

Contents

Introduction. The Role of Agriculture in the Making of the City . . .	xi
Gwenn PULLIAT	
Part 1. Spaces.	1
Chapter 1. The Urban Vegetable Garden: A Socioecological Component of the City.	3
Thi-Thanh-Hien PHAM and Paul Émile TCHINDA	
1.1. Introduction.	3
1.2. Definitions of the vegetable garden.	6
1.3. Historical significance of vegetable gardens	8
1.4. What vegetable gardens tell us about how cities are made	9
1.4.1. Factors determining the composition of urban vegetable gardens.	10
1.4.2. Spatial dynamics of the city as seen through the vegetable garden	14
1.4.3. Temporal dynamics of the city	16
1.4.4. Sociodemographic and economic dynamics of the city.	19
1.4.5. Political dynamics of the city	20
1.5. Conclusion	23
1.6. References	23

Chapter 2. Unequal Access to Agricultural Land within Cities	31
Angèle PROUST	
2.1. Introduction.	31
2.2. Urban agriculture as a testament to social, spatial and historical injustices in São Paulo	34
2.2.1. The metropolization of poverty in São Paulo since the 1970s. . . .	34
2.2.2. Subsistence gardens on the margins: a buffer against exclusion with material and symbolic value	36
2.2.3. Access to land limited by the practical conditions of agriculture	38
2.3. Eco-gentrification: limits and challenges of shared gardens	40
2.3.1. Urban gardens driving new theory and policy on urban agriculture in São Paulo	40
2.3.2. The roots of community gardens: class relations and the reproduction of symbolic capital.	45
2.3.3. Speculative mechanisms incompatible with the right to the city.	47
2.4. Nature in the city and agriculture: an ambiguous relationship	49
2.4.1. Urban agriculture that is environmentally compatible with urban capitalism	49
2.4.2. High-tech, high-performance urban farming models: the future of urban agriculture?.	50
2.5. Conclusion	52
2.6. References	53
Chapter 3. The Reconfiguration of a Peri-urban Market Gardening Plain	59
Isabelle DUVERNOY	
3.1. Introduction: market gardening, from decline to urban demand	59
3.2. Agriculture in urban policies.	61
3.3. Agricultural areas and activities in and around Toulouse	62
3.4. Public control and projects in an urban market gardening area	67
3.4.1. A market gardening plain in a context of rapid urbanization	67
3.4.2. Preserving, regulating and redeveloping agricultural land: an analysis based on public studies and regulations.	69
3.4.3. Preserving agricultural land: for what kind of agriculture? For what kind of farmers?.	74
3.4.4. Connecting the market gardening plain to city life	76

3.5. Conclusion	77
3.6. References	78
Part 2. Stakeholders	83
Chapter 4. Urban Agriculture and Food Assistance	85
Camille HOCHEDÉZ	
4.1. Introduction.	85
4.2. Food assistance: an emergency measure that worsens the disconnect between vulnerable urban populations and agricultural resources	88
4.2.1. Food assistance: a diverse field of action	88
4.2.2. Food assistance mechanisms and stakeholders: a spatial blind spot?	91
4.2.3. Emergency assistance that is unsatisfactory in nutritional and democratic terms, revealing food injustices.	93
4.3. Initiatives to reconnect vulnerable populations with local agricultural resources: toward a relocalization of food assistance	97
4.3.1. Improving access to fresh, healthy food for disadvantaged people by relocalizing food solidarity	98
4.3.2. Participation in urban agriculture: a way to involve vulnerable populations in their food choices.	102
4.4. Dynamics and experiences of relocalizing food assistance in a medium-sized French city: the example of Poitiers	106
4.4.1. Poitiers, a medium-sized city facing significant social and food challenges	107
4.4.2. Experiments in relocalizing food assistance in medium-sized cities	111
4.4.3. Proposals to improve food justice by reconnecting vulnerable consumers with productive areas.	115
4.5. Conclusion	117
4.6. References	119
Chapter 5. Commercial Urban Agriculture in Global City Centers	123
Ségoène DARLY and Kristin REYNOLDS	
5.1. Commercial agriculture diversifying within cities	123
5.1.1. Producing food in cities for the urban market	123

