The Invading Sea: Coastal Hazards and Climate Change in Aotearoa New Zealand

By Neville Peat. The Cuba Press, Wellington, 2018.

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As noted on the back cover of this impressive book, Prime Minister Jacinda Ardern said "We will take climate change seriously ... This is my generation's nuclear-free moment, and I am determined that we will tackle it head on." Neville Peat has written a very timely book about climate change and its impact on coastal New Zealand and Pacific atolls. Production quality is high, it is attractive to look through, well laid out and easy to read. The book is divided into two main sections (Part One – The reality; Part Two – The response) within which there are four and five chapters, respectively. Each chapter is supported by a few key references, and at the end of the book there is a References section and a reasonably comprehensive Glossary.

Writing a book about climate change, in particular one that is aimed at a general rather than a specialist readership, is always going to be a difficult task for several different reasons. Peat does a good job of keeping the text interesting and flowing, without getting bogged down in detail. The chapters are a mix of history and background, technical information, and case studies of individual North and South Island coastal regions and of Pacific atolls. Using blue boxes that are separate from the main text in each chapter, the book describes the stories of individual people and their local coastal hazards, making the book about more than just the science of climate change. This is a story of people and communities dealing with adversity. As I found whilst reviewing the book, it is easy to read a chapter or a section and then put the book down for a few days or a week, and then come back to it. As one might expect of a very well published and respected author, Peat has a good turn of phrase, which makes the book very readable and enjoyable.

The book does an excellent job of highlighting the complexity of the climate change and coastal hazards problem in New Zealand, and also for low lying atolls in the Pacific. At the forefront of the story are communities living on the coast who are now facing unprecedented storm activity and coastal erosion. Mr. Peat tells their story, details individual struggles with the sea itself and sometimes, unfortunately, with the authorities as well. The often piecemeal approach that many different regions in New Zealand have taken over the years in terms of planning for, and then dealing with, coastal hazards is well described. Ultimately, for communities living on the coast, the question is going to be about saving private property and culturally important sites – do we defend against the sea (if so, how?) or do we have a managed retreat? And of course, perhaps the biggest question of all – who pays for this? These and other issues are well described in the book, and give the reader cause for deeper reflection on this pressing issue.

The final chapters of the book describe the problem in the Pacific (Tokelau, Tuvalu and Kiribati) where the situation for low lying atolls is as dire as anywhere in the world (Chapter 7), and also for international adaptation and mitigation strategies (Chapter 8) that have moved at a snail's pace and have not delivered the outcomes that were hoped for. Chapter 9, the final chapter, provides a good summary of recent New Zealand political history as this relates to climate change, the election of the present Labour/New Zealand First/Green Party coalition government, and the change in emphasis that this country now has on climate change in general.

Any book about climate change faces a couple of problems. First, the science underpinning our knowledge of climate change is moving so rapidly that every climate change book written now will be dated (but perhaps not out of date) within two or three years. This is not a criticism, but simply a statement of fact, and reflects the unprecedented global scientific effort to understand and mitigate the problem. Second, the nature of the climate change debate is such that climate change deniers will not read this book, although, of course, they really should. Peat does an excellent job of making the point that even if you don't believe in climate change, the insurance industry and your local regional or unitary authority both do, and this may have a direct impact on you in terms of your ability to buy or to insure your home if you live close to the sea, how you rates will be spent to defend (or not) the coast in your area, and who pays if you lose land or if your home is flooded.

This is an excellent book – very well written and presented, easy to read, entertaining at times and certainly a bit of an eye opener in terms of the mixed bag of legislative framework that exists in New Zealand for dealing with climate change and coastal hazards, and the need for a more integrated national approach. The book is highly recommended: it is aimed at the general public, but could just as easily be used as a teaching resource by secondary schools or as a general resource by local community groups who are grappling with the problem and need a better understanding of the issue and what to expect from their local council. Peat has done an excellent job of making this complex issue easy to read and understand, both in terms of climate change science and also in terms of its impact on people and communities.