DESIGNING AND MANAGING SUSTAINABLE SETTLEMENTS WITH APPROPRIATE HOUSING AND INFRASTRUCTURE

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By:

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# Designing and managing sustainable settlements with appropriate housing and infrastructure

LOUISE CARRINGTON, BIANCA PENGILLEY, SOPHIA DAUBER, YUSUKE FUJIMOTO, GERALDINE MCMAHON, BRETT SUTTON AND DEON V CANYON

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"We thrive and survive on planet earth as a single human family. And one of our main responsibilities is to leave to successor generations a sustainable future."

UN Secretary-General Kofi A. Annan

# Preface

Designing and managing a successful sustainable settlement is a multidisciplinary task involving cooperation and consultation between many parties. Sustainable development highlights the fact that all life is interrelated, insofar as a settlement must meet the needs of the present without compromising the ability of future generations to meet their needs.

The built environment is not equated with the socio-economic and demographic characteristics of individual residents, but includes housing form, roads and footpaths, parks and other public amenities. The effects of the built environment on social interaction, including crime, are most salient for health and thus sustainability. Independently rated features of the built environment are associated with depression and poor health, independent of individual socio-economic status.

Therefore appropriate housing and infrastructure are fundamental to creating a sustainable settlement in which the population is healthy and happy. Housing of appropriate size to meet the requirements of the occupants is crucial. Having adequate infrastructure to support a community in terms of essential services like sewerage, power, water and adequate waste management, is also important. In the following chapter emphasis has been placed on the rural and remote Indigenous communities of Australia where the issues of overcrowding, appropriate housing and adequate infrastructure are paramount.

This monograph was written specifically for postgraduate public health students in subjects and courses related to rural and remote environmental health. Its perspective, however, is broad enough to render it useful in a wider variety of subjects. It reviews the current situation in Australia and in other relevant countries and situations. The text covers recent policy, technological developments and public health issues in review format.

The lack of other texts that cover the information presented in this book mean that this volume will serve as a general reference text.

After absorbing the material in this book, academics and students should be able to:

- Define a sustainable settlement
- Develop an appreciation of the history of a sustainable settlement
- Understand the processes that must occur to achieve a sustainable settlement
- Identify the key players and their roles in settlement planning
- Define appropriate housing
- Understand the importance of appropriate housing design and its impact on health and well-being in rural and remote communities
- Know the importance of 'community control' in the development of sustainable housing and settlements for Indigenous Australians.
- Understand the general complexities involved in Australian Indigenous housing design and sustainable settlements
- Understand the importance of a community development model of consultation with regard to the design of sustainable housing in remote and rural Australia.
- Understand the infrastructure required to create and maintain a sustainable community

Three case studies are included to provide examples of the theoretical material. These are followed by review questions and suggested projects which range in difficulty, resources and a list of references used to provide an evidence-base for this volume.

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