

International Law and Agroecological Husbandry

Building legal foundations for
a new agriculture

John W. Head

 **Routledge**
Taylor & Francis Group
LONDON AND NEW YORK

earthscan
from Routledge

Contents

<i>About the author</i>	ix
<i>Preface</i>	xi
<i>About this book</i>	xi
<i>About natural systems agriculture</i>	xii
<i>About my legal proposals</i>	xiv
<i>About the larger context of crisis</i>	xvi
<i>List of illustrations</i>	xix
<i>Notes on usages, citations, and abbreviations</i>	xxi
<i>Acknowledgements</i>	xv
PART I	
Orientation and preview	1
1 Reconceptualizing agriculture and its legal framework	3
I. <i>Three theses</i>	3
II. <i>What is “modern extractive agriculture”?</i>	4
IIA. <i>My own competing interests</i>	4
IIB. <i>Traditional, extractive, fossil-carbon-based, industrial, modern?</i>	5
IIC. <i>An even longer view of ecospheric development</i>	29
III. <i>Preview: fundamental changes in agriculture and law</i>	33
PART II	
The failure of modern extractive agriculture	37
2 Modern extractive agriculture is economically unsustainable	39
I. <i>Concentration and its implications</i>	40
IA. <i>Farming’s peculiar perils</i>	40
IB. <i>Countering the peculiar perils</i>	45
IC. <i>A narrow set of crops</i>	48

- II. *But what about systemic economic sustainability?* 50
- III. *World food supply as a trump card?* 69
- IV. *A summing-up on economic unsustainability* 74

3 Modern extractive agriculture is ecologically and socially unsustainable

77

- I. *Modern extractive agriculture is ecologically unsustainable* 78
 - IA. An instructive illustration – ecological destruction and agricultural conversion of grasslands 78
 - IB. Environmental damage done by agriculture more generally 83
 - IC. A summing-up on environmental unsustainability 104
- II. *Modern extractive agriculture poses undue risks to human health* 105
 - IIA. Introductory comments 105
 - IIB. Agricultural chemicals: too much use and too little caution 107
 - IIC. Genetic technology: privatization, short-sightedness, and anthropocentrism 111
 - IID. Food-borne illnesses: haste, waste, and resistance 114
 - IIE. Obesity: yet-uncriminalized stacking of the subsidies deck 116
- III. *Modern extractive agriculture goes historically and socially “against the grain” of human development* 117
 - IIIA. Before industrialized agriculture: going “with the grain” 117
 - IIIB. The Native American agricultural experience 120
 - IIIC. The Green Revolution and “industrial” agriculture 123

PART III

The promise of agroecological husbandry

133

4 What is agroecological husbandry?

135

- I. *Etymology, science, perspective, and history* 136
 - IA. An etymological approach 136
 - IB. The ecosystem as the standard 138
 - IC. Husbandry over production 140
 - ID. The historical roots of agroecological husbandry 144
- II. *Exploring perennial polycultures more closely* 148
 - IIA. Searching for the missing combination 148
 - IIB. Metaphor A: humanity’s journey toward food security 152

- III. *Projections for an agroecological future* 158
 - IIIA. “New roots” projections – globalized and updated 159
 - IIIB. Land husbandry 161
 - IIIC. Plant species and animal species 168
 - IIID. Global human population 172
 - IIIE. Energy 174
 - IIIF. Economics 176

5 Realizing the advantages of agroecological husbandry over modern extractive agriculture **181**

- I. *What might be preferable about agroecological husbandry?* 182
 - IA. Addressing economic, ecological, and health-related problems 182
 - IB. Bringing food production closer to nature 188
- II. *Prospects for success in moving toward agroecological husbandry* 201
 - IIA. Progress thus far – general acceptance of perennial polyculture science 201
 - IIB. Progress thus far – specific development of perennial polyculture crops 204
 - IIC. Frequently asked questions 232

PART IV

Building new legal foundations for agroecological husbandry **241**

6 Necessary changes in substantive national law **243**

- I. *Counteracting the economic, ecological, health, and social unsustainability of modern extractive agriculture* 245
 - IA. Legal changes to counter economic unsustainability 245
 - IB. Legal changes to counter ecological unsustainability 251
 - IC. Legal changes to counter human–health risks of modern extractive agriculture 260
 - ID. Legal changes to counter the fact that modern extractive agriculture goes “against the grain” of human development 263
- II. *Making the necessary legal reforms: the US context* 265
 - IIA. Envisioning and enacting a 50-year farm bill 265
 - IIB. Embracing other proposals and critiques 278

7	A new collaborative global legal framework for agroecological husbandry	290
	I. <i>Collective ambition, natural reinvigoration, and the necessity of restraint</i>	291
	II. <i>A Global Convention on Agroecology: designing a new treaty system</i>	296
	IIA. Preamble and Principles	296
	IIB. Responsibilities of Contracting States	306
	IIC. Other provisions of the Convention	321
	III. <i>A question of practicalities: is such a treaty system impossible or essential?</i>	324
	IIIA. Precaution, technology, and research in an agroecological context	325
	IIIB. Reorienting economics	331
	IIIC. The most urgent emergency: climate change and agriculture	337
	IIID. The feasibility of a duty of cooperation	343
	PART V	
	Conclusion	351
8	Pluralistic sovereignty and eco-states?	353
	I. <i>A nutshell account of “monolithic sovereignty”</i>	354
	IA. Bodin, Hobbes, and Grotius: building a Westphalian sovereignty	354
	IB. Sovereignty elaborated and celebrated: the eighteenth century to today	363
	IC. Recent exceptions to “monolithic sovereignty”	368
	II. <i>“Pluralistic sovereignty”: blended authority in global eco-states</i>	373
	IIA. A survey of ecozone clustering	374
	IIB. Pluralistic sovereignty: a tentative account and Metaphor B	380
	III. <i>Closing observations</i>	394
	<i>Appendix A “bare-bones legal and policy brief”: building worldwide legal foundations for a new agriculture</i>	397
	<i>Selected bibliography</i>	408
	<i>Index</i>	412