trol or normalizing variable in these analyses. Virtually overlooked, however, is the possibility that population itself may be a driving force in environmental quality and may behave in more complex ways than is commonly assumed. Indeed, the early results from our research program (*3*) assessing the driving forces of carbon dioxide emissions with the IPAT model (*4*) indicate that population is a significant predictor of national carbon dioxide loads across the entire spectrum of national incomes and suggest that the effects of population may be disproportionately large for the largest nations.

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Pharmaceutical Value Estimates

In his Policy Forum "The world's forests: Need for a policy appraisal" (12 May, p. 823), Norman Myers cites me as the source of estimates of the commercial value of pharmaceuticals from tropical forest plants of $25 billion per year and of the economic value of these pharmaceuticals of at least twice as large. While I do not want to detract from the thrust of Myers's Policy Forum, I would like to state precisely what estimates I made.

The first estimate to which Myers refers characterizes the retail value of plant-based pharmaceuticals in the United States. For 1990, this estimate is $15.5 billion (*1*). The pharmaceuticals included in this estimate are not limited to those derived from tropical forest species; the estimate only covers the market in the United States and it does not include over-the-counter products. The economic value estimate (which includes market value as well as intangible values, such as the value of lives saved or suffering alleviated) describes the economic value of plant-based anti-cancer pharmaceuticals in the United States, and it is about $250 billion (1983 dollars) annually (*2*). As in the retail value estimate, the pharmaceuticals are not limited to those from tropical forests, and the estimate only covers the market in the United States. The derivation and limitations of these estimates have been thoroughly described (*1*, *3*, *4*).

I would also call the readers' attention to the correct citation (*1*) for the work referenced by Myers.

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