

Index

4C See Common Code for the Coffee auditor behavior 192-195 Community (4C) delegation of enforcement authority price premium 106 to 69-70, 224-225 4C Association 95 fees 191 Abbott, Kenneth 6, 259 hypothesis 72 access to medical attention Auld, Graeme 6, 14 private regulation of 144-146 Australia 20 results 146-150 authority trap 258 accreditation 70, 190 Ayres, Ian 48, 172 hypothesis 72 Africa 17, 86, 159, 228, 253 Bacon, Christopher 111 agrochemical storage facilities 146, 157 Bardach, Eugene 14, 66, 67, 194 costs of 150 barriers to entry 13, 61, 62, 63, 90, 98, impact of trainings on 215 private regulation of 144-146 Bartley, Tim 6, 257, 259, 260 results 146-150 Bernauer, Thomas 43 agroecology 78 See also agroforestry; Bernstein, Henry 83 Bernstein, Steven 5, 97 land sharing agroforestry 84, 84-85, 87, 91, 130, best practice reminders 129 175-176, 181-184 binding rules See also critical private regulation of 168 requirements; zero tolerance results 171-176 requirements Ahold 94 impact on outcome additionality aiming big 256 207-210 Akovi, Kevin 216 biodiversity biological corridors 27, 78, 182, 194 Albersmeier, Friederike 224 alternative trade organizations 89 hot spots 4, 16, 74, 179, 181-184 impacts 168, 184 alternative value creation 249 aquatic ecosystem protection improvements 168, 175, 239, 251 private regulation of 170-171 protection 35, 77, 78, 92, 126, 130, results 171-176 178, 262 Blackman, Allen 209 Asia 17, 22, 86, 228, 253, 263 Association of Coffee Producing boom and bust cycles 79, 82, 83, 227, Countries 229 236 atomization of producers 48, 115, 230 Bose, Arshiya 176, 210 auditing organization oversight Bosselman, Aske Skovmand 182 bounded rationality 48, 51, 197 impact on outcome additionality Braithwaite, John 48, 172 224-225 private regulation of 190-192 Brasileiro, Silas 247 auditing organizations Bray, Joshua 46

326



Index 327

Brazil 188 cocoa 4, 19, 229, 254 coffee consumption in 20 coexistence of standards 100 coffee production in 17, 24, 188 coffee agronomy of 84-86 national coffee institution 228–229, 230 Arabica versus Robusta 16, 24, 80, private standards and productivity in 88, 166, 253 international comparison 179 Brazilian Naturals 80 private standards and shade cover in cherry 16, 175, 232, 236 international comparison 182 Colombian Milds 80 **Brundtland Commission 75** consuming countries 20-21 buffer zones 193 consumption of 20-21, 21, 39, 96, private regulation of 170-171 184, 264 results 171-176 dry parchment 16, 118, 232, 236 business-to-business 95 global production surface 86, 88 business-to-business standards 5 national institutions 230-236 Other Milds 80 Campling, Liam 83 processing mills 136, 235, canopy cover 86, 88, 93 See also agro-238-239 forestry; land sharing producing countries 16, 229 production of 17, 18, 19, 24, 76, private regulation of 168, 170 86-89, 106, 180 results 171-176 capacity to comply 14, 67, 68, 201, 210, roasters 21-22, 64-65 rust 28, 85, 88, 151, 154, 181, 230 224 hypothesis 71 single-origin 22 carrots and sticks 41, 127, 197, 241 specialty 3, 22, 51 cartels 62, 229 supply chain of 16, 17 Cashore, Benjamin 5, 14, 55, 97 trade of 81, 83, 89-91, 228 Central America traders 19-20, 81, 109, 116-117 child labor in 165 wet parchment 16, 232, 236 climate change in 89, 166 Coffee Assurance Services 191 coffee production in 86, 188, 228 Coffee Competitiveness Strategy for coffee rust outbreak 231 Colombia 234 certification bodies 59, 190-192 See Coffee Law of 1962 (Costa Rica) 24, 234, 238, 260 also auditing organizations certification programs See private Cohen's d 202, 206 See also sustainability standards standardized effect size child labor Colgan, David 261 collective action 38, 50, 62, 228, 239, private regulation of 159-161 results 161-165 261 worst forms of 161 Colombia China 20, 40, 125 baseline characteristics of surveyed chlorpyrifos 145, 149 farmers 133-135 case selection 28-29 choice heuristics 49 climate change 88-89, 166 coffee production in 17, 24 climate change adaptation 96 coffee rust outbreak 230 practices 129, 184, 241 ecosystem protection in 173 private regulation of 151-152 effectiveness of trainings in 214 results 152-157 financial incentives in 217 club good 59, 255 impacts of rule knowledge in 200 Club of Rome 75 international strategies of 228



