

## BEYOND BRUNDTLAND: THE EVOLUTION OF SUSTAINABLE DEVELOPMENT IN THE 1990S

**Newman R.L.**

*York Centre for Applied Sustainability, Toronto, Canada*

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### Summary

The United Nation’s document *Our Common Future*, commonly known as the Brundtland report, increased the profile of sustainable development by an order of magnitude. The Brundtland report emerged out of concepts such as carrying capacity and previous predictive reports such as *Limits to Growth*, but it transcended these beginnings by being inclusive and open-ended.

Despite these promising features, the Brundtland report did not achieve its goal of a sustainable world by the year 2000. Sustainable Development continues to grow as a concept though, and *Our Common Future* encouraged numerous private non-governmental initiatives to foster thought on Sustainable Development and develop tools for measuring and implementing sustainable development initiatives. Future progress towards sustainable development will depend on the continuing cooperation between government and non-government interests, including business interests and the individual citizen.

### 1. Introduction

#### 1.1. Precursors to “Our Common Future”

In order to understand the impact of the Brundtland report and the developments following its release, it is important to understand factors that contributed to the

evolution of the concept of sustainable development. This evolution has roots that stretch back to the eighteenth century and writers of the romantic style, who first commented on the adverse effects of industry. During the same period, the Luddites battled to preserve their livelihoods and rural way of life. Though they did not succeed in derailing the industrial revolution, their simple rural values shaped the thinking of future critics of industrial expansion. Both the romantic writers and groups such as the Luddites shared ideals passed down from strong biblical traditions of thrift, equity, and simplicity.

One of the main features of today's sustainable development discourse with roots in the industrial revolution is the idea of carrying capacity. The carrying capacity of an area is defined as the largest population of a species that can live in that area without running down the natural resources available. Thomas Robert Malthus is often credited as a father of the concept of human carrying capacity, largely due to his 1798 work, *An Essay on the Principle of Population*. He wrote this work in response to the growing utopian technocratic movements of the time. Unfortunately, Malthus is widely misquoted and misunderstood by both his detractors and his supporters.

Malthus is perhaps credited too quickly as a voice warning of environmental collapse, though he clearly saw mankind's ability to appropriate natural resources as the weak link in the relation between humanity and the environment. A mathematician by training, Malthus stated that our ability to produce children ruled out the coming "perfection of man" other thinkers were predicting. He argued that the ability of population to grow in a geometrical manner would outstrip the increase in food production, which grows in an arithmetical manner. He was thus arguing that technology can increase carrying capacity, but only at a rate that is, in the long run, doomed to be overtaken by human numbers. This cold statement of mathematical rules led Malthus to be almost universally detested at the time of his writing. Romantic poets such as Coleridge and Wordsworth described him as anti-poor, and Marx and Engels, whose utopian theory hinged partly on the ability of technology and equitable social organization to free the poor from hunger, attacked him vigorously as elitist and anti-progress.

It is important to note that Malthus did not predict any kind of catastrophe, merely the continuing action of natural constraints to population growth. He fully expected technology to provide for a higher carrying capacity, but after each expansion, he warns that shortages of food will eventually reoccur. His work established carrying capacity as a foundation for the discussion growth, and thus of sustainable development as well. Unfortunately, Malthus' work also helped sow the seeds for our unhealthy obsession with population issues.

Malthus and others like him found themselves unpopular in Europe as the industrial revolution progressed. Many groups with non-materialist ideals fled the industrial revolution in favor of the American frontier, often driven by biblical influences. Shunning the growing material lifestyle in Europe, both the Puritans and the Quakers lived simply and had strong ties to nature. These groups laid a quiet foundation in North American society that led to an ongoing resistance to the destruction of the natural world. Diverse groups such as hunting clubs and recreational groups helped to preserve

many natural ecosystems in North America long before the development of a larger environmental movement. Poets such as Robert Frost continued the traditions of the romantics, and followers of simplicity such as Thoreau wrote about the joy of living for more than material gain. The North American way of life centers on an almost spiritual reverence of the natural frontier, and this is reflected in North American discussions of sustainable development.

Already present as an underlying force in society, large-scale awareness of environmental concerns emerged so suddenly and strongly in this century due to the inevitable conflict between rapid growth and North America's strong identification with the idea of wilderness. The publication of Rachel Carson's *Silent Spring*, often cited as a catalyst responsible for modern environmental movements, radically challenged the notion that the global environment was resistant to permanent damage. People began looking at streams and forests with suspicion, afraid of toxins they could neither see nor feel. Pollution threatened America's open spaces, a threat that would create many lifelong environmentalists out of citizens of all political creeds

The founding of Greenpeace in 1971 mustered grass-roots support for campaigns against clear-cut ecological abuse. This grassroots support for better environmental stewardship helped foster government interest in environmental concerns. Several major commissions and reports began to highlight the environmental damage caused by economic growth, including the Stockholm Conference of 1972 and the 1977 *Global 2000* report to President Carter. This report warned of a world that in the year 2000 would be more crowded, more polluted, and less stable ecologically.

The 1970s also saw carrying capacity return to the forefront of environmental debate. Writers such as Paul and Anne Ehrlich reintroduced a controversial interpretation of Malthus' work in their 1974 book *The End of Affluence* and their 1983 work, *The Population Bomb*. This latter work began a deep and angry debate over population that still continues.

This growing discussion led many groups to wonder how a society could develop in a sustainable way. Quantitative models of future resource use such as those posed in 1972 in *Limits to Growth: A Report to the Club of Rome*, painted an extremely dark vision of humanity's future, and the quantitative nature of the data presented served to stir interest in more conservative circles. Though many of these works proved to be overly pessimistic, they added to a growing concern over the Earth's carrying capacity that created the coming together of various groups known as the World Commission on Environment and Development.

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## Biographical Sketch

**Rob Newman** is an associate of the York Centre for Applied Sustainability in Toronto, Canada. Rob is also a Canada Social Sciences and Humanities Research Council Fellow, and a doctorate student at the Faculty of Environmental Studies at York University. His work focuses on several areas relevant to sustainability. These include the application of chaos and complexity models to human social systems,

self-organization of social groups, consumer behavior, and resource efficiency. Rob's most current work focuses on the preservation of self-organizing systems in both nature and society and the study of these systems.

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