
**FAMILY BUSINESSES
ON A MISSION**

**ATTAINING
THE 2030
SUSTAINABLE
DEVELOPMENT
GOAL OF
LIFE ON LAND**

EDITED BY

**NAOMI
BIRDTHISTLE**

Attaining the 2030 Sustainable Development Goal of Life on Land

FAMILY BUSINESSES ON A MISSION



Series Editor:

Naomi Birdthistle

The Family Businesses on a Mission series examines how the United Nations Sustainable Development Goals (UN SDGs) can be applied in family businesses around the world, providing insights into cultural and societal differences and displaying innovative approaches to complex environmental and societal issues.

Other Titles in This Series

Attaining the 2030 Sustainable Development Goal of Decent Work and Economic Growth

Attaining the 2030 Sustainable Development Goal of Quality Education

Attaining the 2030 Sustainable Development Goal of Industry, Innovation and Infrastructure

Attaining the 2030 Sustainable Development Goal of Climate Action

Attaining the 2030 Sustainable Development Goal of Responsible Consumption and Production

Attaining the 2030 Sustainable Development Goal of Sustainable Cities and Communities

Attaining the 2030 Sustainable Development Goal of Gender Equality

Attaining the 2030 Sustainable Development Goal of Good Health and Well-Being

Attaining the 2030 Sustainable Development Goal of No Poverty

Attaining the 2030 Sustainable Development Goal of Life on Land

EDITED BY

NAOMI BIRDTHISTLE

Griffith University, Australia



United Kingdom – North America – Japan – India – Malaysia – China

Emerald Publishing Limited
Emerald Publishing, Floor 5, Northspring, 21-23 Wellington Street, Leeds LS1 4DL

First edition 2025

Editorial matter and selection © 2025 Naomi Birdthistle.
Individual chapters © 2025 The authors.
Published under exclusive licence by Emerald Publishing Limited.

Reprints and permissions service

Contact: www.copyright.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-83608-215-6 (Print)

ISBN: 978-1-83608-212-5 (Online)

ISBN: 978-1-83608-214-9 (Epub)



INVESTOR IN PEOPLE

Contents

List of Figures and Tables	vii
About the Editor	ix
About the Contributors	xi
Foreword	xv
Acknowledgements	xvii
Chapter 1 The Sustainable Development Goals: SDG#15 Life on Land and Family Business	1
<i>Rob Hales</i>	
Chapter 2 Roots of Success: The Impact of Family Businesses on Economies and Society	13
<i>Naomi Birdthistle</i>	
Chapter 3 Australia: A Forester Among Farmers – How Agriculture and Forestry Can Work Together to Save the Planet	27
<i>Rosemary L. Fisher and Michael J. A. Seidler</i>	
Chapter 4 Australia: Regenerative Agriculture on Echo Hills	41
<i>Amber Marshall, Nikki Thompson and Peter Thompson</i>	
Chapter 5 Honduras: Del Lago Orgánico	55
<i>Marcio Paz, Rebeca Paz and Allan Discua Cruz</i>	
Chapter 6 Australia: SSS Strawberries – Enhancing Environmental Sustainability	67
<i>Marina Skinner and Gina Dang</i>	

Chapter 7 Australia: Family Business and Life on Land – The Case of SOILCO	83
<i>Mary Barrett</i>	
Chapter 8 UAE: MyHive Enterprise Advancing SDG 15 With Sustainable Beekeeping and Biodiversity	97
<i>Jacinta Dsilva</i>	
Chapter 9 Chile: Emiliana Vineyard – Family Businesses in the Wine Sector and Sustainability	109
<i>Claudio G. Muller</i>	
Index	119