328 Index

Colombia (cont.) in global supply chains 19, 62, 64, 65, labor protection in 162 121, 235, 257, 258, 263 long-term farm resilience in 154 in producing countries 184, 261 national coffee institution 230, conflicts of interest 66, 69, 72, 190, 193, 233-234 224-225 operating profits 83 Conservation International 92, 93, private standards and productivity in international comparison 179 Conservation Principles for Coffee private standards and shade cover in Production 93, 96, 178 international comparison 182 Consumer's Choice Council 93 public-private interactions in 237, consumers 39-40, 262-264 239, 244 boundedly rational 65-66 safe working conditions in 147 conscientious 34, 90, 257 sustainable intensification in 140 consumer-citizens 39 technification of production 85 convenient environmentalists 253, training provision in 211 261-262 commodity market 48, 51, 58, 79, 103, ethical 63 188, 261 See also mainstream political consumerism 263 market continuous improvement 59-60, 150, Common Code for the Coffee 188-189 Community (4C) 23 contradiction of concentrated retailing auditing organization oversight 191 65, 257 auditor behavior 193 convention theory 45 emergence 94 co-opetition 15, 98, 99, 254 regulation of ecosystem protection Coordinadora Latinoamericana y del 166 - 171Caribe de Pequeños Productores y regulation of labor protection Trabajadores de Comercio Justo 159-161 (CLAC) 111, 113, 122 regulation of long-term farm coordination problems 8, 109, 249 resilience 151-152 Costa Rica baseline characteristics of surveyed regulation of pricing 104 regulation of safe working conditions farmers 135-136 case selection 26 144-146 regulation of sustainable coffee production in 24 intensification 137 ecosystem protection in 174 standard design 188 effectiveness of trainings in 215 competition financial incentives in 218 between auditors 69, 191, 224 impacts of rule knowledge in 201 between intermediaries 115, 117, labor protection in 163 long-term farm resilience 154 national coffee institution 230, 235 between producers 13, 22, 64, 83 between standards 64, 93, 100, 106, operating profits 83 111, 256 private standards and productivity in compliance 56 international comparison 181 compliance enforcement 63, 67, 68 private standards and shade cover in legalistic or cooperative 60, 67, international comparison 182 192-195, 216 public-private interactions in 238, compliance management 37, 71, 73, 216 safe working conditions in 148 concentration sustainable intensification in 141



Index 329

technification of production 85 results 152-157 training provision in 212 Dunkin' Donuts 113 cost-benefit analysis 110, 158, 175, eco-efficiency 142, 143, 223 188, 245 eco-labels 6, 256 See also private costs of production. See production sustainability standards costs cotton 4, 19, 254 ecological modernization 136 counterfactual 43, 46, 51, 57, 270 Eco-OK 93 cover crops 157 ecosystem destruction 76, 89 coyotes 19, 217 See also intermediaries ecosystem protection 93, 159 credence goods 66 private regulation of 166-171 critical requirements 59, 168, 188, results 171-176 196 education levels 48, 68, 198, 246 results in Colombia 134 hypothesis 71 impact on outcome additionality results in Costa Rica 135 207-210 results in Honduras 133 crowding-out effect 210 effectiveness 43-45, 55-57, 251-252, Cuba 90 265 efficiency See also eco-efficiency; cultural imperialism 195 fertilizer efficiency; input effi-Danwatch 259 ciency; pesticide efficiency Darnall, Nicole 209 as component of effectiveness 43 data collection 32 in the supply chain 96 de Janvry, Alain 62 El Salvador 83, 90, 168, 182 decoupling 224, 243, 245, 255 Elder, Sara 150, 216 enforcement See also compliance deforestation 166 climate change and 89 enforcement in Honduras 27 attitude 186, 192-195 prevention 96, 168, 175 capacity 59, 72, 165, 241, 245 private regulation of 167-168, 242 infrastructure 69 results 171-176 private regulation of 190-192 technification and 239 surrogate 195 DeFries, Ruth 46 entry barriers See barriers to entry delegation of enforcement Equal Exchange 92 responsibility 69-70, 196 equity 43, 98 Delmas, Magali 261 erosion prevention dependencies (in the supply chain) 45, private regulation of 151-152 116, 217, 258 results 152-157 Ethiopia 16, 84, 168, 181 derivatives 81 differentiation 49, 103, 230, 238, EurepGAP 94 Europe 20, 89, 228 in-group/out-group 59, 187-188 extension services 230 in Colombia 233 quality 27 in Costa Rica 235 sustainability 34, 248 displacement effects 263 in Honduras 232, 244 diversification of incomes 93, 132, 151 Fair for Life 100 of production 77, 78, 152-157, 174, fair trade 89-91, 97, 100, 111 Fair Trade USA 23, 99, 113 178, 241

