

## Sustaining life on Earth: environmental and human health through global governance

### *La salvaguardia della vita sulla Terra: salute ambientale e umana grazie ad una tutela globale*

edited by / a cura di  
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A lion crouching by a waterhole can foresee (salivate and probably taste) its future soon-to-arrive prey, but not the impact of its kill on prey populations (nor perhaps on its own population). A unique feature of being human is our ability to foresee larger and longer consequences of actions – our individual and collective actions. We therefore can feel guilt if our current actions predict consequences that we don't like or approve of. This is one basis for morality, and those who deny that we currently have any moral responsibility for the world we leave to future generations are not just short-sighted, but fail to experience guilt. That is the definition of a sociopath. And there are many sociopaths among us including regrettably in leadership positions. Heilbruner's<sup>1</sup> essay "What has posterity ever done for me" reminds us that we cannot rely on rationality alone because a rationale view does not automatically value future generations, anymore than our ancestors a century ago worried enough about the world of violence and inequity that they bequeathed to their own offspring.

This book that Colin Soskolne and colleagues provide is therefore avowedly anti-sociopathic and guardedly optimistic. In the interest of self-disclosure let me say at the outset of this review that any mention of "sustainable" or "sustainability" immediately alerts me to some phenomenon or condition that is most likely not sustainable. Trained as an ecologist I believe in the finite carrying capacity that any ecosystem, small or large, has for any organism, big or small. A Petri culture dish can only support so many billions of bacteria for so long. They multiply rapidly, eating themselves out of house and home, and eventually exhausting their resources, the entire culture succumbs. Migratory locusts devastate and move,

living a short, merry, non-sustainable life style. And humans too, with burgeoning populations, particularly in the poorest countries, outstrip the resources they need to support the barest essentials of life. Faced by shortages and overcrowding they must stagger long distances to fetch water or firewood, or forage for food – imitating in many cases and places the hunter-gatherer life of the earliest humans. Small, soil-depleted farms can support only so many family members, forcing others to migrate to cities which will soon contain more than half the world's population. Famine, war, and genocide have ecological underpinnings. In the face of sustained population growth, health is not sustainable. There is no infinite lunch.

In the past, discussion of sustainability has focussed on expanding the carrying capacity – building infrastructure, converting forest to farms, investing in technology, crop enhancement, and new agricultural techniques. The much heralded Green Revolution provided a blip to the carrying capacity, much as new breeds of rice and other crops will hopefully do. Joel Cohen<sup>2</sup> attempted to estimate how many people the Earth can support, by examining estimates of exploitable land and water, but found the question perplexing. What does "support" mean, with what lifestyle. In exploring the earth's carrying capacity he concluded that the "caring capacity" or responsiveness of social institutions, was a critical determinant of human well-being.

Demographers have for decades projected population growth into the future, their estimates remarkably precise. Thus, frustrated by reading many articles and books on climate, energy, food, health, and sustainability, which eschew any reference to population growth and control, I did not have high hopes for "Sustaining Life on Earth",

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suspecting it might be more of the same. My apocalyptic vision of humans sustaining themselves by alternating bouts of war and famine, was pleasantly disrupted by this volume. It is not a blueprint, exactly, but a guidance for optimism, at least guarded optimism. Soskolne and colleagues argue that there are things that we can do, that we should do, that we must do. To be sure there is no easy way out, no free lunch. While the politicians and economists argue about carbon trading, for example, or the merits of subsidizing corn, the contributors to "Sustaining Life on Earth" extol an approach to ecological integrity based on natural ethics, moral responsibility, and a global ethic – *The Earth Charter*. So this book is important reading, needs a widespread audience, and should be widely taught. It is not more of the same.

Firstly I was glad to learn that there is a Global Ecological Integrity Group and that, unlike some political organizations, that is not a misnomer for its opposite. The list of chapter authors reveals widespread representation of relevant disciplines including basic science, ecology, engineering, policy, law and ethics. Anthony McMichael (Australian expert on climate change and health) sets the stage in the Foreword by identifying "*a prime focus on... the health of ecosystems and of the human species*" and their interdependence. Human health, well-being, satisfaction, and economy are inter-related with environmental quality and the services that an intact global ecosystem provides: air, water, soil, and food. And, most gratifyingly, there on the first page is the mention of "human numbers", so often shunned by conservationists, climatologists, nutritionists and all. And McMichael emphasizes that "*sustainability is not a destination. It is an endless journey*". So far so good: he has my attention.

