BOOK REVIEW

CLIMATE CHANGE ADAPTATION for Health and Social Services. Rae Walker and Wendy Mason (Eds.). (2015). Clayton South, VC: CSIRO Publishing, 280 pp., \$62.95, ISBN: 9781486302529 (paperback)

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The book delivers a factual but timid attempt to explore a necessary topic; its central focus is on the local Australian context, but also includes intermittent commentary with international implications. This book is, to some extent, a useful resource to students and educators, but is of limited assistance to practitioners. Upon reviewing this book, the principal criteria have been observed to include content, organization, and reference sources. While organizational inconsistencies are abundant throughout the book, many of the shortcomings of this first edition can be improved upon by later editions. On the other hand, content issues and deficiencies will require extensive work before significant improvements can be made and its intended benefits can be captured by a broader audience. Organizational and content concerns are a major distraction to the main objectives of the book, which, at the end of the text remain only partially met. The ideas supporting the development of the objectives of the book are presented to the readers in a manner than lacks clarity, leaving them wondering not only what the adaptation process to climate change encompasses, but also about how this process occurs.

The editors, Rae Walker and Wendy Mason, are a scientist and a professional practitioner, respectively. Emeritus Professor Rae Walker has a background in health, education, and social sciences, and her research focuses on community-based services with emphasis on service delivery and inter-organisational relationships. Wendy Mason has worked in the area of services in both metropolitan and rural settings, and is experienced in partnership development, stakeholder engagement, strategic and area-based planning, and conceptual modelling. The theoretical and practical backgrounds of the editors influence the content in the text as well as the organizational characteristic of the book. While each have authored or co-authored a chapter, the editors put together the work of diverse scientists and professionals with a wide range of backgrounds. The author(s) of each chapter contributes to the objectives of the book by focusing on a specific area of expertise; nevertheless, consistency and readability issues often arise with the inclusion of a large number of contributors who are intended to be coordinated by the editors in charge.

The book is divided into three parts: issues, vulnerable populations and appropriate adaptations, and organisational adaptation. Throughout the book the authors present factual information making an effective use of references; however, the (at times overwhelming) use of references in the text prevents the reader from identifying the original ideas the authors are intending to present. The background of the authors influences the writing style, which is reflected in the eagerness to present factual information, but also limits the contributions to the actual adaptation to climate change process. While the authors take the readers on a journey in which the impacts to certain weather conditions are presented, the point of departure is taking the occurrence of climate change as fact. The authors miss an excellent educational opportunity and impose onto the reader the idea of climate change. Independently of the position of the reader on the topic of climate change, there are sectors of the scientific community and society (e.g., politicians) with a certain degree of influential power disputing the arguments supporting the occurrence of climate change. Somewhere in the middle of the journey, one of the authors states, "Australia has always had a climate that is subject to drought. Long-term weather records document drought affecting some areas more than a century ago," and goes onto say that "these records lead many in rural areas to consider recent drought conditions to be part of the normal cycle of climate variation that is characteristic of Australia." A stronger link between severe weather and climate change may be missing in the text. Hence, the authors should have started the journey presenting a strong scientific and factual case on climate change to give the reader an opportunity to form an opinion around the topic, while also creating a strong basis for the case of adaptation to climate change.

Intentionally or not, the authors present the readers with a journey with multiple stops. The book seems to be more of a compilation of scientific articles in which each focuses on the literature review section of the topic at hand; each chapter seems to be a potpourri of ideas within the topic of the chapter. As a result, the readers face an overwhelming volume of statistical information and set of ideas that at times sound repetitive and disconnected. While the expertise of each author clearly comes across in the presentation of facts, they seem to

be more interested in highlighting statistics (impacts) and failures of the system than presenting a solution to the problem. Throughout the book, the ideas are underdeveloped and the book falls short in presenting a well-structured framework for climate change adaptation in the form of a management system, response emergency plan, or any other tool, mechanism, or methodology. Consequently, at the end of the text, the reader may wonder how to respond to climate change and the role they, health and social services, and other organizations have in the adaptation process.

