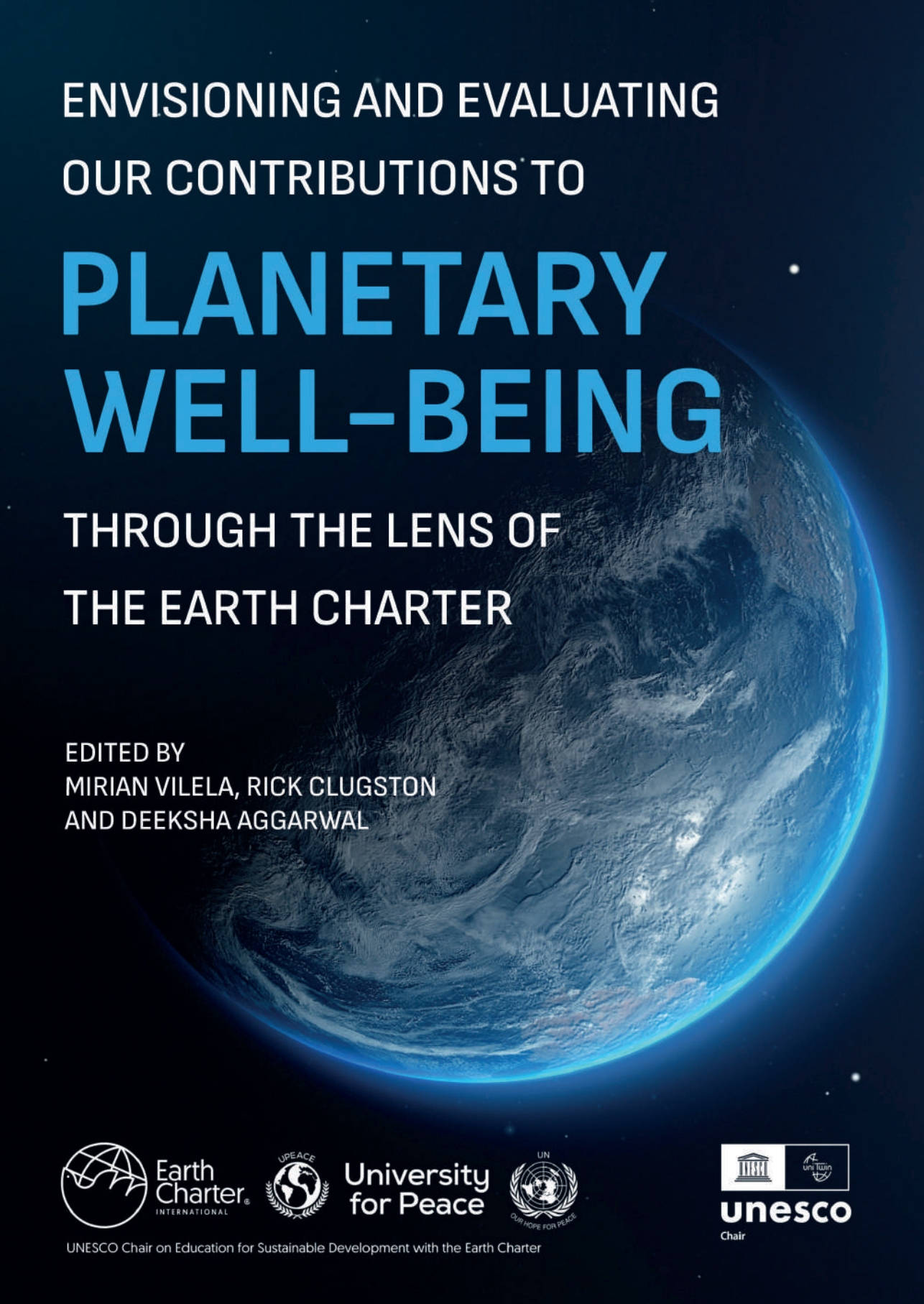
ENVISIONING AND EVALUATING OUR CONTRIBUTIONS TO

PLANETARY WELL-BEING

THROUGH THE LENS OF THE EARTH CHARTER



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Envisioning and Evaluating our Contributions to Planetary Well-Being through the Lens of the Earth Charter

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"We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one **Earth community** with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare **our responsibility to one another, to the greater community of life, and to future generations."**

Earth Charter Preamble

Table of Contents

Foreword

Building new insights to understand and evaluate the well-being of the planet and humanity

Francisco Rojas Aravena
Rector, University for Peace

We are living in times of global challenges and great uncertainty. The direction international systems will take in the immediate future is unclear, and even less so in the medium and long term. Faced with this loss of compass in the global system and global disorientation, it is essential to develop analyses and actions that allow preventive measures to be taken, and the emergence of recurring and increasingly deep crises to be avoided. Prevention means studying possible transitions and paths toward a new era. Looking at these futures requires new narratives and new instruments to drive and guide the processes of change.

In this context, there is a need to coordinate amongst academic, individual, and collective efforts; to promote interdisciplinary and multicultural dialogue that allows us to anticipate scenarios and propose responses to emerging challenges, especially new global threats. The environmental crisis is one of the most impactful threats. The construction of innovative instruments requires the convergence of diverse knowledge, experiences, and perspectives around achieving a shared horizon. Only through openness and cooperation, we can imagine and design alternative paths and build solid foundations for a more just and sustainable future and a planet capable of emerging from the serious and profound environmental crisis that has brought us to the threshold of the 'Anthropocene'.

Thinking about future scenarios requires imagination to design new indicators capable of illuminating 'how to achieve the well-being of the planet alongside the well-being of human beings'. Concerns about the

well-being of the planet have not been present in research related to the impacts of the "war that humans are waging on the planet." Asking questions about planetary well-being opens a new and broad area of research, hypotheses, and multiple possibilities that shed light on new opportunities to stop this war against our Common Home.

Building indicators and new measurement tools that function as a barometer of the performance of the global and regional systems, as well as each country, in terms of how much they contribute to planetary well-being requires a systematic effort, carried out with the highest professionalism, from various areas of knowledge, to achieve new insights, generate new narratives, and develop appropriate prevention proposals. This is a commendable effort.

We need to create new tools and studies that allow us to broaden our perspective and horizons as an international community, as an academic community, and as researchers with values rooted in the human well-being of the planet and of life on Earth.

The commitment to innovation and the search for answers to the challenges of the 21st century must be based on multi-sectoral cooperation and openness to joint learning. Only in this way, can we create the necessary conditions for the emergence of platforms that facilitate the evaluation and continuous monitoring of planetary well-being, integrating social, economic, political, environmental, cultural, and ethical dimensions into the analysis.

The urgency of the current situation demands that we move beyond traditional paradigms. The conceptual frameworks of the Cold War are no longer useful. New conceptual frameworks are needed to reset the global compass and reorient us appropriately. This will be possible if we open ourselves to new knowledge and new possibilities that generate and open up scientific creativity and political imagination to redefine global, regional, and national priorities. Artificial Intelligence is an important tool that will contribute to the systematization of knowledge and provide guidance in these processes.

It is now essential to recognize that human well-being cannot be separated from the well-being of the planet; both are intrinsically connected and require comprehensive and global solutions. At the same time, we must dare to design metrics with completely new approaches and paradigms.

The success of this endeavor depends on building strong partnerships and a willingness to share knowledge across disciplines, cultures, and generations. In this way, we can lay the foundations for a new ethic of planetary co-responsibility, where every contribution, no matter how small, adds up to a sustainable and equitable future.

This book is a contribution to make these efforts a reality.

We seek to galvanize broad collaboration among diverse individuals and institutions that can strengthen this new vision and expand its reach. Using the Earth Charter as the basis for this work is extremely valuable, given its comprehensive approach and ethical foundations.

Universities and research institutes play a fundamental role in generating new instruments that can eventually influence decision-making and change processes through the dissemination of knowledge and policy recommendations.

For the University for Peace, it is a great honor to serve as a place for cultivating and sowing innovative ideas such as those expressed in this book, which invites us to reflect and visualize not only what Planetary Wellbeing means, but also how we can measure the most diverse contributions in that direction.

This publication offers a collection of essays and chapters written by authors from diverse backgrounds, fields of knowledge, and nationalities, which helps us envision from different angles a possible new instrument or index on planetary and human well-being.

I congratulate the Earth Charter International for promoting discussion and analysis of this topic. We welcome the contributions of the authors of the 20 chapters, with a wide variety of approaches that are crystallized in this valuable publication.

Introduction

Towards Planetary Well-Being

Rick Clugston

The Earth Charter's preamble begins by presenting our global challenge:

> "We stand at a critical moment in Earth's history, a time when humanity must choose its future... We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice and a culture of peace." The Preamble ends with the hope that this document's "interdependent principles for a sustainable way of life" will be "a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed."
>
> (Earth Charter International, 2000)

Earth Charter International is engaged in ongoing efforts to expand our planetary consciousness and our ethical responsibility towards the well-being of the human family and the larger living world. As we enter the second quarter of this new century, we are still facing growing social and environment challenges, despite new knowledge, policies and technologies that have emerged over the past 35 years. Many now question the validity of mainstream instruments that are being used to measure progress, development or well-being, which reflect an outdated narrative concerning development and progress. We believe it is necessary and urgent to increase our understanding of, and to elevate the importance of, Planetary Well-being, and to develop new instruments to assess and measure our contribution to Planetary Well-being. We pose the question what could be the more appropriate indicators to measure our contributions to planetary well-being and serve as a barometer for positioning a country in this regard. Such an instrument could eventually generate a new narrative on

what is important to measure and where investments should be made. The Earth Charter offers a valuable lens for developing such an instrument.

In this book, a diverse group of contributors share their reflections on the meaning and importance of planetary well-being. They suggest various indicators that should be used to assess our countries' contributions to planetary well-being guided by the Earth Charter's values and principles. The authors of the book's 20 chapters come from a diversity of contexts, countries and professions. Some have been involved with the Earth Charter since the 1990s; in the United Nations' sustainable development deliberations for years; and in coordinating national Earth Charter activities. Others have been involved in the more recent efforts to develop better measures of progress derived from their understandings of Planetary Well-being.

This introduction will review a range of efforts to develop new metrics that include the many factors which enable planetary well-being. After brief reflections on the Earth Charter's distinctive contribution to this effort, highlights from the various chapters will be summarized.

Efforts to develop better metrics

The quest for sustainable development began with the recognition that the dominant development approach was having detrimental environmental and social consequences. This dominant approach has focused on increasing countries' economic growth as measured by Gross Domestic Product (GDP). It has become increasingly clear that a new "bottom line" is needed to measure a nation's real progress. This often termed "triple bottom line" incorporates indicators of ecological and social well-being, along with economic indicators, into a fuller and more accurate measure of a nation's genuine progress.

Many point out that GDP was never designed for the purpose of measuring development, much less sustainable development. As Kuznets pointed out when first proposing GDP as a metric of national income in 1934: "The welfare of a nation can scarcely be inferred from a measurement of national income." (Costanza, et.al. 2014)

Over the past two decades, there have been an increasing number of

efforts to develop these more appropriate measures. Joseph Stiglitz, in an article titled "Measuring What Matters" describes what is wrong with GDP as well as some of the most promising efforts to guide a nation's pursuit of genuine prosperity.

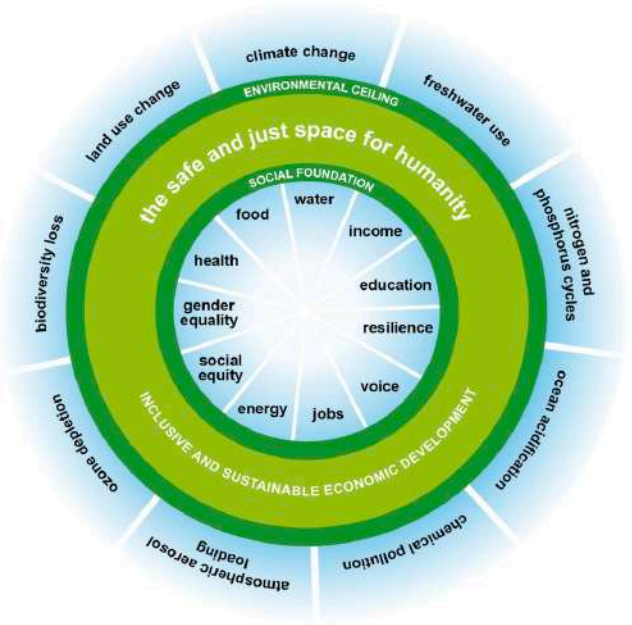
Stiglitz begins by referencing Robert Kennedy's 1968 speech decrying the destructiveness of using GDP as a measure of national progress. Kennedy concludes that GDP "measures everything in short, except that which makes life worthwhile." Stiglitz describes the many ways "the relentless drive to maximize short-term GDP" has resulted in negative outcomes for Americans. He has been working to promote a variety of other indicators that various countries could choose from to construct their own dashboards. In choosing other indicators to complement GDP, he argues, "Policy makers and civil society groups should pay attention not only to material wealth but also to health, education, leisure, environment, equality, governance, political voice, social connectedness, physical and economic security, and other indicators of quality of life. Just as important, societies must ensure that these 'goods' are not bought at the expense of the future. To that end, they should focus on maintaining and augmenting, to the extent possible, their stocks of natural, human, social and physical capital." (Stiglitz, 2020)

Fortunately, many countries, cities, communities are developing or have established alternative measures for their development that integrate social and ecological well-being (or well living) and concern for future generations, as well as economic sufficiency into new metrics of progress. Costanza, in an article titled, "Time to Leave GDP Behind", lists 13 of these new metrics, identifying what they measure, the countries that are using them, and their websites. He states, "Alternative measures of progress can be divided into three broad groups, namely those that use: 1. Economic measures adjusted to reflect social and environmental factors; 2. Subjective measures of well-being drawn from surveys; and 3. Weighted composite indicators of well-being, including housing, life-expectancy, leisure time, and democratic engagement." (Costanza et.al., 2014)

These "Alternative National Indicators of Welfare and Well-Being" include Sustainable Society Index, Happy Planet Index, OECD Better Life Index, Inclusive Wealth Index, Gross National Happiness, Genuine Progress Indicators, National Well-Being Index, Well-Being of Nations. Others include Buen Vivir (Bolivia, etc), Genuine Prosperity (Thailand) Genuine

Wealth Indicators (UN), and a wide range of genuine progress indicators developed at the local level. (ibid)

The most recent UN efforts to establish a comprehensive framework for assessing progress toward sustainable development began at the UN Conference on Sustainable Development in 2012. This Rio+20 Conference called for the development of Sustainable Development Goals (SDGs) to replace the Millenium Development Goals (MDGs) which were to expire in 2015. Like the MDGs, the SDGs were to include targets as well as indicators that would measure if the targets were met. During this conference, the Oxfam Doughnut was a major contributor to identifying desirable SDGs. The outer circle of the doughnut establishes the environmental ceiling or planetary boundaries that shouldn't be crossed, based on the analysis carried out at the Tällberg Forum in June 2008. The inner circle adds the dimensions of the social foundations that must be met to create "the safe and just space for humanity."



"Oxfam Doughnut," Kate Raworth, Oxfam International, 2012.

After a three year, very inclusive, drafting process, in September 2015, the 193 UN member states adopted "Transforming our World: the 2030 Agenda for Sustainable Development" with 17 SDGs and 169 targets. This Agenda 2030 seeks to create "a world that works for all" and that "leaves no one

behind." To accomplish this transformation, it states, "business as usual is not an option." (United Nations, 2015)

The 17 SDGs fall into three general categories:

1. Providing for everyone's basic needs (the social foundations): eliminating poverty and ensuring food security, good health and education, water and sanitation, energy (electricity), gender equality, and decent work for all. (SDGs 1 to 8)

2. Protecting ecological integrity (not crossing planetary boundaries): combating climate change; protecting, restoring and sustainably using terrestrial and ocean ecosystems. (SDGs 13, 14 and 15)

3. Strengthening enabling mechanisms (the institutional structures and policies needed to remain in the safe operating space): sustained, inclusive and sustainable economic growth and sustainable (green) infrastructure; reducing inequality; promoting sustainable production and consumption as well as good governance and effective global partnerships. (the remaining SDGs)

The 169 targets and the now 244 indicators are a large menu covering many aspects of social and ecological well-being, which can be helpful for those seeking to construct a more manageable dashboard. The SDGs and their targets have the further advantage of having been adopted by all 193 member states to be accomplished by 2030.

The indicators for the SDG targets are objective measures. They include easily quantifiable measures such as life expectancy and greenhouse gas emissions. Iriarte and Musikanski (2019) argue that to assess social well-being one must use subjective well-being indicators, such as a person's sense of security and life satisfaction, trust in government, and others, which rely on surveys and self-reporting. They propose adding a set of happiness indicators to complement the SDG indicators, giving a fuller picture of social well-being. Many survey-based measures, such as perceptions of corruption, have demonstrated adequate validity and achieved wide acceptance. More reliable results can be achieved by triangulating between objective and subjective measures, and many nations are using both subjective and objective indicators in their dashboards.

Over the past six years the urgent need for new metrics has become increasingly recognized. The United Nations policy brief, "Valuing What Counts: Framework to Progress Beyond Gross Domestic Product," states, "In the 2030 Agenda for Sustainable Development and Our Common Agenda, it is recognized that a harmful anachronism exists at the heart of global policymaking...namely, that our economic models and measurements overlook many aspects that sustain life and contribute to human well-being while perversely placing disproportionate value on activities that deplete the planet. (United Nations, 2023)

In September, 2024, the UN member states signed on to the Pact for the Future. It's Action 53 (b) calls for the establishment of "an independent high-level expert group to develop recommendations for a limited number of country-owned and universally applicable indicators that go beyond GDP." (United Nations, 2024)

Recognizing that different countries face different challenges, Stiglitz envisions that each country would create its own particular indicator dashboard, drawing from the wealth of available indicators. However, he does recommend that countries share 5 to 10 common indicators; so that comparisons can be made regarding their developmental progress. "GDP would be among them. So would a measure of inequality or some pointer toward how the typical individual or household is doing. Other common indicators would be meaningful "employment, environmental degradation (say, air or water quality) economic sustainability (indebtedness), health (life expectancy) and security." He encourages the inclusion of intermediate variables such as "trust in government." (Stiglitz, 2020)

The Earth Charter's Unique Contribution

In the 25 years since the Earth Charter was finalized, considerable work has been done in establishing indicators to measure social and ecological well-being. Many of these indicators do measure many of the goals set out in the Earth Charter's principles. However, what distinguishes the Earth Charter as a framework for sustainable development is its bio or ecocentric approach. Klaus Bosselmann observes that in the Earth Charter, "'Environment' is not merely the resource base for human consumption, not just one of the three factors [social, environmental and economic] to be

considered. Rather, it incorporates the greater community of life including human beings and the life-support systems on which we all depend. This shift to a broader life-centered perspective marks one key difference between 'weak' and 'strong' sustainability." (Burdon, et.al., 2019)

Steven Rockefeller, who chaired the Earth Charter drafting committee, comments on a foundational Earth Charter guideline,

> The emergence throughout the world of a new ethical and spiritual consciousness that supports the transition to a just, sustainable and peaceful world is one of the most promising developments of the last sixty years. The ethical and spiritual values associated with this new consciousness have been given expression in many Intergovernmental and civil society declarations such the Universal Declaration of Human Rights, the World Charter for Nature, the Rio Declaration and the Earth Charter. The Earth Charter identifies the basic spiritual challenge that the world community must address if it is to make the transition to strong sustainability when it states: 'We must realize that when basic needs have been met, human development is primarily about being more, not having more.' This guideline is, of course, entirely consistent with the teachings of all the world's great wisdom traditions. The values associated with human rights, cultural diversity, social and economic justice, a culture of peace, intergenerational responsibility, and respect and care for the greater community of life, are all part of what 'being more' means in the 21st century. In addition, the Earth Charter recognizes the importance of reverence for the mystery of being, compassion, love, hope, and the joyful celebration of life. 'Being more' in the spirit of these values and ideals is the only sure path to a sustainable world. (Rockefeller, 2010)

Cultivating this planetary ethical and spiritual consciousness is an ongoing contribution of the Earth Charter Initiative. As Pope Francis states in his Encyclical, Laudato Si',

"The Earth Charter asked us to leave behind a period of self-destruction and make a new start, but we have not yet developed a universal awareness

needed to achieve this. Here, I would echo that courageous challenge: 'As never before in history, common destiny beckons us to seek a new beginning...Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life." (Francis, 2015)

Our way forward in constructing an Earth Charter Index of Countries' Contributions to Planetary Well-being involves identifying which of the many existing indicators are most closely linked to the Earth Charter principles. Then a set of indicators need to be selected-or developed-which best measure ecological and social well-being in light of this ethical and spiritual consciousness.

Contributions of Chapter Authors

The following highlights the authors' contributions to understanding and measuring planetary well-being. In general, these authors focus on the following five themes:

1. Our global crises and the needed response.

Most authors begin their chapters with an analysis of the global challenges we face. Many explore the root causes of our interconnected global crises, emphasizing the need for a shift in worldview from a materialistic anthropocentrism to a more eco-centric approach focused on planetary well-being. They then critique governments' reliance on short term economic growth, as measured by GDP as the major indicator of progress, noting that this narrow pursuit encourages over production and consumption, degrades ecological systems, and leads to the inequitable concentration of wealth. To shift to development agendas more in harmony with nature, they emphasize living systems paradigms, ecological economics, circular economies, as well as sustainable livelihoods models drawn from indigenous life ways, among others.

2. Definitions of Planetary Well-being.

Their definitions focus on the need to integrate social and ecological

flourishing, and concern for future generations, into a new guiding framework for economics and development policies. Often, they recognize the importance of providing for the basic needs of all people without crossing planetary boundaries, and emphasize preserving the regenerative capacities of ecological systems. The Earth Charter pillars of ecological integrity; social and economic justice; and democracy, nonviolence, and peace provide principles necessary to realize Planetary Well-being. The overarching pillar of respect and care for the community of life expresses the needed ethical foundation.

3. Best practice examples of countries that are contributing to Planetary Well-being.

Authors describe various countries that are adopting alternative development models, such as Gross National Happiness in Bhutan, Buen Vivir in Ecuador and Bolivia, and Genuine Prosperity in Thailand. Some share their own countries' efforts to contribute to Planetary well-being as examples. In China, under the rubric of Ecological Civilization, ecological conservation red lines are being drawn. Costa Rica has adopted a Forestry Law that has contributed to the country's increase of the forest cover and promoted clean energy and ecotourism.

4. Methods to evaluate and measure contributions to Planetary Well-being.

Various indicator sets are highlighted. These indicator sets go beyond GDP to include indicators of ecological and social well-being in a new "bottom line" for a county's development. Mentioned are the Happy Planet Index, the Environmental Sustainability Index, the Genuine Progress Index, OECD' s Better Life Index and the Human Development Index. The latter now includes a planetary boundaries adjustment. Assessing a country's Ecological Footprint and recognizing the Rights of Nature are recommended. Using the lens of the Earth Charter's principles, some authors identify indicators from these sets that would best measure a country's contribution to Planetary Well-being.

A few authors point out that it is often western European countries that score highest on these indicators, despite their high levels of consumption and their past colonial exploitation and carbon emissions. Thus, it is becoming increasingly important to explore ways in which indicators reflect, or also measure, historical as well as current impacts on social and ecological

well-being. These factors, and the Earth Charter's emphasis on "being more, not having more after basic needs are met," need to guide indicator development. Creating National Commissions for Earth Trusteeship and Ombudspersons for Future Generations are also recommended.

5.Implications for education.

Only a few authors address the role and importance of education in promoting a narrative centered on Planetary Well-being. The Cooperative Learning for Tomorrow in The Netherlands is seeking to integrate sustainability into all subjects at school. In Mexico, the Earth Charter is used to help students develop lifestyles that promote Planetary Well-being. In the Earth Charter, education is a cross-cutting concern, and it's been a major focus of Earth Charter International. A possible indicator could be the extent to which a country has mainstreamed quality education for sustainable development and global citizenship in their formal and nonformal educational systems.

The Earth Charter emphasizes the cultivation of certain values, e.g., universal responsibility, humility and restraint, an emphasis on being more not having more. These are difficult to measure except through surveys, though one could analyze countries national development plans for the presence of such attitudes. One major indicator could be a country's efforts to develop alternative measures of progress, which emphasize ecological and social well-being beyond GDP measures. (And the indicators they choose for their dashboards could be reviewed through an Earth Charter lens, to identify those most suitable for inclusion in an Earth Charter Index.)

Creating a more just, sustainable and peaceful future requires that countries go beyond GDP to include indicators which measure the extent to which their development path fosters planetary well-being. We hope this book will encourage efforts to create new metrics through the lens of the Earth Charter.

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1

An Ecological Civilization: Setting the Conditions for Planetary Well-Being

Fritjof Capra and Jeremy Lent

Hurtling Toward a Precipice

We live in an age of great paradox. Humanity as a whole possesses unprecedented material wealth, yet four billion people—over half the world's population—subsist below the income level needed for basic nutrition. The world's aggregate Gross Domestic Product (GDP) has increased tenfold since 1978, yet the Genuine Prosperity Index (a measure of well-being) has declined over the same period. Through the internet, humans are more connected than ever before, yet we are haunted by a growing sense of separation and alienation.

Perhaps the greatest paradox of all is that, while our technological mastery of nature grows exponentially, we are careening toward a precipice of global climate and ecological breakdown. What were once ominous warnings of future climate shocks wrought by wildfires, floods, and droughts have now become a staple of the daily news. Yet, even after renewed climate pledges arising from COP26, the world is on track for potentially catastrophic temperature rise this century. Increasingly, respected Earth scientists are warning, not just about the devastating effects of climate breakdown on our daily lives, but about the potential collapse of civilization itself unless we drastically change direction. Leading Earth scientists have identified nine "planetary boundaries" representing what they call the "safe operating space for humanity"—and report that we have already exceeded four of them. Concerned that their message has not been heard by the world at large, a group of fifteen thousand scientists from 184 countries issued a warning to humanity in November 2017 that, because of our

overconsumption of the world's resources, we are facing "widespread misery and catastrophic biodiversity loss." Time is running out, they aver: "Soon it will be too late to shift course away from our failing trajectory." (Rockström, J., et al., 2009. 472–475) (Ripple, W. J., et al., 2017, 1026–1028)

Why is humanity not responding appropriately to this existential emergency? When we look at the multi-faceted global crisis we are facing today, what is most evident is that none of our major problems—the climate emergency, ecological breakdown, economic inequality, and others—can be understood in isolation. They are systemic problems, which means that they are all interconnected and interdependent.

To understand and solve them, we need to learn how to think systemically—in terms of relationships, patterns, and context. Indeed, such a systemic understanding of life has recently emerged at the forefront of science. It is a conceptual framework that integrates life's biological, cognitive, social, and ecological dimensions. (Capra, F., & Luisi, P. L., 2014)

A systemic analysis of each of our interconnected crises reveals that, at the deepest layers, they are caused by common underlying drivers: the predominant view that humans are fundamentally separate from and superior to the rest of nature; and that nature is nothing more than a resource to be managed for human benefit. This has led to a global economic system based on the perpetual accumulation of wealth through ever more efficient techniques of exploitation and resource extraction. The success of the system is measured by growth in GDP regardless of whether real value is created or destroyed in the process. Money, rather than the well-being of people and the community of life, has become the defining measure of value in our global economy. (Korten, D., 2021, May 25)

In this system, perpetual growth is pursued relentlessly by promoting excessive consumption and a throw-away economy that is energy intensive, generating waste and pollution, depleting the Earth's natural resources, increasing economic inequality, and driving the climate crisis.

