

Chapter 9

Islands in the Midst: Environmental Change, Vulnerability, and Security in the Pacific

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Popular imaginations of the Pacific are of unspoiled islands. However, in both the colonial and postcolonial periods, economic and social transformations have led to widespread environmental and resource degradation. Weak economies and limited social capital raises questions about the internal capacity of the Island nations to cope with environmental variability and change. The analysis draws on concepts of *vulnerability*, specifically the notion of vulnerability as a “hazard of place,” which integrates both biophysical and social considerations in defining vulnerabilities in a particular place. For the Pacific Islands, vulnerability is analysed with reference to resource exploitation, threats from toxic substances, and climate variability and change. Since the concept of vulnerability of place encapsulates social and institutional capacities to cope (*social vulnerability*), there is reference also to institutional responses to environmental degradation and change.

1. INTRODUCTION

Seeing these volcanic islands and coral atolls, and wandering, above all, through this cycad forest on Rota, has given me an intimate feeling of the antiquity of the earth, and the slow, continuous processes by which different forms of life evolve and come into being. Standing here in the jungle, I feel part of a larger, calmer identity; I feel a profound sense of being at home, a sort of companionship with the earth (Sacks, 1996, p. 225).

Sacks evokes a common image of the islands of the Pacific—peaceful, unaffected by the wider world, steeped in natural splendour, and evolving gradually along a path defined more by nature than by people. It is the imagery of films and tourist brochures. It would be wrong to suggest that these images of the Pacific are entirely misleading, but they do obscure another reality. Indeed, earlier in the same book Sacks recounts his arrival at Johnston Atoll, a small island that has been exploited by the United States for its resources since the late 1800s and that, more recently, has been used by that country as a nuclear test site and a dumping ground for dangerous chemical wastes.

After almost a thousand miles, we at last saw land—a tiny, exquisite atoll on the horizon. Johnston Island! I had seen it as a dot on the map, and thought, ‘What an idyllic place, thousands of miles from anywhere.’ As we descended it looked less exquisite: a huge runway bisected the island, and to either side of this were storage bins, chimneys, and towers: eyeless buildings, all enveloped in an orange-red haze... my idyll, my little paradise, looked like a realm of hell (Sacks, 1996).

Colonel Jim Nielsen of the U.S. Pacific Army said of Johnston Atoll: “Feared by some as a toxic wasteland contaminated by scattered plutonium and spilled dioxin, remote Johnston Atoll sits at the center of the Pacific, and of Pacific nations’ concerns over global environmental issues” (Nielsen, 1992). The vulnerability of the people of the Pacific arises from things far more numerous than the threats of contamination by the toxic chemical soup of Johnston, however.

My objective in this chapter is to assess the vulnerability of the Pacific Islands to environmental change and to reflect briefly on aspects of the institutional responses in that region to environmental change. The analysis of vulnerability and adaptation is underpinned by the following propositions:

- Vulnerability in the region is the product of both internal tensions and the pursuit of political and economic agendas by agents based outside the region.
- Environmental degradation is an outcome of political and economic agendas, which suggests that the relationships between environment and security must be assessed with reference to the wider political economy of the Pacific. For example, resource and environmental ‘imperialism’ is a significant feature of the region.
- Vulnerability and the implications for security need to be assessed with reference to the effects of external agents on cultural norms and customary practice, which have been undermined by forms of social and economic organization that are different from those traditionally observed in the region.
- Environmental change is a cumulative process in the sense that it is the product of many different processes and activities operating at a range of spatial scales.
- Prescriptions for institutional adaptation to environmental change have often been founded in models applied to developed Western economies, without adequate thought as to the implications of their transfer to Pacific Island nations.
- The Pacific Islands provide a good example of the benefits of regional cooperation as a method of institutional adaptation to threats to security, even though the foundations of the alliance are not entirely stable.

The next section deals with the question of vulnerability, which is assessed not only in terms of direct environmental threats, but also in terms of the economic and political processes that give rise to these threats. The response of the Pacific Island states to environmental change is considered primarily from an institutional perspective.