Fairtrade Foundation 134

private regulation of 151-152



Fairtrade International (FLO) 23, 113	cost of 150
auditing organization oversight 190	impact of trainings on 215
emergence 91	private regulation of 144–146
price premium 110	results 146–150
regulation of ecosystem protection	First Sustainable Coffee Congress 92
166–171	fisheries 45, 46, 50, 254
regulation of labor protection	flexibility 58, 64, 68 See also
159–161	inclusivity
regulation of long-term farm	in enforcement 60, 63
resilience 151–152	in pricing 122
regulation of pricing 103	in regulation 250
regulation of safe working conditions	in sourcing 65
144–146	FLOCERT 190
regulation of sustainable	food insecurity 154, 155, 158 See also
intensification 138	food scarcity
regulation of training provision 211	food scarcity 153, 154 See also food
regulations on prices 110	insecurity
service-focused role of 259	forestry 46, 55, 242, 254
social premium 110	forests
standard design 189, 245	agroforestry 84, 170
standard evolution 98	conservation of 130
Fairtrade/organic	deforestation See deforestation
auditing organization oversight 190	natural 94
price premium 112	primary 77
regulation of ecosystem protection	reforestation See reforestation
166–171	tropical and subtropical 91, 153,
regulation of labor protection 159–161	166, 264 Fransen, Luc 6, 259
regulation of long-term farm resilience 151–152	freeriding 82, 186 futures market 81
regulation of pricing 103	Tutures market of
regulation of safe working conditions	gender
144–146	equality 3, 259
regulation of sustainable	inclusivity 211–213
intensification 138	of surveyed farmers 133, 135
standard design 188	Giuliani, Elisa 223, 244
farmer organizations 19, 148, 236, 245,	Global Coffee Platform 30, 95, 96
253	Global Economic Accord 240
Federación Nacional de Cafeteros de	global value chain analysis 45
Colombia (FNC) 28, 233–234,	GlobalGAP 191
237, 239	glyphosate 142, 145, 149, 157
fertilizer efficiency	goal attainment 43 , 57, 252
private regulation of 137–138	good agricultural practices 94, 177, 244
results 139–142	training in 210, 238, 244, 245
financial incentives	Grabosky, Peter 48, 126, 195, 220, 251
hypothesis 71	Grameen Bank 134
impact on outcome additionality 220	group administrators 196, 210
private regulation of 103–104	group certification 115, 116, 195, 240,
results 216–219	249
first aid kits 129, 146, 221	GTZ 94



