



# Antecedents of sustainability

Hardly a day passes without media reference to ‘sustainability’ or ‘sustainable development’. The three interlocked economic, social and environmental factors that sustain the earth, its population and its biosphere are familiar to many people working in both the natural and human sciences. The philosophy of sustainable development is usually expressed in phrases such as ‘being able to meet the needs of the present without compromising those of the future’ or ‘maintaining an ecological balance by avoiding the depletion of natural resources’.

The 17 Sustainable Development Goals of the United Nations are clearly articulated, and they also form the national agenda for policy and action in many individual countries. This includes South Africa that has an official National Framework for Sustainable Development.<sup>1</sup>

It is often assumed that the idea of sustainable development emerged in the 1980s with the World Commission on Environment and Development chaired by Gro Harlem Brundtland, three times Prime Minister of Norway and Director-General of the World Health Organization (1998–2003). The Commission, and its report *Our Common Future*, rode the wave of environmentalism triggered by disappointment in the technological promise of the post-war world, the impact of writers like Rachel Carson<sup>2</sup>, events such as the first Earth Day (1970), a growing appreciation of the gap between rich and poor and, particularly, as the report expressed it, the danger ‘of creating a planet our ancestors would not recognise’<sup>3</sup>. The ideas in *Our Common Future* were reinforced with fanfare by the 1992 United Nations Conference on Environment and Development (Earth Summit) in Rio de Janeiro and by the 2002 World Summit on Sustainable Development in Johannesburg.

But, like many other ideas believed to be ‘new’, sustainability is not new, and many antecedents are worth revisiting. *The Invention of Sustainability: Nature and Destiny, c.1500–1870*, a recent book by Cambridge scholar Paul Warde, is indispensable for the topic<sup>4</sup>, and reading it would productively be accompanied by *The Environment: A History of the Idea*<sup>5</sup>.

The idea of sustainability has a very long history that stretches back more than 300 years; it emerged as a principle of forestry that required the attention of government even at that time. In England it was articulated by John Evelyn (1620–1706), founding member of the Royal Society of London. *Sylva, Or a Discourse of Forest-Trees and the Propagation of Timber in His Majesty's Dominions* was one of the first books published by the Society (in 1664).<sup>6</sup> Its purpose was to explain how to utilise, but not to deplete, the nation's trees so that the Royal Navy's ship-building programme might prosper, and with it the country's economy, military security and geographical expansion. Of particular urgency was the need to plant trees in the Forest of Deane, as Evelyn noted in his diary, ‘with Oake now so much exhausted of the choicest ship-timber in the World’<sup>7</sup>. *Sylva* is one of the most influential texts on forestry ever published and is frequently referred to in many publications even today. So, too, is Evelyn's 1661 work on air pollution (London was notoriously polluted for centuries until the legislation of the 1950s) entitled *Fumifugium, Or the Inconvenience of the Aer and Smoak of London Dissipated, Together With Some Remedies Humbly Proposed*. This was the first publication to deal with urbanisation and pollutants, explaining the problem and suggesting a solution. Moreover, Evelyn's gardening manual of 1664, *Kalendarium Hortense, Or the Gard'ners Almanack, Directing what He is to do Monthly Throughout the Year*, has been the model for all books on gardening thenceforth.

In 2013, German Chancellor Angela Merkel officially celebrated the tricentenary of the German word for sustainability: *Nachhaltigkeit*, observing that it had been transformed into ‘a principle of survival’<sup>8</sup>. The term appeared in *Sylvicultura oeconomica*, a book by Evelyn's contemporary, Hans Carl von Carlowitz (1645–1714), an aristocrat in the German kingdom of Saxony who was in charge of the region's silver mines. Vast amounts of charcoal were vital for mining and smelting ores. While the ore in the Saxony mines remained rich and abundant, in Von Carlowitz's time, output (and thus employment) were contracting owing to a timber shortage and escalating prices for what was available. Von Carlowitz wrote to the king, explaining how woodlands had disappeared, trees having been felled and replaced with cultivated crops and villages into which a growing population settled. He argued that national prosperity relied on good future planning, with land usage controlled and careful statistics maintained for ongoing monitoring of resources. Improvement in supply would not come about if the prevailing ethos was profligacy and Von Carlowitz urged that fitting policies be introduced for sustainable forestry.<sup>9</sup>

One might argue that despite centuries of discussion about the appropriate use of renewable resources and principles of sustainability, this vision will not materialise while the world remains dominated by policies predicated on constant improvement in the lives of 7.7 billion humans in a context of ever-expanding economic growth.

## References

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## HOW TO CITE:

Carruthers J. Antecedents of sustainability. S Afr J Sci. 2019;115(9/10), Art. #6759, 1 page. <https://doi.org/10.17159/sajs.2019/6759>