I accept the Brundtland Commission<sup>3</sup> definition of sustainable development: "*meeting the needs of the current generation without compromising the needs of future generations*" or, in the words of an anonymous bumpersticker: "*we borrow the future from our children*". The bumpersticker is only half right: we do inherit the earth from our ancestors and it is obvious what an awful hash they have made of it – centuries of wanton resource exploitation and pollution – ignoring the global commons. So also in the interest of disclosure, I have been steeped in the "commons" tradition ever since reading Garrett Hardin's 1968 seminal paper "The Tragedy of the Commons"<sup>4</sup>. It is interesting that Soskolne and colleagues cover some of the same ground, focussing on ecosystem integrity, rather than the more resource management oriented "commons" theme illustrated by Burger and colleagues<sup>5</sup>.

Colin Soskolne's preface identifies the objective of changing the past irrational ("dumb") behaviour and

recognizing and fulfilling "*our duty to protect the earth's capacity to sustain life*". He emphasizes the *Earth Charter* which becomes the centerpiece or focal point of the book. We are accustomed to an anthropocentric view of the earth and universe, while this book gives credibility to an ecocentric view as well. We must train ourselves to see the world as many other species (on which we depend) see it. The emphasis throughout is on *ecological integrity*.

The ensuing 27 chapters, sorted into eight parts, each with a non-specialist summary, represent a broad range of perspectives and experiences focussed on the many dimensions of human-environment interaction. It is human ecology writ large (and long). This is a book for non-specialists, that many specialists will find stimulating, reassuring, and providing at least some basis for optimism regarding reversing the seemingly inexorable 20<sup>th</sup> Century "progress" towards widespread environmental degradation.

There isn't room, short of another monograph, to characterize each chapter and reveal its contribution to the future integrity of the human environment. Part I brings together government with ecology and economy as support for human well-being. Not much optimism here. Our current models of government are poorly chosen to protect the global commons.

Part II addresses globalization and its impact on the human condition and human rights. More self-destruction and non-sustainable activities herein. The global economy, spearheaded by multi-national corporations and international finance institutions, are achieving a form of supra-national governance bent on rapid resource extraction and short-term amortization of investment. In grade school we subscribed to the "Weekly Reader" with its polyanna-ish predictions for our great society, extolling the virtues of renewable resources. As children we were taught that forests and fisheries were being managed sustainably. Not so. It was sobering later to learn that fishery economics encouraged you to fish out the resource, make a big profit quickly, and sell your boats to some other nation so they could do the same.

Part III pursues these themes, examining governance alternatives, reminding me of Aristotle's *Politics*, in which he compared and contrasted individual (home manager) *versus* governmental (king) relationships to resource acquisition and management.

Part IV examines treaties and covenants and sets forth the *Earth Charter*, adoption of which will move mankind towards sustainability and peace. Part V itself is divided into four parts, offering far-ranging discussion of ideology related to alternative governance, with emphasis on the Kyoto Protocol and failures to fulfill it, and on access to

food and water. Here I must emphasize the Pimentels' important chapter on the human population. At 6.5 billion people, we already have at least half that number in poverty, undernourished or malnourished, many flirting with frank starvation. While Americans "*expect the most advanced and effective diagnosis and therapies for disease, no matter the cost*"<sup>6</sup> the other half of the world has minimal access to modern health care, preventive or therapeutic. We in the developed countries, now engaged in self-flagellation over our profligate and disproportionate use of resources, do not clearly articulate that we maintain our lifestyles not only at the expense of our environment, but at the expense of those who must go hungry. They may go hungry even when surrounded by food too dear to purchase, while we stuff ourselves with food that remains relatively cheap by our inflated standards.

Optimists such as Joel Cohen<sup>2</sup> predict that population may stabilize at 9.5 billion, perhaps as early as the mid-century. At the other extreme, a population of 13 billion, not stabilized, may occur. As our World population doubles, possibly by 2070, we will leave further behind most of the new additions who will be born into poor countries with poor food security. We will be lucky if they have the strength to cut more forest or gut more mangroves, to plant food for our own growing population (since our land is becoming too valuable to merely farm it, except perhaps for subsidized biofuel). I don't know whether I am an optimist or a pessimist, because starvation and poverty are already bad enough. There doesn't seem to be a viable plan for making them better now. This book offers a path of optimism for keeping them from getting a whole lot worse in the future. But it will take commitment.