If we are to shift our current trajectory toward one that enhances, rather than detracts from, planetary well-being, we need to transform the foundation of our global cultural and economic system. We must move from a civilization based on wealth accumulation to one based on the health of living systems: an ecological civilization. A change of

such magnitude would be an epochal event. There have only been two occasions in history when radical dislocations led to a transformation of virtually every aspect of the human experience: the Agricultural Revolution that began about twelve thousand years ago and the Scientific Revolution of the 17th century. If our civilization is to survive and prosper through the looming crises of this century, we will need a transformation of our values, goals, and collective behavior on a similar scale.

What Is an Ecological Civilization?

An ecological civilization would be based on core principles that sustain living systems in natural ecologies. Over billions of years on Earth, life has evolved resilient processes that allowed it to spread in rich profusion and diversity into virtually every nook and cranny of the planet. As a result, if left undisturbed by human depredation, natural ecosystems can persist in good health for millions of years.

Living systems are characterized by both competition and cooperation. However, the major evolutionary transitions that brought life to its current state of abundance were all the results of dramatic increases in cooperation. The key to each of these evolutionary steps—and to the effective functioning of all ecosystems—is mutually beneficial symbiosis: the process by which both parties in a relationship give and receive reciprocally, reflecting each other's abilities and needs. With symbiosis, there is no zero-sum game: the contributions of each party create a whole that is greater than the sum of its parts. The symbiosis intrinsic to natural systems translates in human terms into foundational principles of fairness and justice, ensuring that the contributions people make to society are rewarded equitably. (Lent, J., 2021)

An important result of symbiosis is that ecosystems can sustain themselves almost indefinitely. Energy from the sun flows seamlessly to all the constituent parts. The waste of one organism becomes the sustenance of another. In contrast to our current civilization, which built its wealth by extracting resources and letting waste accumulate, nature has a circular economy where nothing is squandered. (Capra, F., & Jakosen, O. D., 2017)

Nature uses a fractal design with similar patterns repeating themselves at different scales, which result in multileveled structures of systems

nested within systems. Each individual system is an integrated whole and, at the same time, part of larger systems. For example, the human organism contains organs made of tissues which, in turn, are made of cells. The organism as a whole is embedded in larger social systems which, in turn, are embedded in ecosystems. Each system is constituted according to similar underlying principles of self-organization and is thus fractally related to the other nested systems. In all cases, the health of the system as a whole requires the flourishing of each part.

An ecological civilization would, similarly, be based on the crucial principle of fractal flourishing: the well-being of each person is fractally related to the health of the larger world. Individual health relies on societal health, which relies in turn on the health of the ecosystem in which it's embedded. Accordingly, from the ground up, it would foster individual dignity, providing the conditions for everyone to live in safety and self-determination, with universal access to adequate housing, competent healthcare, and quality education.

The complex interconnection of different organisms in a fractal, symbiotic network leads to another foundational principle of nature: harmony. Harmony does not mean bland agreement. On the contrary, it arises when different elements within a system express their own needs so that the system as a whole is enriched. In the fractal design of an ecosystem, harmony arises not through homogeneity, but through each organism contributing to the whole by pursuing its own unique path of sustainable well-being. Accordingly, an ecological civilization would champion diversity, recognizing that its overall health depends on different groups—self-defined by ethnicity, gender, or any other delineation—developing and contributing their own unique gifts to the greatest extent possible. (Magdoff, F., 2012)

In a natural ecology, the type of exponential growth that characterizes our global economy could only occur if other variables were out of balance, and would inevitably lead to the catastrophic collapse of that population. The principle of balance would accordingly be crucial to an ecological civilization. There would be a balance between a system's efficiency and its resilience; competition would be balanced by collaboration, while disparities in income and wealth would remain within much narrower bands. And crucially, growth would become just one part of a natural life cycle, slowing down once it reaches its healthy limits—leading to a

steady-state, self-sustaining economy designed for well-being rather than consumption.

Above all, an ecological civilization would be based on an all-encompassing symbiosis between human society and the natural world. Human activity would be organized, not merely to avoid harm to the living Earth, but to actively regenerate and sustain its health—and thus achieve long-term planetary well-being.

An Ecological Civilization in Practice

The overriding objective of an ecological civilization would be to create the conditions for all humans to flourish as part of a thriving living Earth. Currently, the success of political leaders is assessed largely by how much they increase their nation's GDP, which merely measures the rate at which society transforms nature and human activities into the monetary economy, regardless of the ensuing quality of life. A life-affirming society would, instead, emphasize growth in well-being, using measures such as the Genuine Prosperity Index mentioned earlier.

For over a century, most economists have recognized only two domains of economic activity: markets and government. In an ecological civilization, the value created by households and the commons would additionally be recognized. In particular, the commons would become a crucial part of economic activity. Historically, the commons referred to shared land that peasants accessed to graze livestock or grow crops. But more broadly, the commons refers to any source of sustenance and well-being that has not been appropriated by the state or private ownership: the air, water, sunshine, and even human creations like language, cultural traditions, and scientific knowledge. The global commons belongs to all of us, and in an ecological civilization, it would once again take its rightful place as a major provider of human welfare. (Raworth, K., 2017; Henderson, H., 1978)

The overwhelming proportion of wealth available to modern humans is the result of the cumulative ingenuity and industriousness of prior generations going back to earliest times. Once we acknowledge the vast benefits of the commons bequeathed to us by our ancestors, it transforms our conception of wealth and value, with the realization that this immense bank of prior knowledge and social practices—the commonwealth—is a shared asset

that belong to all of us.

It is, accordingly, the moral birthright of every human to share in the vast commonwealth bestowed on us. This could effectively be achieved through a program of unconditional monthly cash disbursements to every person on the planet, creating a foundation for the dignity and security required for society's fractal flourishing. Research has shown repeatedly that such programs—known as universal basic income (UBI)—are remarkably effective in improving quality of life in communities. Programs consistently report reduction in crime, child mortality, malnutrition, truancy, teenage pregnancy, and alcohol consumption, along with increases in health, gender equality, school performance—and even entrepreneurial activity. Work is not something people try to avoid; on the contrary, purposive work is an integral part of human flourishing. Liberated by UBI from the daily necessity to sell their labor for survival, people would reinvest their time in crucial sectors of the economy—in households and commons—that naturally lead to life-affirming activity. (Mokka, R., & Rantanen, K., 2017, February 15)

Transnational corporations would need to be made accountable to the communities they purportedly serve, rather than merely to shareholders. Corporations above a certain size would only be permitted to operate with renewable charters that required them to optimize social and ecological well-being along with shareholder returns. Currently, these "triple bottom line" charters are voluntary, and very few large corporations adopt them. If, however, they were compulsory and strictly enforced, it would immediately transform the intrinsic character of corporations, causing them to work for planetary well-being rather than against it. (Lent, J., 2018)

In place of vast homogenized monocrops of industrial agriculture, food would be grown on principles of regenerative agriculture, leading to greater crop biodiversity, improved water and carbon efficiency, and the virtual elimination of synthetic fertilizer. Manufacturing would be structured around circular material flows, and locally owned cooperatives would become the default organizational structure. Technological innovation would still be encouraged, but would be prized for its effectiveness in enhancing the vitality of living systems rather than generating exorbitant shareholder returns.

Cities would be redesigned on ecological principles, with community

gardens on every available piece of land, essential services within a twenty-minute walk, and cars banned from city centers. The local community would be the basic building block of society, with face-to-face interaction regaining ascendance as a crucial part of human flourishing. Education would be re-envisioned, its goal transformed from preparing students for the corporate marketplace to cultivating in students the discernment and emotional maturity required to fulfil their life's purpose as valued members of society. (Hester, R., 2006)

Local community life would be enriched by the global reach of the internet. Online networks with scale, such as Facebook, would be opened to the commons, so that rather than manipulating users to maximize advertising dollars, the internet could become a vehicle for humanity to develop a planetary consciousness. Cosmopolitanism—an ancient Greek concept meaning "being a citizen of the world"—would be the defining character of a global identity that would celebrate diversity between cultures while recognizing the deep interdependence that binds all people into a single moral community with a shared destiny.

Governance would be transformed with local, regional, and global decisions made at the levels where their effects are felt most. While much decision-making would devolve to lower levels, a stronger global governance would enforce rules on planetary-wide challenges such as the climate emergency and the loss of biodiversity. A Rights of Nature declaration would put the natural world on the same legal standing as humanity, with personhood given to ecosystems and high-functioning mammals, and the crime of ecocide—the destruction of ecosystems—prosecuted by a court with global jurisdiction.

Toward Planetary Well-Being

At the heart of the transformation required for an ecological civilization is a new ethical foundation in contrast to the wealth-based values of our current global system. Ethics are usually associated with philosophy or religion, but can also be considered from a scientific perspective. The core insights of wisdom traditions around the world point to the same underlying reality that the systems view of life validates through science: we are all deeply interrelated. Throughout the fractal layers of life, sustained flourishing can only exist when it is in harmony with the whole. The well-being or suffering

of one group—whether within our community, elsewhere in the world, or in nonhuman form—cannot be isolated from what is happening elsewhere in the web of life.

To lay this out in detail is quite a challenge, but fortunately we have a magnificent document, the Earth Charter, which covers the broad range of human dignity, human rights, and ecological integrity. The Earth Charter was initiated at the Earth Summit in Rio de Janeiro in 1992, and was written in the subsequent years in a unique collaborative effort of many groups — NGOs, Indigenous peoples, and other groups around the world. It is a declaration of sixteen values and principles for building a sustainable, just, and peaceful world. The vision of the Earth Charter is a systemic vision. It recognizes the interdependence of our global problems and provides a broad ethical framework for appropriate systemic solutions.

Inspired and energized by the framework of the Earth Charter, a new ecological worldview is spreading globally throughout cultural and religious institutions, establishing common ground with Indigenous traditions that have sustained their knowledge worldwide for millennia. In Bolivia and Ecuador, traditional ecological principles of buen vivir and sumak kawsay ("good living') are written into the constitution. In Europe, large-scale thriving cooperatives, such as Mondragon in Spain, demonstrate that it is possible for companies to provide effectively for human needs without utilizing a shareholder-based profit model. Economists, scientists, and policymakers are pooling their resources to offer alternative frameworks to the current economic model, while around the world an international movement of "transition towns" are transforming their communities from the grassroots up. (Kelly, M., 2012)

When one considers the immensity of the transformation needed, the odds of achieving it may seem daunting. However, as the current world system begins unraveling on account of its internal failings, the strands that kept the old system tightly interconnected also get loosened. Every year that we head closer to catastrophe—as greater climate-related disasters rear up, as the excesses of racial and economic injustice become even more egregious, and as life for many people becomes increasingly intolerable—the old story loses its hold on the collective consciousness of humanity. Waves of young people are looking for a new worldview—one that makes sense of the current unraveling, one that offers them a future they can believe in.

It's a bold idea to transform the very basis of our civilization to one that's life-affirming. But when the alternative is unthinkable, a vision of a flourishing future shines a light of hope that can become a self-fulfilling reality. An ecological civilization will only emerge when enough people around the world decide to work together collaboratively to shift the direction of our species. Each of us has a part to play in co-creating our destiny and bequeathing a vibrant Earth to future generations. If achieved, an ecological civilization could set humanity and nonhuman nature on a course for an indefinitely prolonged period of mutual flourishing—an era of true planetary well-being.

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2

Planetary Well-Being: Rebuilding Our Relationship with Nature is Key to the Survival of the Human Species

Maria Fernanda Espinosa

In this article, I explore the concept of Planetary Well-being and how the distorted relationship we have in Western society with the use, domination and control of nature poses a direct threat to our survival. The planet shows us signs that we have crossed its limits, underscoring the urgency of making urgent political decisions at the local, national, regional and global levels. These decisions must aim to reconcile the times of nature with the material progress of societies.

The Earth Charter was ahead of its time, but its principles are more relevant than ever. The document serves as a roadmap to achieving the highest level of satisfaction, equity and equality in the relationship between nature and the various political and economic systems. Adopting its principles could enable us to urgently build a new value system that protects the current and future generations.

In general, Western civilization has historically created a barrier, a division between the natural world or system of nature and the social structure or operating system of human civilization. In fact, all Western philosophy, from the Greeks to the Enlightenment, has been based on the ability of human beings to use, control and dominate nature for their benefit (Coates, 2013). In contrast, this great divide we see in the West, between society and nature, is not registered in the same way across cultures. For instance, in my experience working with Amazonian Indigenous peoples, their relationship with nature is seen as a symbiotic relationship, with great symbolic and spiritual value. Indigenous peoples regard a relationship where the life of

nature and the life of human beings are interdependent.

The concept of Planetary Well-being, as I understand it, encompasses the health of the planet and reflects the highest levels of satisfaction, equity and equality across natural, human, political and economic systems. Planetary Well-being is a transformative paradigm, a utopian vision for how societies and economies must reconcile with nature, which is something urgent to be addressed.

I believe that talking about Planetary Well-being should not be an abstract topic. In reality, this concept is about the survival of the human species on the planet. If we do not transform our ways of producing and consuming, our ways of relating to each other, and or ways in which we relate to our natural environment, the human species simply has no future.

It is important to remember that nature and ecosystems can live perfectly without the human species. On the contrary, the human species is the only one that cannot live without a natural environment that is free of contamination, that is healthy and safe. A clear example is the climate crisis, which exposes the fragility of our dependence on nature. The accelerated loss of our genetic resources, biodiversity, or pollution that kills millions of people every year, are among the greatest threats to human security. Talking about planetary health is, therefore, fundamentally about the continuity of human life on this planet.

In addition, talking about Planetary Well-being also involves recognizing the close relationship that exists between the cultural and natural heritage of peoples. For example, the languages, cultures, symbolic and material expressions of Amazonian Indigenous peoples are the product of a deep knowledge of the dynamics of the functioning of natural systems. The Earth is an interconnected, integrated system that includes human societies. Therefore, balance – respect for planetary limits – is the only guarantee for the human species to continue to exist.

To ensure this balance, we must make the appropriate political decisions. This requires rethinking the entire framework of values and priorities that currently animates and orders our Western societies. There is an urgent need to reconcile societies with nature, as well as align the times of politics with the cycles of nature. When we make decisions at all levels - personal, community, national, regional and global - we have a responsibility to maintain planetary health and the life cycles that, in turn, allow us to

continue to exist as a species. This is not only a responsibility of the so-called "leaders". All individuals have enormous power as consumers and as citizens when we decide who will represent us at the local, regional or national level through our right to vote.

Local power, the role of cities is also essential to change the relationships between society, politics, nature and economy. More than half of the population lives in cities, but these urban spaces are also the ones that generate 70% of green-gas house emissions (IPCC, 2022) In turn, they are also sites for experimentation and transformation of the ways of producing and consuming. There are many examples that investing in urban transformation and poor communities can create green, inclusive and low carbon cities (Cities Alliance, n.d.). The decisions we make about common goods are essential for the organization and functioning of communities in urban and rural spaces. I insist that local governments can be vital in transforming the relationship between society and nature.

National and regional spaces are also key in addressing environmental crisis. National governments are responsible for making regulatory decisions and implementing appropriate public policies and actions. Regional integration is equally crucial, as we must remember that nature transcends national borders. When we face the devastating effects of climate change, when floods, droughts, or other types of natural disasters occur, regional dynamics are fundamental to face environmental crises. Spaces such as the Community of Latin American and Caribbean States, CELAC; the African Union, AU; or the Association of Southeast Asian Nations, ASEAN, generate opportunities to discuss joint actions against the effects of the environmental crisis. Regional cooperation and integration are essential to seek joint solutions, to negotiate with greater influence and weight in global multilateral spaces.

Spaces for decision-making around global public goods are equally vital to transforming the relationships between society, economy, politics and nature. I am referring specifically to the so-called three Rio conventions: climate change, desertification, and biodiversity, in addition to the forest forum. These frameworks, along with dozens more environmental conventions, are the basis of international environmental law and serve to generate collective action and shared responsibility. In short, global engagement is critical when it comes to planetary health.

The multilateral system and, in particular, the role of the United Nations is crucial to protect and manage the common goods such as the atmosphere, water or oceans in a sustainable manner (Espinosa, 2024). In addition, international frameworks serve as a reference for national legislation. For example, s in Portugal, the climate is already considered as a common good of humanity and there is serious concern on the need to ensure a safe environment for human beings and for all living species (Magalhaes, 2020). To achieve such goals, collective responses and coordinated actions are required.

I always say that climate change is not the problem, but rather the symptom of a deeper crisis of civilization, of our value systems, of the way we relate to nature, of the way we produce and consume.

All of the above takes shape in the Earth Charter, which is a foundational and visionary document that celebrated 24 years of existence last June (Earth Charter International, n.d.). Its principles remain as valid as ever, they speak of respect and care for the community of life, ecological integrity, but also social justice, peace and democracy. These pillars should guide this moment of deep crisis towards the recovery, reinvention and renewal of that relationship between society, the economy, nature and politics. Although we are in a moment of crisis, it can also be an opportunity for reinvention, a moment of re-founding and reimagine our systems, priorities and values

We live in a deeply interdependent world, a reality that was evident during the COVID-19 pandemic. We realized, first, how vulnerable and fragile we were as a species and, second, that our very lives depended on the behaviour, solidarity and discipline of others (Sachs et al., 2022). This interdependence extends not only among human species but also with our natural environment. It is likely that COVID-19 had a zoonotic origin, much like the so-called monkeypox. Such diseases arise when human activities transgress nature's limits. Diseases of animal origin are the expression or the "voice" of nature that tells us that we cannot cross its limits, that we have abused its resources and that our ecological footprint is altering the functioning of their vital cycles.

In this context, I believe that the Earth Charter is a reference document and that it is more contemporary now than ever. It is a moral and political call that recognizes the right of all forms of life to exist. It highlights the importance of cultural diversity in transforming our perception of Earth –

not an object that we make unlimited use of but invites us to build a new rationality in which nature is a subject of rights. This is already reflected, for example, in the Ecuadorian Constitution, which was the first in the world to recognize the rights to nature (Ecuador First to Grant Nature..., 2008).

Planet Earth is our only home, and we have the responsibility to maintain and take care of it for the current generation, but also for future generations. This is an intergenerational responsibility that we must all share. However, this responsibility is both common and differentiated. World leaders have a greater responsibility. Transnational companies and corporations must also share the responsibility to respect human rights and the rights of nature. It is a question of advancing towards reducing the gaps of inequality and exclusion, combating poverty, and overcoming the culture of privilege without depleting our sources of life. To this end, I believe that once again the Earth Charter is an indisputable reference.

The sixteen principles of the Earth Charter have the same or more validity and force today than 24 years ago, when it was launched in The Hague. This document advocates for respecting life in all its diversity, treating nature with compassion and love, building societies that are fair, and ensuring that global assets and the wealth of nature are preserved not only for those present, but also for future generations. I believe that they are the axes of a new system of values, of a new morality and of a new ethic. More than two decades ago, we thought about protecting and restoring the integrity of ecological systems, using the precautionary principle so as not to damage ecosystems, adopting sustainable production and consumption patterns, and it turns out that these are the issues and major challenges of today.

In addition, when we talk about the issue of social justice, that is, how to reduce inequality gaps, fight poverty and promote a life with dignity for all, leaving no one behind, the Earth Charter is a necessary reference. It also points out that gender equality must be a prerequisite for sustainable development. Women are key to climate action, bearing the disproportionate consequences of climate change, yet they are powerful agents of change and resilience in driving sustainable solutions (UN, n.d.).

Finally, we are experiencing moments of deep distrust in democratic institutions and systems. The Earth Charter also mentions the need to strengthen democratic systems and institutions at all levels. It emphasizes the promotion of a culture of non-violence and peace. It is undoubtedly

a cry for hope in moments of great darkness, great confusion and mega crisis that we are currently experiencing.

In conclusion, the Earth Charter should be disseminated and integrated into educational curricula at schools, colleges and universities. It should be a reference for political leaders and decision-makers. It is a necessary document for the world we live in and provides a roadmap, a guide and a compass for the future. By embracing these principles, we can work toward a civilization that is conscious of its responsibility to ensure and committed to contribute to Planetary Well-being.

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3

The Role and Strategic Sense of the Earth Charter Index

Ricardo Young

Introduction

We live in an anguished search for new models of development that make sense in the face of the climate threat that the human era, the Anthropocene, created. In all ages, in all cycles of civilizations, the human species has never reached the present stage of almost absolute mastery over the destinies of the planet. It is also true that despite this extraordinary feat, humanity has not awakened the necessary consciousness to play its new role: that of guardian of the Planet and Life (Earth Charter, 2000). National and geopolitical approaches to global problems are coming to an end, a new civilizational order is being demanded by this same evolution. (Harari, 2018)

The Anthropocene arrives even before planetary consciousness has installed itself as a desired quality inherent to the globalized civilization. One thing is the globalization of financial flows, products and people. Another is co-responsibility for the common destiny of the human species and the community of life that we impact so much.

If we consider that a good part of the crisis, we are experiencing today has its origin in a concept of development that has growth as its main driving force (Meadows, 2004), there is no way to think about Sustainability without reviewing these parameters in depth. Would development be an impossibility for a sustainable world? Or are we talking about a type of development that, by emulating Nature, would allow development in a way that balances growth so as not to be preyed upon by it? If yes, which one would it be or how would that look like?

Much of the indices that capture dimensions of global well-being and prosperity are showing setbacks (Saraph et al 2021), and we seem to be heading into a dead end. The fact is that we have so far failed to find a satisfactory way out, although here and there we can find some progress. In the aggregate of countries, only 14 out of almost 200 so far have managed to achieve 80% or more of the SDGs according to the Sustainable Development Report 2022 (United Nations, 2022), with just under eight years to go until 2030.

Even when we look at the 20 countries that lead the ranking of the SDGs, we notice that they are mostly small countries, with low population and small territories and do not compute the impact of their consumption of a more complex and sophisticated nature on the rest of the planet. The United Nations Development Programme (UNDP) itself suggests adjusting the Human Development Index - HDI of countries according to their emissions and ecological footprint to correct this distortion (UNDP, 2020). Without undermining the fact that these countries are somehow reaching some targets, the adjustment of their respective HDIs through the Planetary pressures–adjusted Human Development Index (PHDI) shows that they are not doing as well as they seem.

It does not seem to be an easy task to find ways that adequately ensure and builds on Nature Based Solutions (NBS) (IUCN, 2020). Attempts such as the work of the Stockholm Resilience Center in mapping the planet's boundaries in nine dimensions (Stockholm Resilience Center, website 2020) or Oxfam with Kate Raworth with the Donut Economy floor and ceiling concept are fundamental (Kate Raworth, website 2020), but they do not answer the fundamental question: *What change in mindset can offer us a profound transformation of perspective? What is the leap in consciousness that can really make a fully functional approach to Sustainability possible?*

It seems to me that this change involves a new ethical paradigm. As long as the concept of development is impregnated with nationalism, competition and accumulation, the level of trust and collaboration necessary for the Anthropocene not to be a Babel will hardly occur. And this is exactly where the Earth Charter can make a profound difference.

The Earth Charter proposes a shift from an anthropocentric view to a bio or geocentric view in the Anthropocene. As contradictory as it

may seem - hence its extraordinary character - the imperative in the Anthropocene is a regenerative and integrated vision of life. Without this displacement, the Anthropocene will reinforce anthropocentrism, exacerbating the fragmented and predatory vision, leading to the extinction of many species and the extreme risk of many others, in which the human is included. *By offering the possibility of another set of values that integrate life, The Earth Charter nurtures an ethic of responsibility for the whole, the imperative of interdependence and defines the human species as a determining element in the integration and regeneration of the diversity of life, giving it back to the evolutionary capacity its full potential.*

There will be no possibility to realize sustainable development if the systemic and complex elements of Sustainability are not among the values of this approach to development. There will be no possibility of Nature Based Solutions without a deep understanding of its essence, its diversity, its interdependence and the phenomenon of life as sustaining the planet in its whole.

In other words, the concept of Sustainability transcends and overcomes the limited geopolitical approaches that currently structure the relations between countries. Before and beyond nationality, people belong to the species and the human species coexists symbiotically with thousands of others, constituting the fabric of life and the planetary whole.

From clans to tribes; from tribes to villages; from villages to fiefdoms; from fiefdoms to cities; from cities to kingdoms; from kingdoms to nations; from nations to continental blocs; from continents to geopolitical blocks; from blocs to multilateralism; from multilateralism to the Planet. The human evolution establishes structuring wholes according to its degree of evolution. Each new evolutionary stage proposes a new whole of socio-economic and political organization that in turn incorporates and surpasses the previous one. Each new stage of human evolution and organization corresponds to a set of values, an ethics, a way of operating the economy, laws, and society. Finally, a new level of consciousness shall eventually emerge. At each historical period we have a way of thinking and conceiving the world and society. Thus, Sustainability implies the idea of a new whole, through the lenses of *planetary civilization*. For this new vision of a whole, it is necessary to think about the values, ethics, the form of socioeconomic and political organization of the populations

and the set of structuring elements of this new whole. The Anthropocene suggests that from now on, planetary evolution is closely associated with the evolution of humanity itself. It is not just the physiochemical, biological and ecosystem conditions that condition human evolution. Humanity itself began to interact with these conditions, changing them; and by changing them, it impacts and redefines its own evolution.

In light of this situation, just as the Earth Charter anticipates much of the structuring elements of this new emerging level of consciousness, it is necessary to develop forms of development that are suitable for this upcoming *planetary civilization.* Therefore, countries and geopolitical blocks cannot operate only from the traditional concept of sovereignty where the evolutionary level of a nation could take place autonomously or semi-autonomously, as an inseparable part of the whole. More than interdependence, countries need to operate their economies and prosperity taking into account the health and well-being of the planet.

This article will seek to focus on how the proposal for an Earth Charter Index can contribute to this debate and why the Index effort, despite being still in its experimental phase, could be seminal to the debate and concerns above mentioned.

The Index proposal and its four axes

The proposal of the Earth Charter Index is to establish a reference in which countries are ranked and made visible according to how they are conducting their development policies in order to effectively contribute to each of the four great Pillars that compose it. The initial proposal of the Earth Charter Index is structured, therefore, following the four main pillars of the Earth Charter, and a fifth dimension that establishes a synergistic and aggregate relationship of the four pillars, producing a ranked reference of the contribution that each country is giving to the well-being of the Planet, namely:

- Respect and Care for the Community of Life
- Ecological Integrity
- Social and Economic Justice

- Democracy, Nonviolence and Peace
- Aggregate index of countries' contribution to the planet

For each of them, some indicators were identified whose aggregation best expresses the set of actions that reinforce this index. For the purposes of this article, we will not repeat the methodology used in this first exercise and the various databases consulted, the main one being that of the World Bank, as they are quite well demonstrated in the pilot text of the Index proposal referenced here. Our main focus here is to highlight which ethical elements are presupposed in the adoption of indicators, what difference they produce, and potential vulnerabilities contained in these choices.

I - Respect and Care for the Community of Life

In the case of the first pillar "Respect and Care for the Community of Life", the indicators chosen for this first exercise are related to the concept of *humility*, in the sense of *absence of arrogance*, in the face of the community of life in each country. Thus, the indicators chosen are related to the size and preservation of forests and the proactive use of energy. Although the concept of humility and lack of arrogance can be quite subjective, the assumption is that respect for the community of life imposes restrictions on the use of resources available. The maintenance of forested areas, combined with low energy use, presupposes the use of only necessary resources to maintain the well-being of the population without threatening other species and guaranteeing the non-wasteful use of energy. Note that the index does not differentiate between sources of fossil energy from clean or renewable energy sources. Something quite important to consider.

