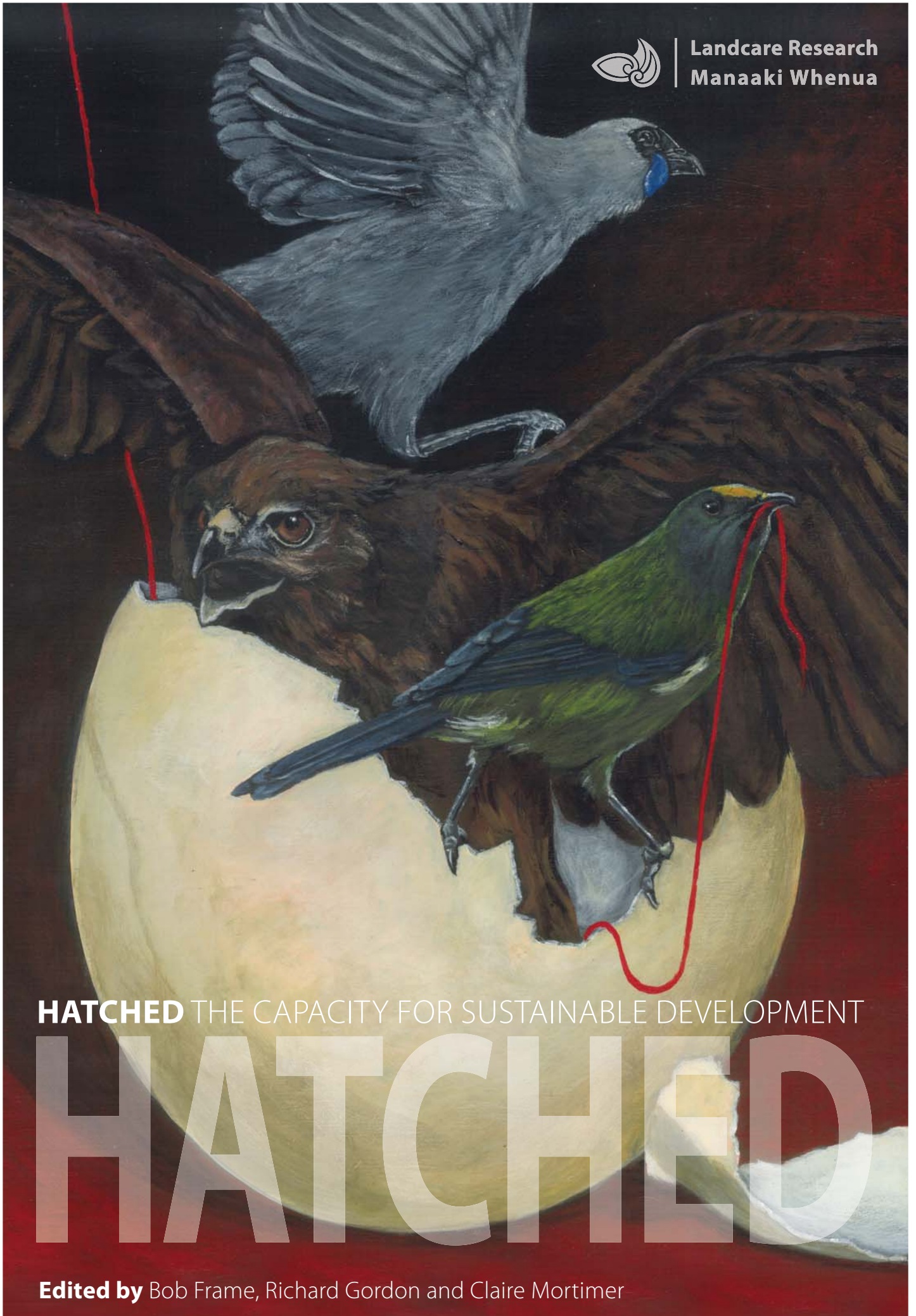




Landcare Research
Manaaki Whenua



HATCHED THE CAPACITY FOR SUSTAINABLE DEVELOPMENT

HATCHED

Edited by Bob Frame, Richard Gordon and Claire Mortimer

acknowledgements

The core of the research reported in this e-book was supported through the Foundation for Research, Science and Technology project Building Capacity for Sustainable Development: The Enabling Research (C09X0310), which ran from October 2003 to September 2009. We have attempted to distil much of what we have learnt on this and associated projects so as to make it accessible to others: both those working and studying in this complex and emerging topic and those implementing the ideas and tools in their day-to-day working lives. However, we equally see our learnings as foundational for longer term research that will attempt to understand and deliver solutions for the benefit of New Zealand and which will confirm its reputation as an innovative, practical and future-oriented supporter of good science.