5.1.2. From subsistence farming to entrepreneurial activity: a continuum of socioeconomic forms of agriculture	124
5.2. Access to land: a policy framework with variable constraints	131
5.3. Trend toward increased polarization in urban agriculture.	131
5.4. Conclusion	133
5.5. References	133
Chapter 6. Peri-urban Farmers Navigating Multiple Expectations	139
Héloïse LELOUP	
6.1. Introduction.	139
6.2. Agriculture as seen by urban dwellers: the emergence of new expectations and new functions for the activity	142
6.2.1. Changes in food demands	143
6.2.2. Transforming the role of agriculture in cities: a shift toward more human-centered urban planning?	146
6.3. Urban farmers: between adapting to the city and the persistence of existing models.	151
6.3.1. Historical overview of an activity focused on the export market	152
6.3.2. Land relegated to the metropolitan outskirts, between Lima and the provinces	154
6.3.3. An activity doubly disconnected from the urban environment	156
6.4. Adapting to the city's demands: unprecedented ambiguities	159
6.4.1. Market gardening, a classic response to urban demands and constraints	159
6.4.2. Commercial agricultural logic under scrutiny	161
6.4.3. Land-use change: opportunity or adversity?	165
6.5. Conclusion	166
6.6. References	167
Part 3. Environment.	177
Chapter 7. The Environmental Services of Urban Agriculture	179
Gwenn PULLIAT	
7.1. A wide range of environmental services provided by agricultural areas at multiple scales.	180
7.1.1. Thermal regulation and urban heat islands	180

7.1.2. Hydrological functions and water management	184
7.1.3. A role in urban biodiversity	184
7.1.4. Improving the urban environment	185
7.1.5. Green spaces or agricultural areas?	185
7.2. A special place within the urban setting	186
7.2.1. Urban agriculture and urban metabolism	187
7.2.2. The urban ecosystem: an ecosystem services approach.	188
7.2.3. Urban and peri-urban agriculture as components of environmental policies	189
7.3. How can we assess the environmental functions of urban and peri-urban agricultural lands?	190
7.3.1. Difficult assessment but consensus on multifunctional value . . .	190
7.3.2. Agricultural areas in an urban setting: challenges of coexistence	191
7.4. Conclusion	192
7.5. References	193
Chapter 8. Agriculture in Environmental Risk Management.	197
Gwenn PULLIAT	
8.1. Agricultural areas in flood risk management	198
8.1.1. Flood management measures in Bangkok.	198
8.1.2. Peri-urban agricultural areas: dual pressures from urbanization and flooding	200
8.2. Agricultural areas and urban development: what role should agricultural areas play in urban planning?	204
8.2.1. The challenges facing urban environmental governance	204
8.2.2. Agriculture in the city: social issues and perspectives	209
8.3. Conclusion	211
8.4. References	211
Chapter 9. Gardening in the Post-industrial City.	215
Louise CLOCHEY	
9.1. Introduction.	215
9.2. The socio-environmental challenges of urban gardening	217
9.2.1. Urban political ecology, gardening and industry.	217
9.2.2. The industrial city: a space marked by significant and evolving power relations	220
9.2.3. The specific case of the environment	222

9.2.4. Gardening: the sentinel of urban socio-environmental change and a political tool for tackling poverty	225
9.3. Daily practices and micro-politics in two community gardens in Dunkirk: a case study in political ecology	229
9.3.1. Rehabilitating urban wasteland and raising environmental awareness through partially food-producing plant cover.	229
9.3.2. Reshaping working-class relationships with the environment through agroecology: a “reconnection effort” disconnected from local realities?	235
9.3.3. A critical perspective on the relationship between industry, gardening and the environment.	239
9.4. Conclusion	242
9.5. References	244
Conclusion	253
Gwenn PULLIAT	
List of Authors	255
Index	257