In this pillar, and for this first exercise, the best ranked countries were the Central African Republic, Suriname, Guyana, South Sudan and the Republic of Congo, all with a score greater than 90%, with 75% of 186 countries measured scored less than 47.49% on their performance. Which can represent confusion, or even misinformation, considering the situation of each of these countries and their true commitment to Respect and Care for the Community of Life. Are the decisions and policies of these countries really consistent with the commitment to Respect and

Care for the Community of Life?

The value here is that respecting and caring for the community of life involves harmonizing with it, extracting only what is necessary from the environment, in a non-arrogant, non-predatory and, above all, non-dominating way.

II - Ecological Integrity

In the case of the second pillar "Ecological integrity", what is intended to measure is the degree of restriction to human activities in terms of what can change the integrity and resilience of ecosystems. For this indicator, a relationship between GDP and territory was used for this pilot version, with the assumption that the larger the territory and the lower the GDP, the greater the country's contribution to ecological integrity. And conversely, the higher the GDP and the smaller the territory, the less the country contributes to ecological integrity.

The value here is that there are limits to growth within a given territory, without affecting others. This means that if a country has a GDP that is disproportionate to its territory, it is probably producing externalities imposed on other nations and on the planet. It is important to note, and hence the importance of *the Planetary pressures - adjusted Human Development Index* (PHDI) suggested by UNDP (UNDP, 2020) because a country may have a high HDI, be reaching the SDGs, but exporting its ecological footprint to other countries.

In this ranking, the best-placed countries that scored above 85% are only three: Greenland, Central African Republic and Mauritania, while 75% of the 206 countries measured in this regard had a performance below 48.31%. Here, too, the doubt emerges regarding this result, are these countries really contributing to planetary well-being from the perspective of Ecological Integrity? Here, the classification depends only on the indicator used and not necessarily on whether the set of decisions and policies of these countries are aligned with the concept of Ecological Integrity and, above all, with all the principles that are articulated in this pillar of the Earth Charter.

III - Social and Economic Justice

In the case of the third pillar, "Social and Economic Justice", what is measured is the longevity of the population as a measure of social security, sociability, health and spiritual well-being. The value assumed here is that the longevity of a population results from, and at the same time contributes to, social and economic justice.

The aggregate of longevity does not enter into the merits of the quality of life of elderly individuals or of specific public policies related to the elderly, it only infers longevity as a result of successful socioeconomic policies.

In this pillar, the countries that scored above 90% were many, with Hong Kong, Japan and Macau, China leading the ranking. In this regard, 75% of the 200 countries evaluated scored below 62.21. It is interesting to note that there is an obvious relationship between this Indicator and the HDI, so most countries that scored above 62.21% are also ranked better in terms of their HDI.

IV - Democracy, Nonviolence and Peace

As for the fourth pillar, "Democracy, Nonviolence and Peace", what is measured in this first pilot exercise is how much the population feels safe in their country and as a result does not emigrate seeking greater security, peace and social participation elsewhere. *The value here is that those countries that obtain greater stability of their population in their territory and do not migrate to other territories, are those that count on democracy, nonviolence and peace.* The fact that they do not produce population displacements would presuppose less pressure on the countries receiving immigration.

The assumption is that economic, political and social security would be strong stimuli for the stability of populations and their relations with their countries and territories of origin.

In this regard, the best ranked countries were Australia, Ireland, Japan, Italy and Spain, all with a score equal to or greater than 95%. However, 75% of the 183 countries evaluated were below the alarming 48.87%, and this indicator has been deteriorating, from an average of 89.69% in

1990 to 61.13 in 2018, revealing a possible increase in political and social instability in the world in the last 30 years.

Aggregated Indicator of each country's contribution to the shared well-being of the planet

From the analysis of each axis individually of this first pilot of what could become the Earth Charter Index, it makes a general adjustment of the contribution that each country makes to the well-being of the planet. This adjustment is made from the weighting of the averages obtained by axis so that the countries are ranked based on the averages obtained in each pillar.

Here we will observe very large differences between the indices used for each pillar for each country, denoting asymmetries that reveal disparate and fragmented national public policies. *Perhaps the greatest contribution that the Earth Charter Index could offer would be to reveal the absence of a systemic approach to public policies permeated by values that are coherent with each other and, additionally, integrated values that at the same time serve as guiding policies for development, to the needs of each country and at the same time contribute to the general improvement of living conditions on the planet.*

When analyzing this total ranking, we observe that the best-placed countries are ranked by the sum of the averages, even if one or more of them are low. In other words, high averages carry the result offsetting the lows, showing the fragmentation identified above.

For example, the top-ranked countries Suriname, the Central African Republic and Australia show high aggregate indices, although some of the partials are poor.

In the case of Suriname, leader in the aggregate ranking, the indicators used under pillars II, III and IV are 30% lower than the score for pillar I. In Australia, while pillars III and IV have a performance above 90%, pillar I and II are below 50%. In the case of the Central African Republic, the situation is even more eloquent: while the first two pillars show rates above 92%, the figures for pillars III and IV are disastrous, 16, 96% and 1.92% respectively.

This means that not necessarily a good position in the general ranking of this first exercise of creating such an Index denotes public policies pro-Sustainability, homogeneous and as State policies. *There is, perhaps due to the methodology adopted and the aggregating variables of each pillar, a causal absence of public policies capable of expressing a concern of each individual country with the well-being of the planet in the four Pillars of the Earth Charter. There is a long way to go.*

Conclusion

The Earth Charter Index initiative is not only legitimate and necessary, but also opens up an absolutely pertinent discussion: *are national public policies, even if in compliance with the SDGs, effectively contributing to an improvement in living conditions on the planet? If so, how could this contribution be measured and be consistent with the methodological variables to be used in the Earth Charter Index (as the thinking behind it evolves)? If not, wouldn't the fulfillment of the SDG targets by most countries be enough for the 2030 Agenda to be achieved in its planetary dimension?* And if this is a true hypothesis, *would there be a need to develop variables and indicators that could reference the national effort with its planetary result?*

It seems to me that we need to continue exploring different angles and indicators to shape this new Index in such a way that it better reflects the assumptions of the Earth Charter. It seems to me that we have three possible avenues for further exploring research on this, all of which are complementary:

The first, and already mentioned here, is to better understand how the two variables of the PHDI - carbon emissions and per capita consumption of the countries - are articulated with the variables used in the new Index being developed. In the case of Pillar I, we have solid evidence that this study and indicators could improve it, giving it greater accuracy. The merit of these variables is that they have a transversal and systemic role, calibrating national indicators when interpreted in relation to the set of other countries.

A second way would be to articulate the variables of each pillar, especially I and II, with the nine dimensions of the Planetary Boundaries proposed

by the Stockholm Resilience Center. If the Index variables incorporated these boundaries, they would certainly expand the approach being developed and would capture more accurately the impact of human activity on ecosystems. Pillar II would benefit greatly in this regard, as we would not only be point at forest cover and biodiversity preservation, but we could also add the concept of resilience, that is, how much the ability to recover the ecosystem integrity of a given territory is affected and in what level. Reinforcing here that ecosystem systems and environmental services do not recognize geopolitical boundaries and occur in a Planetary dimension.

A third way would be to adopt the floor and ceiling principles of Kate Raworth's Donut Theory. In addition to the systemic and consistently pedagogical view, this theory deeply incorporates the relationship between environment and society, allowing the use of integrated metrics in decisions about the systemic impact of development, the limits imposed by the socio-environmental balance with checks and balances, in a dynamic balance; marking the limits of development aligned with the imperative of Sustainability.

Although there are overlaps and synergies between the Donut Theory and the Planetary Boundaries, especially in the outer circle of the mandala proposed by Raworth, the floor, of social limits, human rights and life, dialogues with the SDGs and establishes strong restrictions on the predatory conception of development.

Even considering the experimental character of the Earth Charter Index, its contribution can already be considered seminal. First, because it brings up the issue of the ethics of Sustainability and its articulation with development and the importance of expanding and orienting our vision on planetary well-being, and especially on the importance of contributing to it. There is no possible development in this Anthropocene era that does not serve humanity, the community of life on the planet and, above all, act in a way to regenerate the wounds opened by the current model of growth without limits and without values. *The Earth Charter puts back the ethical question and answers how, for whom and what development should serve and what are the principles that can guide our decisions and policies so that they contribute to planetary well-being.*

Second, because the idea of this new Index was born in a period when there is an explicit recognition of the climate crisis, which has led to numerous research about the way forward. The world debates the SDGs and their realization; companies discuss how to evolve in the new ESG logic to minimize their externalities and increase their value to society; economists speak of a new model of capitalism, with limits to accumulation, value sharing and reduction of social inequalities; politicians discuss and dispute which of the state models: democratic, social-democratic, nationalist populist or capitalist models, including the Chinese socialist model, best serve a globalized economy that needs to be redefined in terms of its socio-environmental impacts; multilateral organizations strive to make national efforts compatible with the global and urgent demand for shared solutions; the academy continues to debate which development models best serve sustainability and scientists find that in the face of severe climate events, what mitigation alternatives are available and how technology can contribute to it.

In this context, the proposal to create an Earth Charter Index brings us to the basic, existential, ontological reflection of our ancestry to the present time: *what are the values that should guide our relationship with each other, with other species, with the community of life and the planet?* It takes us back to the primeval pillars that sustain life in society and in biodiversity. Therefore, it does not matter how the Earth Charter Index dialogues and will dialogue with the numerous indices and theories of Sustainability already existent today. What is important is that whatever the Index, whatever the theory that is generated through this exercise, it will have to dialogue, extensively and in depth, with the ethical imperatives established in the Earth Charter and incorporate them. Since there will be no solution in the Anthropocene for humanity and for life on Earth without a new and solid ethical reference that gives meaning, depth and transcendent meaning to the challenge of Sustainability and our commitment to planetary well-being.

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4

Rethinking our Fit in the Fabric of Life: from Human Well-Being to Planetary Well-Being

Mateo Aguado Caso

The current course of unsustainability to which the global capitalist metabolism is pushing us, threatens to compromise the future of humanity and that of the biosphere itself in the coming decades. The great environmental problems of our time, such as climate change, pollution, the loss of biodiversity or the deterioration of ecosystems, are basically direct consequences of a development model that, for the most part, has been centered on the axiom of indefinite growth —at the economic level— and in the promotion of a highly consumerist and wasteful way of life —at the cultural level. On a finite planet subject to biophysical limits, continuing to defend these ideas is clearly unfeasible, as well as reckless and irresponsible. Human activities have already exceeded the safety thresholds of several essential biophysical processes for the proper functioning of the Earth System. We cannot keep speeding up the machinery; we cannot continue to overexploit the planet without expecting anything bad to happen.

To move towards a more prosperous and sustainable world in the next years, human beings will have to completely rethink our dominant conception of well-being from new systemic approaches that conceive the quality of human life as a subsystem within the ecosphere; that is, that we understand that people are eco-dependent beings who cannot prosper turning our backs on nature, since our well-being and the health of the planet are, basically, two sides of the same coin. Accepting the existence of biophysical limits to global socioeconomic growth will therefore be essential to be able to build honest well-being measurement strategies in the coming years that are able to assess in a fair and plural way the human sustainability and how it fits in the ecological fabric of life. This is undoubtedly one of

the greatest challenges facing the human enterprise in the complex and uncertain beginning of the new millennium.

Evaluate well-being beyond being-well

In recent years, an increasing number of governments, organizations, foundations, research centers and institutions of various kinds have been proposing the use of different well-being indices aimed at evaluating the social prosperity of countries in an increasingly broader and multidimensional way. Among the enormous number of existing proposals, there are two indices that fit particularly well with the socio-ecological notion of well-being that is argued for in these lines. These are the *Happy Planet Index* (HPI) (Jeffrey et al., 2016) and the *Sustainable Development Index* (SDI) (Hickel, 2020). It is not the purpose of this article to delve into the methodological details of these two indices (those who want to know more about them can visit their web pages). It is worth noting, simply, that although they are built from different indicators, the key to both indices lies in the fact that they divide the human well-being resulted by the environmental impact that its achievement entails, evaluating well-being from a double socio-ecological perspective, not only in relation to the benefits that it generates for people, but also in terms of the damage that its pursuit generates on the biosphere. Thus, and unlike the rest of the existing proposals (which are limited, most of the time, to evaluating social prosperity from multidimensional approaches that, at most, cover environmental aspects only in terms of "healthiness" through indicators such as quality of air or water or the recycling of waste), the approach of these two indices is the only one that, deep down, implicitly recognizes the existence of planetary limits to human development, offering a tool through which to estimate the cost of how much environmental impact each society is sustaining their way of life.

Now, it must be recognized that embracing the use of this type of approach on a global scale would mean turning upside down the traditional schemes through which the most developed nations have been evaluating the success of societies in recent decades (think, for example in the Gross Domestic Product [GDP] or in the Human Development Index [HDI]). The countries that have traditionally occupied the first positions of the rankings in the classic indices of progress and well-being are heavily penalized in

the HPI and the SDI due, fundamentally, to the high environmental impact that their economic models and lifestyles entail. An illustrative example of this is provided by Sweden, a rich and developed country that is often used as an example towards which we should — supposedly — walk. Well, while Sweden ranks thirteenth in the world rankings for GDP per capita and seventh in the HDI, we have to drop down to positions 41 and 146 respectively to find it in the HPI and SDI rankings. This is obviously due to the high environmental impact of the Swedish model, a country whose way of life is based on a huge ecological footprint that, if extrapolated to the rest of the world, would far exceed the biocapacity of the planet. Extending the development guidelines of the rich countries to all corners of the planet is, therefore, something ecologically unfeasible, since it would lead us to overflow the safety thresholds of the biosphere and face, sooner rather than later, different scenarios of social-ecological collapse with fatal consequences.

One of the most interesting conclusions that emerges from the socio-ecological proposals represented by these two indices is that, while for the poorest countries the path to a good life is fundamentally related to undertaking plausible improvements in social aspects, for the richer countries the main challenge is undoubtedly to *decrease*; that is, in reducing the size of their economies in order to reduce the levels of environmental impact that their lifestyles generate. Working in parallel on this dual purpose — always keeping the global impact of humanity below the biophysical limits of the planet — would allow us to walk towards a kind of planetary socio-ecological confluence in which all people on Earth would enjoy a good life, while the planet itself would enjoy good health based on the good condition and functioning of its ecosystems and biodiversity.

A brief parenthesis is worth mentioning here. In its latest Human Development Report for 2020, the UNDP presented a new adjustment to the HDI that incorporated, for the first time — and very much in line with the HPI and the SDI — the environmental pressures that development entails on the planet. However, the truth is that this new index, the *Planetary pressures - adjusted Human Development Index (PHDI)* (UNDP, 2020), despite representing a significant improvement in the HDI in order to measure human development in a more sustainable way, it does not actually manage to assess well-being in a way consistent with planetary boundaries. This is due, essentially, to the fact that the timid environmental

adjustment applied by the UNDP does not sufficiently penalize the enormous ecological impact that the most developed nations have. Thus, most of the countries that appear in the top 20 of the HDI remain in the top 20 for the IDHP.

There is no doubt that well-being has to be related much more to the effects it has on ecosystems. Consequently, we should recognize and value much more quality to a life lived sustainably than to one lived unsustainably. Although there is obviously a long way to go, the analytical framework proposed by the HPI and the SDI is undoubtedly a good starting point to move towards a broader, more plural, fair and sustainable evaluation of well-being.

Towards a new global culture of sustainability

The alternative to the unsustainability that capitalism has caused will depend, to a large extent, on the ability we have as a global society to leave behind the current chrematistic, mercantilist and consumerist drift of well-being to collectively rethink its notion under the paradigm of sustainability and from the watchtower of complexity. Embracing this challenge will mean building a new global culture of sustainability that is far from human utilitarianism and that breaks with the illusory dichotomy between society and nature. It will mean, in the end, moving towards a good life for all human beings that is based on social justice and respect for the planetary boundaries. In this regard, the emerging notion of planetary well-being, articulated through new analytical proposals of a socio-ecological nature such as the HPI and the SDI, could help lay the foundations for a new *ecosocial* contract that, going beyond traditional anthropocentric views, is focused on letting ecosystem's function, respecting the biophysical fabrics that configure and support life on Earth.

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5

A Holistic Framework to Foster Harmony

Deeksha Aggarwal

Introduction

Since the early years of global governance, matters of environment have always been kept on the sidelines. This has often led to a fragmented and inconsistent framework, often focusing on broad portfolios such as agriculture or infrastructure. However, over the past few decades, as environmental degradation became so visible and started affecting humans extremely, specialized institutions started to come up. As Robert Falkner explains it, *"It was not until the 'environmental revolution' of the 1960s, which transformed environmentalism from an elite concern into a mass movement with wider electoral consequences for governments, that international society began to accept environmental stewardship as a primary institution"* (Falkner R., 2021). Today, many nations have integrated environmental governance into their administrative frameworks, showing a global commitment to sustainability. However, there is a major gap between enacted environmental laws framework and effectively implemented or enforcement of these laws (UNEP, 2019).

The concept of Planetary well-being, with an ethical, ecological and systematic approach, to address challenges of anthropocentrism, could be an effective way to measure international and national environmental policies, as instruments that contribute to planetary well-being.

The Earth Charter, an ethical framework and soft law instrument, complements this vision by advocating principles of ecological integrity, social justice, and shared responsibility for a sustainable future. The proposed frameworks, such as the EC-Assess from the Earth Charter, highlight the importance of collective accountability and localized actions in

achieving global harmony, and also call for actionable solutions grounded in legal, ethical, and institutional mechanisms (Earth Charter Initiative, 2000).

Defining Planetary well-being

Scholars have been trying to define "planetary well-being" in their own ways. Some define it as *"...a state where the integrity of Earth system and ecosystem processes remains unimpaired to a degree that species and populations can persist to the future and organisms have the opportunity to achieve well-being."* (JYU.Wisdom community.) While some define it as *"... the highest attainable standard of well-being for human and non-human beings and their social and natural systems. In short, planetary well-being must be understood as well-being in, of, and for the planet."* (Antó J.M. et al, 2021).

In defining planetary well-being, one should not be confused between the terms 'planetary well-being' and planetary health (which focuses on inter-dependence of human health and earth's natural systems), or planetary boundaries (which is a scientific framework defining the safe operating space for humanity concerning earth's biophysical systems), or ecological well-being (which emphasizes on the health and stability of ecosystems), earth system resilience (which focuses on the capacity of global systems), or Anthropocene (which emphasizes on the impact of human activities on earth's systems). Planetary well-being should definitely not be confused with Sustainable Development which is particularly *"...development that meets the needs of the present without compromising the ability of future generations to meet their own needs"* (Brundtland Report, 1987).

It thus becomes important - as to what one really means by planetary well-being. From all the different attempts of definitions, certain elements can be identified, such as: ecological stability, justice and equity, interconnectedness of human and environmental health, responsible use of natural resources, prevention of irreversible tipping points, intergenerational responsibility, global and local perspectives, ethics and moral responsibility, to name a few. While all of these aspects touch individual, community, national and global parameters, these still do not define well-being. This is wonderfully explained by Teea Kortetmäki, Mikael Puurtinen and Mikka Salo in their paper on planetary well-being. They explain how well-being is defined

differently in several studies. According to their proposal, planetary well-being acknowledges the value of both human and non-human well-being for their own sake: the moral right for both humans and non-humans to exist, to have their needs satisfied and to realize their typical characteristics and capacities. While one can agree to their questioning of defining well-being, their proposal of the definition falls short when we try to bring it into practicality. Could a cow moo and say she has a right to freely express? Could a tree refuse to be cut for timber as their right to life? Or could a river have a right to not be contained by dams, as their freedom of expression? In a global society where, as a collective, we still haven't been able to give women right to education entirely, where as a society, we fail to provide asylum to people facing ethnic cleansing and let alone safety of a child who is being trafficked and smuggled across the globe for some money, well-being becomes a very subjective term.

In the terms of the Earth Charter, the term 'planetary' is not just environmental. This can be understood by the four pillars of the Earth Charter, which are about respect and care for the community of life; ecological integrity; social and economic justice; and democracy, non-violence and peace. Similarly, 'well-being' cannot just mean to be well-being in just one sphere of living. It includes freedom to express, be and choose what is the best for oneself. Thus, we can say that 'Planetary well-being' encapsulates well-being of all, 'all' being – humans, non-human beings, nature as a living organism, nature as a resource, ecosystems, individuals, communities, etc., be it physical, mental, emotional or spiritual, or any other way of well-being. This is not just a 'right of nature' or 'rights of non-human beings' debate – it is about understanding who is where in the ladder of freedom to be themselves. This is where we need to accept that planetary well-being is a matter of ethics. Planetary well-being cannot be based on a person's materialistic happiness, or how rich a person is in terms of their income, nor does it base itself on countries deciding their territories by putting borders and deciding what is their natural resource, it is rather based upon the accessibility of fundamental rights, sustainability of resources one has and whether it is enough when it comes to their scale of living. It is essentially upon the ethical behaviour of humans towards others, be it towards their own kin, other living beings and non-living beings. So, how do we ensure humans stay ethical?

Law, Ethics and Planetary Well-Being

The philosophy of law, or jurisprudence, bridges the gap between ethics and enforceable actions, ensuring individuals and communities adhere to principles of prudence and morality (Hart, 1961). As Fennis puts it, law, at its core, is a societal tool to institutionalize ethical behaviour, transforming moral ideals into tangible rights and duties (Fennis, 1980). Legal positivism explains how laws provide a structured framework for defining and upholding planetary well-being by delineating obligations towards the environment and non-human entities (Kelsen, 1967). Simultaneously, natural law theory highlights how universal moral principles should guide the creation and interpretation of laws. By embedding these ethical imperatives into policies and regulations, legal institutions create accountability mechanisms that compel humans to act responsibly, thus operationalizing planetary well-being in practical and enforceable terms (Rawls, 1971; Kortetmäki et al., 2021).

There is indeed a significant shift in the prioritization of planetary well-being. For example, the environmental ministry of India came into being in 1980, as a recommendation from the Tiwari committee, to carry out environmental appraisals of development projects (Down to Earth, 1996). Today, the same ministry has grown in its functions and now plans, promotes, co-ordinates and oversees the implementation of India's environmental and forestry policies and programmes (Government of India, 2025). In Spain, environmental responsibilities were distributed among various ministries such as development, agriculture or the presidency. It was only in 1996 that Spain established a standalone Ministry of Environment for environmental governance (Agencia Estatal Boletín Oficial del Estado. 2008). Similarly in Brazil, between 1974 to 1985, the Ministry of Environment and Climate Change was originally the 'Special Secretariat for the Environment' within the Ministry of Interior. It became a full-fledged ministry over time (Brazil, 1973). This itself shows how growing awareness of the pressing challenges posed by climate change, biodiversity loss and environmental degradation has led the nation to substantial progress in integrating environmental governance into their administrative framework. However, this entirely does not mean that planetary well-being is being achieved by formulating these governmental departments.

To translate the concept of planetary well-being from an ethical framework into actionable reality, legal and policy institutions play a crucial role.

By embedding the principles of planetary well-being into legislative frameworks and international agreements, these institutions can create enforceable mechanisms to guide behaviour (Kortetmäki et al. 2021). For example, the recognition of the "Rights of Nature" in Ecuador's constitution or the legal personhood granted to the Whanganui River in New Zealand embodies ethical considerations in law, ensuring that non-human entities are protected and valued. Another example is Costa Rica where in 1986, Álvaro Umaña propsed the creation of a new ministry focusing on natural resources, energy and mines, which led to establishment of Ministry of Environment and Energy which has made Costa Rica as a global leader for environmental protection (Umaña, n.d.). Thus, a mere establishment of institutions does not further the concept of planetary well-being, it is the enforcement of laws and policies which lead to an actionable reality.

Adding to this further, in my opinion, planetary well-being requires a holistic approach. Planetary well-being cannot be achieved by having one sphere of challenges have a solution while other spheres don't or by having one community flourish while others suffer. Critical safeguards need to be provided by creating mechanisms that prevent exploitation by human. One such away imagined and tried is the Paris Agreement on Climate Change, which emphasized on global accountability, requiring nations to commit to measurable actions for reducing greenhouse gas emissions. Policy frameworks such as the Sustainable Development Goals (SDGs) further operationalize these principles at a global scale, encouraging nations to adopt policies promoting equitable resource distribution, environmental justice, and resilience against ecological tipping points (United nations, 2015). And this can be seen in several ways. Costa Rica incentivizes farmers and landowners to conserve forests and ecosystems which promotes sustainability while maintaining biodiversity through the Payment for Environmental Services (PES) (Pagiola, 2008). New Zealand has a Living Standards Framework (LSF) which incorporates environmental, social and economic measures to guide policy decisions, focusing on long term well-being (Treasury New Zealand, 2019). The European Green Deal is a policy framework which integrates climate action with regional economic development (European Commission, 2019). The Amazon Region Protected Areas Program (ARPA) in Latin America safeguards the Amazon rainforest and balances conservation with sustainable economic development for local communities (WWF, 2020).

The push for Planetary well-being, in translating ethical imperatives into actionable legal standards and policies, is through institutions like regional working groups such as Arctic Council, South Asia Co-operative Environment Programme (SACEP) and others; national institutions such as Ministry of Environment, Forest and Climate Change (India), Ministry of ecological transition (France) and others; and international agencies such as UNEP, IUCN and more. Without these institutions, the world risks fragmentations, where individual nations prioritize short term economic gains, over long-term planetary well-being. Creating specific institutions further helps in creating specific, nuanced and focused policies which helps in giving weightage to specific challenges being faced by the communities. It is then important to merge these challenge specific policies, for a holistic approach towards planetary well-being.

Assessment for Planetary Well-Being

To create a framework which could assist in measuring Planetary well-being, certain aspects need to be kept in mind.

Firstly, it needs to be multi-dimensional and should combine ethical imperatives with legal and institutional mechanisms while addressing global and local challenges. It should be holistic in its approach and cover environmental, social, economic and ethical dimensions comprehensively. Secondly, the framework must provide quantifiable results and progress tracking through measurable indicators based on Earth Charter's four pillars. These measurable indicators can be based on respect and care for the community of life (ethical treatment of animals, sustainable use of natural resources, cultural preservation), ecological integrity (biodiversity health, carbon neutrality, water quality, soil fertility), social and economic justice (equality in access to education, healthcare, economic resources, poverty reduction, human rights compliance) and democracy, non-violence and peace (conflict resolution mechanisms, inclusivity of governance systems, protection of vulnerable groups). Thirdly, inspiration must be taken from other frameworks such as the SDGs, Rights of Nature legislations and Living Standard Framework. These frameworks must be studied to understand what is lacking in them, which then needs to be incorporated to a new planetary well-being assessment framework, so that the gap can be filled. For example, while SDGs are fairly holistic, they lack measurable indicators

to assess the growth of nations. This requires assessment tools which could help in analysis with a new approach.

In my view, there is a requirement to have an assessment framework which combines ecological, social and economic barriers in a quantitative manner, subsequently providing quality by assessing community perspectives on well-being and cultural sustainability through participation. Both of these aspects become crucial as both of the assessments are interdependent. This assessment should also have a different section on emphasis on ethics such as intergenerational equity and intrinsic value of non-human entities. For example, a community which worships elephants, but also has a law which leads to elephant ill-treatment, loses points in total assessment. This would give weightage to ethics as it would not be considered as a small part of the assessment, rather as a strong and vital step to assess planetary well-being. Lastly, the framework needs to be flexible to accommodate diversity. Since the parameters of well-being are different for everyone, it would be better if the framework analysis is qualitative and subjective, without creating a classification or rankings.