Index 331

Guatemala 24, 121, 182 inclusivity 58 Gulbrandsen, Lars 44, 45 hypothesis 71 Gunningham, Neil 48, 126, 189, 195, impact on outcome additionality 207-210 220, 251 India 20, 40 Guthman, Julie 62, 64 Indiana Workshop in Political Theory Haggar, Jeremy 176 and Policy Analysis 41 Havana Charter 228 Indonesia 20, 125, 181 Hawkins, Keith 68, 194 inflation 80, 107, 111 health and safety of workers 93 See also informal labor 165 safe working conditions information asymmetry 106, 109, 221, hedging 19, 49, 82, 119 249, 264 Ingenbleek, Paul 15, 39, 99 high conservation value 93, 96, 167 high ecological value 77, 94 See also in-group/out-group differentiation 59, high conservation value 187-188 Honduras input efficiency 77, 97, 127, 138, 206 baseline characteristics of surveyed private regulation of 137-138 farmers 132-133 results 139-142 case selection 26-28 Institute for Agriculture and Trade coffee production in 24 Policy 92 Institute for Multi-Stakeholder ecosystem protection in 171 effectiveness of trainings in 213 Initiative Integrity 160 financial incentives in 217 institutional analysis 7 See also impacts of rule knowledge in 199 micro-institutional analysis labor protection in 161 institutional arrangements 47, 50, long-term farm resilience in 152 national coffee institution 232-233 institutional capacity 244, 245, 246 private standards and productivity in institutional design dilemma 12, 60, international comparison 181 58 - 70Instituto Brasileiro do Café 228, 230 private standards and shade cover in international comparison 182 Instituto del Café de Costa Rica public-private interactions in 237, (ICAFE) 234, 235, 238-239, 240 Instituto Hondureño del Café (IHCAFE) 232, 237 safe working conditions in 146 integrated pest management 78, 127 sustainable intensification in 139 technification of production 85 private regulation of 137-138 training provision in 211 results 139-142 Hylander, Kristoffer 168 intensification 21, 86, 155, 184 See also sustainable intensification Ibanez, Marcela 209 Inter-American Coffee Agreement 228 impact evaluation 5, 45-47, 270 interdependent decision making 49 implementation Interim Coordination Committee for International Commodity costs 126 Agreements (ICCICA) 228 importance of studying 54, 256 of rules 45, 68 intermediaries 17, 114, 217, 232, 260 of trained practices 212 internal management schemes 195 previous studies of 45 International Coffee Agreement (ICA) support 243

International Coffee Organization

(ICO) 79, 82, 83, 178

incentives See financial incentives;

market incentives



332 Index

International Federation of Organic
Agriculture Movements (IFOAM)
91
International Labor Organization (ILO)
160, 162
intoxication 145
intrinsic motivation 110, 142, 210, 265
investment costs
hypothesis 71
impact on outcome additionality
220–221
ISEAL Alliance 41, 46, 99, 186
ISO 17065 191, 193
Ivory Coast 230

Jacobs Douwe Egberts 21, 64, 95 Japan 20 Jennings, Steve 46 Jevons paradox 77 Jha, Shalene 181, 182 jurisdictional approach to certification

Kagan, Robert 14, 66, 67, 194 Kenya 89, 151, 181 Keurig Green Mountain 21, 113 Kreider, Karin 41, 186 Kuit, Michiel 46, 166, 176, 216

label confusion 66, 100, 263 label fatigue 66 See also label confusion labor protection private regulation of 159-161 results 161-165 Lambin, Eric 176, 216 land sharing 78, 84, 96, 175 See also agroecology; agroforestry private regulation of 168 results 171-176 land sparing 77, 96, 184 See also sustainable intensification private regulation of 167-168 results 171-176 land use change 88, 173, 176 regulations 24, 27, 77, 167 landscape approach to certification 260 Latin America 86, 91, 229, 253 Lemeilleur, Sylvaine 254 Levy, Marc 44

lexical ordering of money and responsibility 48, 110, 172, 219, 224 live-and-let-live approach 65 See also co-opetition logic of control 14 long-term farm resilience private regulation of 151–152 results 152–157 low-hanging fruit 14, 158

Maertens, Miet 216 mainstream market See also commodity market conditions 86 incentives 120, 249 institutions 12, 115 structures 16, 89, 120 mainstreaming 14, 59, 100, 105, 190, 252, 254 See also upscaling and mainstreaming Manning, Stephan 98 marginal cost of compliance 13, 15, 32, 63 market access 5, 19, 61, 108, 245, 255 See also barriers to entry market incentives 59, 61-63, 106-107, 119-121, 216-220, 262 market power of intermediaries 232, 235 of producers 230 of retailers 39, 65, 263 of roasters 21, 39, 64, 65 market-driven regulatory governance 6, 55, 58, 255 Max Havelaar 90, 111 Mayacert 191 Meidinger, Errol 243 meta-standardization 99 Meulenberg, Matthew 15, 99

