

Chapter 9

An Overview of Climate Change and Impacts on Food Security in Small Island Developing States

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ABSTRACT

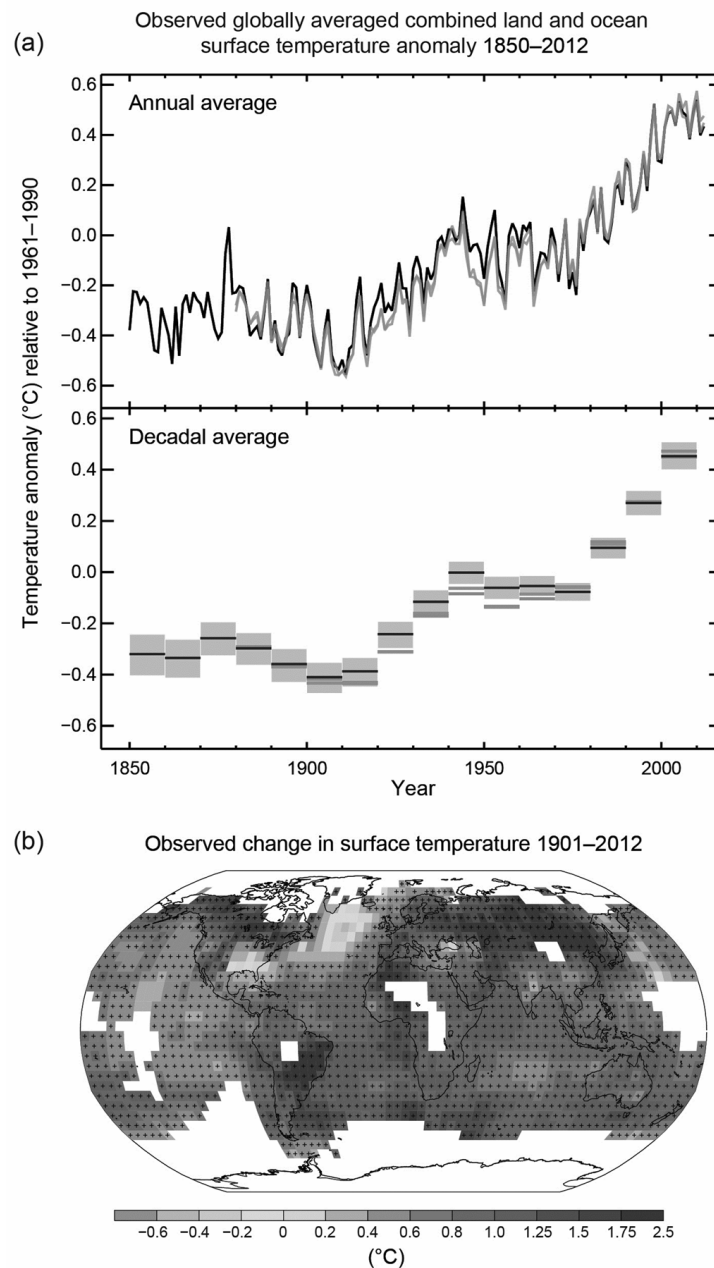
Our climate is changing and this will impact food security around the world. The impacts from climate change will not be evenly felt around the world. Some of the most vulnerable areas will be coastal zones and island territories. Small Island Developing States (SIDS) are especially vulnerable. This chapter provides an overview of climate change, discusses climate change projections, and then highlights specific regional climate change projections. It then discusses how SIDS can respond to climate change, introduces gender as a variable to consider when discussing climate change, and concludes by emphasizing the importance of monitoring and evaluation.

INTRODUCTION

Our climate is warming at a pace unparalleled in the history of our planet (Lobell & Burke, 2010; Stocker et al. 2013). We no longer have the luxury of pretending that climate change is not happening. Although some people may be skeptical, over 97% of climate scientists from around the world agree our climate is warming and changes observed over the last 100 years are attributable to activities by people (Anderegg et al. 2010; Doran & Zimmermann, 2009; Oreskes, 2004; Stocker et al. 2013). The Intergovernmental Panel on Climate Change (IPCC) reports that atmospheric greenhouse gas concentrations have increased, mean surface temperatures for land and oceans have warmed, sea levels have risen and snow and ice levels have decreased (Stocker et al. 2013). Globally, the last three decades have been the warmest recorded since 1850 (Figure 1). A failure to acknowledge these challenges and start planning is a recipe for disaster.

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Figure 1. Observed globally averaged combined land and ocean surface temperature anomaly 1850–2012 (© 2013, Intergovernmental Panel on Climate Change. Adapted from IPCC 2013: Summary for Policymakers. In Climate Change 2013: The Physical Science Basis. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Figure SPM 1. Used with permission.)



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