The assessment of contributions to planetary well-being must be engaging, communicative and impactful. It is suggested that stakeholders must be taken into account for reporting, which could help in publishing accurate and comprehensive updates periodically.

One key assessment tool is already developed by the Earth Charter. This assessment tool, called EC-Assess, is designed to help organizations, communities and individuals to evaluate their policies, practices and initiatives to be coherent with the principles of the Earth Charter, which itself promotes global sustainability, ethical responsibility and respect for human rights. This tool assesses current practices with a structured approach to align policy enactment of organisation/ community/ nation with sustainability principles. Based on the results, it thus highlights areas where sustainability efforts may be lacking and need enhancement, and offers a guide to plan better the integration of sustainability practices into policies. It has a scoring system and self-evaluation surveys which encourages dialogue among stakeholders. (Earth Charter International, 2021; Bosselmann K., et al., 2010; Rockefeller S. & Elder M., 1992)

In my opinion, EC-Assess should be used for integration of sustainable education in schools, by businesses for ethical decision making, for public

policies and community development. Then an index of these results should be curated, on several different basis and an overall index of rankings, for an accurate planetary well-being index.

Conclusion

Measuring our contributions to planetary well-being, informed by the ethical principles of the Earth Charter, presents a transformative paradigm for navigating the challenges of the Anthropocene. By emphasizing interconnectedness, ecological responsibility and justice, it transcends traditional notions of development and prioritizes the flourishing of both human and non-human systems. It is true that nations are now better in formulating policies, having high arching technologies for protection of its citizens, ministries for every subject which needs to be governed, but somehow, implementation becomes the biggest challenge, when it comes to ethics. The Earth Charter's principles serve as guiding pillars for embedding planetary well-being in global policy and practice. A framework for assessing contributions towards planetary well-being would underscore the shared responsibility of humanity in fostering a sustainable and equitable Earth system. By aligning legal, ethical, and institutional mechanisms with these principles, planetary well-being offers a roadmap for achieving a harmonious and thriving global community, ensuring a sustainable future for generations to come (Earth Charter Initiative, 2000; Kortetmäki et al., 2021).

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6

Toward a Sustainable and Equitable Future for our Planet

Kazuo Matsushita

Introduction

The twentieth century was a century of growth and expansion, but also a century of war and destruction. In reflecting on the twentieth century and looking ahead to the future of global society, it should have been humanity's hope that the twenty-first century would be a century of peace and sustainable development. The Sustainable Development Goals (SDGs), adopted by the United Nations General Assembly in September 2015, following the Earth Summit in 1992 and the Earth Charter in 2000, are a concrete expression of humanity's hopes for 2030. However, the world to date in the 21st century is increasingly deviating from the path to peace and sustainable development.

Living in the Anthropocene[1], we need to recognize that "in order to realize the dream of a world with sustainable environment, society, and economy on a finite planet (Earth), unlimited economic growth is unsustainable, the existing system is flawed, and the dream cannot be realized if we follow the same path as before. Today, we live in an era where a systemic shift of society to a sustainable development path is inevitable from an environmental perspective, and at the same time, it is economically, ethically and socially rational and justified." (Watson, R. Ed., 2012)

The myth that economic growth will solve all problems

It has been pointed out for quite some time that due to the various environmental problems caused by the advent of the highly industrialized society that developed in the latter half of the 20th century, as well as population and economic growth, we are facing the limits of the Earth's environmental capacity. These points have been made clearly in, for example, the Club of Rome's "The Limits to Growth" (1972), the U.S. Government's "The Global 2000 Report to the President-Entering the 21st Century" (1980), and the "State of the World" reports by the Worldwatch Institute founded by Lester Brown.

At the international level, the United Nations Environment Programme (UNEP) was established to address these issues, and many multilateral environmental treaties including the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity, have been concluded to address specific global environmental problems. As a result, today's environmental policies and technologies have become much more sophisticated.

Unfortunately, however, the answer to the question of whether these measures are achieving the desired results is no. The reason for this is that the majority of the world's leaders are obsessed with the principle of economic growth first, believing in the myth that economic growth will solve all problems. As a result, there is still widespread acceptance that the primary task of government is to manage the economy, and that the level of economic growth is the touchstone for measuring the success or failure of government. Environmental measures have been implemented only as a symptomatic remedy to the extent that they do not interfere with economic growth and have so far, fallen far short of fundamentally and structurally changing the society that causes environmental problems.

Infinite economic growth is impossible

It was Kenneth E. Boulding, a British-born American economist, who was the first to point out that infinite economic growth is impossible in the finite, closed system of the Earth. In 1966, he wrote an essay titled "The Economics of the Coming Spaceship Earth" (1966), in which he criticized

conventional economics for its unreasonable assumption of unlimited resource availability, calling it a "cowboy economy". Boulding said, "The 'closed economy' of the future should be called the 'astronaut economy'. The earth will be a spaceship, with nowhere to store unlimited reserves, nowhere to mine, nowhere to pollute. Therefore, in this economy, humans will understand that they are in a cyclical ecosystem or system". Boulding's warning came as a shock to many people with a sense of reality, partly due to the historical background of the time when humans first saw the earth from space.

Globalization accelerates reaching the limits of the Earth

More than half a century after Boulding's point, economic growth is still the primary concern of governments and leaders in almost every country in the world. However, the globalization of capitalism has accelerated the destruction of the global environment by removing the constraints of national borders. The rapid economic globalization that began in the late 1980s refers to the increasing integration of economic activities on a global scale through the accelerated movement of trade, capital investment and information. The growth of population in various parts of the world and the expansion of economic activities backed by globalization have led to the aggravation of diverse and complex environmental problems. This means that at the local, national, transnational regional and at global levels, economic activities have exceeded the capacity of the underlying ecosystem to maintain itself, causing various damages to nature and people's lives and health. Furthermore, there is an increasing number of cases in which the economic activities of one country or company have an impact on other countries or the global environment beyond its borders.

Looking at various indicators of the global environment, we can see that the limits of the earth on which economic activities are based on, are becoming increasingly apparent. In terms of global warming trends, for example, in order to limit greenhouse gas concentrations to levels that are likely to keep temperature rise to less than 1.5 degrees Celsius compared to pre-industrial levels, a goal that was globally agreed upon in the Paris Agreement and substantially endorsed at the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change

(COP26) in November 2021, it has been shown that global greenhouse gas emissions must be reduced by 45% from 2010 levels by 2030 and to almost zero by 2050 (Watson, R. Ed., 2012). It is clear that reducing greenhouse gas emissions is not going to be easy, even if we make significant improvements in energy efficiency, dramatically increase renewable energy, and stop deforestation, as long as exponential economic growth continues.

If Boulding has hit the nail on the head, then the world is full of lunatics and economists. Why is this the case? It is important to note that 'growth' and 'development' are fundamentally different concepts: 'growth' implies quantitative expansion, as symbolized by the expansion of GDP, while GDP ignores the social costs of pollution and depletion of resources associated with economic activity, and when environmental pollution occurs, the cost of pollution control is accounted for as a positive in GDP. GDP accounts for this in a positive way. On the other hand, 'development' involves qualitative changes and does not necessarily mean quantitative expansion. What should be the policy goal – is the sustainable maintenance and development of people's welfare. Moreover, we are required to achieve this within the life support system of a closed earth's ecosystem.

Sustainable development as a philosophy for social change

The concept of sustainable development was proposed with the intention of making economic development environmentally and socially sustainable. It is well known that sustainable development was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" in the report, "Our Common Future" in 1987 by the Brundtland Commission established by the United Nations (World Commission on Environment and Development, 1987). This definition clarifies the inter-generational responsibility that economic development should not threaten the development potential of future generations. Sustainable development originally meant development that maintained environmental, social and economic sustainability, with the aim of improving the quality of life of people and maintaining the sustainability of ecosystems.

The background to this is that "economic growth and environmental

conservation are not inherently opposed and contradictory, and it is quite possible to make economic development environmentally sustainable. It is also possible to achieve environmental and social justice within and between generations." (World Commission on Environment and Development, 1987). This was the perception and expectation of the time. However, as mentioned above, the world has since tended to focus only on economic expansion and has emphasized a technology-centered approach to environmental issues based on the premise of maintaining economic growth.

It has to be emphasized that the Brundtland Report also describes sustainable development as "a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs" This states that sustainable development is deeply related to the technologies and institutions of a society and the need to focus on the process of change.

To elaborate on this definition, "sustainable development" is an environmental concept that presents a new vision of environmental society and at the same time intends a policy process for constant change toward this vision. In other words, the Brundtland Report expected countries and the international community to recognize the limits of the global environment and to redesign conventional economic development patterns through collective political action and policy design. Therefore, the realization of "sustainable development" means to solve the various environmental problems that have arisen in the course of the development of a highly industrialized society, to envision a "new vision of an environmental society" for a post industrialized society, to ensure social equity, and to continuously reform and integrate institutions, technology, resource use, and investment in order to realize this vision. It also means to continuously reform and integrate institutions, technologies, resource use, and investment to realize this vision. This implies the need for innovation in the social system itself.

Herman Daly's Sustainability Principles

After the publication of the Brundtland Report, a lot of literature was published on the concept of sustainable development and its definition.

Among them, it was the American economist Herman E. Daly who saw the concept of sustainable development as reflecting a fundamental shift in the relationship between human economic activities and the natural world. According to Daly, the scale of human economic activity expands year by year, but it is materially dependent on global ecosystem, which is a closed ecosystem. The global ecosystem is finite and does not grow quantitatively. The macro-economy is a subordinate system of the global ecosystem, which is finite and does not grow. Therefore, the macro-economy cannot expand indefinitely and has an optimal size. In order for development to be sustainable, the level of economic activity must be kept at a level that is sustainable for the ecological system that encompasses it (Daly, H.E., 1996).

Daly sees sustainable development in terms of material cycles and ecosystems and proposed the following three principles.

Herman Daly's Three Rules (Meadows D. H., Meadows D. L., Randers, 1992)

1. The sustainable use of renewable resources requires that consumption not be greater than the rate at which resources regenerate.

2. The sustainable use of nonrenewable resources requires that the rate of consumption not be greater than the pace at which renewable substitutes can be put into place.

3. The sustainable pace of pollution and wastes requires that production not be greater than the pace at which natural systems can absorb, recycle, or neutralize them.

According to Daley, in today's society, the sub-system of the economy has grown significantly compared to the ecosystem that encompasses it, and as a result, the remaining natural capital has become scarce compared to man-made capital. Moreover, the scarcity of natural capital cannot be completely replaced by man-made capital, so unlike the past when man-made capital was scarce and man-made capital was a constraint on economic growth, today natural capital is a constraint on economic development.

The significance of Daley's argument lies in the fact that, in addition to (1) efficient resource allocation and (2) fair income distribution, which have been the targets of traditional economics, he explicitly states the third policy goal of (3) achieving a sustainable (optimal) economic scale based on the carrying capacity of natural ecosystems (environmental capacity). Conventional economics focuses on (1) but tends to leave (2) to the choices of society and avoid value judgments. The addition of (3) as a policy goal makes it even more difficult to achieve these policy goals simultaneously under a liberal market economy and a decentralized democratic system.

The theory of 'Ecological Modernization' as a driver of sustainable development policy frameworks

How can we put environmental and social sustainability at the center of government and market decision-making in a society where the dominant discourse is that 'unlimited economic growth is possible and good' and 'economic growth is the solution to all problems'? The Nordic countries, the Netherlands, and Germany, for example, are seen as examples of countries that have achieved some success in this regard. In Germany, for example, policies based on 'ecological modernization' have been introduced since the early 1990s, aiming at technological innovation, economic growth, and job creation through strategic investment in the environmental sector.

The theory of ecological modernization is an ideology that considers sustainable development as a new stage of modernization and attempts to solve environmental problems that have arisen as a result of modernization and rationalization through policy innovation in the social system. As a policy framework for realizing ecological modernization, the following are proposed: strengthening environmental regulations, introducing environmental taxes, promoting green consumption behavior, promoting environmentally friendly technological innovation, and developing proactive environmental diplomacy. In order to realize these policies, consensus building among the government, businesses, and citizens is important.

In the process of consensus building, the emphasis is on deliberative and participatory democracy. This is because it is recognized that without the

deepening of democracy and the resulting fundamental change in people's consciousness, as well as their active participation and involvement in public issues, global environmental problems cannot be fundamentally solved. With this in mind, Germany and other countries have been steadily building on their efforts to expand renewable energy and economic development through proactive environmental investment and regulatory frameworks. As a result, Germany has seen a dramatic increase in renewable energy and has successfully decoupled economic growth from greenhouse gas emissions (Matsushita, K., 2014). Ecological modernization theory has a high affinity with sustainable development, and efforts in Scandinavia and Germany, backed by this philosophy, have achieved relative success. However, it should also be noted that there are some criticisms against ecological modernization theory.

Toward a sustainable and equitable future

The objective of economic activity is not to achieve material growth and the quantitative expansion of production and consumption, but to bring prosperity and enable a better life for present and future generations. This can only be achieved within the natural workings of this finite planet Earth. Short-sighted economic policies aimed at short-term corporate profits and demand growth undermine long-term environmental sustainability as well as the long-term healthy development of the economy. For example, the manifestation of climate change impacts and the loss of biodiversity are major obstacles to sustainable development. Moreover, economic development is not incompatible with climate change and biodiversity protection measures. From an ethical standpoint that considers future generations, the cost of mitigating climate change is less than the cost of inaction, and the cost increases significantly the longer we delay action.

The outcome document of the Rio+20 Conference (United Nations, 2012) includes that *"countries recognize the green economy as a powerful tool for achieving sustainable development. The green economy is 'an economy that improves people's well-being and social justice' while significantly reducing risks to the environment and ecosystems"*. The efficient use of resources (energy, water, etc.), which is a key element in achieving a green economy, leads to cost savings for businesses and households. In addition,

the valuation of ecosystem services and the creation of markets will create new economic opportunities. The green economy will be a source of new jobs and technological innovation in the future. Governments, the business sector and civil societies, as a collective, must each play a key role in the transition to a low-carbon economy, adaptation to climate change, and more sustainable use of ecosystems.

Today, we need to rethink the original concept of sustainable development, which is to maintain and develop people's welfare in a sustainable manner within the constraints of global social and environmental sustainability, and to design and implement realistic policies for the transition to a sustainable society. Given that it will take centuries to recover from the adverse effects of climate change and the loss of biodiversity, which in many cases will never be reversed, we must immediately do everything in our power to work towards a sustainable future.

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Notes

[1] A term coined by the Nobel Prize-winning German atmospheric chemist Paul Crutzen to describe the recent geological era in which humans have come to have a significant impact on the Earth's ecosystem and climate.

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7

Indigenous Economic Futurisms – Upholding Reverence, Respect and Dependency in our Economic Relationships with Mother Earth

Carol Anne Hilton

In Indigenous reality, the earth is referred to as 'Mother.' In noting this, it is important to be aware of the elevated role of the fundamentals of reverence, respect and dependency in this human relationship with her. In the Inca tradition this is referred to as 'Pachamama' in the Aymara and Quechua languages along the Andes Mountain range in South America. This concept is referred to as 'Ashkaakamigokwe' the Mother Earth in the Ojibwe language, 'Papatūānuku' in the Maori reality, and 'Mattarahkka' was the primal mother, the goddess of earth from the Nordic Indigenous perspective. The common thread tying these parallel global Indigenous realities is the belief of upholding the primal life force through reverence, respect and dependency at the heart of the human relationship with her across time.

Fundamental to Indigenous worldviews is the operating belief of living in the proximity to life, to the innate aliveness, consciousness and spiritual essence of all things in the world and that expands out into the universe. Stemming from this central concept, respect for all life forms is an essential component of Indigenous ways of being and knowing that is fundamentally connected to the concept of economy and ecological well-being. In Indigenous knowledge systems, the source of all knowledge and understanding must come from examining all the attributes of our whole being: our mind, body, emotion, and the spirit.

The dominant economic mindset of today was imposed violently upon

Indigeneity. The mindset of growth was birthed in colonialism, patriarchy, industrialism, capitalism and the cognitive linearity of the one worldview that has caused the displacement of Indigenous economic knowledge systems that have continued over thousands of years. It is important to examine the role of Europe in this process. Although Europe represents only 8 percent of the total planet's land base, in the timeframe of the early 1400's through to the 1900's, several key nations in Europe set in motion the dominant intention of conquering and colonizing over 80 percent of the entire world's remaining land base and peoples in an endless quest for new resources and control. This perspective and position of dominance and superiority lasting throughout centuries and has led to widespread inequality, poverty, economic isolation, displacement and is one of the primary causes of rapid pace of global economic growth.

It is in this dominating worldview that the linearity of economy was activated. In the words of David Peat in *Gentle Action for a Harmonious World* he describes *'...once we view nature and society as mechanical then we tend to act and treat it in a mechanical way and that is where the trouble lies. That, in essence, is why the world faces so many problems.'* The Industrial Age serves as an expression, a deepening or quickening of the experience and knowledge systems built on linearity. The long horizon of industrialization shaped the endless quest for productivity and growth. Humanity is still recovering from the habitualization of the Industrial Age which shaped modernity, economics, and the fundamental questions and outlook of the human experience today. The advancement of economics paralleled the ongoing destruction of ecological systems and planetary well-being. It is in the proximity to honouring the very essence of the integrity of life itself that humanity is urgently needing to collectively respond to now. The Indigenous worldview offers insights into the response to this urgency.

Today, humanity is still recovering from the effects of colonialism and industrialization. It is out of the urgent necessity and pressures of today that are testing humanity's continuity, for which we must learn to integrate our economic activities, design & technology to better align with our natural ways of life, ways of knowing and the structure of living systems that are vital to our continuation as a species and as a whole ecosystem. It is here we see the emergence of the human- centered economy - a response to the effects of linearity and imposed worldview.

In 1974, upon Friedrich Hayek accepting the Nobel Prize in economics, he asserted that economists were essentially unsure about their predictions, and that the tendency to present these findings using the language and methods of science could potentially be misleading and cause negative effects. In building upon this point, it is when we as humans are removed from the nature of reality and function of ecology, that our assumptions lead us astray in our collective economic model and well-being. The concepts of growth, capital, supply, demand and debt all stretch beyond their current confines and limited meaning, when viewed within Indigenous reality and worldview. It is time to address our collective assumptions because economics is incomplete in its current form.

'Indigenomics' is a constructive platform to facilitate modern relational economics and is a response to the needs of the economic crisis of human identity and well-being. Indigenomics is a new word and serves to describe economics from an Indigenous worldview. It is a platform for modern Indigenous economic design. It serves to uphold and create the space for Indigenous world view and in particular Indigenous ways of knowledge systems and ways of being around economy over time. The Indigenous economy exists within the relationship to ourselves, to each other, to the earth, to our past and to our future. In mainstream reality- economy is an externalization of something that 'happens to us', something outside of ourselves. In Indigenous reality, we are one and the same.

Indigenomics highlights the ongoing role of colonialism and its structures of systemic economic exclusion and brings into visibility the honesty and insight required to evolve and align economic thought and human approaches today. It brings into visibility the assumptions we make about wealth, progress and development and the measurement of these today. It speaks to the growing relevance of Indigenous economic and spiritual worldviews in a world struggling with its own economic chaos and understanding of the nature of reality itself. Indigenous epistemologies have always embraced cyclicality and relationality and in many ways, Indigenous economic thought can be seen as the originator of the circular economy. Circularity is the true state of nature; yet our collective economic push towards linearity has come to its natural limit.

In Indigenous realities, the source of wellness is alignment to the original teachings which describe our relationships, responsibilities and

accountabilities to ourselves, our families, our communities' past and present.

It is at this intersection that new questions arise, causing us to question our belief systems and everything we were told about economy itself. Is it possible it is now to time to expand our collective understanding of the purpose of economy to embrace well- being and how can we include and gain understanding from an Indigenous lens?

The Global Centre of Indigenomics identified a series of prime directives of Indigenous economic design. In highlighting the legacy of planetary well-being, these directives bring into focus the responsibility to future generations and to planetary well-being.

Indigenomics offers these prime directives of modern economic system design-

- Dignity- It is in the absence of human rights that human dignity comes into focus.

- Resilience- an outcome of a healthy economy must be resilient ecological systems.

- Impact- measuring risks and impacts from an Indigenous worldview brings into focus greater or expanded perspectives of longer term ecological impacts.

- Responsibility- understanding of the greater connected systems and personal responsible is directly embedded within Indigenous futurisms.

- Generational accountability- decision-making frameworks that take into account the next seven generations is a central to Indigenous economic worldview and knowledge systems.

An example of a framework that has been initiated and applied globally and that is contributing to Planetary Well-being is the Rights of Mother Earth framework. The Rights of Mother Earth is an Indigenous led governance, policy and constitutional framework that takes into account the specific rights that are recognized for Mother Earth as a whole and

for ‘all beings of which she is composed’ which are the rights to life and to exist; to be respected; to regenerate bio-capacity and to continue vital cycles and processes free from human disruptions; to maintain identity and integrity as a distinct being. While established as a legal construct, the implications for international mining sectors primarily as an extractive industry substantially shifted and aligned Indigenous rights and the rights of Mother Earth.

The increasing role of Indigenous Protected and Conserved Areas (IPCA) Indigenous led areas of protection, activate stewardship governance that is aligned with long term generational responsibility to place and to people. IPCA’s are lands and waters where Indigenous governments have the primary role in protecting and conserving ecosystems through Indigenous laws, governance and knowledge systems. Indigenous cultures and languages are at the centre of the structure of

In these examples, this space that has been created, is wide open to evaluate Indigenous led conservation and legal structures as contributions to Planetary Well-being and provides a road map aligned with the work of the Earth Charter.

We must keep in our line of sight the purpose of a human centered economy – it must also be about creating the space for people to lead dignified lives. A human centered economy means life at the center. The concept of post capitalist futures better aligns with our planetary goals embedded in low carbon economies. It is time for economy and human dignity to be fundamentally aligned and measured. Building an economy with life at the center proposes a radical rethinking of how we engage with resources, how we produce goods, how we limit waste production and ultimately how we relate to each other and are inspired by natural systems. The circular economy describes an emerging space within the spectrum of value creation. It establishes a distinctive place for innovation in the process of value and wealth creation through the relationship, use and consumption of material resources.

We are in a collective moment- the urgency of designing our collective future. Like a child seeing itself in the mirror, humanity is staring into the eyes of our own finiteness, closing in on our comfort zone that has been built on the fallacy of the metrics of supply and demand that are

devoid of connection to the natural sources of abundance and prosperity, yet desperately seeking to shape meaning in upward curves of endless economic growth. This current moment can be seen as a crisis of values. Today, the lack of intentional values and the deficit of relationality in our economic system has created an alarming pressure for new actions and a greater need to activate the design principles of a human centered economy.

In this moment, we are invited to radically rethink how we want to experience economy and how we are responsible for the outcomes of our collective and planetary well-being. It is an invitation to return to meaning informed by the natural world and to shape our modern economic reality based on natural law and inter-connectivity. It is important and timely to address our collective assumptions of what we perceive as 'good' and 'right' about economics itself. In the poignant words of Sheila Watt-, a Nobel Peace Prize nominee and Indigenous activist *"You can't separate human trauma & planet trauma; they are one & the same."* It is time to shift our gaze to the seventh-generation economy, to stretch the experience of time and value and return humanity to the experience of an economy that is connected to the natural world we live in. In the words of Ovide Mercredi, past national Chief of Canada *"Our present is our responsibility, our past is our authority. our future is our mandate"* This is the Indigenomics horizon. It is time to build economy with life at the center. Let's have the courage to do this together!

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8

Slow Motion Catastrophe: Charting a Way Out

Ladislau Dowbor

"*The time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being. And the measures of well-being should be put in a context of sustainability*" – Joseph Stiglitz, 2009

A first step consists in breathing freely, by getting our heads out of the flood of ideological simplifications. This is not about capitalism or socialism, it is about reality. What brought prosperity to the world is not capitalism, but science. Copernicus a few centuries ago was still afraid to publish his findings, Galileo's *Eppur si muove* was reportedly just whispered, but in the last two and a half centuries of our thousands of years of human existence we got the steam engine, and electricity, and oil, and cars, trucks, ships, fertilizers, vaccines, TV, DNA, electronics, computers, internet, satellites, algorithms. A human being presently uses hundreds of times the strength of his muscles, and his intelligence has growing support from databases and artificial intelligence. This is a civilization construct, with cross-fertilization of so many researchers. Louis Pasteur and Albert Einstein belong to humanity, not to corporations. And scientific progress is posting on.

This brought us growth. We are not poor anymore. In 2022 we are reaching a US$100 trillion-dollar GDP, equivalent to four thousand dollars per month per four-member family. What we produce in goods and services is more than enough to ensure everyone in the world can lead a dignified and comfortable life. A very moderate reduction in inequality would be sufficient. A modest transfer of 2% of the wealth of the top 1% would be enough to double the wealth of the bottom 55%. These are the proportions. Our problem is not economic, it is a social and political organization challenge. For the first time in our turbulent history, we have sufficient resources to end so many

dramas and so much suffering. Science has brought us here, albeit with different forms of organization, Sweden, China or North America, but also Brazil, Nigeria or Myanmar. We have the science, the energy, and we have the financial resources.

But not social and political progress. In this 8 billion inhabitant planet, 2.3 billion suffer from food insecurity, 850 million go hungry. Some 20% of them are children. If we take grain alone, the world produces over one kilo per person per day. In Brazil we produce 3.5 kilos, and we have 125 million in food insecurity, while 33 million suffer from hunger. Undernourished children are hit for life. In the US, 70% of soy and 30% of corn are fed to cattle. Couldn't we feed children? JBS, a major meat producer in the world, is profiting from destruction of the Amazon and the Cerrado, from chemicals in water, soil and even food, and spends millions on ads, repeating "we feed the world", and "we protect the environment". This is the kind of information we all receive, and particularly the uninformed. How cynical can we get? Well, the pay-off to shareholders is strong, and the algorithms have not been instructed on the Amazon dramas. A peaceful European retiree will seldom be tracing from what kind of activities the dividends on his savings are coming from. Any growth in dividends is welcome. We do have concerned and informed minorities, but the responsibility information chain is broken.

We know what must be done. The 17 Sustainable Development Goals are detailed in 169 objectives and quantified in over two hundred indicators. It has been over thirty years since the UN got over the World Bank World Development Indicators simplification, based on GDP, and brought us Human Development Indicators. A modest progress, including health and education, but GDP still reigns, with its absurd simplifications and gross accounting errors. How can we consider financial intermediation costs, this huge overhead on the production process, as "product" instead of cost? Environment disasters such as Exxon-Valdez, or BP in the Gulf of Mexico, generated huge cleaning up measures, which raised GDP. This is the dimension of the absurdities we are facing. Renewed and scientifically serious ways of measuring progress have been drawn up and can be found in so many publications, years ago in the Stiglitz-Sen-Fitoussi report, most recently by Mariana Mazzucato in *The Value of Everything,* Kate Raworth in *Doughnut Economics,* or Michael Hudson in *The Destiny of Civilization* (Dowbar L, 2014).

