Migration and Climate Change

by Graeme Hugo Northampton MA: Edward Elgar 2013 ISBN: 978-1-84980-851-4 Hardcover, \$520.00, 984 pp.

> Reviewed by Bill Marr Wilfrid Laurier University

Graeme Hugo has assembled an excellent collection of previously published articles on all aspects of the connection between migration of people and climate change. This is the fifteenth collection in the International Library of Studies on Migration series published by Edward Elgar. He also provides an introduction that sets out the cross-connections between migration and climate change, and provides a lead-in to the articles that follow in this compilation. He recognizes that the relationship between migration and climate or environmental change is complex; in fact, he emphasizes that many populations will not migrate when faced with climate change, but will instead adjust to that change where they are living. He also stresses the point that most migrations that are in response to climate change will be internal migrations within the confines of one country; they will not be international migrations. Likewise, when people move, they are often encouraged to do so by a number of so-called *push* and *pull* factors that influence such migration, and so climate change, when it is happening, will be just one of those factors. Yes, this is a complex subject.

The 44 previously published articles range from the theoretical to the empirical, with some articles, of course, adding to both our theoretical and empirical knowledge in the areas of migration and climate change. The articles are organized under eleven parts or themes, each one emphasizing some aspect of the interconnection between migration and climate change. It is practical in a collection of this sort to only mention the themes of each part.

Part I contains articles that set out the general relationships between climate change and migration, and notes that we must distinguish between sudden—often catastrophic—changes in the climate and climate change that takes place gradually. Part II is entitled "Definitions and Concepts," and contains an interesting discussion of the terms environmental migrant and environmental refugee. The articles in Part III relate to the displacement and resettlement process, and note the important distinction between sudden cataclysmic events related to climate change and longer-term, more gradual changes in the climate; the displacement and resettlement effects may differ depending on which it is. As compared to resettlement, migration can be an adaptive response to climate change, which is the focus of Part IV. For example, in response to environmental change, some but not all members of a family may migrate to new income-earning areas and send remittances back home. The articles in Part V examine how the vulnerability and resilience of populations to climate change can affect the migration process. Part VI is called "Economic and Social Implications," and the articles here examine the multi-directional impact among economic factors, social change, climate change, and migration. Part VII links climate change and migration with the response that regions make (disaster response, if you will) to that change, and subsequent migration. The important point is made that some migrants do not want to return to their country of residence before the climate change. The articles in Part VIII study the case where climate change interacts with political, social, economic, and demographic forces to cause conflict, which then leads to migration. The two articles in Part IX explore the methodologies that are necessary to link the often desperate fields of migration and environmental

change. Part X defines hot-spot areas on Earth, which are regions that seem especially likely to experience negative climate change impacts: coastal areas, river valleys and deltas, low-lying island states, semi-arid and low humidity areas, and areas susceptible to extreme weather events. The articles in this section give three case studies of hot spots. The final section, Part XI, looks at policy and program responses to negative climate changes. Four types of policy responses are noted, namely, *mitigation, modification, migration,* and *making do.* Migration policy responses may be of two types: (1) moving people out of affected areas, either temporarily or permanently; and (2) displacement and settlement elsewhere.

There is not much more that can be said about a collection of 44 previously published articles. They all appeared originally in very good journals, and thus have been critically reviewed. Other editors would no doubt have selected some other articles, but those included here would be an excellent place to start if someone wanted to cover most of the important topics and researched areas in the overlap between migration and climate change during the last 20 years; the earliest article in this collection was published in 1993. This collection provides a good mixture of theoretical and empirical studies, with several articles combining both theory and data.