Mexico 24, 182, 230 Meyfroidt, Patrick 167 micro-institutional analysis 51 collective-choice level 52, 55, 265 constitutional level 51, 52, 265 operational level 52, 54, 55, 58, 265 micro-institutional rational choice 57, 100, 126, 130, 250 framework 41, 47, 265



migrant labor force 160, 164, 171	impact on outcome additionality
minimum wage 93	221–224
private regulation of 159–161	results 221–224
results 161–165	organic input use
modular governance architecture 98	private regulation of 137–138
monoculture 77, 78, 85, 88, 130, 173	results 139–142
monopsonies 258	organic standard 23
Morocco 224, 243	emergence 91
multiple certification 28, 106, 117, 132	Ostrom, Elinor 7, 40, 41, 50, 51–57,
multi-stakeholder	197
initiatives 94, 178, 252	Ostrom, Vincent 54
platforms 95, 96, 101	outcome additionality 70, 202,
roundtables 52	204–208
standards 23, 94	overregulation 73
Mutersbaugh, Tad 100	oversupply
0 /	of certified coffee 105–106, 107, 109
NAMA Café 240	249
naming-and-shaming 65, 259, 264	structural 49, 62, 82, 83
Naranjo, Maria 209	Oxfam 90, 92
Neilson, Jeffrey 46	
neo-Gramscian approaches 45	palm oil 4, 254
Nespresso AAA 23	paraquat 149
auditing organization oversight 192	Pattberg, Philipp 5, 51
emergence 94	payments for social and ecosystem
regulation of ecosystem protection	services 36, 158, 223, 252
166–171	perennial crops 79
regulation of labor protection	personal protection equipment 88, 115
159–161	129, 177
regulation of long-term farm	cost of 150
resilience 151–152	private regulation of 144-146
regulation of pricing 104	results 146–150
regulation of safe working conditions	Peru 2, 24, 125, 181, 182
144–146	Pesticide Action Network 149
regulation of sustainable	pesticide container disposal 146
intensification 137	private regulation of 144–146
regulation of training provision	results 146–150
210	pesticide efficiency
standard design 189	impact of trainings on 213
Nestlé 21, 22, 64, 95, 121, 259	private regulation of 137–138
Newsom, Deanna 243	results 139–142
Nicaragua 24, 90, 164, 166, 199	Petrokofsky, Gillian 46
Nygren, Anja 199	Philpott, Stacy 176
	pickers 160
off-farm employment 153, 155,	results 161–165
213	plantations 17, 99, 127, 254
Oikocredit 134	polycentricity 226, 266
oligopsonies 62	Ponte, Stefano 257
opportunity costs 103, 126, 127, 130,	potable water
159, 177	private regulation of 144–146
hypothesis 72	results 146–150, 151



Poverty Probability Index 133, 135, 136	labor costs 87, 111, 142, 160, 162 opportunity costs 103, 126, 127,
price	130, 159, 177, 221–224
ceiling 120	productivity 96–97, 179, 261–262
commodity price development 79	improvements 96, 104, 127,
commodity pricing 77	136
discovery 81	maximization 77, 87
equitable 93	private regulation of 137–138
farm-gate 76, 118, 216–220, 236	results 139–142
FOB 79, 80, 107, 119	professionalization
minimum 65, 103, 110–113, 122, 230	of producers 153, 215 of standards 99
price-takers 79 stock market 81, 110, 120	profit maximization 48, 61, 127, 130, 144, 219
undercutting of Fairtrade prices 122	prohibited pesticides 145
volatility 81, 90, 102, 117, 236	private regulation of 144-146
price premium 61	results 146–150
conditions to maintain 13, 62 hypothesis 71	proliferation of standards 63, 66, 100, 254
impact on outcome additionality 216–220	propensity score matching (PSM) 33, 202, 270–272
income increases via 97	proxy accreditation 191, 192
private regulation of 102–105	public policy
results 106–107, 115, 119, 216–219,	in the coffee sector 230–236
238	interactions with private regulation
price-to-be-fixed contracts 81	237–241
principal-agent dilemmas 69, 72, 225	regulatory implementation in 66, 186
private governance 5–7, 43–45, 53, 255	public-private interactions
private regulation 6	hypothesis 72
of ecosystem protection 166–171 of financial incentives 104–105	impact on outcome additionality 241–244
of labor protection 159-161	results 237–241
of long-term farm resilience 151–152	
of safe working conditions 144–146	quality
of sustainable intensification	country strategies 240
137–138	improvements 96, 97, 103, 137, 155,
private rules 5, 51	261–262
private sustainability standards 5	requirements 94, 120
aggregate effects of 177	specialty-grade 22
demand for 114	standardization of 81
uptake of 105	quasi-experimental research design 131
problem definition 57	quintal 138
problem-solving	quota systems 82, 90, 143, 229
approach 44, 57	
potential 43, 47	race
producer organizations 19 See farmer	to the bottom 226
organizations	to the middle 15
production costs 76, 87	RA-Cert 190
input costs 77, 78, 80, 87, 126, 137, 144	radical flank effect 260 Rainforest Alliance 23



