

The Ecological Paradox: Can Human Prosperity and Planetary Health Co-Exist?

Book review: Leuddeke, George R. (2019). *Survival: One health, one planet, one future*. New York, NY: Routledge, 235 pp. ISBN:978-1-138-33495-3

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Abstract

Over the past century, advances in public health have led to longer, healthier, and more prosperous lives. However, this rising prosperity has led to increases in consumption contributing to loss of biodiversity, climate change, air pollution, ocean acidification, and deforestation. In his new book entitled, “*Survival: One Health, One Planet, One Future*,” George Lueddeke examines this paradox and what can be done to ensure a sustainable planet as well as healthy human and animal populations.

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Longer, healthier, and more prosperous lives have long been the goal of public health scientists and professionals. This has been our goal and we have been successful at it. In the United States, life expectancy increased by more than 30 years between 1900 and 2016 (Centers for Disease Control and Prevention, 2018). Globally, we have reduced the number of people who live in extreme poverty by 36% between 1990 and 2015 (World Bank, 2018). This rising prosperity has led to increases in consumption. Developing countries are predicted to consume 107 million metric tons of meat and 177 million metric tons of milk in 2020 compared to the late 1990s (Delgado, 2003). In 2017, global carbon emissions grew by 2% mostly due to more coal burning in China (Le Quere et al., 2018). Improving human prosperity has contributed to loss of biodiversity, climate change, air pollution, ocean acidification, and deforestation (Rabinowitz, 2017).

In his new book entitled, “*Survival: One Health, One Planet, One Future*,” George Lueddeke examines this paradox and what can be done to ensure a sustainable planet as well as healthy human and animal populations. In the first section of the book (Part One), he lays out a number of growing concerns that threaten to doom the planet. From rapid urbanization and the rise of mega cities to climate change in coastal regions and the growing problem of plastic pollution, he paints a grim picture for the future of humanity and our planet. He explores a variety of trends in the 21st century including the 4th industrial revolution and the intelligence era, the growing problem of a shortage of health care workers in the developing world, and the threat of increasing antimicrobial resistance. He ends the section on a positive note looking at capitalism with a social conscience and entrepreneurship as a way out of poverty.

In Part Two, he explores changes in politics and world order. Discussing the loss of democratic societies and increasing global militarization, he points to a world that is continually in conflict and getting worse. The threat of nuclear war is again becoming a concern both with rogue nations and independent terrorist groups. From here, he examines megatrends and develops a prediction of what the world will look like in 2050, including a shift in global economic power to the BRIC (Brazil, Russia, India, and China)

nations. Within this shift is the potential for a loss of up to 30% of current jobs to automation and the need to combat corruption in countries where it is endemic.

After 100 pages of doom and gloom, Lueddeke changes his focus to present a positive way forward, starting with an examination of how we can reorient society towards a sustainable future. He starts by reviewing the Millennium Development Goals and the current Sustainable Development Goals (SDG). He presents a mixed 2017 progress report on the SDG and the industry and government response to them. He then introduces a model where the economy is realigned to serve society rather than the other way around, with key points and policy recommendations. He finishes Part Two by examining the relationships among global health, planetary health, and One Health. He examines how the SDG fit within a One Health framework and how this approach can be used to develop a sustainable future.

In Part Three, he turns his attention to education, collaboration, leadership, and the promise of the next generation. First, he examines the need for universal, high quality education, especially among females and marginalized groups. He then has 17 organizations from the US Centers for Disease Control and Prevention to the World Wildlife Fund discuss their One Health and Well Being initiatives. He then presents a picture of a new World Order focused on sustainability, before finishing with an examination of the potential of Generation Z, given their exposure to global issues and willingness to address sustainability.

Overall, this book is an impressive compendium of the work going on in One Health, sustainability, and planetary health. Lueddeke is well versed in the numerous global efforts, censuses, documents, and treaties. The book is heavily referenced and rich with data, and makes excellent use of tables and figures to display complex concepts. This book would be ideal for graduate classes in sustainability and health or as a desk reference. This is one of the most important topics of our time. It is well worth the read.

References

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