The four chapters included in Part 1 discuss a range of issues to assist the readers in understanding the health and social impacts of climate change while presenting the mitigation and adaptation responses to it, and also emphasising the need for effective communication about climate change. The authors attempt to make the case for climate change over population experiencing social disadvantage; however, the authors miss the opportunity of introducing sustainability and the need for the implementation of sustainable development strategies to mitigate and adapt to climate change while seeking socio-economic equity. Nonetheless, the manner in which extreme weather conditions contribute to health inequities are effectively and clearly presented with the aim of demonstrating the consequences of climate change. The readers may benefit from an extended discussion on the link between climate change and health inequities: Are those consequences purely due to climate change?

By Chapter 2, the authors expect the readers to understand the difference between the adaptation process to climate change and extreme climates; however, extreme climates are recognized by the authors as a natural part of the Australian landscape that are integrated into the culture of its people, which makes it difficult for the readers to differentiate between the two concepts. It is obvious the authors' focus in this book is on a reactive approach (adaptation) to climate change rather than a proactive approach (prevention and mitigation of causes). Either approach to climate change requires the engagement of organizations and communities in the planning phase; hence, the authors should have expanded on the issues of identification, engagement, and management of stakeholders (e.g., public and private organizations, communities) and how they affect the process. Additionally, the monitoring and evaluation section of Chapter 2 that introduces the need for development instruments for evaluating success should have also been developed further.

Based on content, Chapters 3 and 4 would have greater impact if placed differently in the book. Mitigation is a proactive approach to climate change; therefore, it should be placed before Chapter 2, which discusses the reactive approach: adaptation. In addition to discussing some impacts to climate change, the authors provide the definition of climate change and global warming, and particularly focus on fossil fuels and energy use; however, the topic of renewable energy resources is only briefly discussed, which is surprising for a chapter focused on mitigation. The readers should have benefited from a discussion on some of the renewable energy resource options, their economics, and the outlook for the renewable industry. Similarly, the authors miss the opportunity for mentioning advances that have been made in the area of climate change mitigation: (1) the green revolution occuring in the construction industry, specifically the building industry, and (2) the development of assessment tools and methodologies to measure the effective implementation of mitigation strategies (e.g., sustainability and environmental rating systems). While communication about climate change is one of the issues in the adaptation process, the topic discussed in Chapter 4 would serve a better purpose if it were placed in Part 3 of the book as a full chapter on organizational adaptation. The information provided by the authors in Chapter 4 this reinforces the idea that some information is missing in the book; a chapter making the scientific case of climate change would contribute to the education of the public—a well-informed community can better communicate about the different aspects within the topic of climate change. It is important to recognize the advances made toward educating younger generations; today, society is more inclined to discuss, question, and even acquire knowledge in the areas of sustainability and environmental science. A critical point missing by the authors refers to the role and responsibilities of some influential societal groups in climate change adaptation. For example, politicians have a great degree of responsibility in communication about climate change and driving the legislative agenda. Major political parties in developed countries still oppose the idea of climate change. The authors also discuss the need for framing the message; however, there is a fine line between wanting to communicate the causes and effects of climate change and picturing an apocalyptic future to serve the needs of a scientific or political agenda. Yes, there is a need for mitigation and adaptation, but there is no need for terrorising the public.