List of Figures and Tables

Figures

Fig. 1.1.	17 Sustainable Development Goals.	2
Fig. 2.1.	Defining Family Business: The Family Business Bull's-Eye.	15
Fig. 2.2.	Bullseye 2021.	16
Fig. 2.3.	Global Assessment of Family-Owned Businesses: National GDP Contribution and Workforce Participation.	19
Fig. 3.1.	Related and Overlapping Activities at Bambra.	32
Fig. 3.2.	Bambra – Before and After the Application of Rowan's Agroforestry Principles.	37
Fig. 4.1.	The View Over Echo Hills From the Main Farmhouse.	42
Fig. 4.2.	Peter Thompson Operating GPS and Autosteer on the Quadtrac Tractor.	51
Fig. 4.3.	Welcome Sign Made by Peter Thompson.	52
Fig. 5.1.	(a) Company Logo and (b) Company Brand.	55
Fig. 5.2.	Marcio (L) and Rebeca (R) Promoting Products From Del Lago Orgánico in a TV Show.	58
Fig. 5.3.	Organisation Chart of Del Lago Orgánico S de RL.	59
Fig. 6.1.	The GEA Freeze-Drying Machine Allows for a Variety of Production Applications.	69
Fig. 6.2.	Dang Family Source: SSS Strawberries.	70

Fig. 6.3.	SSS Strawberries: Historical Timeline.	72
Fig. 7.1.	SOILCO at a Glance.	84
Fig. 7.2.	Charlie Emery (Left) and Mark Emery (Right).	96
Fig. 8.1.	Certificate of Appreciation by MyHive.	104
Fig. 8.2.	Best Honeycomb Award in 2019.	105

Tables

Table 1.1.	SDG#15 Targets and Indicators.	3
Table 2.1.	Definitions of Family Businesses With a Structural or Process Lens Applied.	13
Table 2.2.	Oldest Family Businesses in the World.	20
Table 5.1.	Milestones of Finca la Fé and DLO.	59
Table 5.2.	SDG#15 Indicators for DLO.	63
Table 6.1.	Products and Services Provided by SSS Strawberries.	68

About the Editor

Professor Naomi Birdthistle has entrepreneurship and family business running through her veins. She tried to work in her family business when she was four but was told she was too small. She came back year after year asking to work, and eventually, her grandmother capitulated and let her work in the family business when she was seven. After years of working in the family business part-time and having completed her studies at Stirling University, Babson College, Harvard University and the University of Limerick, Naomi established her own consulting business, consulting family businesses in her hometown. She is now a Professor of Entrepreneurship and Business Innovation at Griffith University, teaching future family business leaders and researching family business issues as well. Naomi is an award-winning academic having received numerous awards for her teaching and her research.

This page intentionally left blank

About the Contributors

Professor Mary Barrett, Faculty of Business and Law, University of Wollongong, Australia. Mary Barrett is an Honorary Professor of Management in the Faculty of Business and Law at the University of Wollongong, Australia. Her research interests include entrepreneurship, leadership, business communication and gender in management, especially how these play out in family firms and different national contexts. Though formally retired, Mary continues to research, supervise higher-degree students and review articles for academic publications. Her publications include seven books and numerous research articles in refereed journals. Mary's most recent book, *Women in Family Business: New Perspectives, Contexts and Roles* (Edward Elgar, 2024) was co-edited with Dr Jolien Huybrechts and Professor Jean Lee. With Emeritus Professor Ken Moores AM, Mary has also written two other chapters in this series on the UN Sustainable Development Goals (SDGs): one on Outland Denim, for the chapter on Decent Work and Economic Growth (SDG#8), and another on Wagner Corporation and its Airport for Industry, Innovation and Infrastructure (SDG#9).

Dr Allan Discua Cruz is the Director of the Centre for Family Business and member of the Pentland Centre for Sustainability in Business and at Lancaster University Management School (United Kingdom). His current research interests relate to entrepreneurship by families in business. He has published in journals such as *Entrepreneurship and Regional Development*, *Journal of Business Research*, *Journal of Business Ethics*, *Entrepreneurship Theory and Practice*, *International Journal of Entrepreneurial Behaviour and Research*, *Journal of Family Business Management* and *International Small Business Journal* among others. He is currently co-editing a special issue on entrepreneurship and poverty in the *Entrepreneurship and Regional Development Journal*. He has published three cases in this series related to SDG#1, SDG#8, SDG#11 and SDG#13.