Our difficulty in going beyond GDP is not linked to scientific resilience of its

methodology, particularly since it has been deformed to include financial costs as product, but to corporate interest. Whatever corporations promote, real-estate speculation, debt bondage, natural resources depletion, monopoly pricing, is presented as raising GDP and as such, "growth". The political strength also resides in the fact that what keeps people from sleeping is unemployment, the loss of the possibility to keep one's family afloat. And growth, at whatever costs, is seen as opportunity. Even GIG jobs. And the more inequality, environment and social dramas we create, the more insecure populations support any corporate opportunism generating growth. The rural populations in the Amazon region, even if paid miserably for burning the forest, hate environmentalists. They have no use for quality of life indicators. We do have all the necessary numbers, all our dramas are quantified and duly published. But who is listening?

The 1% is earning huge fortunes in this financialized world. Thus, the problem is not bringing new numbers to the front – see for example the Oxfam reports on inequality – but reaching out to the population in general, in order to generate a change in the overall approach to our economic, social and environmental dramas. The 1%, in spite of all the "talk" on ESGs, has not changed its decision process, maximizing shareholder revenue, whatever the costs. The narrative that consumers will punish dirty corporations, forcing them to become responsible, is simply not working, despite much publicized examples. The UN Secretary General Antônio Gutierrez makes this contradiction clear: *"We can choose to bemoan the lack of financing for the 2030 Agenda in a world awash with so much unproductive and unrewarding finance. Or we can grasp the opportunity to reshape finance, according to our urgent, collective needs. The choice is clear. Let us invest in the 2030 Agenda and finance a better world for all."* The 100 billion dollars profits of the fossil fuel industry in the first quarter of 2022 he calls *"grotesque greed, punishing the poorest and most vulnerable people while destroying our only common home, the planet."* (Guterres A., 2017).

Most people have difficulty to imagine what 100 billion can mean, as profits for a group of the largest fuel corporations, in one quarter, but we can compare it with the ambitious 2015 Paris summit, which had set a goal of 100 billion a year to fix our climate dramas. And in tax havens we have over 20 trillion dollars, 200 times as much, and tax exempt. BlackRock, the asset management giant, a private corporation which maximizes returns for shareholders, has 10 trillion to play with. The speculative derivatives world market reached staggering sums: *"The notional amount of OTC*

derivatives declined modestly in the second half of 2021, to $600 trillion." (BIS, 2022). We are dramatically out-financed and out-marketed. For anyone who thinks tax evasion through tax havens is a fringe process, the Economist provides the basic figures: *"A 2018 study found that about 40% of multinational profits made abroad are artificially transferred to low-tax countries...The part of multinational profits abroad, registered in tax havens, has grown from 30% two decades ago to around 60% today."* (Economist, 2021). The negotiations on an eventual 15% global tax on these profits is being discussed, and discussed, in so many commissions, over the last few years. The basic fact is that the corporate world's game is global, and we have no global government.

This is not only about the 1%, or the key 0,01% deciders, but also about a larger community of financial investors, set on dividends maximization, and the highly paid managers of the system. Michael Hudson sums it up: *"Western democracies tend to polarize into oligarchies composed of creditors, landlords and monopolists, who win support from middle-class voters who fear radical policies threatening their aspiration to make rentier gains for themselves as small investors and property owners...Some professionals, innovators and artisans are able to save up and make gains in housing and the stock market. Their feet are in the wage-earning class, but they are reaching up to the asset-holding class as its advocates, enablers and entertainers."* (Hudson M., 2024). So many people depending on financial corporate gains for their earnings and pension safeguard generate a larger political support for a system that is leading us to economic, social and environmental chaos.

People know how to react to traditional exploitation of labor through low salaries. Fed-up employees can paralyze a company, demand better wages and better work conditions. But the systemic global financial distortion we face works on a global level. We are supposed to understand which product we buy is "green" and the result of sustainable procedures, and it certainly did generate a niche market, but the billions of consumers in the world must take what they can pay. Straining our eyes on the tiny letters on the product to know how sustainable it is will not help. Understanding how the financial drain on the productive economy works is beyond most of us, as is the case of the global platforms. Yet every one of us is paying, for example through inflated prices or debt service.

The positive side is the important shift in how economy is being explained, taught, or even presented in accessible ways. A generation of economists, a

few of them mentioned above, are allowing us to understand how corporate money-making has divorced from social and environment improvement. The absurdity of Milton Friedman's *The Business of Business is Business,* clearing corporations from any responsibility, is standing bare. The success of Thomas Piketty's volumes shows that at last we are understanding the workings of the system. So many institutions, like the Tax Justice Network, the Roosevelt Institute, New Economics Foundation, Alternatives Economiques, World Inequality Database – just to mention a few - are shedding light on the key deformations. Economics is moving from complex narratives to justify corporations, to the obvious measures to reduce inequality and preserve the planet.

In terms of measurement, the challenge is not to substitute the GDP errors with a better magic number. The well-being we seek is not to be reduced to one indicator. But we do know the critical challenges, concerning climate change, biodiversity, water contamination and shortages, hunger, child mortality and the like, and these key-indicators should be systematically publicized as a question of human survival, of ethical decency, not of political colour. On the other hand, we must put more light on the local indicators that are particularly sensitive according to so many different regions and municipalities. The indicators must be brought down to the concrete challenges the populations face in their neighborhood, allowing for a bottom-up mobilization.

But we also must stop shying away from addressing the causes. "More progressive tax policies, including on income, wealth, corporations, property and other forms of rent income, could help address income inequalities. Regulating private financial flows will be essential to steering private finance toward these broader social goals. Curtailing restrictive business and predatory financial practices will be key to reigning in corporate rentierism and crowding in private investment to productive activities included in the green economy." (UNCTAD, 2019)

The basic issue is that we know the numbers of every drama, the solutions have been detailed, we have all the necessary financial and technological capacities, but so little is happening. The scientific data must be transformed into a scaled-up communication effort. How helpless can we be in the face of a slow-motion catastrophe!

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9

Planetary Well-Being: a Vision and an Index

Kazuo Takahashi

Introduction: Despair and Hope

Toward the end of the Rio Summit in June 1992 (where Mr. Maurice Strong asked me to accompany him almost constantly for consultation, just in case a serious problem arose. He was concerned that anything could happen at a summit.), Mr. Strong told me that the summit was a failure. Aiming high, targeting at a global cultural revolution through the unusual process of a UN Summit, a process which had started in December 1990, Mr. Strong tried to mobilize the whole spectrum of the government structure of the member states of the United Nations, the business communities across the world and the global civil society. The reason for the negative assessment by Mr. Strong was the banality of the political declaration to be adopted by the Summit (Strong M., 1992). After this disappointment, his major concern was turned to moving the unfinished global revolution forward in some other ways. From 1993, his approach was to twist the whole structure of the movement upside down, from the summit to the grass-roots - globally, creating an association of environment related NGOs world-wide through the Earth Council, mainly for action, while also assembling policy intellectuals from around the world to draft an earth charter (Earth Council, 1993).

In the meantime, Mr. Gorbachev arrived at a similar assessment with regard to the critical needs of humanity: ensuring environmental sustainability along with security in relation to weapons of mass destruction (WMD) and to international terrorism and with the ever-widening gap between the rich and the poor. According to his memoir (Gorbachev M, 2007),

based on his long commitment to agriculture from the outset of his career in the communist party of the Soviet Union, he had observed the serious destruction of traditionally fertile lands at each level of the party hierarchy. After the dissolution of the Soviet Union - which resulted in his expulsion from the political leadership about half a year before the Rio Summit, experiencing a severe desperation, Mr. Gorbachev began after a while to address these grave problems through his Foundation (Gorbachev Foundation, 1995).

The meeting of the minds of these two giants set the framework of the eventual Earth Charter. While the details should have emerged from the consultations of the world class policy intellectuals, and the dialogues between them and the grass roots assemblies world-wide, the broad structure of the charter was expected to reflect their rich experiences of the lifetime: 1)The first point was that the charter should aim for a long timespan. It was believed by then that the global cultural revolution to be pursued should be a struggle which may well take decades at least. 2)The second point was that the charter should be based on high ethics and a deep philosophy. It was strongly felt that only the combination of these two would provide a credible basis for a durable fundamental change of the value structure in the world community. 3)The third is the importance of a broad perspective. The relevance of a number of issues to the question of sustainability was pointed out by both of them on a number of occasions. They were believed to include such issue areas as peace and security, science and technology, such values as freedom, human rights and democracy, a sound global economy, social welfare as well as global environment.

These concerns are reflected in the Earth Charter, which has turned the despair of Messrs. Strong and Gorbachev to the hope to be pursued in the course of the 21st century (Earth Charter Initiative, 2000).

1. Tension between Religion and Philosophy

The major power of the Earth Charter is derived from its positioning in-between religion and philosophy. The Preamble of the Charter points out that *"Humanity is part of a vast evolving universe. .....The protection of Earth's vitality, diversity, and beauty is a sacred trust."* (Earth Charter

Initiative, 2000)

The Bible (the Book), in chapter 1 of the Genesis entrusts to man to take care of all creatures and things that have been created by the God. According to the oldest of the Chinese classics (the Book of History, sometimes called simply the Book whose editor is regarded as Confucius), man has been instructed by the Heaven to take care of all the things, living or not. While the views expressed by Chinese classics are religious or not may be a definitional question, the similarity of the views between the two (the Bible and the Book) on the basic task of man, namely the major reason for the existence of man may provide the common basis for humanity (Confucius, 2007).

The perspective of the Earth Charter is very close to religion but not quite there. The task of man, which is perceived in a similar manner between the East and the West, can be a basis of philosophical pursuit of the relationship between man and the universe as well as of a major religious teaching. However, the answers to the question of why the universe exists differ between a religion and science. The answer of the religion is that the God has so decided. The scientific answer is that we are looking for it with our reason. In-between religion and science, but closer to religion, that is where the philosophy of the Earth Charter is. The closeness between a religious perspective and the philosophy of the Earth Charter provides the power of motivation for actions.

The Earth Charter philosophy is unique, in that it calls for evolution instead of providing a complete set of values. For example, at the end of the Preamble it states: *"We urgently need a shared vision of basic values to provide an ethical foundation for the emerging world community."* And also, in Principle 1 b, it states: *"Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity."* Thus, the Earth Charter's philosophy emphasizes the creative process of the Earth Charter movement. The interactions between the Earth Charter and the historical process are the essence of what the Earth Charter is all about. Attempts at discovering new values are constantly called for on the part of those who are committed to the Earth Charter (Earth Charter Initiative, 2000).

2. Ethical Underpinnings

The strength of the Earth Charter philosophy is further enhanced by a set of ethical proclamations. Among a number of important ethical points made in the Earth Charter, the most unique statement which should have a lasting influence due to its linkage with another vitally important report, is included in a sentence in "Challenges Ahead" as *"We must realize that when basic needs have been met, human development is primarily about being more, not having more."* (Earth Charter, 2000). This point comes from the Delor Report of UNESCO which was published in 1996 when the committee on an Earth Charter was launched (Delors J, 1996). The subject of the Delor Report was the lifelong education in the 21st century. The essence of the Report was to stress that the objectives of education were to develop four capabilities in an inter-related manner: to learn, to do, to be and to live together. This Report has generated unusual impacts globally for a message coming from any international organization. The concept of "to be", which links the Earth Charter with the Delor Report of UNESCO, will continue to have considerable impacts on education world-wide in the course of the 21st century.

3. Respect of Cultural Diversity

In the "Way Forward", the Earth Charter states as *"Our cultural diversity is a precious heritage and different cultures will find their distinctive ways to realize the vision."* (Earth Charter, 2000). The cognitive revolution of the second half of the 20th century in the world community is largely based on the discovery of the importance of cultural diversity, a perspective which is being strengthened in the course of the 21st century. The increasing irrelevance of GDP as a measure of the progress of a nation is related to this discovery (Stiglitz et al., 2009).

The contrast between cultural diversity and a global measurement poses a difficult challenge to any attempt to understand where we are and where we should be heading for in the world community. The very concept of diversity defies attempts at indexation, and yet it is a key factor in the Earth Charter, a factor without which the value of the Earth Charter will be diminished considerably. As difficult as it is, it may not be an impossible

task which obviously requires highly intellectual exercise that should be available for the Earth Charter community world-wide (Earth Charter Initiative, 2000).

4. Moving the World

In the light of the above factors that have been incorporated in the Earth Charter, the world community has benefitted from it in a number of ways in the past two decades:

1. The launch of the Earth Charter was made in June 2000, just before the adoption of the Millennium Declaration by the UN Summit in September 2000 where the central focus was the Millennium Development Goals (United Nations, 2000). The major problem of this highest-level political event was the complaint of the G77 against the process of the elaboration of the MDGs, which was led by the UN Secretary-General, Kofi Annan only with a marginal involvement of G77 (Annan K, 2000). In fact, the MDGs were virtually the photo-copy of the 1996 policy declaration of DAC of OECD (OECD, 1996). The Earth Charter was widely read within the political circles around the world due mainly to the joint leadership of Mr. Strong and Mr. Gorbachev (Strong & Gorbachev, 2000). Being a virtual spokes-person for the ODA community at that time, I was informed by a considerable number of government leaders around the world that the content of the Earth Charter, locating the poverty issue in the broad context, and urging actions based on persuasive philosophy backed by clear ethics, was highly relevant to the MDGs. They were at the same time, pleasantly surprised by the fact that the Earth Charter was produced with the involvement of the grass-roots people in the developing countries. By the time of the adoption of the Millennium Declaration, the complaint of the G77 became very weak. I noticed a powerful function of the Earth Charter for the legitimization of a major decision in the world community.

2. Against the background above, the G77 targeted the year 2015 as the pivotal timing to take back the initiative of policy making in the United Nations. In 2011, the preparatory meeting for the Rio plus 20 ministerial

conference to take place the following year was held in Indonesia (Rio+20, 2012) . The representative of Colombia, Paula Caballero along with a few Central American representatives floated the idea of Sustainable Development Goals, an initiative which was accepted by many representatives without objections, leading to the adoption of SDGs in 2015 by the UN General Assembly (UNGA, 2015). For Mme. Caballero, the idea of a comprehensive approach to the question of sustainability must have been familiar due to her involvement in Latin American environment movement where the Earth Charter activities were more salient than in other regions of the world (Caballero, 2016). While not broadly recognized, the critical function of the Earth Charter in providing a role model for sustainability should be highlighted. In a way, the Earth Charter is the mother of the SDGs.

3. Since the launch of the Earth Charter in 2000, efforts to disseminate its messages have been pursued most intensively through educational activities (UNESCO, 2015). The level of its success varies widely around the world. It should be important to review and assess these activities from an objective perspective so that the value of these efforts should be increased over time.

5. Indexation as a Movement

As the Earth Charter has played such roles as legitimization, a conceptual model and educational materials, it has gradually come to acquire the status of the global public goods over the past two decades. The new attempt at the Earth Charter Index is being pursued as an additional exercise of the global public goods (Kaul et al., 1999).

The indexation of socio-economic as well as political lives has a rather long history which is largely the accumulation of failures, a history of attempts at capturing factors beyond GDP (Stiglitz et al., 2009). It started prominently with Japan's proposal to the OECD in the first half of the 1970s (OECD, 1973). Against the background of the rapid economic growth which was pursued almost single mindedly for the previous quarter century as a reaction against the devastation, brought about by World War II, Japan was by then forced to realize that something was wrong with the concept of GDP

(UN, 1972). Rapid increase in GDP had produced now familiar problems including environmental damages, widening gap between the rich and the poor, atomization of families due to rapid urbanization among others. It coincided with the UN Stockholm Conference on Human Environment in 1972 (Daly & Cobb, 1989). After extensive research and deliberation by top experts, Japan warned the OECD that it was time for the international community to elaborate an index that should capture the true wealth of a nation (Sen, 1999). While Japan's initiative was well received, it gradually died down due to the difficulty of elaborating a concrete index which could be accepted by most members of the OECD (Haq, 1995).

In contrast to a number of failed cases, human development index is mildly a success in the sense that it is relatively widely used in the international development community, shifting the focus of international development efforts from infrastructure to people (UNDP, 1990). The success of the human development index may be largely due to the three factors which were orchestrated by a prominent professional of development (Fukuda-Parr, 2003). The first is the major contribution of a highly respected development thinker cum philosopher, Dr. Amartya Sen in particular through the concept that development is basically the expansion of freedom where freedom was linked to the growth of human capabilities (Kaul, 2006). The second is the elaboration of the concept and indexation by the leading experts jointly at the International Development Association which, having been established in 1956, was the oldest academic association in the field of development (Sachs, 2015). Based on these highly credible works, the third was that the concrete work was pursued by the potential user of the index, UNDP where the first director of the annual human development report, Mme. Inge Kaul and the second director, Dr. Sakiko Fukuda-Parr established the practice that the substance of human development index is an on-going exercise, always adjusting to changing situations and new discoveries. All of these three factors were orchestrated by Dr. Ul Haq, a former minister of finance of Pakistan, a highly respected figure in the field of development (UNDP, 2020).

These examples of failures and a mild success suggest that an indexation exercise requires extensive preparations and test-runs before implementing it. The worthy attempt at it in relation to the Earth Charter is not an exception.

Against the background of the genesis and the historical functions of the

Earth Charter, the EC Indexation project may reasonably be characterized as a movement of specific global public goods.

Being a movement, it has to be reasonably flexible in terms both of the content and the approach to the public at large. The EC index needs to be ensured that it evolves over time, reflecting the rich substance and the important functions that have already been performed and will perform in the coming period by the Earth Charter.

Being global public goods, transparency, accountability to the world community and free access to all the materials that produce the index should be guaranteed. The internet will be the vital instrument for these purposes.

It is also important to clarify the essence of the Earth Charter rather than to selectively pick up some points of the Charter for the index exercise, with clear understanding of the whole process of the creation of the Earth Charter. This exercise needs to be a set of highly credible activities.

Taking a country approach as a unit of contribution to the planetary well-being, the ranking of countries is expected to inspire each nation to emulate the top runner. If indexation fails to perform this function, it is nothing but an exercise of a second-class social critique.

In order to popularize the Earth Charter in the world community a narrative which translates the rich substance of the Earth Charter to an attractive story will have to be created. The concept of planetary well-being should be expressed in an easily understandable manner without losing its depth and beauty, a rather difficult challenge, but a must. The backup of this narrative should be a powerful support to the indexation attempt.

It should be useful to make the leadership of the EC indexation movement as visible as possible in the world community in particular at the initial period. Visibility is an integral component of the leadership of a movement.

Concluding Observations: The Way Forward

The courageous initial steps have been taken by a small group around

an excellent idea, integrating a number of the positive points of the Earth Charter, some of which are set out as above. It is vitally important to proceed to the next step where a group of high-level experts will contribute to the further elaboration of the index which should inspire individual countries to achieve higher performances along the lines of the index. In a few years' time, it should be useful to assemble another group of people who are expected to be potential users of the EC index, including officials from the World Bank, UNDP and DAC of OECD, for the purpose of reviewing the whole operation of the EC index. A gradual expansion of the EC index circle for the purpose of the mobilization of stakeholders should be the essence of conceptualizing the index project as the movement of the important global public goods. The EC index should be the exercise of constant improvement of the substance combined with the constant expansion of its users.

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10

Other Nations

Sabrina Brando

'The extraordinary life and death of the world's oldest spider', a story told by the people who knew her for almost half a century. She was born under an acacia tree in one of the few patches of wilderness left in the southwest Australian wheat belt, in an underground burrow lined with her mother's perfect silk. She left to dig elsewhere an almost perfect circle straight down into the soil, just large enough to fit her body, lining her new home with silk just like her mother did. She lived in the North Bungulla Reserve, providing precious sanctuaries after farming and industrialisation destroyed almost all the wilderness in this region. Belonging to the *Gaius villosus* species – also called trap door spiders – they called her 16 (inspired by Selk, 2018), and this would be her only home until her death at age 43. This is just one story of billions of animals who are part of the greater community of life, all living their one life.

Earth Charter International believes in practising ethical values that support planetary well-being. At AnimalConcepts, we share this vision and expand it specifically to the other animals we share this planet with. When I think about planetary well-being, it includes individual spiders and acacia trees, all kinds of people, and all other animals and plants; it includes the mountains, rivers, the black sandy beaches in Iceland, the smell and sound of a 25-metre blue whale as she passes me, awed not only by her size but mostly by her magnificent presence, together in and on an arctic sea. For the last 30 years, my life has mainly revolved around the well-being of other animals, both in the wild and in human care. The well-being of people is as important to me as the well-being of other animals. While many of the topics discussed in this essay impact people around the world, especially those who are marginalised, this short chapter will focus more

on exploring what a more just, sustainable, and peaceful world looks like for other animals. These principles are our flashlight: curiosity, attention, kindness, and honesty. For change to happen, a willingness to be auto-reflective and auto-critical is not only essential but necessary. Maya Angelou said that we should do the best we can until we know better, and then we should do better. Let's embrace our responsibility and, importantly, our responsibility to create and maintain spaces for other animals in a kind and compassionate manner.

I am interested in philosophical endeavours, but our work through AnimalConcepts often focuses on practice-related questions, research, and activities that aim to make meaningful changes that support good well-being for those animals in human care and those living (semi-) wild. Many animals today find themselves in all kinds of systems: in people's homes, in wildlife centres, zoos or aquariums, or in intensive systems such as farming and fishing. Animals are given different roles by us, such as food for others, e.g., farm animals and fishes, or companionship or entertainment, e.g., dogs at home or in races. Animals have different roles depending on their system, as well as roles based on religious and cultural differences. Animals can also be categorised by their usefulness to us, other animals, or the environment, such as animals used in testing for medicine or, on the other hand, those seen as nuisances or for their potential to carry disease. Understanding the roles we give to animals and the systems they are in allows us to recognise the kind of experiences the role or system is likely to yield from the animal's perspective. This matters, as it may enable us to address the needless suffering, conflict, anxiety, and pain these systems might cause, granting us the ability to heal the system and transform these experiences into more peaceful and harmonious ones. It is important to recognise other animals as beings in their own right, each with their own needs and preferences; as Principle 1a from the Earth Charter states: *"Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings"*.

In 1974, the philosopher Nagel wondered what it would be like to be a bat, whether we can ever know what it is like to be a bat, a snail, or a spider. We recognise a snoring hummingbird, a dog running in his dreams, and the laugh of a chimpanzee when she is happy. Still, we might never know of the ability to see ultraviolet light, or the joy echolocating can bring. Even if we do not know what it is like to be a bat, oak tree, or worm, we can

acknowledge, care about, and care for them. When asked what 'business' I am in, I tell people I am in the business of animal happiness and human-animal interconnectedness. I am a psychologist who studies human-animal and human-nature relationships, and I would like to invite you on a journey - to invite you to open your heart and mind, to imagine the perspectives of other animals, the lives of other living beings, and nature all around us. To notice and see them, and, importantly, to care and expand the circle of compassion.

Back in 1928, naturalist Henry Beston published his famous book *The Outermost House*. He describes other animals not as brethren or underlings but as other nations:

"We need another and a wiser and perhaps a more mystical concept of animals. Remote from universal nature and living by complicated artifice, man in civilization surveys the creature through the glass of his knowledge and sees thereby a feather magnified and the whole image in distortion. We patronize them for their incompleteness, for their tragic fate for having taken form so far below ourselves. And therein do we err. For the animal shall not be measured by man. In a world older and more complete than ours, they move finished and complete, gifted with the extension of the senses we have lost or never attained, living by voices we shall never hear. They are not brethren, they are not underlings: they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendour and travail of the earth."

Other nations have lived that matter to each individual. While there is still a long way to go, today, there is an ongoing shift in consciousness about animals and our increasing awareness of how we treat them, ranging from very good to very poor. Some animals receive special care, respect, and protection while others are exploited, ill-treated, perpetuating cruelty toward the powerless, sometimes with malice or thoughtlessness. Professor Harold Herzog has long studied how people think about and relate to animals and writes that it would be difficult to overestimate the significance of animals in the social and psychological life of humans: *"Images of animals are everywhere: in our language, religions, dreams, television programs, and folklore."* In the second edition of his book, *Some we love, some we hate, some we eat: Why it's so hard to think straight about animals* (Herzog, 2022), he examines the psychological and moral complexities characterising our relationships with other species. The book is based on

contemporary thinking in cognitive psychology, ethics, animal behaviour, and anthro-zoology (the new science of human-animal interactions). As Herzog wrote in 1988, the feelings we exhibit towards our fellow creatures are intense, complex, and paradoxical, with much earlier expressions to be found over centuries and millennia. Pythagoras (c. 580 - 500 BCE) was a philosopher, mathematician, and a central figure within animism who urged respect for animals; he believed that humans and non-humans had the same kind of soul, one spirit that pervades the universe and makes us one with animals. More recently, the Nobel Peace Prize in 1952 was extended to Dr. Albert Schweitzer for his 'Reverence for Life' philosophy. He believed that the principle of ethics was only complete if it included all living beings, both human and non-human animals, and plants and fungi in this thinking. He believed that humanity will not find peace until we extend our circle of compassion to all living things.

The preamble of the Earth Charter highlights Earth, our home, as being alive with a unique community of life. It shares the global situation of communities being undermined by overproduction and consumption, including animal communities, such as group-living chimpanzees in the heart of Africa and walruses making dangerous falls from cliffs as the sea ice disappears due to climate change. Injustice, violent conflicts, and great suffering are widespread, as a lonely orangutan clings to a single tree left after people made deliberate bushfires for more unsustainable palm oil monocultures. The choice is ours: how do we embody values that respect life, bring back more life, and revolve around; 'being' more and not 'having' more? How do we create a world in which we reduce our impact on wild places and species, and how do we build a democratic world in which the interests of other nations are also considered, not only those of humans but also those of other beings?

In *Zoopolis*, philosophers Donaldson and Kymlicka (2011) make the case for a political theory of animal rights and the novel idea of animal citizenship. What does a democracy look like when the needs, rights, and preferences of orangutans, turtles, and chickens are included? While animals cannot and do not vote, we should consider what is meaningful to them and what the world would look like if their votes were to be represented. We need ethical values of respect and care, compassion, and kindness for meaningful changes. What is peace like when we hold space for large predators, tiny frogs, and buzzing bees? The late Professor Edward O. Wilson proposed

The Half-Earth Project. An inclusive and peaceful community for all is reflected in the survival of species and wild places. It focuses on individual animals as sentient beings and well-being of individuals, in which affective states and psychological well-being are central.

There is a consensus that humans are not the only conscious beings (Cambridge Declaration on Consciousness, 2012) and that non-human animals, including all mammals and birds and many other creatures, including octopuses, possess neurological substrates complex enough to support consciousness. Other animals have been formally acknowledged, through research and treaties, as sentient beings, having the capacity to experience positive and negative feelings such as pleasure, joy, pain, and distress that matter to the individual (e.g., Treaty of Amsterdam, 1997; Lisbon Treaty, 2009; Webster, 2022). These acknowledgements should inform change in how we use and treat these animals in commercial farming and fisheries, as well as in outdated research, engagement and other activities, including those animals living in the wild.

