

SDG15

Life on Land

Towards Effective
Biodiversity
Management

NASIM AHMAD ANSARI, CAHYONO AGUS
and EDWARD KWEKU NUNOO

SDG15 – LIFE ON LAND

CONCISE GUIDES TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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SDG15 – LIFE ON LAND

Towards Effective Biodiversity Management

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CONTENTS

<i>List of Figures, Tables and Boxes</i>	<i>xi</i>
<i>About the Authors</i>	<i>xiii</i>
<i>Preface</i>	<i>xv</i>
<i>Executive Summary</i>	<i>xvii</i>
1. Introduction to Sustainable Development Goals (SDGs) and 'SDG15 – Life on Land'	1
2. Foundations of 'SDG15 – Life on Land': Earth, Forests and Biodiversity	7
2.1. The Importance of the Earth	7
2.1.1. The Evolution of Life on Land	9
2.1.2. The Destruction of the Earth	12
2.1.3. The Degradation of Natural Resources	14
2.1.4. Global Climate Change	17
2.1.5. Environmental Health	21
2.1.6. Blue Earth Revolution	24
2.2. The Forest Ecosystem	27
2.2.1. The Important of the Tropical Forest	30
2.2.2. The Biodiversity of the Tropical Forest	35
2.2.3. Sustainable Forest Management	39

2.3.	Biodiversity Conservation and ‘SDG15 – Life on Land’	44
2.3.1.	Convention on Biological Diversity and Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services	46
3.	Essentials of ‘SDG15 – Life on Land’ for Achieving the Targets: An Integrated Perspective	49
3.0.	Introduction	49
3.1.	Proactive Management for Achieving SDG15 Targets	51
3.2.	Managing the Targets: Essentials of Life on Land	52
a.	Target 15.1: Conservation and Restoration of Terrestrial and Freshwater Ecosystems	52
b.	Target 15.2: From Deforestation to Restoration of Degraded Forests	54
c.	Target 15.3: Ending Desertification and Restoration of Degraded Lands	54
d.	Target 15.4: Ensuring Conservation of Mountain Habitats	55
e.	Target 15.5: Protecting Biodiversity and Natural Habitats	56
f.	Target 15.6: Protecting Access to Genetic Resources and Fair Sharing of Their Benefits	58
g.	Target 15.7: Eliminate Poaching and Trafficking of Protected Species	59

h.	Target 15.8: Preventing Invasive Alien Species on Land and in Water Ecosystems	60
i.	Target 15.9: Integrating Ecosystem and Biodiversity Conservation in Governmental Planning	60
3.3.	Integrative Perspective for Achieving the Targets	61
3.3.1.	Contributions of Biodiversity to the SDGs	61
3.3.2.	The Role of Business in Achieving SDG15 Targets	65
3.4.	Progress towards Achieving SDG15 – Life on Land	66
4.	Drivers of Change for ‘SDG15 – Life on Land’	69
4.0.	Introduction	69
4.1.	Drivers of Biodiversity Loss	72
4.1.1.	Direct Drivers of Biodiversity Loss	72
a.	Habitat Degradation/Land-use Change	72
b.	Pollution/Nutrient Load	73
c.	Overexploitation of Natural Resources	74
d.	Invasion of Alien Species	74
e.	Climate Change	75
4.1.2.	Indirect Drivers of Biodiversity Loss	75
a.	Governance and Economic Growth	76

b.	Science and Technological Interventions	76
c.	Population and Demographic Pressures	76
5.	Plausible Solutions with Reference to 'SDG15 – Life on Land' towards an Effective Biodiversity Management	79
5.0.	Introduction	79
5.1.	Available Policy Instruments for Implementation of 'SDG15 – Life on Land'	80
5.1.1.	CBD and Related Instruments	80
5.1.2.	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)	82
5.1.3.	Legal and Regulatory Instruments	83
5.1.4.	Protected Areas and Conservation Areas	84
5.1.5.	Economic and Financial Instruments	85
a.	The Biodiversity Finance Initiative (BIOFIN) Project	87
b.	The Lion's Share Fund	88
5.2.	Support from Other SDGs	88
5.3.	Mainstreaming Biodiversity Conservation through 'SDG15 – Life on Land'	91
5.3.1.	Approaches and Tools for Mainstreaming	92
5.3.2.	Mainstreaming SDG15 into Policy Sectors of the Government for Biodiversity Conservation	93

5.3.3.	Mainstreaming Biodiversity in Select Economic Sectors of the Government: Agriculture, Forestry and Fisheries	96
5.3.4.	Identifying, Understanding and Prioritising Entry Points for Mainstreaming	96
5.3.5.	Monitoring and Evaluating Biodiversity Mainstreaming	99
	<i>References</i>	<i>101</i>
	<i>Index</i>	<i>123</i>

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LIST OF FIGURES, TABLES AND BOXES

FIGURES

Figure 1.1	Five Dimensions of Sustainable Development	3
Figure 1.2	Foundations of SDG15 – Life on Land	6
Figure 2.1	Trend in Global Tree Cover 1992–2015	14
Figure 3.1	Global Biodiversity Intactness Index Map, 2015	57
Figure 4.1	Overview of the Direct and Underlying Causes of Biodiversity Loss	71

TABLES

Table 5.1	Classification of Economic Instruments for Biodiversity Conservation	85
Table 5.2	Summary of Linkages Between SDGs and Aichi Biodiversity Targets	89
Table 5.3	List of Schemes Highly Funded by the Indian Government	95

BOXES

Box 5.1	Examples of Integrated Biodiversity, Livelihoods and Development Initiatives from India	97
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PREFACE

The current state of biological diversity, critical for the survival of life on Earth, is in great peril. According to the Sustainable Development Goals (SDG), urgent actions are needed to address loss of biodiversity across the globe. This task is central to the aim of Sustainable Development Goal 15 (SDG-15) to provide a better future by:

- Protecting biodiversity.
- Restoring natural ecosystems.
- Promoting the sustainable use of biodiversity.
- Sustainably managing forests.
- Combating desertification.
- Reversing land degradation.
- Attenuating biodiversity loss.