Gina Dang is a visionary leader transforming Australian agriculture with innovation and excellence. As General Manager of SSS Strawberries, she inspires her team with passion and expertise. Gina's journey began in 1994 when her family emigrated from Vietnam to Australia. She and her six siblings co-founded SSS Strawberries (Seven Successful Siblings), now one of Australia's largest and most innovative strawberry farms, renowned for its excellence and sustainability. Her love for food led her to launch Gina's Table, offering frozen and freeze-dried fruit products from Australia's largest state-of-the-art facility. Gina is a multi-talented entrepreneur, balancing roles as a Human Resources

Trainer, a Manager, an Advisor, a CEO and a Director of her family business. Gina oversees the business's property development and management arm, using her Principal real estate licence and her bachelor's degree in Commercial Law and Accounting. She is a Master of NLP and is an Australian Institute of Company Directors graduate.

Dr Jacinta Dsilva is a Research Director at SEE Institute, a hub for sustainability research, education and innovation in Dubai, United Arab Emirates. In her current role, she spearheads the research department and focuses on areas such as sustainability, behavioural studies and circular economy in the built environment sector. She completed her PhD from Coventry University, UK, and holds two master's degrees in Consumer Behaviour and Human Resources Management. She is the author of several books such as 'Business Communication' and 'Surviving the COVID-19 Pandemic' and 'SDG-5: Gender Equality & Female Empowerment Policy for Sustainable Development'. She has several research publications under her belt both in marketing and sustainability. Another area of interest is researching family-run businesses that have developed a sustainable model of operations that has positively impacted the society at large. These research studies highlight how businesses successfully balance growth and social responsibility, serving as models for sustainable entrepreneurship.

Rosemary L. Fisher applies entrepreneurship principles to create a culture of creativity and adaptability in contemporary learning environments using evidence-based teaching strategies, with a passion for fostering innovation and problem-solving. Her research expertise informs her teaching practice, allowing her to design personalised approaches that enhance student engagement, motivation and learning outcomes. In addition to her commitment to education, Rosemary has a strong interest in sustainable practices. By combining her expertise in research with her concern for the environment, Rosemary seeks out unique insights and perspectives that contribute to the broader discussion on sustainable entrepreneurship and education for a more sustainable future.

Associate Professor Rob Hales is the discipline leader for Sustainable Business and Management in the Department of Business Strategy and Innovation. His research interests focus on the governance issues around the grand challenges of our time. Furthermore, his research focuses on SDGs in business and government, a business case for climate change, climate change policy, carbon management, sustainable tourism and working with First Peoples on consent processes and climate change. He was the first programme director of Griffith University's Master of Global Development. He teaches in the Department of Business Strategy and Innovation and has convened master's level courses such as Leadership for Sustainable Business, Research Methods for Policy Makers and Sustainability and Systems Thinking. He supervises PhD students in the areas of collaborative governance, sustainability transitions and climate change.

Dr Amber Marshall is a Lecturer in Management at Griffith University (Australia) whose research focuses on digital inclusion and rural development. Her work explores how individuals, organisations and communities in regional, rural and

remote Australia become digitally connected and adopt digital technologies, and how this intersects with social and economic well-being. Dr Marshall's work draws on interdisciplinary perspectives from management and communication sciences and employs qualitative and ethnographic methods to co-design solutions with local stakeholders. Her research interests include digital AgTech and data, digital inclusion ecosystems, remote telecommunications infrastructure and digital skills and capability development. She has published in top-tiered journals, presented at national and international conferences, produced industry and policy reports and attracted substantial research funding from government and commercial partners.

Claudio G. Muller is a Visiting Professor of Management at Rawls College of Business, Texas Tech University, United States. Dr Muller has published in journals in the field of management such as: *Journal of Family Business Strategy*, *Journal of Evolutionary Studies in Business*, *Cross Cultural & Strategic Management*, *Academia Revista Latinoamericana de Gestión*, *British Food Journal* and *Global Journal of Flexible Systems Management* among others. He is also the co-author of the books *Family Firms in Latin America* (edited by Routledge, 2018) and *Family Business Heterogeneity in Latin America* (edited by Springer, 2021).