Index 335

auditing organization oversight 190 dependency 258 auditor behavior 193 establishment of 108 NGO 92, 93 firm-NGO 259 price premium 106 long-term 93, 122 regulation of ecosystem protection trading 50, 90 rent appropriation 64 166-171 regulation of labor protection reputation 159-161 cooperative 232 regulation of long-term farm corporate 64, 255, 257, 260, 264 resilience 151-152 producing country 120, 234 regulation of pricing 104 standard organization 69 regulation of safe working conditions research methods 29-33 144-146 retreat of the state 227 regulation of shade cover 168-170 Rivera, Jorge 220 regulation of sustainable Rossi, Arianna 224, 243 intensification 138 Ruben, Ruerd 165 regulation of training provision 211 Rueda, Ximena 176, 216 rule cognizance 56, 197 service-focused role of 259 results 197-201 standard design 187 standard evolution 98 rule knowledge 197 See also rule record keeping cognizance private regulation of 138 results 197-201 rules in the books 54, 137 See also results 140, 143 redistributive justice 249 rules-in-form and rules-in-practice rules on paper 54 See also reforestation private regulation of 166-171 rules-in-form and rules-in-practice results 171-176 rules-in-form and rules-in-practice 54, regulatory capture 66, 73, 209 56, 156, 198, 265 regulatory design of standards 187-190 translation 196, 197 of ecosystem protection 166-171 rust-resistant varietals of enforcement mechanisms 190-195 private regulation of 151-152 of financial incentives 104-105 results 152-157 of labor protection 159-161 Rwanda 150 of long-term farm resilience 151–152 of safe working conditions 144–146 safe working conditions private regulation of 144-146 of sustainable intensification 137-138 results 146-150 regulatory duplication 241 Schlesinger, Peter 168 hypothesis 72 school attendance impact on outcome additionality private regulation of 159-161 242 results 161-165 regulatory escalation 68 SCS Global Services 192 regulatory indeterminacy 209 self-categorization of certification 198 regulatory ineffectiveness 66, 209 See also rule cognizance regulatory unreasonableness 73 Semana Internacional del Café 2, 30, Reichman, Nancy 56 Reinders, Machiel 39 Serpa, Fernando 227 Reinecke, Juliane 98, 111 shade coffee production 84, 91, 183, relationships 221, 250 competitive 116 shade management 86, 241