This book, the first of its kind, seeks the implementation of SDG15 through effective biodiversity management strategies, by mainstreaming biodiversity, and proposing solutions to achieve and consolidate the goals beyond 2020. It draws on experienced faculty scientists who are experts in natural resource governance issues in a wide variety of fields ranging from forestry, biodiversity conservation policy to climate change. Following a general account of the SDGs, ‘Towards effective biodiversity management’ sets the tone by providing

assessments of the monitoring mechanism of SDG15 targets and indicators. This is followed by assessment of the significance of the forest ecosystem as the foundation for sustainable development, drawing on examples from across the regions. From a global policy perspective, the book demonstrates in an integrative manner how the essentials of ‘Life on Land’ (SDG15) can contribute effectively towards achieving the SDG targets and presents SDG15 as an appropriate tool for mainstreaming biodiversity across the policy sectors of governance. The book will be of great interest to natural resource policy-makers, scholars and students of natural resources, development studies and sustainable development, as well as those engaged in international climate change discourse and Non-Governmental Organisation practitioners.

Authors

EXECUTIVE SUMMARY

Our understanding of biodiversity conservation and functional sustainability has been developing progressively over the past decades. Evidence abounds today to suggest that biodiversity is critical for ecosystem functions and services upon which life on land depends. Biodiversity is directly linked to the economic, social and environmental components of the sustainability equation. As a result of this, a nexus of scientific research, from the tripartite sustainability triangle has become paramount. This book, the development of life on land (SDG15), targets specific indicators and their integration with other Sustainable Development Goals (SDGs) for addressing effectively ecosystem management. With this, a number of research priorities allow for an integrated approach towards achieving the implementation of the 2030 Agenda and implementation of National Biodiversity Strategies and Action Plans (NBSAP) for biodiversity conservation.

These priorities include research that will improve our understanding of (1) ecosystem services and functions provided by biodiversity that benefit humans; (2) the connection between biodiversity and poverty reduction; (3) biodiversity and agriculture; (4) issues relating to indigenous knowledge of biodiversity; and (5) the development of indicators that allow for an integrative assessment of biodiversity conservation and sustainability objectives. The book concludes by devising an appropriate tool for mainstreaming biodiversity across the policy sectors of governments.

Chapter 1 sets the context and includes a description of the global SDGs with specific emphasis on SDG15 – Life on Land. This chapter highlights the importance of the SDGs’ five dimensions: people, prosperity, peace, partnership and planet, as the basis for sustainable development.

Chapter 2 describes the foundation concepts of SDG15, namely, earth, forest and biodiversity. This chapter also includes a description of environmental, wildlife and climate change, explaining that the Earth is the only planet hosting life as we know it. However, a depletion of natural resources caused by unsustainable use by human beings, poses a grave threat to the future of life.

Chapter 3 discussed the essentials of SDG15, that is, the targets and indicators and progress towards their achievement.

Chapter 4 elaborates on the key drivers of biodiversity loss and impacts upon life on land. The various drivers responsible for impacting nature include the direct and indirect drivers of biodiversity change. We present and analyse both direct drivers (fragmentation, land-use change, habitat degradation, pollution, overexploitation and climate change), and indirect drivers (governance regime, unsustainable economic growth and finances).

Chapter 5 discusses key solutions for implementing ‘SDG15 – Life on Land’ for an effective management of biodiversity loss. Various policy instruments, regulatory mechanisms, acts and legislation address biodiversity loss and help implement SDG15. Policy instruments include social, financial, economic and environmental tools. The Biodiversity Finance Initiative (BIOFIN) project of UNDP is the key project in helping to achieve SDG15 through a set of financial solutions, including payment for ecosystem services, corporate social responsibility, access and benefit sharing, biodiversity offsets, debt instruments, etc. Another solution proposed here is convergence with other SDGs.

The major solution in implementing SDG15 is the mainstreaming of biodiversity conservation in the various policy and governance sectors of the government. The concept of mainstreaming is recognised at a global level by the Convention on Biological Diversity (CBD). Under the CBD, at the national level, most NBSAPs recognise the linkages between biodiversity and development and include targets for mainstreaming. Similarly, the National Development Plans, National Sustainable Development Plans and green growth strategies of some countries include, to a greater or lesser extent, consideration of biodiversity. Continuing challenges in the design and implementation of biodiversity mainstreaming measures include effective horizontal and vertical institutional coordination; adequate human resources and capacity, particularly within sector line ministries; the collection and dissemination of policy-relevant data for mainstreaming; and tracking and mobilising financial resources for biodiversity in the context of national budgets and beyond. The CBD and governments are fully cognisant of the importance and critical role of mainstreaming and mobilising financial resources for biodiversity, but in practice have made little progress and struggle to find ways forward.