

GLOBAL WARMING
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Why has Bjorn Lomborg created such a stir among environmentalists?

"I'M AFRAID there isn't much scientific controversy about Mr Lomborg. He occupies a very junior position in Denmark (an 'associate professor' does not exactly mean the same thing that it does in the United States), he has one possibly very flawed paper in an international journal on game theory, no publications on environmental issues, and yet manages to dismiss the science of dozens of the world's best scientists, including Nobel laureates, Japan and Crawford prize-winners and the like. As any sensible person would expect, his facts are usually fallacies and his analysis is largely non-existent."

Those contemptuous words from Stuart Pimm, a professor of conservation biology at Columbia University, are fairly representative of the response from many environmental scientists and activists to Bjorn Lomborg's recent book, "The Skeptical Environmentalist". In the weeks since the book's release, virtually every large environmental group has weighed in with a denunciation. Numerous heavyweights of science have penned damning articles and reviews in leading journals. Dr Pimm, for one, railed against Dr Lomborg in NATURE, while SCIENTIFIC AMERICAN recently devoted 11 pages to attacks from scientists known for their environmental activism.

Dr Lomborg's critics protest too much. They are rattled not because, as they endlessly insist, Dr Lomborg lacks credentials as an environmental scientist and is of no account, but because his book is such a powerful and persuasive assault on the central tenets of the modern environmental movement.

JUST THE FACTS

Curious about the true state of the planet, the author--who makes no claims to expertise in environmental science, only to statistical expertise--has scrutinised reams of official data on everything from air pollution to energy availability to climate change. As an instinctive green and a former member of Greenpeace, he was surprised to find that the world's environment is not, in fact, getting ever worse. Rather, he shows, most environmental indicators are stable or improving.

One by one, he goes through the "litany", as he calls it, of four big environmental fears:

Natural resources are running out.

The population is ever growing, leaving less and less to eat.

Species are becoming rapidly extinct, forests are vanishing and fish stocks are collapsing.

Air and water are becoming ever more polluted.

In each case, he demonstrated that the doom and gloom is wildly exaggerated. Known reserves of fossil fuels and most metals have risen. Agricultural production per head has risen; the numbers facing starvation have declined. The threat of biodiversity loss is real but exaggerated, as is the problem of tropical deforestation. And pollution diminishes as countries grow richer and tackle it energetically.

In other words, the planet is not in peril. There are problems, and they deserve attention, but nothing remotely so dire as most of the green movement keeps saying.

Nor is that all he shows. The book exposes--through hundreds of detailed, meticulously footnoted examples--a pattern of exaggeration and statistical manipulation, used by green groups to advance their pet causes, and obligingly echoed through the media. Bizarrely, one of Dr Lomborg's critics in SCIENTIFIC AMERICAN criticises as an affectation the book's insistence on documenting every statistic and every quotation with a reference to a published source. But the complaint is not so bizarre when one works through the references, because they so frequently expose careless reporting and environmentalists' abuse of scientific research.

The replies to Dr Lomborg in SCIENTIFIC AMERICAN and elsewhere score remarkably few points of substance*[1]. His large factual claims about the current state of the world do not appear to be under challenge--which is unsurprising since they draw on official data. What is under challenge, chiefly, is his outrageous presumption in starting a much-needed debate.

Some argue that scientists who favour stronger policies to improve the environment must use the same tactics as any other political lobby--from steel companies fighting for tariffs on imports to farmers demanding more subsidies. The aim, after all, is to win public favour and government support. Whether such a view is consistent with the obligation science owes to the truth is debatable, at best. If scientists want their views to be accorded the respect due to science, then they must speak as scientists, not as lobbyists.

Dr Lomborg's work has its flaws. He has made some errors in his statistical analysis, as he acknowledges on his website. And there are broader issues, especially to do with the aggregation of data and the handling of uncertainty, where his book is open to challenge. For instance, his approach of examining data at a global level, while statistically sound, tends to mask local environmental trends. Global marine productivity has indeed risen, as he says--but this disguises collapses in particular species in particular places. Dr Lomborg argues that such losses, seen in a long-term perspective, do not matter much. Many would disagree, not least the fishermen in the areas affected.

Allen Hammond of the World Resources Institute (WRI) makes a related point. He accepts Dr Lomborg's optimistic assessment of the environment, but says it holds only for the developed world. The aggregate figures offered in the book mask worsening pollution in the mega-cities of the poor world. Dr Lomborg agrees that there are local and regional environmental pressures, and that these matter a lot, but it is fair to point out that the book has little to say about them, except to argue that rising incomes will help.

The book gives little credit to environmental policy as a cause of environmental improvement. That is a defensible position, in fact, but the book does not trouble to make the case. And another important question is somewhat skated over: the possibility that some environmental processes involve irreversible "triggers", which, once pulled, lead to sudden and disastrous deterioration. Climate scientists believe, and Dr Lomborg does not deny, that too much warming could lead to irreversible bad outcomes such as the collapse of the mid-Atlantic "conveyor belt" (an ocean current that warms Europe). The science here is thin: nobody knows what level of greenhouse gases in the atmosphere would trigger such a calamity. But the risk argues for caution.

Dr Lomborg's assessment of the science in this area leads him to venture that warming is more likely to be at the low end of the range expected by leading experts than at the high end. He argues that the most-cited climate models misjudge factors such as the effects of clouds, aerosols and the solar cycle. That is plausible, and there is science to support it, but the conclusion is far from certain. Again, it is reasonable to argue that such uncertainty makes it better to err on the side of caution.

Sensible people will disagree about the course that policy should take. Dr Lomborg--a courteous fellow--seems willing to talk calmly to his opponents. For the most part, while claiming in some cases to be men of science, his opponents do not return the compliment.

HOMO ECOLOGICUS

Despite its limitations, "The Skeptical Environmentalist" delivers a salutary warning to conventional thinking. Dr Lomborg reminds militant greens, and the media that hang on their every exaggerated word about environmental calamity, that environmental policy should be judged against the same criteria as other kinds of policy. Is there a problem? How bad is it? What will it cost to fix? Is that the best way to spend those resources?

This is exactly what Tom Burke, a leading British environmentalist, denied in a debate he had with Dr Lomborg in PROSPECT, a British magazine. "What I find most egregious [in] your climate-change argument, however, is the proposition that the world faces a choice between spending money on mitigating climate change, and providing access to clean drinking water and sanitation in the developing world. We must and can do both. Such artificial choices may be possible in an academic ivory tower where ideas can be arranged to suit the prejudices of the occupant, but they are not available in the real world and it is dishonest to suggest that they are."

On the contrary, Mr Burke. Only in an ivory tower could choices such as these be called "artificial". Democratic politics is about nothing but choices of that sort. Green politics needs to learn that resources are not unlimited.

* See the criticisms and Dr Lomborg's replies on his website, www.lomborg.org[2]. Last year, before "The Skeptical Environmentalist" came out, we ran a signed article by Dr Lomborg summarising his views. See www.economist.com/science/lomborg/[3]

[1] <http://www.economist.com/#footnote1>

See this article with graphics and related items at http://www.economist.com/printedition/displayStory.cfm?Story_ID=S%26%2BH4%29QA3%23%0A&ppv=1

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