Marcio Paz is the cofounder and the Director of Operations of Del Lago Orgánico S de RL. He is a Chemical Engineering graduate with postgraduate degrees in Project Management and Strategic Planning. He is currently mentoring his children in all the business areas in Del Lago Orgánico S de RL.

Rebeca Paz is the cofounder of the family business Del Lago Orgánico S de RL. She is a Marketing and Logistics Engineering graduate. Currently, she is the legal representative and general manager of Del Lago Orgánico S de RL.

Michael J. A. Seidler, an engineer with the soul of an environmentalist, holds a Bachelor of Engineering (Elec.) and an MBA from the University of Melbourne. He commenced his professional career in the construction industry as a building services engineer, developing lighting and power solutions for commercial and industrial developments. With time, he expanded his expertise into building automation, industrial process automation and data networking. Transitioning into the mobile telecommunications industry, he spent more than 20 years in technology strategy, product management and development and business analysis and strategy. More recently, he has been working with a focus on renewable energy and environmentally conscious housing solutions and the contribution they can make to greenhouse gas reduction.

Marina Skinner, founder and principal of Generational Harmony, is a leading Australian family business specialist with over 20 years of experience. She holds an EMBA in Family Business from Bond University and has 12 years of hands-on experience managing a small family business, earning a Business Achiever of the Year Award. As a Specialist Accredited Family Business Advisor (SAFBA), she has worked with major international firms like BDO and Grant Thornton, where she helped create the award-winning Family Office Services division. Marina co-authored the 'Family Business Wealth & Knowledge Transfer Report', which

influenced the appointment of the Australian Small Business and Family Enterprise Ombudsman. She is a strategic mentor who ensures best practices and generational continuity for her clients through a holistic business approach. Marina is affiliated with the Family Business Association (FBA) and a judge in the FBA Awards for Family Business Excellence.

Mrs Nikki Thompson has always been a generalist and a visionary who has always followed her heart. She met and fell in love with Peter as a young physiotherapy student and brought those skills with her when she moved to Echo Hills 43 years ago. She has always loved to mix evidence-based practice with more ancient wisdom during her career as a health professional, her coaching career and in her connection with the life on the land at Echo Hills. Her journey with the land has been a gift, and while not ‘working in the paddock’ much, her passion for what comes when we all work on ‘the inner paddock between our ears’ has added different dimension to the emergence of their family and life at Echo Hills.

Mr Peter Thompson was born and raised at Echo Hills walking its land his whole life. He is a farmer who is passionate about agriculture with an emphasis on regenerative practices and its valuable contribution to modern society. He believes in operating as a team in conjunction with his urban counterparts for the long-term financial and environmental sustainability of Australia. He has a life-long love of machinery and technology, especially where it can enhance the human experience. He is a curious innovator who reads and travels widely. He likes to find the techniques that can be trialed and tested in local context rather than devoutly following a particular practice. Peter is totally committed to seeing a fair and equitable integration of energy and agricultural production that first and foremost protects the land, water, agricultural practices and human liveability for future generations.

Foreword

*Prof. Walter Leal Filho (PhD, DSc, DPhil, DTech, DEd)
Chair, Inter-University Sustainable Development Research Programme*

The SDGs adopted by the United Nations General Assembly in September 2015 provide a universal call to action to end poverty, protect the planet and ensure that by 2030 all people enjoy peace and prosperity.

They also entail elements of importance towards a strategic business engagement with sustainability issues. These offer a framework which provides businesses with a systematic approach to identify new business opportunities while contributing to the solution of the grand sustainability challenges facing the world today, including climate change. Each SDG, if achieved, will have a direct and significant positive impact on millions of people's lives around the world and the environment in which they live. Businesses have an opportunity to widen the purpose of business through adopting the SDGs as targets for their operations. Thus, they can make a meaningful contribution to the greater good through achieving their operational objectives.