The 2022 United Nations Climate Change Conference, like so many other previous global and national conferences and meetings, failed humanity again and the greater community of life. It has been clear for a long time that science alone will not change things; we do not need more facts and evidence, but we need compassion, kindness, altruism, and commitment to people, rainforests, jaguars, and those who are not yet born. But, as with the release of the Inconvenient Truth by Al Gore, he too conveniently left out not only one of the largest polluting industries but one of the most disgraceful: animal agriculture. The latest statistics show that 80 billion (80,000,000,000) animals are slaughtered annually, of which 99% are factory-farmed. This number includes pigs, cows, ducks, turkeys, sheep, goats, and chickens –the most slaughtered land animals. It is estimated that shrimp farming fisheries have destroyed 38% of the world's mangroves, leaving the surrounding areas as wastelands. Wild shrimp fisheries aren't a better option for 1 pound of shrimp: the process kills 5 to 20 pounds of undesired species that are also scooped up by the trawler's net (also referred to as bycatch). The number of such fish caught is estimated at 3 trillion (3,000,000,000,000), excluding the millions of birds, turtles, dolphins, and other animals that are harmed or killed as unwanted bycatch (Our World in Data, 2024). The direct and indirect adverse effects of farming are many: pesticides and fertilisers from crops run off the land

and into bodies of water such as rivers, lakes, and estuaries and, when it rains, threaten coral reef ecosystems; the use of antibiotics in farming contributes to global antibiotic resistance for people and animals. Climate change, dead zones, genetic engineering, irrigation problems, pollutants, soil degradation, waste, deforestation, and biodiversity loss are significant environmental issues resulting from agriculture. The rampant deforestation of the Amazon is only one of many examples that threaten planetary well-being, people, and the greater community of life. If the carbon footprint of energy, transport, and agriculture were to be calculated for COP27, it would be enormous; if the suffering of animals were considered, it would be unbearable.

Who are the other animals, their perspectives, and what does it mean to be 'the other'? Other animals are not voiceless nor invisible, but they live in this world, and we should regard them with empathy and compassion. How can we talk about conserving wild places and protecting wild species, as well as individual well-being, when there is so much violence and a lack of respect and care towards the greater community of life? How can we achieve ecological integrity, social and economic justice, democracy, nonviolence, and peace when we disregard the well-being of so many? Among many other examples, we close trucks in which animals are transported; we close the buildings in which we farm them, and we cordon off the places in the Amazon where we pilfer football fields of trees every day at a rate of approximately three fields per minute. Films depicting disgraceful conditions are made illegal through 'Ag-gag' laws (anti-whistle blower laws that apply within the agriculture industry). At the same time, people dedicated to protecting the Amazon are killed without consequence. There is so much violence and darkness, so many activities that cannot stand the light of day; we need light, peace, and love. *'Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate; only love can do that,' said Martin Luther King, Jr.* Imagine a planet where a coercive, exploitative, or abusive relationship with other animals and also people, plants, mountains, and everyone else is transformed into one that is joyful, participative, and symbiotic.

With its sixteen principles, the Earth Charter (EC) inspires a global movement for building a just, sustainable and peaceful world, reflective of the decade-long, worldwide dialogue on shared values. The EC offers a new sense of interdependence and shared responsibility for the well-being

of people, the greater community of life, and future generations. Expanding the Earth Charter to include explicitly the interest of other animals and living beings, as well as rock formations, mountains, and rivers, would be significant. Exploring and embodying well-being for animals is rooted in considering their perspectives and dealing with the contradiction in the acknowledgement that an animal's life has value regardless of its worth to human beings (1a) and (5d), which states that we should 'control and eradicate non-native or genetically modified organisms harmful to native species and the environment and prevent introduction of such harmful organisms.' Both 1a and 5d conflict with Pillar 4 Principle 15, *"Treat all living beings with respect and consideration"*, outlined as a) Prevent cruelty to animals kept in human societies and protect them from suffering; b) Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering; and c) Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species. Most human activities revolving around animals and nature do not follow these sub-principles as described in this chapter.

There is a contradiction between the acknowledgement that an animal's life has value regardless of its worth to human beings and the disregard of practices that harm people, species, and the planet prevalent in almost all areas of society from governments, organisations, and individuals - including those who claim to care about animals, species conservation, and the planet. Meat, fish, and other animal-derived products are present at conferences and in board rooms, including those of nature conservation organisations and zoo associations globally. These conflicts are reflected in work by Bearzi (2009), *'When swordfish conservation biologists eat swordfish'*, and our work on *'Eating animals at the zoo'* (Brando and Harfeld, 2014), *'Eating to save wildlife'* (Gjerris et al., 2016), and, most recently, *'Flying bamboo across the globe and invisible animals: Tales of feeding animals in zoos'* (Brando et al., 2022). We must remember that when we point our finger at others who should be doing the right things, there are always three fingers pointing back at ourselves. A science-based and ethical lens is vital, and it is unrealistic to expect others to change their ways if those advocating for animals, species, and the planet do not walk the talk themselves.

Communication is a challenge with so many different languages worldwide, but to grow closer to a planetary well-being where everyone is considered

we need to adopt another language. A language away from treating beings like resources, where we use animals as we see fit for food and clothing or address them with words such as "it" and "things" as they are referred to in lay terms, laws, and guidelines. We need a language of care and kindness that reflects the living beings they are. Who is that piglet, who is that tiger, who is that tree, who? It's hubris to think that we can arrange, fix, and save everyone and everything; nature will evolve and change, and the forces of evolution and the nature of beings cannot be denied. While we acknowledge evolutionary forces, we also must hold space for the consideration of individuals. The flourishing of beings is not only about a hedonistic perspective of pleasure and happiness but also about how life unfolds over time, the possibilities and opportunities to be an agent of your own life.

Gandhi said that the greatness of a nation and its moral progress can be judged by how its animals are treated and that nonviolence begins with what we eat. Every year, billions of animals are suffering in factory farms, never seeing the sun, and dying in slaughterhouses around the world. Fishes and other sea life caught in immense nets hauled on deck to suffocate in the air have their fins cut off and thrown back in the sea alive or scooped as bycatch and discarded back to sea as useless, often dying a slow death. More than 70 years after his death, Gandhi remains a source of wisdom and inspiration to the world and what genuine care and respect for the greater community of life looks like. One of my favourite quotes is, *"What you do speaks so loudly that I cannot hear what you say"* by Ralph Waldo Emerson. Countries and organisations must be evaluated for their contributions to planetary well-being, which, to me, includes all animate and inanimate life on this Earth. Change is measured not by what is written, spoken, or other types of agreements but by the behavioural changes, the actions and changes made, and the infamous quote of putting your money where your mouth is. And while today much is expressed in monetary value, many types of indicators to planetary well-being can already be found by looking at a country's real, tangible commitment – a commitment that is beyond just empty words - to, for example, reducing CO2, water usage, land protection, animal and natural area protection - or the lack thereof. Often, when I drive by a hill or mountain with a big wound of diggers, scrapers, and massive equipment taking sand, stones, or other materials used for building, paving and alike, I mourn a little for another part of our world that has been lost without questions asked.

It is a warm day in Kathmandu. The siamangs are high up in their cage, where there is a nice shady spot—hanging in the corner, as they do so well and elegantly, and gazing out over the crowd. I am at a zoo in Nepal for work, visiting to discuss and review animal care and well-being programs. I am here to see how the animals are doing. Specifically, the two confiscated chimpanzees rescued from the illegal wildlife trade the month before. I look down, through the cage, to the yard where a greyish shape seems to be moving and remember thinking, 'Is that an elephant?'. I walk past the wolves and head down to the yard. My hosts say, "Shall we continue straight and see the bears?" If you walk straight past the wolves, you end up in front of the bears. But you will be oblivious to the yard and, importantly, to who is in this yard. "One moment", I hear myself say, "Is there an elephant here?" My hosts tried to usher me, but I turned the corner and walked to the yellow metal barrier. The first time I looked at you, I had to grip the barrier, hold on tight, and not walk away. I keep looking at you; I want to see you; I need to see you. I see you. I see you standing under a small canopy, slightly bigger than yourself, at the back of a yard filled with elephant-irrelevant chaos. With a broken wall behind you, a cage with wolves to your left, and a heap of tyres and other rubble to your right. A shed, old machinery, a black broken bike, and no other elephants in sight. You would think someone made a mistake bringing you here. But unfortunately, this is where you live, standing 23 hours a day. Alone. Chained with one leg to the stake in the ground and only being taken out for the tourists that pay to ride on your back. You briefly look at me, then continue staring at the ground, still and withdrawn. Your forehead has wounds and scarring from the gear you wear during the rides and the hook they use to control you. You sway lightly from side to side as if you are rocking yourself to a peaceful place, where again you are with other elephants and walk unchained.

My heart and mind visualise what it is like to be her, to try and understand the experiences of this role and what the system means to her. I imagine her thinking and feeling like, "I see you standing at the barrier; you are looking at me. I miss the company, friends, and family who were with me many years ago. I feel depressed and sad. The people around me don't see me. They don't understand me. I feel they are afraid of me. I am afraid of them; afraid they will hurt me again. I am afraid that this is the rest of my life. The hook they use hurts, and the shouting and pushing are intimidating. It makes me upset and angry. Don't they understand that I am a sentient being? I have feelings, thoughts, desires, and needs. 'Elephant' desires and

needs. If they would only be nicer to me. I would be nice to them. Maybe they do not know how to be elephant nice?"

Everyone has one life. You, me, every plant and animal.

The first I see of you is a blur. You must have just flown into the glass sliding door. I am at the hotel reception paying for my room when it happens. I pick up my credit card and bag and walk to the front door. It can get cold in Washington, D.C., and to stop the cold from getting into the lobby, the hotel has a hallway with two sliding doors opposite each other. I am about to enter the hallway when I see a man walk up to the door you flew against. He stops and looks down. Without hesitation, he steps aside and walks around to enter through the opposing door. I crouch down to pick you up when he enters the sliding doors. You are a beautiful little bird with a white and yellow head. You are all dazed and quiet, barely moving. I can feel your warm body and fast heartbeat as I cup my hands around you. We sit like this for quite a while. I open my hands when I feel you are moving your head a little. You wiggle a few feathers and move your legs. I decide to place you between some bushes, and you hop a little further before sitting there a while longer. Suddenly, you shake and are gone, a little brown speck against a white and colour-dotted parking lot. I remember thinking, 'I hope you are well, my feathered friend'.

Why is it called ecotourism, walking and riding with elephants? Why is it called entertainment, watching and interacting with animals in substandard zoos, sanctuaries, and wildlife centres? Why is it called sport when you lift a fish out of the water where they can't breathe? The truth is that many of these activities are harmful to animals. Animals are all around us in the activities we engage in, the places we visit, and the products we use and eat. Maybe we walk on a market and see them sold as pets; maybe we walk on a beach and see them being offered as a prop for a photo. Perhaps we see them in aquariums and small boxes, sold as food. Do we know the effect of our actions, non-actions, desires, and wants? What does it mean for the elephant when we want to ride her? What does it mean for the slow loris when we want him as a pet? What does it mean for the fish when we want to eat her? The elephant, slow loris, the yellow and white-headed bird who flew against the glass doors - who are they, what are their interests, needs and desires? Do I really see them? Do you really see them? Do we really notice and consider them? Let us imagine the perspective of other animals and explore what it might mean to 'be' the other.

Let us nurture fish compassion.

Let us engage in elephant kindness.

Let us show yellow and white-headed bird empathy.

Let us see the other nations.

Arundhati Roy wrote: *"To love. To be loved. To never forget your own insignificance. To never get used to the unspeakable violence and vulgar disparity of life around you. To seek joy in the saddest places. To pursue beauty to its lair. To never simplify what is complicated or complicate what is simple. To respect strength, never power. Above all, to watch. To try and understand. To never look away. And never, never to forget... another world is not only possible, she is on her way. On a quiet day, I can hear her breathing."*

Planetary well-being, for me, means well-being for everyone beyond humanity. I am hopeful for another world in which other nations are seen and heard, for whom there is not only space but compassion and kindness. Polymath Dr Albert Schweitzer suggested doing something wonderful as people might imitate it, and novelist Henry James indicates that being kind is one of the most essential things in life. We can all do something wonderful, moment to moment, to be the change we want to see in the world, embodying kindness for fellow humans and other animals and beyond. I see the elephant, the fish, the white-headed bird, the tree, the river, and the blue whale. I see you. Who do you see?

Seeing the larger picture and focusing on the details is an important exercise, while at the same time, we need to decide what we can commit to, what we can do, and what small steps we can take every day. Planting a tree or bush each day will see a forest or patch of wildness grow; cooking and bringing that meal every day will bring comfort, care, and loving-kindness to your loved ones, the homeless person with a name, and the neighbour who lives alone. No more plastic and a plant-based diet can keep the Amazon breathing, jaguars roaming, Indigenous people safe in their homes and turtles no longer mistaking bags for jellyfish.

Following a 'consider global, act local' perspective, you can also *consider* global and act local ethos as we unite for change and as a force for good. We can do this instead of saying that it doesn't matter because so many do

not care; so many do not care to recycle, reduce, or eliminate unnecessary purchases; they do not care to reduce their consumption and wearing of animals; they are upsizing inside of downsizing, etc., Despite knowing that others may not live simply so others can simply live. Instead, say that despite all this, it matters; it matters what you do. It matters to you and to all of us who are interconnected on this beautiful planet we share; it matters for future generations of all beings.

You matter, and what you do matters. Vibrantly radiating out your light can inspire others to shine their own lights of change. Look for other lights to feel inspired and supported. Notice how we all have different lights shining to see more clearly, to act alongside each other, and - if you can - to hold the light for those who cannot hold it for themselves. Let's all be hummingbirds, small but powerful, shining all kinds of lights for a brighter world.

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11

Securing Ecosystem Health for the Well-Being of People and the Planet

Marcello Herńandez-Blanco and Robert Costanza

A crisis of priorities

Society's socio-economic and environmental impact today is so significant that we have entered a new geological epoch called the Anthropocene. We have left behind the Holocene, the last 11,700 years that contained relatively stable climate conditions that allowed the development of our current civilization (Steffen et al, 2011). The precursor to the Anthropocene was the Industrial Revolution. But the Anthropocene did not start in earnest until the middle of the 20th century after World War II. This was the beginning of the "Great Acceleration" due to the exponential growth of human impact on the Earth system (Steffen et al., 2011).

But we may now be moving from the Great Acceleration to the Great Decline (Attenborough, 2020), putting one million species at risk of disappearing (IPBES, 2019) and risking the health of the planet we depend on for our survival. We are approaching global tipping points in endangering our Earth system. Rockström et al. (2009) described 9 Planetary Boundaries which should not be transgressed in order to avoid global environmental risks: climate change, ocean acidification, stratospheric ozone depletion, atmospheric aerosol loading, biogeochemical flows (interference with P and N cycles), global freshwater use, land-system change, rate of biodiversity loss and chemical pollution.) found that humanity has already transgressed two boundaries: the rate of loss of biosphere and biochemical flows. Furthermore, humanity is close to surpassing the boundaries related to climate change and land-system change, both of which are in a zone of uncertainty where risk of transgressing them is increasing.

The transgression of planetary boundaries and the consequent deterioration of planetary ecosystem health is the result of the current economic paradigm which is based on the possibility infinite economic growth. Infinite growth on a finite planet is an obvious impossibility, as stated in the preamble of the Earth Charter: "The global environment with its finite resources is a common concern of all peoples". Therefore, society requires a new vision of the economy, one in which the economy is viewed as a subsystem of the encompassing Earth system, instead of viewing the rest of nature as just another source of resources and sink for wastes. This is a core principle of ecological economics, which, contrary to "growth at all costs" neoliberal economics, prioritizes sustainable scale of the economy and creates the polices to assure that the throughput of the economy stays within planetary boundaries (Costanza, Cumberland, et al., 2014).

Therefore, society's priority should be to find a development path that is based on a symbiotic relationship with the rest of nature and the conservation and restoration of planetary ecosystem health. This is reflected in the seventh principle of the Earth Charter which states that we need to "adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being".

The health of complex socio-ecological systems

Human well-being depends on natural capital (i.e. the planet's stock of natural ecosystems and resources) for the provision of ecosystem services (i.e. the benefits people obtain from ecosystems), such as food, water, climate regulation, protection from natural phenomena, recreation and inspiration, among many others (Hernández-Blanco & Costanza, 2019; Daily, 1997; Millennium Ecosystem Assessment, 2005). Nevertheless, natural capital and its services do not generate human well-being in isolation. It needs to interact with human capital, social capital, and built capital (Figure 1 -Costanza et al. 2014).

The provision of ecosystem services depends on healthy ecosystems (Costanza, 1992; Rapport, 1995; Rapport et al., 1998). Costanza (1992) states that "an ecosystem is healthy if it is stable and sustainable, that is, if it is active and maintains its organization and autonomy over time and is

resilient to stress". From this definition, vigor, organization, and resilience are the main features of ecosystem health. The vigor of a system is a measure of its activity or metabolism and can be measured through indicators such as gross primary production and net primary production. The organization of an ecosystem refers to the number and diversity of interactions among the components of the system, which can be measured through its biological diversity and by the number and strength of pathways of exchange among components of the system. Finally, resilience refers to the ecosystem's ability to maintain its structure (i.e. organization) and function (i.e. vigor) in the presence of stress (Figure 1) (Costanza & Mageau, 1999; Mageau et al., 1995).

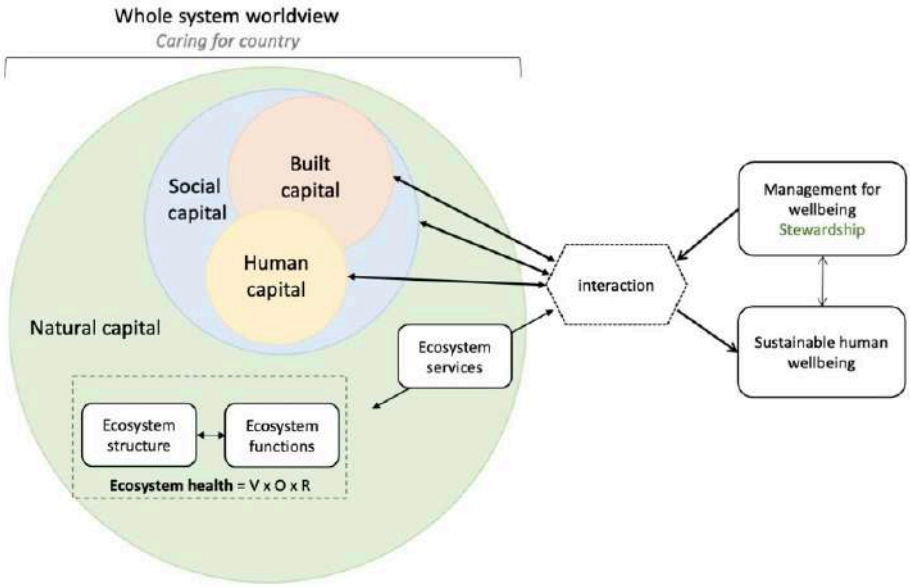

Figure 1: Role of healthy ecosystems in providing human well-being in combination with the other three types of capitals. This framework considers the economy as a subsystem of the broader Earth system, instead of considering nature as just another source of raw materials and sink for wastes. Ecosystem health can change positively or negatively under different ecosystem stewardship schemes. V = vigor, O = organization, R = resilience

(Source: Hernández-Blanco et al., 2022)

Ecosystem health can be expressed as an ecosystem health index, determined by multiplying the ecosystem's vigor (as a cardinal measure) by its organization (as a 0-1 index) and its resilience (as a 0-1 index). In other words, the health index estimates the ecosystem's activity weighted by

indices for relative organization and resilience (Costanza, 2012). Assessing ecosystem health using these three parameters provides a snapshot in time, and a key feature of ecosystems is that they are dynamic, and so is their health. Therefore, assessments of ecosystem health should consider periods of time long enough so they can capture the different phases of ecosystems that are an intrinsic part of their long-term survival.

Planetary ecosystem health will therefore be determined by the interconnected health of the ecosystems across land and seascapes. Protecting and restoring our Earth system for the well-being of humans and the rest of nature will require a whole system worldview, which is in line with the preamble of the Earth Charter which states that "the resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems". In practical terms, this requires an Ecosystem Based Management (EBM), focused on maintaining the ecosystem's structure and function, allowing the system to maintain redundancies and resilience in the face of changes (Ruckelshaus et al., 2008).

Costa Rica as a lab for planetary well-being

From an early stage as an independent nation, Costa Rica recognized both the intrinsic and economic value of its unique natural capital. We highlight here two of the most significant policies the country has implemented to protect and restore the health of its ecosystems, contributing to the local and planetary well-being of people and the rest of nature.

From 1950 to 1987, Costa Rica had one of the highest deforestation rates in the world, going from 72% to just 21% forest cover (Hernández-Blanco, 2019). This put the rich biodiversity that exists in these ecosystems, as well as the benefits society at all levels receive from them, at risk. This decrease in forest cover was mainly due to the growth in cattle ranching and general agriculture, an activity focused only on the provision of one benefit (i.e. food) at the expense of the wide variety of ecosystem services that the forest provides. To tackle this threat, in 1996 the country established the Forest Law, in which among other things, it prohibited land use change (i.e. deforestation) in all its territory and created a Payment for Ecosystem Services (PES) scheme that was the first of its kind in the world.

This scheme pays farmers to protect and restore forests in their properties as a way of securing the provision of ecosystem services such as climate regulation, habitat for biodiversity, scenic beauty, and water regulation. Twenty-six years after its creation, the PES scheme still provides this economic incentive to private landowners thanks to a constant flow of resources the program receives each year. These come primarily from a fossil fuel tax (3.5% of revenues from the tax) and a water tax (25% of the revenues from a tax on water use), both related to the ecosystem services considered under the program (Hernández-Blanco, 2019).

Only two years after passing the landmark Forest Law, Costa Rica established the Biodiversity Law, which created the National System of Conservation Areas (SINAC by its acronym in Spanish), allowing Costa Rica to consolidate its conservation strategy aimed at halting deforestation. Today, SINAC has 145 Protected Areas (PAs). The management categories within these PAs are protective zones (21%), national parks (19%) and mixed national wildlife refuges (19%). The PAs cover 25% of the continental territory of Costa Rica, and 2.6% of the marine Exclusive Economic Zone (Corrales-Chaves, 2019). The vision of the government of Costa Rica to invest in nature conservation through its network of protected areas has proven to be beneficial not only for biodiversity but for people. Costa Rica has been able to steadily increase its GDP per capita at the same time it has increased its forest cover, currently having one of the highest GDP per capita in Latin America (The World Bank, 2020).

The sustained increase over the years in the extent of the PAs has been a major reason that Costa Rica has become a world-class ecotourist destination. According to the Costa Rican Tourism Institute, between 2016 and 2018, approximately 64% of all tourists who visited Costa Rica did so to carry out activities related to ecotourism (Instituto Costarricense de Turismo, 2019).

Conclusion

The conceptual framework of ecosystem health described here, along with indicators for measuring it, provides the basis for better understanding and measuring planetary well-being, composed by the health of all the interconnected ecosystems across the land and seascape at different

scales, as well as the benefits the entire community of life, including humans, receives from them.

Costa Rica's efforts to protect and restore the extent and health of natural capital provides a clear example that sustainable stewardship of natural capital and social and economic development is not only possible, but they go hand in hand. Costa Rica therefore is a lab of successful ideas to improve planetary well-being, which can only be achieved by first understanding how well-being is intimately related to the well-being of the Earth system, and secondly by empowering all actors to take bold decisions to implement a development path in harmony with the rest of nature.

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12

Understanding the Value of Planetary Well-Being and the Relevance to Sustainable Development

Alice C. Hughes, Linda Wong, Jinfeng Zhou

Why is Planetary Well-Being important?

After several years of pandemic we should all realise the importance of planetary health, as unsustainable use of natural resources or management of land can exacerbate the risk of pandemics (Daszak et al., 2020). In fact, a healthy environment is crucial for our everyday well-being, providing clean water, food, and numerous health benefits. As humans we depend on a healthy planet, yet the unsustainable use of resources undermines our ability to access resources or lead safe and secure lives (Rockström et al., 2009). Yet despite our reliance on ecosystem services for resources we are dependent upon, many people may be oblivious to those needs (MEA, 2005). Yet ecosystem health is a crucial component of those services, for example 87% of plants, including most of our crops, require pollination, and in many studies, we have found that pollination services improve at higher proximity to natural areas (Garibaldi et al., 2013). This trend is especially true in the tropics, where native pollinators may depend on access to these natural areas for critical parts of their life-history (Kremen et al., 2007). Similarly preventing landslides and providing clean water are often dependent upon healthy forests, and this is even before the importance of these ecosystems in combating climate change (IPCC, 2021). If we reflect on the consequence of mismanaging these systems, they can in some cases be dramatic. For example, evidence shows that in some now desert areas are the remnants of former expansive agriculture, and that agriculture may have sped the transformation of those areas to make them inhospitable

to humans and the other species dependent upon them (Geist & Lambin, 2004). Similarly, the collapse of the Aral Sea ecosystem, and the decline of almost all known saline lakes is a direct consequence of the ability of unsustainable management to have irreversible consequences for natural ecosystems (Micklin, 2007).

Likewise, increasing volumes of evidence shows that zoonotic spillover is exacerbated in disturbed and fragmented landscapes, where species are stressed by having to ensure sub-optimal conditions, and more likely to encounter species they would not naturally encounter (including domestic animals, livestock and humans) as a consequence (Johnson et al., 2020). Thus, this mismanagement increases both the capacity of animals to contract zoonoses, to be more likely to be symptomatic and have higher pathogen loads (due to immuno-suppression from stress) and shed more of the pathogen, and to be more likely to pass it on (Gibb et al., 2020). For these reasons, as well as the more nuanced benefits to health and wellbeing of a healthy environment, it is essential that we work towards planetary wellbeing (Jones et al., 2008). Likewise, when managed well, conservation and management strategies can have direct economic benefits, such as numerous payments for ecosystem service schemes (Wunder, 2005), and the ecotourism initiative which has enabled Costa Rica to change from 21% forest cover to around 52% whilst massively increasing tourism revenues (Sánchez-Azofeifa et al., 2007).

However, measuring these various contributions can be challenging. Whilst payment for ecosystem service schemes have become popular as effective ways of maintaining ecosystem services, they have only been successfully applied to a subset of ecosystems (Farley & Costanza, 2010). Yet better and more holistic measures, and approaches to integrate them are essential if we are to effectively stem international biodiversity loss, and maintain the crucial services dependent upon them (IPBES, 2019). International rivers for example have downstream implications for neighbouring countries, and thus developing mechanisms to maintain these systems and keep them healthy extends beyond the bounds of a single country (Wolf, 2007). In fact, many consequences of ecosystem mismanagement are not local, and spillovers of pathogens are one example that can have wide-ranging consequences, especially given that such spillovers are much more common than many people realise (Daszak et al., 2001).

Marking a path forward for a more sustainable future

The Aichi targets in part failed because of a lack of ability to measure and chart progress, and thus without metrics and milestones, the UN's decade of biodiversity ended without successful completion of any of its goals (Leadley et al., 2014). Moving forward, having the means to measure success will be critical, and this is one of the reasons the Post-2020 Biodiversity Frameworks Monitoring Framework has received heightened attention, even though more work to refine indicators is clearly needed (CBD, 2022). Thus, measures to monitor and tools to implement measures to maintain healthy ecosystems are essential.

China is a megadiverse country which must reconcile the needs of humans and environment across a diverse suite of different ecosystems, and thus developed a concept of "Ecological Civilisation"; an outlook developed to implement sustainability across growth and development. One crucial tool within Ecological Civilisation is Ecological-conservation redlines (ECRs); a framework which unites ecosystem services, ecosystem fragility and biodiversity to develop spatial goals which maximise the efficient protection of all three. ECRs thus provide a standard approach to outlining targets and enabling the protection of key landscapes. These approaches, and the need for differential approaches on the three planetary conditions (areas for nature, areas for humans and shared lands) both work well within the context of Pillars 1 and 2 of the Earth Charter to protect biodiversity and ecological integrity, and thus the services provided by biodiversity and a healthy environment (Earth Charter International, 2000).

