

1. Introduction

Recent global developments, and higher awareness of the environmental agenda, including issues arising from population growth, are bringing the links between environmental stress and national security issues to the fore.¹ Linkages between the physical environment and national security issues are not entirely "new." Humans have often resorted to violence to gain or maintain control of resources and, during the Cold War period, so-called "strategic studies" were concerned with the ecological implications of nuclear war. The issue, however, is evolving as environmental damage or stress on ecological systems increases, and as political decision-makers and the public become more aware of such threats. Understanding this evolution requires that a distinction be made between environmental stress, i.e., negative environmental effects, and the more general, but intricately linked, case of scarcity of resources. This Paper addresses environmental stress. While perhaps stating the obvious, it is becoming increasingly clear that the environmental stress-national security nexus is likely to become a more explicit and important foreign policy concern for all countries.²

The Paper is principally concerned with the environmental stress-national security linkage in the context of a definition of national security that is associated with violent conflict, although where appropriate a broader definition of national security, one not necessarily associated with violent conflict, is referred to. Both definitions of national security incorporate environmental concerns. The Paper also draws a distinction between environmental stress implications for national security, and the reverse causation of national security implications for the environment, i.e., swords into ploughshares. The primary purpose of the Paper is to identify and where possible elucidate the linkages between environmental stress and national security. In so doing, the Paper attempts to contribute to our understanding of the forest (environment-national security in its broadest and almost all-encompassing sense), by more narrowly focusing on an individual tree (the environmental stress-violent conflict dimension of national security). One conclusion of the Paper is that, while it is apparent that the issue is likely to become a major policy concern, it is also evident that the links between environmental stress and national security are complex and far from being understood. The linkages involve many variables, and raise many

¹This paper was inspired by earlier work on environmental scarcities and violent conflict undertaken by Thomas F. Homer-Dixon, Director of the Peace and Conflict Studies Program at the University of Toronto.

²As will become evident later in the Paper, the environmental stress-national security nexus, in part depending on how national security is defined, is also likely to become a major domestic policy issue.