Part 2 is the next stop on the journey. In a well-documented set of chapters, the authors focus on a number of population groups with the premise that the sectors of the population experiencing social disadvantages are impacted the most and typically have the least adaptation capacity. While highlighting the impacts of climate change, the authors address the specific and widespread needs of the members of each population group. Although a very informative exercise, the readers may find organizational issues and create the incorrect notion that the information of the following chapter was previously presented, which is likely to lead them into a state

of boredom. Upon taking a closer look, a number of shortcomings are noticeable and expected to be addressed by later editions. First, different definitions of the same term (e.g., disability, people with disability) are introduced to fit a specific argument. Second, the use of statistical information from outside the Australian context to establish contrast, reinforces an idea, or validates a statement. While it is completely valid to support ideas and statements on previous research, the authors must keep in mind the book focuses on the Australian environment; information from outside of the intended context must be used with caution. Third, once again, some ideas need to be developed further. In this part of the book (Part 2), it is observed that the author(s) of each chapter is acting in isolation. At the end of each chapter the readers may still have not found the answers to the questions of what is necessary for each population group to effectively adapt to climate change, and what framework can be used to facilitate the adaptation process in each population group—specifically, those groups experiencing social disadvantage.

Because of the tone and content, the readers must keep in mind throughout this part of the book that, without distinction, all population groups are impacted by climate change; therefore, the lack of adaptation strategies in those groups experiencing social disadvantages is not a case of social discrimination, which is an idea that may be created in the mind of the reader based on the fact that the authors—intentionally or not—omit from the discussion population groups that are socio-economically more advanced. Socio-economic inequality is encountered with or without climate change, and strategies for climate change adaptation may be equally missing in those societal groups that are socio-economically more advanced. However, as noted by the authors throughout the book, groups experiencing social disadvantages have specific needs during the planning and implementation of climate change adaptation strategies.

In the last stop of this journey, the authors discuss organisational adaptation. The readers arrive at this stop with good basic knowledge on climate change and its impacts on groups experiencing social disadvantage. Before arriving at Part 3, the readers have created the expectation that the book will present a well-structured framework for climate change adaptation. Some of the information presented in Chapter 11 was to some extent previously discussed, but the authors introduce more statistics while supporting ideas with the use of figures that need to be improved or explained further. Some statistics are presented to make the case for the lack of effective health and social systems in order to respond to events "associated" to climate change. While there may be a need for improving those services, such improvement is needed regardless of whether climate change is occurring. The worsening of events (intensity and frequency) related to climate change simply illustrates just how fragile or inaccurate the system may be. Additionally, even though the authors argue that they have presented a comprehensive set of recommendations about the resources and action required to prepare and adapt community services organizations (CSOs)—and the community service sector, broadly—to climate change and extreme weather impacts, those recommendations do not come across clearly or are just underdeveloped; in other words, some statements, which have should been expanded for the readers to form a clear set of ideas on those strategies, require development and implementation in the climate change adaptation process. The issue of engaging communities in climate change adaptation discussed in Chapter 12 has been superficially introduced in a previous chapter; nevertheless, it may be chapter 12 the one that actually contains significant contribution to the objective of the book since it presents a framework for action; however, the framework must be emphasised and developed further. It would most likely have been beneficial for the purpose of the book to have made the framework the focal piece of information that most of the chapters of the book should have used as their point of departure.

Author description: Cesar A. Poveda is a Colombian-Canadian professional engineer with over 25 years of combined practical and academic work experience. He obtained a doctorate degree in Engineering Management from the University of Alberta and is currently advancing his theoretical knowledge by pursuing another degree in Sustainable Energy Engineering with the University of Maryland. Cesar's knowledge and research interests are encapsulated in three central areas: sustainable development, management, and operational/decision science. While being part of over 25 editorial and/or reviewer boards, Cesar has served as a referee for over 600 manuscripts submitted to international scientific journals; he has also served as a member and/or chairman of international scientific committees for numerous conferences, seminars, summits, and workshops. Additional to other honours, the Journal of Construction Engineering and Management, and the Journal of Management in Engineering have awarded Cesar with the ASCE Outstanding Reviewer 2012 and 2015, and ASCE Outstanding Reviewer 2014 and 2015, respectively; both journals are published by the American Society of Civil Engineers (ASCE).