Using the Earth Charter to facilitate better governance and conservation

Other critical elements of the Earth Charter are its inclusive approach, as humans must work in harmony with nature (a tenant of ecological civilisation) in order to successfully conserve these systems (Bosselmann, 2016). This is inline with the remaining pillars of the Earth Charter, which reflect democracy, justice and inclusion. A good example of such initiatives, and the vital role they play in conservation is community conservation areas. These areas are created by local people with support, and such projects (such as the Community Conservation Areas, or CCAfa, by CBCGDF in

China) empower locally led approaches which enable people to maintain biodiversity and the cultural connections they may have with it Such approaches are crucial to longterm fulfilment of conservation targets, as any intervention which lacks local support is likely to fail in the longer term, and despite China's vision aligning well with the Earth Charter, the ranking of the first two facets shows there is a long way to go in order to maintain a healthy environment. Similarly, initiatives like "Biodiversity Conservation in Our Neighbourhoods" (BCON) provides a further approach to adapt community to different sectors of society or agriculture by promoting and empowering local efforts for conservation and enabling adaptive innovation to develop solutions that fit the challenges of different regions. By encouraging people to conserve biodiversity in their neighbourhoods, everyone can make a personal contribution to SDG15 (and now Target 3 of the KM-GBF) (CBD, 2022), and provide habitats for native species, for example fish-farmers can help protecting migratory birds by not pond-sanitising, and being careful with use of chemicals and agricultural waste; hotels can help by greening their roofs and not using chemical pesticides and herbicides and leave their parking lot without hardening surface and let natural species grow; orchards can try to maintain a healthy system which enhances natural enemies to control pests; etc. Integrating sustainability at smaller scales can contribute not only to awareness, but to normalising practices of sustainability.

The Earth Charter provides a useful way to explore our relationship with the planet, to explore the trends and trajectory, and understand what direction we, as a society are going in. In the wake of the pandemic, with a need for economic recovery, it is also critical that we remind ourselves that an unsustainable recovery, which fails to account for these four pillars is not a recovery, but rather a pause until the next environmental disaster (Steffen et al., 2015). Our society is in the midst of fundamental change, from urbanising cities across the planet, to a climate which will be unmatched during human evolution, and an increased frequency of extreme environmental events; which stem from unsustainable human development. The question should not be whether we wish to develop sustainably, and try to have a positive environmental trajectory, but if we wish future generations to suffer the consequences from if we do not take such a path. With increases in available data, and initiatives which provide that data in concert with planned development (such as the Belt

and Road science plan) as well as a growing body of citizen science, we can now map diversity and gauge impacts of development in a way never previously possible; yet it is up to us to use those tools, and rather than seeing biodiversity as the optional extra in planned projects; to view it as our life-support machine, and thus something, that for our own survival we must do our utmost to maintain (Pimm et al., 2014).

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13

Planetary Well-Being from the Economy: Examples "Pura Vida"

Olman Segura Bonilla

Well-being, health and ecosystems

The human species and other species require the planet's ecosystems for their existence. It is a fact that the healthy survival of all species requires food, water, air, climate stability, genetic diversity and other elements of nature. In other words, the health of the planet's ecosystems is fundamental to the health of humans and non-humans. We live in an interdependent system, connected to each other, and where human actions and pressure on the environment negatively impact the health of ecosystems.

In recent centuries, a concept of "well-being" has prevailed, which has led us to the situation of deterioration of the ecosystems that we have today. This predominantly economic, social and cultural concept has meant that the human species, in its eagerness to increase well-being, only increases a certain material wealth, without taking into account the negative and practically irreversible impact that it is causing to ecosystems. Hence the importance of addressing the concept of "well-being", and trying to understand why this dominant approach exists, what is the type of indicators that support it, and why it dominates and culturally drags the individual behavior and the countries in that address. From here you will be able to emanate greater clarity on how to achieve greater human and planetary well-being.

According to the Royal Spanish Academy (RAE), the concept of "well-being" is made up of the words "well" and "to be", which, in a notorious way, represents a state or situation in which one "is well". Formally, the

RAE defines well-being as the "set of things necessary to live well", or also "the state of the person in which the proper functioning of their somatic and psychic activity is made sensitive" (2021). So, we could understand that well-being refers to a good or satisfactory condition of existence, either of people or of ecosystems. When searching for related words, the references are comfort, satisfaction, happiness, health, prosperity, protection, security, and success.

More specifically, when searching the dictionary for the concept of "welfare economy" we find that its meaning is "an economy whose global objective is to extend the services and fundamental means for a dignified life to all social sectors" (RAE, 2021). In neither of the two definitions is a greater amount of wealth, material goods or money indicated, but as we know from the economic point of view these elements are key indicators of what is now understood by "well-being".

On the other hand, the concept of "planetary well-being" refers to the one that encompasses the well-being of all the members of the world, from people to non-human beings, ecosystems, and in general all existing forms of life. For planetary well-being, security elements in all its senses, sustainability, recovery and conservation of natural resources, among others, are of the utmost importance (Lancelotti, 2018).

Hence the importance of internationally agreeing on a concept of well-being that can be measured and evaluated regularly. It should be taken into account for some individuals it would be important to consider some elements, because for these people they are synonymous with well-being, but not for others; for example, it is probable that ancient civilizations did not consider well-being to depend on the same elements that can be taken into account today. Likewise, the difficulty of accepting the form of measurement from different cultures and different geographical spaces must be addressed. The task of building an index to measure the well-being of countries and the well-being of the planet is complicated; however, starting from a common framework of understanding, such as the Earth Charter, is a first step in the right direction for a good global understanding and therefore an excellent starting point.

Welfare in economic practice

The words economy and ecology come from the same root which is "Oikos", from the Greek meaning common home. For centuries, thinkers maintained the discussion of economy and ecology in an integral way, since in the analysis the theoretical approach interested in caring for and managing our common home dominated. In the last two or three centuries, as specialization has increased, the economy and ecology have been divided and differentiated. The first concentrating on the relationships between human beings and the second rather referring to the relationships of the different species in the ecosystems. In this section we will review some of the most important economists who have set the standard for how "well-being" is understood for humanity and how this concept has also had to evolve in recent decades towards a reunion between both disciplines, which obviously come to understand that they are interdependent.

The great separation

In the classical economy or market economy, it considers as a field of study the maximization of production with given limited resources, optimizing the distribution of the goods and services produced. The main objective is the increase of social welfare, as well as the total utility in a society. This is how it has been defined in the theories developed since the 18th century, by economists such as Alfred Marshall, or in the 19th and 20th centuries by others such as Adam Smith or David Ricardo.

For Adam Smith, the well-being of people is based on economic growth (Rincón and Torres, 2013). This means that well-being depended on the magnitude of the per-capita social product of the population, and the distribution of this was given through the rule of supply and demand; that is, well-being was linked to material production and the distribution of said well-being was carried out in the process of exchange in the market.

It is important to note that for Smith there was a natural order in which individual actions for the satisfaction of the self-interest of each agent, in the selfish sense, come together and create the path that allows maximum benefit to be achieved for the largest number of people (López and Lopez,

2021). In other words, for Adam Smith, individual well-being is the means that allows the collective well-being of a society to be achieved, so it is necessary to allow the economic process to follow its own behavior, under the philosophy of laissez faire.

At the beginning of the 20th century, the well-known Theory of Well-being was given way, which focused on the efficient use of resources to achieve the highest level of satisfaction. This theory was promoted especially by Arthur Pigou, who interpreted well-being as a subjective state of mind, which could be related to money (López, 2014). For Pigou, with the increase in national income, greater stability and a better distribution of it, it was possible to improve the well-being of populations.

Among Pigou's contributions to the theory of well-being is his work "The economics of well-being" (1920), which focuses on how monetary resources should be used efficiently, in such a way that it is possible to achieve the maximum level of wellness. This studies the consequences that variations in prices have on consumption, when the change that occurs is the result of distortions in the income of consumers. This is because, when consumer wealth increases, more is generally consumed, which implies an increase in the demand for products and therefore their prices.

So, Pigou's welfare economy was aware of these externalities derived from higher income, and its main solution was for the State to correct people's living conditions, through a greater presence of social security that provided opportunities for more egalitarian consumption. to all sectors in sensitive areas such as education, housing and health (Reyes and Franklin, 2014).

It is clear that since Adam Smith the concept of well-being is linked to the quantity of goods and that later with Pigou it is also related to monetary resources, wealth and income. In other words, the greatest well-being is purely measured by cash or pecuniary wealth and not by the quality of life, the health of people and much less of the natural resources and ecosystems from which the inputs to produce wealth were extracted. material.

In line with the above, it is important to mention that John Maynard Keynes, like Pigou, was in favor of the State as a mechanism to achieve greater welfare in societies. This approach or paradigm generated a difference with the neoclassical economy that laid the foundations of the current

capitalist economy, which has generated that in modern capitalism the welfare state is a fundamental part (Aguado et. al, 2012).

Another important contribution to the economic concept of "well-being" was made by the well-known economist Wilfredo Pareto. He formulated a series of statements that have prevailed in society, where the Pareto optimum stands out, whose bases are based on criteria of utility, or well-being. Basically, the Pareto optimum can be considered as a classification criterion for certain situations. People generally seek to achieve their maximum possible well-being, so this criterion allows us to distinguish between optimal and sub-optimal situations. Optimal situations are those in which it is possible to improve the well-being of an agent, without diminishing that of others. On the contrary, sub-optimal situations occur when the well-being of one agent can be improved, but affecting that of others (Bellido, 2017).

From this economic theory, it is possible to find an equilibrium in which the agents would have the highest possible level of well-being. This will occur at the point where the exchange of goods stops generating benefits for all agents; that is, the balance of general well-being occurs when it is no longer possible for anyone to improve without affecting others (Garvan, 2019).

Again, it can be affirmed that, although from the economic point of view it has evolved in the ways of understanding and measuring well-being, an economistic and chrematistic bias continues to prevail to this day, achieved in the market and with some interventions by the governments. National accounting indicators, such as the Gross Domestic Product (GDP) or GDP per capita are used to measure wealth and well-being, of course without taking into account the negative impacts on the environment and natural resources.

According to the Organization for Economic Cooperation and Development [OECD], GDP is defined as "the standard measure of the added value created through the production of goods and services in a country during a given period" (s.f). It is for this reason that nations, in order to promote the growth of this indicator, have opted for a production and marketing paradigm that causes distortions in people's reality, making them believe that the more wealth and consumption there is in their lives, the greater it

will be your well-being. At times, as an academic exercise and seeking to generate some political influence, some economists have been interested in measuring and assessing the negative impacts generated on the environment according to the production systems of each country and thus modifying the GDP indicators, and that in all cases meant being reduced by significant amounts.

The important reunion

Under this logic, it has been possible to evaluate and document that natural capital, as the environment and ecosystem resources of the planet are also called, is reaching and even in some cases, exceeding the limits of source and sink. The production processes, to enhance the GDP of each country, require the use of inputs in large quantities, which are extracted directly from the environment. This generates a vicious circle that has prevailed for centuries, using nature to extract natural resources (source) to manufacture goods and services, whose production and consumption generate waste, which usually returns to nature (sink), thus causing a double damage in its assimilation and regeneration capacity. This situation shows once again the great need and importance of generating indicators such as the one sought by the Earth Charter, that are accepted at a global level and that allow generating policies to correct the course we are on.

The great paradox of recent times is that although GDP growth indicators have been relatively positive for a long time, environmental and social problems have been magnified. Climate change, loss of biodiversity, desertification, soil degradation, loss of wetlands, damage to reefs, depletion and contamination of fresh water, and affectation of the oceans, are some of the environmental problems that we face as humanity. But the problem is enormous, complex and difficult for any person or country to address, especially if it is not addressed systemically, since the difficulties respond to a system of interdependence.

Various initiatives of a post-materialist nature arise, in favor of personal identity, the rights of all living beings, the environment, and other elements. They are also directly related to well-being; but this time with a more planetary than chrematistic well-being. In 1972, the United Nations (UN)

Conference on the Human Environment was held in Stockholm, Sweden, which was the first world event to emphasize the importance of the environment. In this, the Stockholm Declaration was made, which positioned environmental aspects to the world view and initiated the dialogue between nations about the relationship between economic growth, environmental pollution and the well-being of people around the world (ONU, s.f.).

Starting in the 1980s, in a context in which attention was drawn to environmental and social issues that affect planetary well-being, Ecological Economics emerged, which has helped to understand that advances in environmental policy and administration, as well as the protection of well-being for the next generations depend fundamentally on the economy and its functioning (Constanza et.al, 1999). Among the main authors are Nicholas Georgescu-Roegen, Kenneth Boulding, Herman Daly, Robert Costanza, among others. From my point of view, it is a sort of reunion of economy and ecology.

In 1983, the World Commission on Environment and Development (Brundtland Commission) was created in the United Nations, which helped make more visible the economic, social and environmental problems presented by the predominant production model. In 1987, the Brundtland Report was published, popularizing the concept of sustainable development, which has been widely known and used ever since. It also laid the foundations for the Earth Summit held in Rio de Janeiro in 1992, where the Convention on Biological Diversity and the Framework Convention on Climate Change were approved; but topics about health, biodiversity, sustainable development, climate change, among others, which have a direct relationship with planetary well-being (ONU, s.f.) were also discussed.

The Earth Charter and the 2030 Agenda

In 1994, the United Nations promoted an initiative that ended up more like a great civil society initiative, known as the Earth Charter. Formally, "it is a declaration of fundamental ethical principles for the construction of a just, sustainable and peaceful global society in the 21st century" (The Earth Charter International, 2000). This document seeks to inspire, and indeed

has, a new sense of global interdependence and shared responsibility for the well-being of all people around the world, and of future generations.

The mission of the Earth Charter initiative is to establish a solid ethical foundation for the emerging civil society and help build a sustainable world, based on respect for nature, universal human rights, economic justice and a peace culture. The four pillars that support this Charter are: 1- respect and care for the community of life, 2- ecological integrity, 3- social and economic justice and 4- democracy, non-violence and peace. By becoming aware that the construction of a sustainable world is not achieved easily and in a short period of time, the creation of an index to measure progress and the contribution of each of the parties in this great task becomes more relevant, but Of course, considering the concept of well-being that is much broader, comprehensive, holistic than the purely economistic concept.

Another important initiative that exists at the moment is the 2030 Agenda. It was approved in 2015 by the member states of the United Nations, which accepted a set of seventeen Sustainable Development Goals (SDGs), related to priority issues such as extreme poverty, inequality, economic growth, sustainable cities and territories, climate change, among others, which are obviously linked to planetary well-being, taking into account the social, economic and environmental conditions that currently prevail. Each of the countries is committed to periodically presenting a Voluntary National Report to monitor the SDGs. This document includes a series of indicators and other information that should be complemented with the creation of the possible index of the Charter.

“Pura Vida” initiatives

In Costa Rica, a series of initiatives have been developed that fit very well with what could be elements of increasing “well-being” for the country, in its holistic meaning and in some way an example for planetary well-being. Costa Rica is a small Central American nation in terms of territory, but big in biodiversity, social commitment, solidarity, environmental awareness and a potential example in some elements.

On the other hand, Costa Ricans use this term “pura vida” to greet, say

hello, goodbye, or that everything is perfect, that everything is going well. So, below are some of the examples of social welfare pura vida in the country:

Elimination of the army and use of resources in health and education

Costa Rican president and caudillo José (Pepe) Figueres Ferrer eliminated the army in 1949 and from that moment decided that the budget be transferred to the country's ministries of health and education. This act has led to the development of national well-being, understood as a culture very different from that of many other countries, not only because it does not have the presence of military weapons, vehicles and military culture; but also because it has been possible to invest in a much more comfortable way in the national health and education systems. Although these systems are not perfect, they are much more efficient and have a universal welfare impact than the rest of Central America, for example.

Military spending data for each of the Central American countries is difficult to obtain; however, you can use the public information that BBC News Mundo used to make a report on this topic. According to them, if the proportion of GDP were adopted as a measure of the benefit that Costa Rica receives from not having military forces, it would be found that savings would reach around US$450 million per year, compared to Guatemala, Honduras, El Salvador and Nicaragua. (BBC News, 2015). This is a not insignificant sum per year that is used in health and education; however, we cannot fall into our same criticism, since that is a monetary amount, while we must quantify the benefits of the absence of an army in the country in a different way.

Forest and biodiversity protection policy

Among the country's main initiatives, it is worth highlighting the national forestry policy framed in Forestry Law 9635, which includes a series of recognitions for the production and payment of environmental services (PES) for forests, reforestation or forest protection. This was a pioneering

policy at the global level and there are already many other countries promoting the payment of PES, specifically for carbon sequestration, protection of water sources, protection of biodiversity and scenic beauty.

According to the latest data from the National System of Conservation Areas [SINAC], for the year 2020 Costa Rica presented a total of 13,030.55 km2 of protected land and islands (25.50% of the national territory) and 15,501.92 km2 of protected marine areas (2.63% of the national territory) (2020). The SINAC initiative, together with others related to this area, have allowed the country to conserve the great biological wealth it possesses, which is close to 5% of the world's biodiversity, and to exercise great environmental leadership in the international arena, contributing that way to planetary well-being, from environmental conservation and regeneration.

A series of positive effects have been triggered by this process of reversing the forest cover, which was very bad in the past and now covers 25% of the territory. For example, PES is paid to farm owners who would otherwise probably have made a change in land use, but now also generate a series of ecotourism activities and the growth of biodiversity inventories.

Clean power generation

On the subject of energy, Costa Rica is usually well known, since in the country for years there have been a large number of regulations, laws and policies that make up the framework for the generation, distribution and commercialization of renewable energies (H2OLAC, 2020). However, in this case the most important to emphasize is the VII National Energy Plan 2015-2030 of the Ministry of Environment and Energy [MINAE] and the United Nations Development Program [UNDP], since, from the implementation of this, the country has more firmly consolidated its transition towards a sustainable energy matrix, which uses renewable sources by taking advantage of the natural resources present.

According to figures from the National Electricity Control Center [CENCE] (as cited in the Presidency of the Republic of Costa Rica, 2021), for the month of December last year the country reached 99.98% of clean energy production, with the use of the five national sources. Specifically, the water

resource contributed 74.12% to the energy matrix; the geothermal source 12.97%; the wind source 12.33%; biomass and the sun 0.56%, and the thermal source 0.02% (2021, para. 3). This initiative has clearly contributed to the country maintaining access to and quality of electricity service, without burning fossil fuels, without emissions, without harming the environment, economic development or planetary well-being.

Path to planetary well-being

Actually, in Costa Rica there are a huge number of planetary welfare initiatives developed precisely to contribute to humanity. But very probably in each country we will be able to find this type of spirit when we become aware that we really have a shared responsibility. For this reason, it is of the utmost importance that the contributions made by each territory be able to be evaluated in order to achieve that holistic and integrating planetary well-being.

The great ecological and social challenges that we drag continue. Biomass grabbing, climate change, land degradation, biodiversity loss, high levels of poverty and inequality, food insecurities, and other events that demonstrate a likely collapse of planetary well-being are present, but now increased by unthinkable phenomena that have happened to us in recent years, such as the COVID-19 pandemic in 2020, and the war between Russia and Ukraine in 2022 with the economic and social effects that they triggered.

Changes in the concept of well-being are happening. Environmental education in primary and secondary school has been deepening in recent years so that it is understood that well-being is really related to quality of life and that we must abandon the dominant culture that we have described. If the Earth Charter develops and massively disseminates the new index, it is expected that it will be permanently consulted and used for decision-making, as well as the generation of national policies and the behavior of each individual. It is always important to measure the impacts of "progress" and to document how we achieved it, so that this allows different people, leaders, politicians and economic agents, how much their country contributes and how it could contribute even more to increase progress. economy and maintain the well-being of the planet.

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14

Costa Rica's Contribution to Planetary Well-Being

Edgar E. Gutierrez-Espeleta

Costa Rica is a very small country, covering almost 9% of France's territory, with a relatively small population of just over 5 million inhabitants and a marine area that is about 5% of France's. Our GDP per capita is close to 30% of France's GDP per capita, and we are considered a developing country (United Nations, Ret. 2024). Both France and Costa Rica are members of the Organization for Economic Co-operation and Development (OECD).

In this article, the writer shall bring to light the model on which Costa Rica has achieved well-being within its own territories. How the nation influences global well-being and what still needs to be achieved. It further explains how planetary well-being is a concept which needs to be achieved by well-being of nature and its people.

Can Costa Rica be capable of influencing the global context?

The answer is a resounding yes!

Costa Rica has stood out for its unique characteristics, on both regional and global levels—having no army, a universal and free health and education system, producing electricity entirely from renewable sources, and maintaining forests on more than half of its territory.

Many scholars, both from Costa Rica and around the world, have studied the particular case in an attempt to explain a model that has been relatively successful despite the structural challenges the country faces (Chicago Council on Global Affairs; World Bank; Oxford Academic). This model, it

should be said, has legitimized Costa Rica's voice in the concert of nations, allowing it to be a respected and listened-to interlocutor on many issues concerning human rights and inclusive development.

The social and cultural achievements that today make Costa Rica an example to follow in many areas share a common point - social dialogue as a constant exercise. After the last civil conflict, Costa Rica was able to design a long-term common path through unimaginable agreements where communists, liberals, oligarchs, and labour representatives shook hands (Tribunal Supremo de Elecciones). The permanent abolition of the army has undoubtedly contributed to this: while its Central American neighbours have spent millions of dollars on the military, Costa Rica has used that money for social investment, which for many years allowed a relatively equal society, the material basis of the democracy.

On its path, Costa Rica has historically demonstrated that human well-being can indeed be at the heart of national development. Inheriting important achievements from the first half of the 20th century, the Second Republic - which began in the second half of the 20th century - showed the world that a country can develop if it bets on human well-being. Starting in the early 1950s, transformations that have been an example to the world began to take shape, such as the commitment to free, compulsory primary and secondary education provided by the government; the commitment to a fully universal health system; universal access to potable water as a citizen's right (recently declared a human right); access to electricity generated from renewable sources (nearly 100%); guaranteed fair prices for farmers and consumers; and the strengthening of a full (universal) democracy with absolute respect for the vote.

Within this context, Costa Rica has raised its moral and ethical voice on the global stage, showing that it is possible to think about everyone and work for the well-being of all. Based on its own experience, the State has supported international disarmament, the prohibition of nuclear weapons and cluster munitions, gender equality, the right to reproductive health, the abolition of the death penalty, the fight against climate change and inequalities of opportunity, respect for citizen participation (currently guaranteed by the Political Constitution), among many other flags.

Costa Rica has positively influenced the rest of the world by daring to experiment with new development instruments, which have allowed it to

demonstrate that it is possible to reverse, for example, the deforestation rate and to pay landowners for the ecosystem services of their regenerated forests thanks to a tax on fossil fuel use; to use ecological conservation instead of raw material extraction for economic growth; to invest in human talent through quality higher education, thus opening the necessary space for foreign investment that uses science and technology as its best input; and to develop eco-tourism as a key activity so that the world can enjoy our natural assets while contributing to improving the livelihoods of local communities.

Costa Rica has repeatedly welcomed migrants from neighboring countries, embracing them within its borders as a commitment to global well-being. The nation firmly believes that achieving global well-being starts with ensuring the well-being of its own people and nature. By fostering a healthy, harmonious environment domestically, Costa Rica strives to positively influence the global context.

Costa Rica's most important achievement on a global level has been to demonstrate, through experience, that when there is political will within democratic processes, great achievements can be reached. If a country with economic limitations like Costa Rica can do it, any nation can.

The country has been a kind of laboratory from which lessons have emerged for the entire planet. Some things are achieved well, though not everything. But like other countries, it has encountered challenges that remain unresolved, especially those that have emerged as the society, has become globalized and democracy has begun to weaken due to the crisis of political parties and the rise of post-truth.

After more than 70 years in this laboratory, some tasks have lagged behind, thus affecting people's well-being. These tasks relate to gender equality in all fields, guaranteeing the real right to secondary education, equity in investments between rural and urban areas and coastal regions, wastewater treatment, the use of agrochemicals, solid waste management, and the management of seas. All these issues are currently part of the national political agenda.

However, there are social and cultural elements that have remained ingrained in the Costa Rican imagination, making it easier to maintain the path charted by our forefathers. People defend democracy as the only possible option, and elections are usually festive and respectful processes.

The population also loves and defends its natural environment and is critical of 'extractivist' ideas that occasionally threaten this model. The people of Costa Rica have endeavoured to be a society respectful of diversity, as reflected in the Political Constitution, where they define themselves as a multicultural and multi-ethnic nation. Although the country is not immune to the fundamentalisms and divisions that traverse the planet, Costa Rica has somehow managed to preserve social peace.

A way forward

Costa Rica shares a strong message with the rest of the world – it has a desire to remain a country that, despite being hard to find on the world map, provokes a powerful echo when it raises its voice globally. Sure, it faces many internal challenges to continue being an example, but it instills confidence in experts that these internal challenges can be resolved with the spirit of Costa Ricans. The messages by the nation are clear - eliminate armed conflict (anywhere in the world); climate change does not wait; nature can be conserved alongside people's well-being.

The country wishes to continue to be the first to raise its hand when it comes to signing human rights instruments, the country that repeats as a "mantra" that democracy is the only possible way. In today's world, where populisms, fundamentalisms, and anti-democratic currents are increasingly gaining ground, this tiny country wants to keep showing that other paths are possible.

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15

Planetary Well-Being and its Ethical Dimension: The Earth Charter Index

Georgy Fomenko and Marina Fomenko

The planetary crisis is profoundly systemic; sustainability requires large-scale transformation[1]. In this context, the shortcomings of existing conceptions of development include orientation to human domination and regulatory compliance, ignoring the importance of integrating considerations of human well-being and the well-being of other living beings, as well as concern for the interests of future generations. The Planetary Well-Being Index proposed by the International Earth Charter Expert Group and Planetary Well-Being Theory aim to overcome these shortcomings by shifting the focus from the well-being of individuals to the Earth systems and ecosystem processes that underpin all well-being. At the heart of the approach is the desire to find ethical dimensions of planetary well-being, drawing on the four pillars of the Earth Charter.

This article presents our vision of planetary well-being and its importance for humanity, the prerequisites and foundations of its development, and targeting and behavioral modeling based on the concept of responsibility. It also proposes a vision of approaches to the dimensions of planetary well-being.

Used concepts: planetary well-being, sustainable development, environmental, social, economic and institutional imperatives, sustainable development goals, behavioral model of *homo responsabilis,* indicators of planetary well-being.

Introduction

Progress toward planetary well-being depends on the ability to ensure the well-being of both planetary and local geosystems and meet the needs of living beings in ways that do not compromise the integrity of the Earth system and ecosystem processes, now and in the future. The values of respect and care for the community of life, ecological integrity, social and economic justice, democracy, non-violence, and peace, when put into practice, contribute to the well-being of the planet. The Earth Charter International Expert Group has been working since 2020 to create a tool for measuring planetary well-being based on the four pillars of the Earth Charter. In 2022, the Earth Charter Index was proposed for discussion, and trial calculations were presented (Saraph et al., 2021). According to the authors, this index is not intended to replace existing indices or measure the Earth Charter pillars but rather to measure the ethical values of the Earth Charter pillars as a contribution of countries to planetary well-being [2].