In addition to the most welcome contributions from 30 authors, we must thank many colleagues for unstinting support during the project and the preparation of this book. Inadvertently we may well pass over those whose efforts were critical to our success. However we specifically thank Alison Dalziel, Ann Magee, Louise Marra and Andy Pearce for their commitment and encouragement to the programme especially in its formative stages. We seek to thank everyone involved for many long days, creative tensions and runaway successes which have helped to take the thorny issue of research into sustainability to a new level in New Zealand. For the present though we owe a huge thank you to Christine Bezar and Nicollette Faville for taking our rough-hewn copy and breathing professional design into it. As a group we have enjoyed the support of Michael Krausse, Diane O'Connor and Tamsin Rees and many others who continue to make Landcare Research a unique institution in New Zealand in which to undertake this important work.

Each chapter reflects the authors' work but also that of many others as researchers, participants, colleagues, contracting agents and stakeholders. While there are too many to thank individually, all 30 authors are grateful for the many contributions that lie behind these chapters and the many other activities that have taken place. However, the true test will be the resilience of these ideas and the continued support to really make a difference.

The painting 'Hatched' by Penny Howard, illustrates the CS Lewis quote, that at a personal and collective level we need to transform states to both survive and reach our full potential. Three New Zealand birds; the songbirds Korimako and Kōkako and the farsighted Kāhu, are shown hatched but not quite taking flight. The red thread in Penny Howard's paintings refers to bloodlines and I Nga Wa O Mua, the Maori world view, to look in front of us and to the past for guidance.



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National Library of New Zealand Cataloguing-in-Publication Data

Hatched : the capacity for sustainable development / edited by
Bob Frame, Richard Gordon and Claire Mortimer.
ISBN 978-0-473-16123-1 (internet)—ISBN 978-0-473-16124-8 (pbk.)
1. Sustainable development—New Zealand. 2. Environmental
protection—New Zealand. I. Frame, Bob. II. Gordon, Richard (Richard
Francis Starforth), 1955- III. Mortimer, Claire. IV. Manaaki Whenua-
Landcare Research New Zealand Ltd.
338.9270993—dc 22

ISBN 978-0-473-16123-1 (eBook)

ISBN 978-0-473-16124-8 (print)

Book design – Nicolette Faville
Proof reading – Christine Bezar
Cover Painting: 'Hatched' by Penny Howard

Published by Landcare Research New Zealand Ltd
PO Box 40, Lincoln, 7640
January 2010

"It may be hard for an egg to turn into a bird: it would be a jolly sight harder for it to learn to fly while remaining an egg. We are like eggs at present. And you cannot go on indefinitely being just an ordinary, decent egg. We must be hatched or go bad."

C. S. Lewis



introduction

C. S. Lewis's egg provides a metaphor for humanity's defining choice: stay as we are and, through global resource depletion, climate change and social inequity, allow civilisation to crumble and decay, or, alternatively, transform and take flight.

More than 30 years of scientific evidence shows the trajectory that the developed world and New Zealand have pursued up till now cannot be sustained. Over the last two years the warning signals have become increasingly tangible: the collapse of banking institutions worldwide, melting Arctic sea ice, volatile oil prices as global supplies diminish, and the risk of water wars, domestically and internationally, that hides deeper issues of food security.

Developing new ways to live and do business will be the defining challenge of our age. Our last chance to hatch, or go bad...

Sustainability and long-term success require substantial change throughout society. Six years ago New Zealand appeared to many to be, as Lewis warned, 'an ordinary decent egg'. Some did not see any need to change, while others did not know where to start. In 2002, when editors Richard Gordon and Bob Frame designed the six-year research programme Building Capacity for Sustainable Development: the Enabling Research, we were guided by the government's thinking on sustainable development, which was later published in Sustainable development for New Zealand: Programme of Action (DPMC 2003). Our research programme, whose findings are explored in this book, aimed to identify and develop the capabilities needed in New Zealand to meet the government's call for 'a different way of thinking and working' in order for New Zealand to achieve sustainable development.

How is sustainable development defined in this book? There has been considerable debate over the concepts of strong and weak sustainability, and as a natural science institute we

appreciate that socio-economic systems are fundamentally dependent on robust natural systems. But the chapters within this book provide more nuanced perspectives of sustainability. Māori self-determination and cultural resilience, for example, lie at the heart of many sustainable Māori business models, while an urban sustainability concept considers how to balance those elements of city systems that require long-term stability with elements that need to constantly adapt and change. Sustainability in this book is not tightly defined but is explored within different contexts.