Family businesses are uniquely placed to contribute to SDGs for many reasons. Firstly, because family business models have longer time perspectives, and this allows the family business to link with the longer-term SDG time frame – 2030. Second, family businesses often focus on aspects of business operation which do not have an immediate return on investment such as relationship building with stakeholder groups. Thirdly, family businesses tend to rate the importance of ethics higher than standard businesses and thus align well with the social dimensions of the SDGs. Lastly, family businesses have intergenerational perspectives which is a core principle of sustainability.

This book provides insights into how family business operationalises SDG#15: Life on Land. The book uses a rigorous case study approach for family businesses to detail aspects of their business which help life on land. The cases provided here are living proofs that family business that operates for the greater good actually works! Non-family businesses can take a leaf out of the family businesses portrayed in this book as they can provide different perspectives on how businesses can successfully align SDGs and business strategy.

Despite many businesses having adopted environmental social governance strategies and environmental management systems, the effect of this activity has not been reflected in a healthier planet. Many 'state of the environment' reports indicate that planetary health is decreasing, and planetary boundaries are being

crossed or are about to be crossed. While the cause of this decline is not entirely the fault of business, there still needs to be a greater effort to address the decline. The challenge for family businesses is to use their unique characteristics and set ambitious programmes of work that make a meaningful contribution to achieving global goals. This book provides insights into how family businesses can achieve such a mission and how non-family businesses can be inspired to do the same.

Acknowledgements

The Editor would like to thank the contributors of the book for providing insights and sharing learnings from their business practice. We acknowledge that writing up cases in the format required considerable time and effort. The quality of the cases presented is testament to their efforts.

The Editor would also like to thank Emerald Publishing for supporting the publication of this book and the mission for deeper sustainability through utilising the SDGs.

Dr Amber Marshall, Mrs Nikki Thompson and Mr Peter Thompson, authors of Chapter 4, acknowledge the traditional owners of the land where Echo Hills Farm is situated, on Yiman country in Queensland. We give gratitude to all those who have walked, lived and cared for this land since humans evolved in this place. We have been and always will be owned and grown by this land. May we all remember that as we journey forward together collaboratively as true custodians.

Gina Dang, the co-author of Chapter 6, wishes to take this opportunity to express her heartfelt gratitude to her entire family: her husband Toan Nguyen, her siblings, Victor, Lilly, Cindy, Thanh, Trinity and Rena Dang for their relevant contributions, expertise, insightful discussions and suggestions which greatly improved the quality of this case. Finally, Gina Dang would like to thank her parents and spiritual mentors from Tao for their endless love and support, without which this family business story would not have been possible.

Prof Mary Barrett, the author of Chapter 7, would like to thank Charlie Emery, the Managing Director of SOILCO, for the interview he granted very early on a business day, and for his help with access to website resources. She would also like to thank his staff for making the interview arrangements. Thanks are also due to SOILCO's founders Maria Emery and Tony Emery, who generously gave her a tour of SOILCO in about 2011. Tony Emery surely sowed the seed for this chapter when he remarked to her, 'You think you've seen compost? I'll show you compost!'

Dr Jacinta Dsilva, the author of Chapter 8, would like to take this opportunity to express her heartfelt gratitude to Mr Alaa Mustafa for generously sharing his valuable time for the interview and giving her and her research assistant, Lydia Cherian, valuable information to complete this case study. My sincere acknowledgement goes to Lydia Cherian, my research Intern and Ivory the staff member of MyHive for their unwavering support in completing this case.

This page intentionally left blank

Chapter 1

The Sustainable Development Goals: SDG#15 Life on Land and Family Business

Rob Hales

Griffith University, Australia

Introduction

The 2030 Agenda for Sustainable Development, adopted by all United Nations member states in 2015, serves as a shared blueprint for promoting peace, prosperity and well-being worldwide. The Sustainable Development Goals (SDGs) call for innovative solutions to complex societal and environmental issues. Businesses, particularly family enterprises, play a vital role in advancing these goals, as they constitute a significant portion of the global economy. The 2030 Agenda urges all nations to address critical challenges such as poverty, inequality, climate change, environmental degradation, peace and justice. These challenges are identified by 17 SDGs as depicted in [Fig. 1.1](#) and within the SDGs are a total of 169 targets.

