecting Fields of Research ..... 89
      - 3.3.3.3 Defining and Measuring (Future) Needs ..... 90
    - 3.3.4 Structural Political Challenges ..... 91
      - 3.3.4.1 Institutional Collaboration ..... 92
      - 3.3.4.2 Enforceability of the Sustainability Concept ..... 93
      - 3.3.4.3 Self-Interest of Stakeholders ..... 93
      - 3.3.4.4 Temporal Considerations ..... 98
      - 3.3.4.5 Costs ..... 100
      - 3.3.4.6 Communication ..... 101
    - 3.3.5 International Challenges ..... 102
  - 3.4 Summary ..... 104

4.	Sustainability and Labor.....	107
4.1	The Importance of Labor.....	107
4.2	Labor Market Policy.....	110
4.3	Labor Market Policy Measures.....	113
4.3.1	Measures.....	115
4.3.1.1	Passive Labor Market Policy Measures.....	115
4.3.1.2	Active Labor Market Policy Measures.....	116
4.3.1.3	Company Measures.....	118
4.3.1.4	Macroeconomic Measures.....	119
4.3.2	Labor Market Policy Measures in Germany.....	120
4.4	Sustainable Labor Market Policy.....	122
4.4.1	The Economic Dimension of Sustainable Labor Market Policy.....	123
4.4.2	The Ecological Dimension of Sustainable Labor Market Policy.....	124
4.4.3	The Social Dimension of Sustainable Labor Market Policy.....	128
4.4.4	Intragenerational Justice and Sustainable Labor Market Policy.....	129
4.5	Summary.....	130
5.	Indicators.....	131
5.1	Introduction.....	132
5.2	Basic Requirements for Indicators.....	132
5.3	Types of Indicators.....	137
5.3.1	Single Primary Data Indicators.....	138
5.3.2	Indicator Sets.....	139
5.3.3	Aggregated Single Indices.....	139
5.4	Building Indicators.....	140
5.5	Sustainability Indicators.....	141
5.6	The Applied Use of Indicator Systems.....	145
5.6.1	Sustainability Indicator Systems in Germany.....	145
5.6.2	International Sustainability Indicator Systems.....	147
5.7	Wellbeing and Indicator Systems.....	151

5.8	Summary.....	155
6.	Evaluation.....	157
6.1	Introduction and Definition .....	157
6.2	The Tasks of Evaluation .....	159
6.3	Basic Principles of Evaluation .....	161
6.4	The Evaluation Process.....	165
6.5	Evaluation Methods .....	167
6.6	Types and Models of Evaluation .....	170
6.7	Challenges to Evaluation .....	173
6.7.1	Methodical Challenges .....	173
6.7.2	Human Challenges .....	174
6.8	Policy Evaluation.....	175
6.9	Evaluating Labor Market Policies .....	178
6.9.1	Labor Market Policy Evaluation.....	178
6.9.2	Challenges for the Evaluation of Labor Market Policy .....	181
6.10	Evaluating Sustainability .....	185
6.11	Summary.....	186
7.	Indicators for the Evaluation of Sustainable Labor Market Policy.....	187
7.1	Criteria for Sustainability Indicators.....	187
7.1.1	Explanatory Aspects.....	187
7.1.2	Technical Aspects.....	188
7.2	Micro-level Indicators.....	189
7.2.1	Net-Costs of the Measure .....	190
7.2.2	Integration of Participants into the Formal Labor Market .....	191
7.2.3	Quality-of-Job Indicators.....	192
7.2.3.1	Long Working Hours .....	192
7.2.3.2	Commuting Time.....	193
7.2.3.3	Quality of Work Life .....	194

7.3	Macro-level Indicators.....	194
7.3.1	Influence of LMP on Labor Productivity .....	195
7.3.2	Influence of LMP on GDP per Capita .....	196
7.3.3	Employment Indicators .....	197
7.3.3.1	Employment Rate .....	197
7.3.3.2	Precarious Employment.....	198
7.3.3.3	Long-term Unemployment Rate .....	199
7.3.4	Income Poverty.....	200
7.3.5	Education Indicators.....	201
7.3.5.1	Adult Secondary/Tertiary Schooling Attainment Level.....	201
7.3.5.2	Life-long Learning.....	202
7.3.6	Work Accidents and Occupational Illnesses.....	202
7.3.7	Income Inequality .....	203
7.3.8	Number of Decent Green Jobs in Green Industries .....	204
7.4	Summary .....	205
8.	Conclusion.....	207
9.	Publication bibliography .....	209