shade cover	regulation of labor protection
private regulation of 151-152	159–161
results 152–157	regulation of long-term farm
Shepsle, Kenneth 50, 52	resilience 151–152
shirking 56, 73, 186	regulation of pricing 104
short-term versus long-term thinking	regulation of safe working conditions
103, 129, 144, 153, 157	144–146
Sides, Stephen 209	regulation of sustainable
Simon, Herbert 44, 49	intensification 137
Small Producer Symbol 100	regulation of training provision
smallholder farmers	211
Fairtrade focus on 100, 245	standard design 189
integration in global value chains	State of Sustainable Markets 179
254–255	stock market 81, 110, 120
production conditions of 48, 76, 103,	stringency 58
116, 265	hypothesis 71
share of global market 4, 17	impact on outcome additionality
SMBC Bird Friendly standard 93, 249,	207–210
263	versus inclusivity 58, 60, 187, 190,
Smithsonian Migratory Bird Center	192, 196
(SMBC) 92, 93	Stroup, Sarah 258
Snidal, Duncan 6, 259	structure-induced equilibria 50
Snider, Anna 199, 219, 246	subsistence crops 153, 154, 167
social capital 219	substantive rules 6
Social Progress Index 24, 244	
	sugar 19, 135, 155, 229, 254
socio-legal insights 56, 66, 186, 187	sun coffee production 85, 221, 250
soil analyses 216, 244	super-seal 93, 100
private regulation of 137–138	supply chain management 257, 260
results 141, 143	supply management 109, 229, 261 See
soil cover	also International Coffee
private regulation of 151–152	Agreement (ICA)
results 152–157	surrogate enforcers 195
Solér, Cecilia 175	survey design 32
sourcing commitments 108, 263	sustainability
soy beans 254	definition 75, 76, 93–94, 96–97,
sparse shade production 85	126–127, 184–185, 249–250
Specialty Coffee Association of America	economic 76, 83
30, 74	environmental 96
spot market 81	social 76, 96
standardized effect size 202, 204–208	strong 39
standards market 16, 98, 101	sustainable development 75
Starbucks 109, 113, 121	Sustainable Agriculture Network (SAN)
Starbucks C.A.F.E. Practices 23	23
auditing organization oversight 192	Sustainable Coffee Challenge 95, 129
auditor behavior 193	Sustainability Framework 96, 178
emergence 94	Sustainable Coffee Foundation 93
regulation of ecosystem protection	sustainable coffee sector 125, 262
166–171	definition 74



Index 337

sustainable intensification 77, 127, 136, private regulation of 137-138 results 139-142 sustainable production practices categorization 34, 35, 127-130, long-term investments (Tier II) 34, 35, 129, 206 positive externalities (Tier III) 34, 36, 129, 206 sustainable intensification co-benefits (Tier I) 34, 35, 127, 206 switching costs 61 Takahashi, Ryo 209 Tanzania 181 tea 4, 20, 254 technified coffee production 85, 239 Thanksgiving Coffee 92 theory of change 34, 61, 97, 103, 211, 252 of Fairtrade International (FLO) 138 of Nespresso AAA 192 three levels of action 42, 51, 53 three tiers of sustainable agricultural practices 126, 128 Three Worlds of Action 7 See also three levels of action time lags 109, 249 Todo, Yasuyuki 209 toxicity of agrochemicals 144 traceability 55, 258 training provision hypothesis 71 impact on outcome additionality 213-215 private regulation of 210 results 211-213 treatment of processing water private regulation of 170-171

Uganda 166, 181, 245 UN Conference on the Human Environment 75 uncertainty 48, 49, 50, 109, 114, 144 Underdal, Arild 44

results 171-176

triple bottom line 76

underregulation 73, 186, 209 United Nations Conference on Trade and Development (UNCTAD) 229 United Nations World Commission on Environment and Development 75 United States 20, 83, 228, 229 upscaling and mainstreaming 14, 15, 60, 101 USAID 85 UTZ 23 auditing organization oversight 191 auditor behavior 193 emergence 94 price premium 106 regulation of ecosystem protection 166-171 regulation of labor protection 159-161 regulation of long-term farm resilience 151-152 regulation of pricing 104 regulation of safe working conditions 144-146 regulation of sustainable intensification 137 regulation of training provision standard design 188

Valkila, Joni 199
valorization strategy (Brazil) 228
van der Ven, Hamish 6, 256
van Rijsbergen, Bart 151
Vietnam 17, 28, 166, 179, 182
voluntary environmental programs
209, 255
voluntary sustainability standards 257
See also private sustainability
standards

Waarts, Yuca 46 Walmart 109, 227 waste management 140, 177, 223, 251 willingness to pay 63, 102, 104, 130 windbreaks private regulation of 151–152 results 152–157 win-lose 158, 189 win-win 34, 35, 125, 137, 142, 143,



338 Index

Wong, Wendy 258 World Bank 24, 83 World Coffee Producers' Forum 30, 240, 261 World Governance Indicators 24, 244 Wyss Bisang, Britta 104 yield maximization 36, 86, 129 Young, Oran 11, 43, 44, 129, 158

zero tolerance requirements 59, 67, 159, 161, 163, 170, 186 Zorn, Alexander 224 Zuniga, Guillermo 165