

It is generally accepted that population growth is a contributor to most of the three major types of environmental stresses discussed above.<sup>32</sup> Precisely how a given population or changes in a population influence the environment is case-specific and dependent upon many variables. Technology will play a key role, both in the creation of environmental threats, such as the invention of motor vehicles and emissions from their use, and in the technologies developed and deployed to reduce environmental stress, such as waste management or even reproductive technology. In light of this, the further in the future population projections are made, such as forecasts of global figures for the years 2100 and 2150, the less reliable they become as indicators of potential contributors to environmental stress. The reason for this is technological change. The potential environmental impact of a future population becomes more uncertain as more assumptions on possible new technologies are made. Moreover, population growth may also contribute to demographic and social tensions which influence national security concerns directly, and not through any environmental effect. Changes in ethnic composition, such as Israeli settlements in the West Bank, even without taking account of possible environmental influences, have sparked violent actions. All these complex factors make it difficult to generalize on how population growth will contribute to specific national security concerns.

A related uncertainty is the rate of population growth itself. Depending on assumptions made, such as contraceptive use and the average age of marriage, a wide range of potential populations may be generated for any future date.<sup>33</sup> The mid 1994 world population is estimated to be 5.63 billion.<sup>34</sup> Whether the current global population will treble or quadruple, before it levels out, is a matter of speculation. The 1994 U.N. population projections for the year 2025 range from a low of 7.6 billion to a high of 9.0 billion.<sup>35</sup> The U.N. population projection for 2050 has a range of 7.9

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<sup>32</sup>See World Resources Institute, World Resources 1994-95, Chapter 2, "Population and the Environment" for some case studies (Philippines, Costa Rica and others) on the environmental impact of population growth.

<sup>33</sup>The International Conference on Population and Development (ICPD) held in Cairo, September 1994, considered many factors that have traditionally not been taken into account, such as women's access to education and political rights, and the potential relationships between these factors and demographic change.

<sup>34</sup>Population Reference Bureau, Inc., Population Today, Vol. 22, No.11, November 1994, p. 2.

<sup>35</sup>The United Nations, The Sex and Age Distribution of the World Populations, The 1994 Revision, New York, 1994. An earlier publication, The United Nations, World Population Prospects, The 1992 Revision, New York, 1993, had global population estimates for 2025 ranging from 7.8 billion to 9.1 billion.