INDEX

fatalities, 89–91 Cultural heritage, 22, 24 Cultural services, 31 green infrastructures (GIs), 39-43, 65, Data interpretation, 53–55 78 - 85hotspot analysis, 81-82 Decision-making processes, 12, 29, 36, 51 InVEST (See InVEST) Designers of theories, 4 land use change (LUC) 'Differential' method, measurement, 64, 65 27 - 28multipart data to Digital Elevation Model, 50 network design, Dilution and sequestration, 80 - 81Natural Capital, 67, Discontinued urbanisation, 70 planning purposes, 30 provision, 28 Ecological resilience, 18 resilience, 123-126 sustainability, 122-123 Eco-systemic planning, 5, theoretical stage, 65 27–43, 61 human health, 109-113 urban planning, 30-39 weighted overlay tool, methodological coherence, 110–111 well-being, 111–113 Enhancing resilience, 18 Eco-systemic planning Environmental problems, reform, 11 62 agenda for urban Environmental standards, planning, 55–57 62, 63 ecology, 46-49 Equilibrium, 18, 19 methodology, 49-55 Erosion reduction model, Ecosystem services (ES), 16, 19–25, 29 European Commission, aggregate polygons, 82 - 83European Soil Thematic Strategy, 47 approaches, 20 assessment, 29, 54, 62 Fertile soils, 9 biophysical/economical Fitness for use concepts, assessment, 68 degradation on health, 'Fows' method, 28 86 - 91

Geographic Information System (GIS), 27, 100	decision-makers, 68 evaluation, 70
GIs. See Green	GIS-based ES
	assessment, 67
Infrastructures (GIs)	Natural Capital, 67, 70
Green Infrastructures (GIs),	User's Guide, 49, 67, 68–69
aggregate polygons, 82–83	uses, 49
	Integrating cultural/ aesthetic values, 22
application, 42	
definition, 22, 40	International Union for
design, 22, 53	Conservation of
effects, 24	Nature (IUCN), 87
hotspot analysis, 81–82	InVEST. See Integrated
multi-functionality, 23	Valuation of
multipart data to	Ecosystem Services
network design,	and Tradeoffs
80–81	(InVEST)
urban open spaces, 41 weighted overlay tool, 81	Jeopardised urbanisation, 8
Habitat risk assessment	Lack of resilience, 16
model, 70	Land capability
Hotspot analysis, 43, 52,	classification, 65, 66
81–82, 83	Land take process, 11, 40,
Hydropower production	99
model, 70	administrators and
	planners, 129
Impermeabilisation, 32	culture, 46
In-depth soil knowledge, 74	definition, 96
Infrastructure, 65	environmental effect, 74
Institutional vulnerability,	96
25	Green Infrastructures
Integrated Valuation of	(GIs), 40
Ecosystem Services	limitation, 46
and Tradeoffs	mono-disciplinary
(InVEST), 29, 36, 38,	paradigm, 65
49, 50, 62, 64, 67	soil consumption, 33

Land use, 24, 35 policies, 33 quantitative analysis, 28	Modern Liquidity, 8 Multi-functionality, 23, 52 Multivariate analysis, 43
Land use changes (LUCs), 27, 29, 64, 65, 68 particulate matter (PM), 95	Natural Capital, 12, 13, 29, 30, 63, 67, 70, 79 monetary evaluation of
Land Use Land Cover map,	ecosystems, 36
29	Natural resources, 11
Land use planning, 63–91,	No-development zones, 54
136	Nutrient Delivery Ratio, 38
Land Use Regression (LUR) equation, 100	Nutrient retention model, 50, 71
Land use suitability, 66	0 1 1 1 70
Land Utilization and	Overlap analysis model, 73
Capability Indicator	D. 1
(LUCI), 29	Park availability, 135
Leapfrogged urbanisation,	Particulate matter (PM)
8	flux analysis, 99
LIFE SAM4CP programme,	mass concentration of
67	airborne, 97–98 Milan area, 101–105
Limiting policy, 65	Physical gravitational
N. 11 1 55	theory, 9
MacHarg approach, 55	Planetary Urbanisation, 7
Managed timber	Planning
production model, 72	discipline, 8
· -	goals, 61
Mapping, 30, 34, 49	strategy, 62
air quality, 95–108 role, 37–39	Post-modern interpretation,
	8
Marine finis aqua-cultural	Private mobility, 9
production model, 73	Programming, 100
McHarg's approach, 43	Provisioning, 31
Methodology, 49–55,	110,1010111118, 01
99–100	QGis, 69
Metrics, 8	Quantifying ecosystem
Modelling, 63–91, 100	services, 32
	· ·

Index 1.57

Radial urbanisation, 8	Sediment retention model,
Recreation and tourism	50, 71
model, 72	Sensitised population, 135
'Reductionist' theory, 12	Soil
Regulating services, 31	consumption, 27, 33
Re-naturing cities, 134	contemporary lifestyle, 9
Resilience, 29, 61	fertile, 9
adaptation, 14	orographic reasons, 9
definition, 17, 115, 116	properties, 28
ecological, 18	quality, 28
empirical experiment,	sealing, 33
120–122	vulnerability, 32
enhancing, 18	'Soil for fun,' 66
environmental	Soil quality, 97
disciplines, 13	Species-specific
ES indicator, 123-126	environmental
exposure, 15	projects, 23
lack of resilience, 16	Stability, 18
limit, 19	Stress, 13
Natural Capital, 13	Supporting services, 30–31
risk, 16–17, 116	Sustainability, 29, 40, 61
sensitivity, 15	ES indicator, 122-123
sustainability, 116-118,	resilience, 116–118
119–120	urban ecosystem
uncertainty, 116	services, 119–120
urban ecosystem	Sustainable development,
services, 119–120	61
vulnerability, 16	
Responsiblities, 128–132	Territorial discipline, 8
Risk assessment, 14, 25	Territorial governance, 4
	Territorial planning, 24
SAM4CP research, 88	Testing, 100–101
Scenario generator, 73	Total Ecosystem Service
Scenic quality provision model, 72	Value, 111
Scientific inductive	United Nations Sustainable
approach, 8	Development Goals,
Sealed soil, 33	61
ocaica son, 55	01

Urban biodiversity, 20 Urban Growth Boundaries, 54 Urban regulation, 10 Urban resilience, 17, 18 'Urban transformation' phase, 46

Validation, 36 Vulnerability, 14, 15, 16, 18 ecosystems, 24 human settlements, 24 institutional, 25 quantitative approaches, 25

Water scarcity, 48
Wave attenuation model,
72
Wave energy production
model, 73
Well-natured water,
134