Bosselmann's chapter promoting global governance independent of nation-states, appeals to the idealist in me, sounding much like visions we discussed as undergraduates. Unfortunately, although the growing power of transnational corporations and international finance is already undermining national sovereignty, it is trending in the opposite direction, leading to fragmentation rather than cohesiveness.

In my school days (late 1940s) my father worked at the very new United Nations, and I was raised with an intense conviction that that world organization would literally save the world with its focus on all dimensions: peace, justice, self-governance, food and agriculture, and health. Perhaps frustrated belief in World Governance makes me a sceptic. Bosselmann sees globalization as opportunity and invokes the *Earth Charter* as guidance for protecting ecological integrity.

So what is the *Earth Charter*? Is it sound? Does it work? Could it work? Is it precautionary? It consists of

three sections: a Preamble focussing on our Earth ecosystem, the challenges for nurturing it (and ourselves), and our "universal responsibility". The second section lists 16 principles (Table 1), with 59 subheadings. The entire document is available at [www.earthcharter.org](http://www.earthcharter.org).

Finally there is "The Way Forward" which requires a fundamental change of head and heart, and a new sense of "universal responsibility". We must "*harmonize diversity with unity*", and I am particularly pleased to note the exhortation for nations to renew commitment to the United Nations. The UN is by no means perfect, but it embodies the principles represented throughout the book and has agencies which could recreate themselves to foster interdependence, clean air and water, good health and nutrition, and population regulation, leading in turn

**Table 1** - The sixteen principles of the Earth Charter

1. Respect earth and life in all its diversity
2. Care for the community of life with understanding, compassion, and love
3. Build democratic societies that are just, participatory, sustainable, and peaceful
4. Secure Earth's bounty and beauty for present and future generations
5. Protect and restore the integrity of Earth's ecological systems with special concern for its biological diversity and the natural processes that sustain life
6. Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach
7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being
8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired
9. Eradicate poverty as an ethical, social, and environmental imperative
10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner
11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care and economic opportunity
12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being with special attention to the rights of indigenous peoples and minorities
13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice
14. Integrate into formal education and life-long learning the knowledge, values and skills needed for a sustainable way of life
15. Treat all living beings with respect and consideration
16. Promote a culture of tolerance, non-violence and peace

to reduced resource exploitation, reuse and recycling of materials, and reduction of the human footprint. And pragmatically, judging by the failure of leading nations to sign on to many recent environmental treaties, there is little likelihood of creating an alternative infrastructure in the foreseeable future. So by all means let's make good use of the UN and its resources. So the *Earth Charter* makes sense in its clarity, could work, and is precautionary. Can it be marketed? This is another question.

It is easy for sceptics and sociopaths (among which I include many international leaders) to deny apocalyptic predictions, because they see malnutrition (afflicting half the world's children today) and war as natural consequences of poverty, arguing that expanding investment would provide jobs, technologies and new food crops, thereby beating the odds on poverty. Secretly or not so secretly they interpret "poverty" to mean "cheap labour". Large scale famines and genocides occur intermittently and far away and economists seem able to ignore these.

It is helpful to see this book in context. It reminds me of Tom Emmel's "Global Perspectives on Ecology", which had more ecology and cataclysm chapters, but ended grappling with similar issues on decisions, policy and global governance, notably Maurice Strong's chapter "A Global Imperative for the Environment"<sup>8</sup>. Strong exhorted us to "evolve a strategy for global environmental security – a planetary policy to avoid disaster" facing "spaceship Earth". His six elements were 1) population stabilization (policy-based rather than relying on war, famine or disease), 2) conservation of scarce resources and development of technologies and consumption patterns that are less energy-intensive, 3) new models for social and economic progress, 4) resource transfer from rich to poor to provide basic social services to combat poverty, 5) science and technology to reduce ignorance about environment, resources, and population, aimed at improving rather than degrading the human condition, and 6) placing the ocean resources under international control, requiring new dimensions of international cooperation and an expanded rôle for a "new internationalism". The *Earth Charter* is a more mature exposition of these themes.