The 17 SDGs acknowledge that ending poverty and other global challenges need strategies that improve health and education, reduce inequality and spur economic growth – all while tackling climate change and working to preserve our oceans and forests ([United Nations, 2021](#)). This book makes an important contribution to research on family businesses by highlighting how businesses can make valuable contributions towards sustainable development and in particular assist in achieving the SDGs.

The adoption of SDG#15 is aligned with other business sustainability initiatives. Corporate businesses are increasingly adopting initiatives such as the [Science Based Targets for Nature \(n.d.\)](#), the Taskforce on Nature-related Financial Disclosures ([TCFD, n.d.](#)) and Target 10 of the Global Biodiversity Framework ([Convention on Biological Diversity, 2022](#)). The challenge for family businesses is to follow these types of frameworks that align with SDG#15. Although there is a growing list of initiatives aimed at increasing the environmental and social governance of companies in relation to biodiversity management, a focus on SDG#15 and the targets is a simple but deep approach to biodiversity preservation and management for a family business. When using the

Attaining the 2030 Sustainable Development Goal of Life on Land, 1–12

Copyright © 2025 Rob Hales

Published under exclusive licence by Emerald Publishing Limited

doi:[10.1108/978-1-83608-212-520241001](https://doi.org/10.1108/978-1-83608-212-520241001)

SUSTAINABLE DEVELOPMENT GOALS



Fig. 1.1. 17 Sustainable Development Goals.

Source: United Nations (2021).¹

SDGs as a strategy to improve the elements within any goal, it is vital to use specific targets of each goal. These targets then need to be translated into business action.

Book Series Focus – SDG#15

This book focuses on SDG number 15 (SDG#15), which focuses on life on land. The main targets for SDG#15 are shown in Table 1.1. These targets can assist family businesses align business value chains with greater impact towards SDG#15 – to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.

To help businesses understand and implement these targets and indicators, various authorities have produced guidance documents. Two commonly used guidance documents are the SDG guides from the [Global Reporting Initiative \(2019\)](#) and the [United Nations Global Compact \(n.d.\)](#). These documents provide a range of actions which businesses can implement to assist in achieving the targets. By aligning their strategies and operations with these targets, businesses can not only mitigate their environmental impact but also create long-term value

¹The content of this publication has not been approved by the United Nations and does not reflect the views of the United Nations or its officials or Member States.

Table 1.1. SDG#15 Targets and Indicators.

SDG#15 Targets	SDG#15 Indicators
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area 15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type
15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	15.2.1 Progress towards sustainable forest management
15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	15.3.1 Proportion of land that is degraded over total land area
15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	15.4.1 Coverage by protected areas of important sites for mountain biodiversity 15.4.2 Mountain Green Cover Index
15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	15.5.1 Red List Index
15.6 Promote fair and equitable sharing of the benefits arising from the utilisation of genetic resources and promote appropriate access to such resources, as internationally agreed	15.6.1 The number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits

(Continued)

Table 1.1. (*Continued*)

SDG#15 Targets	SDG#15 Indicators
15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked
15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species
15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	15.9.1 (a) The number of countries that have established national targets in accordance with or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets and (b) integration of biodiversity into national accounting and reporting systems, defined as implementation of the System of Environmental-Economic Accounting
15.a Mobilise and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	15.a.1 (a) Official development assistance on conservation and sustainable use of biodiversity and (b) revenue generated and finance mobilised from biodiversity-relevant economic instruments
15.b Mobilise significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation	15.b.1 (a) Official development assistance on conservation and sustainable use of biodiversity and 15.b.1 (b) revenue generated and finance mobilised from biodiversity-relevant economic instruments

Table 1.1. (Continued)

SDG#15 Targets	SDG#15 Indicators
15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked

Source: [United Nations \(n.d.\)](#).

for their stakeholders and the communities in which they operate. Some important ways that family business can align their business practices with SDG#15 and the challenges of alignment are provided below.