Hatched also describes some of the many branches of research that grew from the Building Capacity programme. Principal among these were:

- Regional futures: the development of three parallel projects: in the Waikato Region (integrated systems for decision support, Chapter 4), Canterbury Region (addressing the wicked problem of water as a constraining resource, Chapter 21), and the Marlborough Region (a network of champions for achieving carbon neutrality, which supported development of the EBEX21 and carboNZero programmes, Chapter 12)
- Certification standards: we believed that businesses and other organisations needed practical tools to achieve early wins (e.g. cost savings) and longer term, credible demonstration to their stakeholders of performance and integrity (carboNZero, Chapter 12, Greening the Screen, Chapter 13)
- Māori business: in our view, founding businesses on indigenous people's world views and values created a new business model that embodied many aspects of sustainable development (Chapter 10).

Hatched provides some of the findings, stories and tools

developed over the past six years. It's an eclectic mix – ranging from an historical review of what creates successful cities, to a stakeholder evaluation tool, to new theoretical approaches, to understanding governance. Despite the diversity, five thematic strands emerge from the research identifying key capacity needed for sustainability and forming the five sections of the book.

The first section explores the need to think and act for long-term success. We often make decisions assuming the future will resemble the present, but a short review of history will remind us this is not so. How do we stretch thinking beyond our limited imagination for change, beyond immediate demands of the present? Government has a particular role here; the market, which we have increasingly relied upon to shape New Zealand, has neither memory nor foresight to do this. Its strength is its agility to adapt and innovate; but it is not the marketplace but society and government who will need to deliberately envision and create pathways to a desired future.

The second section considers businesses as sustainability innovators. Businesses have the capability, creativity and resources to adapt and capitalise on future change and we found some of the most significant shifts in the last six years within the business sector. Globally, sustainability reporting is now a mainstream management and communications tool for large companies – with nearly 80% of the largest 250 companies publishing reports. In New Zealand the development has been more tentative, but the rewards in overseas markets for businesses that engage with sustainability issues (climate change especially) has led many to be innovative in the product, service and business models.

The third looks at individuals – as citizen consumers. Changing ourselves and how we live is extraordinarily complex. Our behaviour and consumption choices are influenced by our values, identity and knowledge, and by social norms and institutional constraints. Our research suggests that changing behaviours will require more than providing solid information. People need to learn from each other and create their own solutions. And at a fundamental level society will need to reactivate the concept of citizenship – of acting for the common good versus acting as the individual consumer.

The fourth is facing up to wicked problems. The complexity and value-laden nature of many global change processes is proving

too onerous for many tools developed for situations, for example, when resources were considered to be infinite. Such problems are being characterised as 'wicked', or 'super-wicked' in the case of climate change. Facing up to wicked problems requires new ways of working and new modes of thinking. Our research opens up the difficulty in achieving this, sketches some pathways forward and describes what those pathways might look like in practice.

The fifth and last section looks at the future as a set of choices. It is easier in the face of great challenges to believe in inevitability, safer to shuffle deckchairs, more human to deny change is happening. It is a mark of leadership, however, to believe that we can make choices – especially when those choices are hard and require a fundamental review of our assumptions. New Zealand has enormous potential to determine its own future but only if it acts decisively and proactively. In this last section we consider the next steps for sustainable development both in New Zealand's research and practice and beyond.

The aim of this book is to provide a representation of research findings in an accessible form for practitioners within the public, business and the wider community sectors. We hope readers will delve deeper into the academic papers listed at the end of each chapter. There is much more available on our website and we invite readers to contact our lead authors for our most recent work. General comments can be directed to buildingcapacity@landcareresearch.co.nz

This book does not pretend to cover all aspects of sustainability. It leaves out many great ideas, experiments and successes. It does not address biophysical science, for example in climate change, biodiversity, soils, land and urban ecosystems; that is a feature of the work of New Zealand's Crown Research Institutes. Instead our research has focused on supporting New Zealand's and international capacity for sustainable development. We believe that capacity has now, in C.S. Lewis's words, begun to hatch. We hope the insights within this book will continue to help individuals, organisations and communities to transition from the potential of the egg to the flight of the bird.

Claire Mortimer, Richard Gordon and Bob Frame

1 November 2009, Aotearoa New Zealand