Strong emphasized that this was "not a utopian dream but an objective necessity...well within our reach" requiring "the community of nations" and "political wisdom". Since these are not new themes, we have an opportunity to assess how well they have performed since the 1970s. And the present volume examines some of these trends during the intervening generation. Have we moved closer or away from global governance? Have we seen the strengthening or weakening of the United Nations as the pre-eminent institution poised to move forward? Can we

infer that trans-national corporations, international treaties, and financial institutions, by weakening national jurisdiction over resources and labour, have helped us toward ecologic integrity or undermined it? Lamentably, green advertising and propaganda notwithstanding, the evidence is opposite. Accelerated exploitation of resources, short-term profitability, the cheapening of life and labour, the broadening gap between rich and poor, all point to the devastating impact of these dynamics.

At the other extreme, in a book ironically and aptly titled "A Poverty of Reason", economist Wilfred Beckerman argues that we don't even need to worry about development being sustainable. "Not every need of the present generation is being met, so why should future generations be any different?" Beckerman's starting premise is that "needs" are not an objective reality. "Although billions of people today suffer appalling environmental conditions – such as lack of clean water and sanitation, and deteriorating ecosystems – these problems are caused predominantly by poverty, not 'unsustainable' development". Like many economists Beckerman believes that there are free market mechanisms to deal with shortages, whereas many environmentalists (among which I proudly include myself) think that our problems, including widespread poverty, stem largely from free market failures – globalization and trans-national corporate exploitation of resources and labour being glowing examples.

Even if the authors of "Sustaining Life" started from separate viewpoints they converge and expand on these themes from a generation once-removed. Climate change, or rather accelerated climate change due to anthropogenic atmospheric modification, is hardly a new concept. The World Resources Institute<sup>10</sup> featured it nearly 20 years ago, and it wasn't new then. I abhor the cumulative disregard of climatologic science, but it isn't sea level rise that I worry about. Despite the increasing concentration of population in coastal cities on all continents, people don't really fear the rising water. It is the already evident destabilization of climate regimes, particularly temperature and rainfall that will impact agricultural productivity and disease patterns. Nor is our carbon footprint going to catch up to us as quickly as air pollution and energy depletion. Already half the world doesn't have access to basic energy requirements (cooking and heating), much less to land and food.

Those of us who believe in democracy might hope that democratic institutions and public realization of the importance of ecologic integrity (at least on a national scale) will lead to better decisions. How can one extract optimism from the chaos and the negative indicators? I force myself to remember that when environmentalists

first began to extol the virtues of recycling, it didn't occur to us that anyone would listen, much less that it would become the norm and even the law in many lands. Likewise, cleaning up hazardous waste seemed out of the question in the 1970s: just stop new waste from accumulating. Then along comes Superfund, and money gets spent, and hazardous waste gets removed, treated, contained. We climate change spokespersons have been hammering the issue since the mid-1980s, and it is now front page news. So the Malthusian and the World Government view could very well become the establishment view in the next generation – let us hope it is not too late. “Sustaining Life on Earth” directs us there.

In conclusion, this book reminds us of Garrett Hardin's perceptiveness, for in “The Tragedy of the Commons”<sup>4</sup> he emphasized that the problem facing society was one for which there was “no technical solution”, and this revelation amazed or puzzled readers and leaders in a generation which revered technical approaches to virtually everything<sup>11</sup>. Many chapters in “Sustaining Life on Earth” likewise emphasize that we are suffering the consequences of relying on failed technical rather than untried social approaches. The two intertwined themes of the book are “duty” and “ecological integrity” as articulated by Soskolne in the preface. “Duty” is a key word. Readers who feel this duty will learn a lot from this book on changing duty into action. But equally important will be readers who become convinced that they have such a duty. This book needs to be read widely, discussed widely, and the *Earth Charter* needs to become as familiar today, as the *Four Freedoms* announced by Franklyn D. Roosevelt was more than sixty years ago.

Ironically, Norman Rockwell's illustration of the *Four Freedoms* on a US postage stamp in 1943 proved an effective marketing tool for selling War Bonds. Maybe an international postage stamp campaign in which all countries could advertise the *Earth Charter* could be a first step in marketing the book's theme on a large scale.

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