Target 15.1 – Preserving Terrestrial and Freshwater Ecosystems

Businesses that directly have operations in land and freshwater areas will have regulations relating to sustainable use, and this will vary in regulatory strength depending on where the business is located. The family businesses that have sustainability at the core will have adopted preservation and sustainability practices that go beyond minimal compliance standards. Family businesses situated in rural locations or near natural habitats also can contribute to the preservation and sustainable use of terrestrial and freshwater ecosystems. However, it depends on how sustainability is positioned concerning the business model of the organisation and how the business is linked to the local communities in which they are situated ([Krause et al., 2020](#)).

Target 15.2 – Sustainable Forest Management and Reforestation

For family businesses involved in forestry, agriculture or related sectors, adopting sustainable forest management practices is crucial. Businesses directly related to forestry must prioritise biodiversity preservation and sustainable management, guided by a range of forestry certification standards. One of the most prominent standards is the Programme for the Endorsement of Forest Certification (PEFC). This standard lays out international requirements that national forest management standards must meet for PEFC endorsement. For family businesses aiming to be sustainable, labelling schemes for certified forest products are vital. The Forest Stewardship Council (FSC) is the predominant standard. Family businesses may struggle to meet certification programs but can align themselves with the principles of practice.

Target 15.3 – Combating Desertification and Land Degradation

In regions affected by desertification and land degradation, family enterprises can play a crucial role in addressing these challenges. By adopting sustainable agricultural practices, such as water conservation techniques, soil management strategies and cultivating drought-resistant crops, they can mitigate the impacts of desertification and promote the restoration of degraded lands. However, these efforts are often hindered by limited access to resources, knowledge and technology, as well as the impacts of climate change exacerbating the severity and frequency of droughts and extreme weather events.

Target 15.4 – Conserving Mountain Ecosystems

For family businesses located near or operating in mountain regions, conserving mountain ecosystems and their biodiversity is a critical responsibility. They can support conservation efforts, implement sustainable tourism practices and promote the preservation of traditional knowledge and cultural practices related to mountain ecosystems (Geneletti & Dawa, 2009). By investing in sustainable infrastructure development and adopting environmentally friendly practices, these businesses can minimise their impact on these ecosystems. A major challenge for family businesses in these regions is balancing economic activities with environmental conservation, as many family businesses in mountain regions rely on natural resources for their livelihoods (Kreutzmann, 2024). Despite close links to the environment the constraints of finance and technology are a major challenge.

Target 15.5 – Protecting Biodiversity and Threatened Species

Safeguarding biodiversity and threatened species are a collective responsibility that family businesses can contribute to in various ways. These businesses can also raise awareness about the importance of biodiversity, collaborate with environmental organisations and encourage their employees and local communities to participate in conservation activities (Hajjar & Oldekop, 2018). Furthermore, they can support research and monitoring efforts and advocate for stronger policies and regulations to protect threatened species and their habitats.

Target 15.6 – Fair and Equitable Sharing of Genetic Resources

Family enterprises that utilise genetic resources or traditional knowledge must ensure fair and equitable sharing of benefits with local communities and Indigenous peoples. This can involve establishing benefit-sharing agreements, respecting intellectual property rights and promoting the sustainable use of these resources (Schroeder & Pogge, 2009). By fostering mutually beneficial relationships with local communities and Indigenous peoples, family enterprises can contribute to the preservation of traditional knowledge and the sustainable use of genetic resources, while also promoting social and economic development.

Target 15.7 – Combating Wildlife Trafficking

The illegal trade in wildlife products poses a significant threat to biodiversity and the survival of many species. Family businesses can take a stand against wildlife trafficking by implementing strict policies against the trade of illegal wildlife products, raising awareness among their employees and communities and supporting law enforcement efforts (Phelps et al., 2016). They can also collaborate with conservation organisations and government agencies to combat the demand and supply of illegal wildlife products (Zain, 2020). Tourism family businesses dependent on wildlife play a direct role in creating an alternative political economy as opposed to wildlife trade. Like other SDG#15 targets, family businesses should also adopt nature-related disclosure practices.

Target 15.8 – Preventing and Controlling Invasive Alien Species

Invasive alien species can have devastating impacts on native ecosystems, biodiversity and economic activities. Family enterprises can contribute to preventing and controlling these species by implementing biosecurity measures, supporting research and monitoring efforts, and promoting sustainable practices that minimise the introduction and spread of invasive species (Hulme, 2009). They can also collaborate with relevant authorities and organisations to develop and implement effective management strategies for invasive alien species. Like other SDG#15 targets, nature-related disclosure practices are also important for family businesses to embrace.

Target 15.9 – Integrating Biodiversity Values Into Planning and Strategies

To truly embrace sustainability, family enterprises must integrate biodiversity values into their planning, development processes and strategies. This can be achieved by conducting comprehensive environmental impact assessments, adopting sustainable business practices and considering the value of ecosystem services in their decision-making processes (Houdet, 2008). Through the implementation of these measures, family enterprises can play a significant role in advancing SDG#15 and contribute to the conservation and sustainable use of terrestrial ecosystems and biodiversity.

Family Business and an Eco-centric Approach to Biodiversity

Family businesses possess a distinct advantage in leading the transition from a human-centric to an eco-centric approach. Their deep-rooted connections to local communities and environments provide a natural foundation for this shift. While traditional Environmental, Social and Governance (ESG) metrics have primarily focused on promoting sustainable finance, green taxonomy screening and sustainability reporting, recent research underscores the urgency for greater accountability

and action to counter species extinction – a challenge that family businesses are well-positioned to address.

The recent research by [Miroshnychenko et al. \(2024\)](#) examined the environmental management practices of family businesses concerning sustainability. [Miroshnychenko et al. \(2024\)](#) analysed 1,690 family and non-family publicly traded firms from 29 countries and 19 industries over the period 2007–2014. They found that there was substantial heterogeneity in the environmental practices of family firms, ranging from extremely unsustainable to highly sustainable. On the end of the pro-sustainable continuum, sustainable family businesses tended to be older and were smaller in size. They also found that many sustainable family businesses had independent directors and institutional ownership. High-income countries were also noted as having the highest rates of sustainable family business. This implies understanding the role of family business in biodiversity management and the achievement of SDG#15. Unsurprisingly, the study found that family businesses that were in ‘dirty industries’ (Manufacturing and fossil fuel-based industries) were not more sustainable than non-family businesses.

Family businesses with strong financial performance and a long-term outlook are more likely to become champions of environmental stewardship. Family businesses that have a strong long-term presence in local communities are more likely to have their operations and decision-making processes closely intertwined with the surrounding environment. This proximity to the natural world fosters a deeper understanding of the intricate relationships between business activities and ecological systems. SDG#15 is an important SDG for family businesses because sustainability in these businesses tend to have an anthropocentric bias, limiting their effectiveness in protecting biodiversity ([Kopinina et al., 2024](#)).

The Chapters and Contribution to SDG#15

This book showcases how family businesses contribute to preserving and sustainably managing terrestrial ecosystems, forests and biodiversity. A summary of the chapters in this book are provided below.

Chapter 2 provides an explanation of what family businesses are and how they contribute to global economies. Chapter 3 explores Bambra Agroforestry Farm which exemplifies how integrating forestry into agricultural landscapes can significantly contribute to SDG#15. The farm is owned and operated by Rowan and Claire Reid in Victoria, Australia and have demonstrated that commercial tree growing, and conventional agriculture can coexist. Through education, consultancy and practical demonstration, Bambra Agroforestry Farm has become a living laboratory, showcasing how farmers can adopt sustainable land management practices that promote the sustainable use of terrestrial ecosystems. The Reid family has planted over 50 commercial tree species and implemented various planting arrangements and regenerative management techniques. The business model is an inspiring example of how agricultural practices can be transformed to align with the goals of SDG#15.