This is a daunting task, both in the depth of the issues raised and in the scale of the phenomena and processes under consideration. The initiation of a broad discussion of the content and prospects of application of the Earth Charter Index brings to the fore a discussion of the limits, possibilities, and indicators of ethical measurement. Encouraged by the significance of the International Earth Charter initiative and inspired by the successes already achieved by the expert group, recognizing the planetary purpose of the index and the need for its development, we have taken the liberty to present our thoughts on the conceptual issues of planetary well-being raised by the developers.

The Importance and Prerequisites of the Planetary Well-Being

We are living in an era of global change, when tension has risen between the well-being of living people, the interests of future generations, and the existence of other forms of life due to the enormous complexity of the world. The extremely rapid spread of information and communication technologies, drones, biotechnology, etc. is changing all areas of society, the structure and nature of resource flows. As a result, socio-cultural contradictions and conflicts of interest are intensifying. Human actions

threaten irreversible changes to the planetary system, exceeding critical safety limits of the integrity of the biosphere, biogeochemical flows, climate, and terrestrial systems (Rockstrom et al., 2009a; Steffen et al., 2011, 2015a, 2015b; O'Neill et al., 2018; IPCC, 2019). "The risks of loss of planetary well-being increase significantly in a situation where the accelerating development of the technosphere in our civilization outpaces the spiritual comprehension of what is happening and, in connection with this, a human crisis is brewing," wrote Academician Valery Legasov, who directly provided scientific support for the emergency works after the Chernobyl disaster.

The main feature of modern times and the main cause of the ecological crisis has been the expansion of the humanity's "ecological footprint" and the transformation of the biosphere into a risky anthropocene (von Weizsaecker et al., 2017) – a full world with Human-Dominated Ecosystems (HDE). And humans are part of them as an integral and active component. Increasing consumption of natural resources and food does not increase human well-being but increases inequality, exacerbates the climate and ecological crisis, and harms human well-being and nature's health. The COVID-19 pandemic reaffirmed fears about the unwillingness of countries to act together, even in the face of the common threat.

Although the existence of a planetary development crisis has been recognized at the highest international level, existing conceptual frameworks shaped by the empty world are not sufficiently suitable to deal with it. In this context, the shortcomings of existing conceptions of development include orientation to human domination and regulatory compliance, ignoring the importance of integrating considerations of human well-being and the well-being of other living beings, as well as concern for the interests of future generations. Humanity is ethically responsible for keeping the planet living, livable, and thriving. It is no coincidence that the outstanding Russian philosopher Sergei Bulgakov, considering the problem of harmonization of interaction between humans and nature, noted that cultural values and meanings determine human behavior in the economic sphere (Bulgakov, 1990). The value foundations are also typical for the post-non-classical science of Vyacheslav Stepin (2003) and the universal evolutionism of Nikita Moiseev (1990).

Nature and Humans throughout history have contributed to the evolution and self-design of ecosystems, which are dynamic complexes of plant, animal, and microorganism communities and the non-living environment

interacting as a functional unit (Millennium Ecosystem, 2005). This is a global process because, as the prominent Russian philosopher Nikita Moiseev noted, it is obvious because Humankind interacts with Nature as a single biological species, and the implementation of the principle of co-evolution is a necessary condition for ensuring its future. The foundations of such a vision are present, for example, in the Russian philosophical tradition, Russian cosmism, and the natural science of Vasily Dokuchaev, Vladimir Vernadsky, and Nikolay Timofeev-Ressovsky. Their foundation is the realization of a person as an active part of Nature (and even wider - of the Universe); this unity with it is the realization of a person in the world of living, belief in the possibility of implementing the great principles of coevolution.

At the very beginning of the 20th century, Vernadsky was the first to formulate the statement that humans are becoming the main geologically transforming force of the planet and to ensure the future, people must take responsibility for the further development of the biosphere and society, and all civilizations must have some common vector of effort (Vernadsky, 1991, 2012). Moiseev noted that "... it is important to imbue the idea of unity, to include it in our general education, to make it part of our common culture. The implementation of this responsibility comes down to a multitude of specific tasks. And it is not easy to single out the most important ones. Or perhaps there are no more important ones! For all tasks are interconnected, and the destruction of even one link in the system leads to its complete destruction. And we must outline and solve all these tasks by ourselves - no one is able to set it for us today" (Moiseev, 2010).

Conceptualizing planetary well-being

The importance of a conceptual understanding of planetary well-being stems from the fact that inspired by the need to strive for it, people would develop appropriate goal-oriented systems of measures and indicators to measure the current state and the effectiveness of the steps taken. To better understand the concept of planetary well-being, it is necessary to answer a fundamental question: what is well-being? The most common concepts link well-being to the satisfaction of basic needs, that is as perceived from a neutral, non-subjective perspective. Needs-based conceptions of well-being also apply (1) to human well-being (Doyal &

Gough, 1984; Max-Neef, 1991; Gough, 2015, 2017; Rice, 2013); (2) animal well-being (e.g., Broom, 1991; Bartussek, 1999; Singer, 2002; Nussbaum, 2006) and (3) wellbeing of populations and ecosystems (e.g., Schlosberg, 2007; Kortetmäki, 2017), which are necessary to meet the needs of diverse life forms on Earth. Ecosystem well-being, for example, is defined as the functional integrity of an ecosystem and its ability to maintain its typical functions and characteristics (Schlosberg, 2007; Kortetmäki, 2017, Zaharov et al., 2018; Zakharov & Smurov, 2018), including continuity and adaptation. In contrast to many related concepts, planetary well-being seeks to avoid anthropocentrism. It allows discussions about the well-being of humanity and nature within a systemic multilevel approach and responsible treatment of the existential condition of all living beings. This increases the role of the ethical component in the discourse on the well-being of the planet, countries, and people.

From this integrated perspective, the idea of planetary well-being was developed in the first decade of the 21st century as a guide to action. In 2015, the Rockefeller Foundation and The Lancet proposed adopting the "Planetary Health" concept to refer to the highest level of human health achievable without compromising the Earth's natural systems (Whitmee et al., 2015). The most successful definition of Planetary Wellbeing is related to the activities of Pompeu Fabra University in Barcelona, where, in 2018, the Planetary Wellbeing Initiative (PWI) was launched. It is a long-term institutional strategy (UN Resolution, 2015) based on the UN Sustainable Development Goals (SDGs) [3] that recognizes the real threat of today's global emergencies and shows a determination to meet the new challenges posed by these emergencies. PWI understands the concept of "planetary well-being" as the highest attainable standard of well-being for human and non-human beings and their social and natural systems."

This vision of reality makes holistic paradigms [4] more relevant than elementalism and reductionism. Van Steenbergen noted that the holistic paradigm replaces the observer with a participant; it involves thinking in terms of processes, similarity with systems theory, and ecologism (Van Steenbergen, 1990). This is reflected in the concept of living, self-developing "human-dimensional" systems of post-non-classical science, with synergetics as the interdisciplinary assembly core (Stepin, 2006).

In recent years, research on the concept of well-being has expanded considerably. Research has moved from fragmented and subjective

assessments to interconnected eco-psychological and eco-social views to objective and needs-based conceptualizations that help consider well-being in terms of social equity and aspects related to public policy and beyond humankind. This view of planetary well-being recognizes the value of both human and non-human well-being (intrinsic value). This refers to the moral right of both humans and other beings to exist, to have their needs met, and to embody their typical characteristics and capacities (JYU. Wisdom community, 2021).

According to the JYU.Wisdom Community (2021), planetary well-being emphasizes the integrity of Earth system processes (such as global climate and biogeochemical cycles of elements) and ecosystem processes (such as succession and pollination) rather than the well-being of organisms because, at the level of organisms, life is rife with conflict, such as predator-prey relationships. Thus, not all organisms can be "well" at all times. Death and aging are also normal life processes, although they may demonstrate the organism's lack of well-being. Nevertheless, the integrity of the Earth system and ecosystem processes is essential for the survival and evolutionary potential of species and the existence and well-being of the organisms and ecosystems they inhabit.

Life on Earth can generally be understood as a set of interconnected, interdependent systems. At any level, well-being is the integrity of that system (whether individual organism, population, or ecosystem). Nevertheless, the general diversity and the number of different needs of different life forms make it difficult to integrate these views into a unified approach to well-being, or at least make the possible results hardly applicable in practice. There is no ethically acceptable solution to the problem of the right to life of certain living organisms particularly dangerous to humans, e.g., anthrax, COVID-19, etc.

Another problem with current conceptions of well-being is that discussion on its planetary nature does not pay enough attention to the scaling of life-supporting systems. This is one of the reasons for the slow development of systems of local and regional well-being indicators.

Targeting Planetary Well-Being

The key role of the teleological approach in the development and

implementation of any theoretical constructions concerning complex self-organizing systems is beyond doubt because to exclude the very possibility of a development scenario unacceptable for the planetary well-being, it is important to support the strengthening of those attractors (evolutionary goals of self-organizing geosystems) that are most preferable for the planetary well-being [5]. Kant, not absolutizing the teleological method of cognition and critically defining the limits of teleological thinking application in the metaphysical interpretation of the world, emphasized that "...the concept of purposeful connections and forms of nature is another principle allowing to bring its phenomena under rules where laws of mechanical causality are insufficient" (Kant, 1965). The Kantian view of the SDGs sees them as a desirable approximation to such a "realm of ends," and the pursuit of their achievement is the moral action, which is motivated by the pursuit of the higher good. Kant's "realm of ends" is regulatory in nature.

Under today's high planetary uncertainties and risks, targeting support for the preferable scenario for geosystems becomes dramatically more difficult because the facts are uncertain, the stakes are high, and decisions require urgency. It is no coincidence that Dave Griggs and Norichika Kani et al., as early as 2013, integrated planetary well-being into the understanding of sustainable development, extending it as follows: as "development that meets the needs of the present while safeguarding Earth's life-support system, on which the welfare of current and future generations depends" (Griggs et al., 2013). They identified various "must-haves" as prerequisites for human prosperity derived from the nine planetary boundaries of safe human behavior defined by Rockström et al. in 2009 (Rockström et al., 2009b). The authors combined these boundaries with the Millennium Development Goals (MDGs) [6], which have since been updated and expanded to 2030 or later, to create six of the seventeen UN Sustainable Development Goals (SDGs) (UN Resolution, 2015): (1) prosperous lives and livelihoods; (2) sustainable food security; (3) sustainable water security; (4) universal clean energy; (5) healthy and productive ecosystems; and (6) governance for a sustainable society. One important scientific advance in formulating the SDGs has been the recognition that in the Anthropocene (Crutzen, 2002), human development and well-being cannot be sustained in the long term unless the Earth's natural systems are preserved, and their role is clearly recognized by any new development agenda (Crutzen, 2002; Sarukhán et al., 2003).

The SDGs embody the ideals and ambitions of the world and show the way toward a collectively desirable state of the world. Ethical statements refer to alternative actions in the future and choices between them based on values, motives, and outcomes. Thus, SDGs are ethical statements that address or imply the dimensions of the worldview space. Consequently, a hierarchical, multipolar system of sustainable development goals emerges, presenting a fractal structure as a stochastic construct. Nevertheless, its segments have no solid substantive self-similarity (Fomenko, 2021). Thus, the possibility of developing and actualizing the importance of creating a multi-level system of indicators of planetary well-being from the global to the local levels is substantiated.

Institutional Model of Planetary Well-Being and the Pillars of the Earth Charter

Combining a systemic goal-oriented vision and a concept of well-being with a necessary ethical transformation away from anthropocentrism fosters discussion of the ecological crisis and action in several ways: finding trade-offs between different needs and desires, setting goals and measures for decision-making, and overcoming divergent worldviews. This attitude has called for attention to developing appropriate models of planetary well-being in the context of sustainable development.

Since the ideas of planetary well-being and sustainable development are inseparable, widely accepted sustainability models are applicable for a better understanding of planetary well-being. For example, the three-pillar model (Keiner, 2005) structures the principles of planetary well-being along three dimensions: ecology, society, and economics. It is widely known that these dimensions are arranged in the form of an equilateral triangle, where the endpoints of its corners are the limit states of a one-sided goal orientation – economic, ecological, or social. If we pay attention only to one of the three components of the triangle, approaching one of the corners, the sustainability, and therefore well-being, decreases. As a result, each of the corners of the triangle forms an area where sustainability principles do not apply.

Supplementing the three-pillar basic model with an institutional component creates a four-pillar volumetric model of planetary well-being. Thus, the

initial model is complemented by the activity component: to the three dimensions (social, economic, and environmental), the institutional one is added [7], and six interconnections are formed (Figure 1). Accordingly, each dimension contains imperatives - economic, social, environmental, and institutional; the latter is expressed through institutions (formal and informal) (North, 1997), relevant norms, and mechanisms. It is essential that the upper point of the institutional dimension is ontologically unattainable because it assumes the behavior of individuals with ideal morality and responsibility. Nevertheless, a consistent approach to it increases planetary well-being by harmonizing the use of natural, social, and anthropogenic capital in a world of individuals whose rationality is partial and whose morality is flawed.

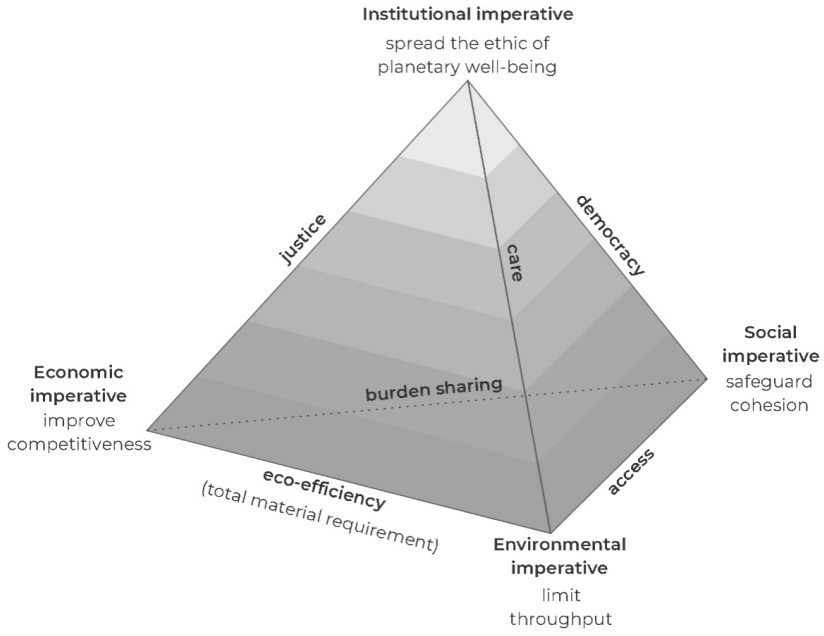

Figure 1 - The four-pillar model of planetary well-being

Source: In development of (Valentin & Spangenberg, 2000).

The institutional imperative introduces notions of moral incentives into the four-pillar model of planetary well-being, from local communities to the entire humanity, encouraging a transition to a sustainable way of life that

meets the current needs of all humanity in a way that allows the Earth to reproduce, regenerate, and evolve, as well as meeting the needs of future generations (Brundtland, 1987).

In our view, such an attitude can be seen as a categorical imperative for planetary well-being since moral law is an imperative that commands categorically because law is unconditional (Kant, 1965, p.). Let's recall that, according to the unconditional command, the Kantian categorical imperative in its various interpretations is formulated as follows:

1. "... Act only in accordance with that maxim through which you can at the same time will that it become a universal law." (Kant, 1965, p. 260).

2. "...Act as if the maxim of your action were to become through your will a universal law of nature." (Kant, 1965, p. 261).

3. "... Act so as to treat humanity, whether in your own person or in that of another, at all times also as an end, and not only as a means." (Kant, 1965, p. 270).

It is generally recognized (L'Etang, 1992; Micewski & Troy, 2007; Aganesian, 2018) that the first practical principle of the categorical imperative involves universalization, without which planetary well-being is also impossible. The institutional imperative is linked to the economic, social, and environmental imperatives through the categories of caring, justice, and democracy, which are organically consonant with the pillars of the Earth Charter. Today, the Earth Charter represents an ethical framework consisting of four pillars that guide people's consciousness to action: (1) Respect and Care for the Community of Life; (2) Ecological Integrity; (3) Social and Economic Justice; (4) Democracy, Non-violence, and Peace (Saraph et al., 2021).

Indeed, this is the ideal maxim, and the pursuit of it shapes the core ethical issue of planetary well-being: the institutionalization of social relations. Despite the unquestioned recognition of its importance, the ethical component of sustainable development is still poorly understood and requires further reflection. Even the adoption of the global SDGs [8] does not imply the imposition of uniform requirements for developing the institutional systems of different countries and people. Still, it supplements the universal institutions with local, socio-culturally conditioned institutions, paying attention to the informal norms and rules of conduct (Fomenko, 2017).

The pursuit of goal-oriented multilateral constructive interaction increases sustainability by increasing trust and cooperation compared to (market) anonymity, competition, and efficiency, especially in the management of the (global) commons (Ostrom, 1990, 2000, 2009; Rothstein, 2015; Fomenko G. & Fomenko M., 2020; etc.). Crucially, the weaker the presence of ethical values in the institutional component, the further people's everyday behavior is from the corresponding categorical imperative, the greater the likelihood and severity of teleological conflicts and the risks of loss of planetary well-being.

Homo responsabilis as a Prerequisite for Planetary Well-Being

The need for management decisions under conditions of high risks of loss of planetary well-being (climatic, environmental, food, etc.) has called into question the effectiveness of the widely used behavioral model of the rational hedonist and utility maximizer economic human [9]. Accordingly, they criticize highly simplified spatial institutional systems with zero transaction costs, for which history, tradition, culture, and concern for future generations and other living beings are irrelevant.

The leading position of the ethical *category of responsibility* is justified by the fact that all life on Earth, including humanity, has no right to suicide. This aspect is basic in clarifying the behavioral model as a research tool in the theory of planetary well-being. In the context of the high uncertainties and risks of the modern world, attention to the category of responsibility is justified by the need to perceive humans not as a sum of reactions to stimuli but as a complex being with innate structures of understanding and moral sensitivity. It is the appeal to the moral value component of the model that can compensate for the partial rationality of human activity and institutionalize the importance of caring for future generations and the surrounding world. Ethics is a correction and compensation for the failure of the market; religion is a correction and compensation for the failure of ethics. According to this approach, science, ethics, and religion create a system of transcendences, transitions into something else, and a repetition (iteration) of compensations (Kozlowski, 1999, and others).

As a value category, responsibility reduces the irrationality of human behavior. It encourages decision-makers to continually evaluate their

actions from the perspective of risk tolerance, such as the a priori exclusion of development scenarios that do not guarantee planetary well-being. The shared experience for most people of the threat of planetary catastrophe can, according to H. Jonas, act as a negative ethical basis for joint responsible activity since it affects the right of future generations to exist. In his view, human responsibility is about preserving one's species and preserving the environment: both should be protected, first and foremost, from one's own actions. For the ethics of responsibility, what "you shouldn't do" is prioritized over what "you should do" (Jonas, 1984). It is the value orientation that reduces the possible destructiveness of an individual's behavior and increases the rationality of his actions in the face of incomplete information.

The institutionalization of the behavioral model of *homo responsabilis* in connection with planetary well-being is complex and takes time, as it relates to an epistemological process and is related to the notion that learning and skills occur through cultural formations, acquired through the adaptation and identity of values between free people living in the same environment (Berger and Luckman, 1995; Selznick P, 1996). Gradually, over time, concepts emerge that create a vision of reality largely based on myths and behavioral narratives.

Integral Indicators of Sustainable Development

Even though most of today's indices reflect an anthropocentric view of the world, in one form or another, they also seek to consider the interests of the environment. A critical examination of the established practices of developing and applying the key integral indicators (Table 1) in the context of measuring planetary well-being is of undoubted interest.

Name of the indicator/ system of indicators	Who introduced it	Purpose and main characteristics
System of Integrated	Statistical Office of the UN Department of Economic and Social Affairs and the UN Environment Programme (UNEP) Source: https://seea.un.org	The System of Environmental-Economic Accounting (SEEA) is a framework that integrates economic and environmental data to provide a more comprehensive and multipurpose view of the interrelationships between the economy and the environment and the stocks and changes in stocks of environmental assets, as they bring benefits to humanity. It contains the internationally agreed standard concepts, definitions, classifications, accounting rules and tables for producing internationally comparable statistics and accounts. The SEEA framework follows a similar accounting structure as the System of National Accounts (SNA). The SEEA is a multi-purpose system that generates a wide range of statistics, accounts and indicators.

Genuine (domestic) savings	World Bank Source: Hamilton, Kirk. 2000. Genuine Saving as a Sustainability Indicator. Environment Department papers; no. 77. Environmental economics series. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/18301	Growth theory provides the intellectual underpinning for expanded national accounting and, through the measure of genuine saving, an indicator of when economies are on an unsustainable development path. This theory points in useful directions for countries concerned with sustainable development. The genuine savings analysis raises an important set of policy questions that goes beyond the traditional concern with the macroeconomic and microeconomic determinants of savings efforts. The questions of rent capture, public investments of resource revenues, resource tenure policies, and the social costs of pollution emissions are equally germane in determining the overall level of saving, although it is clear that monetary and fiscal policy levers remain important. This analysis also provides a practical way for natural resource and environmental issues to be discussed in the language that ministries of Finance understand. This may prove to be an important advantage as many resource-dependent economies struggle to achieve their development goals.
Environmental Sustainability Index (ESI)	A group of scientists from Yale and Columbia Universities for the World Economic Forum (Davos) Source: https://sedac.ciesin.columbia.edu/data/collection/esi	The Environmental Sustainability Index (ESI) is a measure of overall progress towards environmental sustainability. The index provides a composite profile of national environmental stewardship based on a compilation of indicators derived from underlying datasets.

		Environmental sustainability is measured by using 5 key indicators: (1) environment characteristics – air, water, soil and ecosystems; (2) levels of pollution and environmental impacts; (3) losses to society from environmental pollution in the form of lost products, diseases, etc.; (4) social and institutional capacity to solve environmental problems; (5) capacity to solve global environmental problems by consolidating efforts to preserve nature. The authors believe that the index allows to compare between countries on the level of environmental sustainability, to evaluate the results of environmental policy, to identify the best results, to determine the countries threatened by environmental crisis, to compare economic growth and environmental protection.
Genuine Progress Indicator (GPI)	Redefining Progress, which developed it based on the index of Sustainable Economic Welfare (ISEW), proposed by G. Daly and J. Cobb in 1989. Source: http://rprogress.org/index.htm	A genuine progress indicator (GPI) is a metric used to measure the economic growth of a country. It is often considered an alternative metric to the more well-known gross domestic product (GDP) economic indicator. Described by its authors, the Genuine Progress Indicator (GPI) provides citizens and policymakers fruitful insight by recognizing economic activity that diminishes both natural and social capital. Further, the GPI is designed to measure sustainable economic welfare rather than economic activity alone.

		To accomplish this, the GPI uses three simple underlying principles for its methodology: account for income inequality, include non-market benefits that are not included in Gross Domestic Product, and identify and deduct bads such as environmental degradation, human health effects, and loss of leisure time. The GPI is used in ecological economics, "green" economics, sustainability and more inclusive types of economics. It factors in environmental and carbon footprints that businesses produce or eliminate, including in the forms of resource depletion, pollution and long-term environmental damage.
Human Development Index (HDI)	United Nations Development Program (UNDP) Source: https://hdr.undp.org/	Integral indicator calculated annually for cross-country comparison and measurement of living standards, literacy, education and longevity as the main characteristics of the human potential of the territory under study. It is a standard tool in a general comparison of living standards of different countries and regions. The index was developed in 1990 by a group of economists led by Mahbub ul Haq; its conceptual structure was created thanks to the work of Amartya Sen. It has been published by the United Nations Development Program in its annual Human Development Reports since 1990. The HDI uses the following indicators: (1) life expectancy; (2) literacy rate (average number of years of schooling) and (3) years of schooling; (4) standard of living, measured by GNI per capita at purchasing power parity (PPP) in US dollars. In 2010, the family of indicators that measure the HDI was expanded with the introduction of three new indicators: the Human Development Index adjusted for socioeconomic inequality (IHDI), the Gender Inequality Index (GII) and the Multidimensional Poverty Index (MPI).

Living Planet Index (LPI)	World Wild Fund Source: https://www.livingplanetindex.org/home/index	The Living Planet Index (LPI) is a measure of the state of the world's biological diversity based on population trends of vertebrate species from terrestrial, freshwater and marine habitats. The LPI has been adopted by the Convention of Biological Diversity (CBD) as an indicator of progress towards its 2011-2020 target to "take effective and urgent action to halt the loss of biodiversity." Each indicator reflects the change in the population of the most representative sample of organisms in the ecosystem.
Ecological Footprint (EF)	Global Footprint Network (GFN) Source: https://www.footprintnetwork.org/	It reflects human consumption of food and materials in terms of the equivalent area of biologically productive land and sea area required to produce these resources and absorb the waste produced, and energy consumption in terms of the equivalent area required to absorb the corresponding CO2 emissions. The EF per person is the sum of 6 components: the area of arable land for growing human-consumed crops, the area of pastures for producing animal products, the area of forests for producing wood and paper, the area of the sea for producing fish and seafood, the area occupied for housing and infrastructure, the area of forests for absorbing the CO2 emissions generated by per capita energy consumption. The EF method compares the actual pressure of society on nature and the possible pressure in terms of potential reserves of natural resources and assimilation processes.

Table 1 - Main integral indicators of sustainable development

Each of the integral indicators has advantages and disadvantages in terms of the most important criterion: planetary well-being. In this context, the launch of the Earth Charter Index on the 30th anniversary of the Rio Summit on Sustainable Development is an essential step toward disseminating the ethical dimensions of planetary well-being.

The Uniqueness and New Opportunities of the Earth Charter Index

The Earth Charter Index was born out of this need to measure the magnitude of each country's contributions towards their common home, shared by the greater community of life and shared responsibility for its well-being. It seeks to reflect action along the lines of (1) Respect and Care for the Community of Life, (2) Ecological Integrity, (3) Social and Economic Justice, (4) Democracy, Non-violence, and Peace (Saraph et al., 2021).

The index proposed by Anupam Saraph, Mirian Vilela, Alicia Jimenez, and Sifan Jiang (2021) could be a critical resulting systemic indicator of the state of the planetary geosystems and countries. By avoiding an anthropocentric approach and attention to the ethical dimension of human activities, the Earth Charter Index differs significantly from existing indicators used in international comparisons. Therein lies its uniqueness as a means of coordinating interactions on a sustainable development platform. The focus on reducing overconsumption (about which there is a relative consensus of the world's major religious doctrines) is rightly adopted. The Earth Charter Index is being developed. It seems appropriate to consider several factors in its future development.

First, the Earth Charter Index should reflect strong sustainability approaches since the well-being of present and future generations depends on preserving Earth's life-support systems (Griggs et al., 2013). Therefore, it is advisable to identify and set environmental limits on the consumption of natural resources and ecosystem services and the negative impact on the natural environment in the process of socio-economic development. This is the most difficult methodological task because it ideally involves understanding the extent to which the threshold of unacceptable ecosystem changes is approached at the planetary, country, and local levels. Many ecosystem functions are indispensable, such as maintaining the balance of carbon in nature, hydrological cycles, nutrient cycles, water-conserving

functions of forests, water-purifying (filtering) functions of wetlands, etc. Natural wealth (capital) provides opportunities for economic activity (minerals, water, space, etc.) and for the quality of human life (recreation, hedonic needs, scientific research, etc.) (Figure 2).

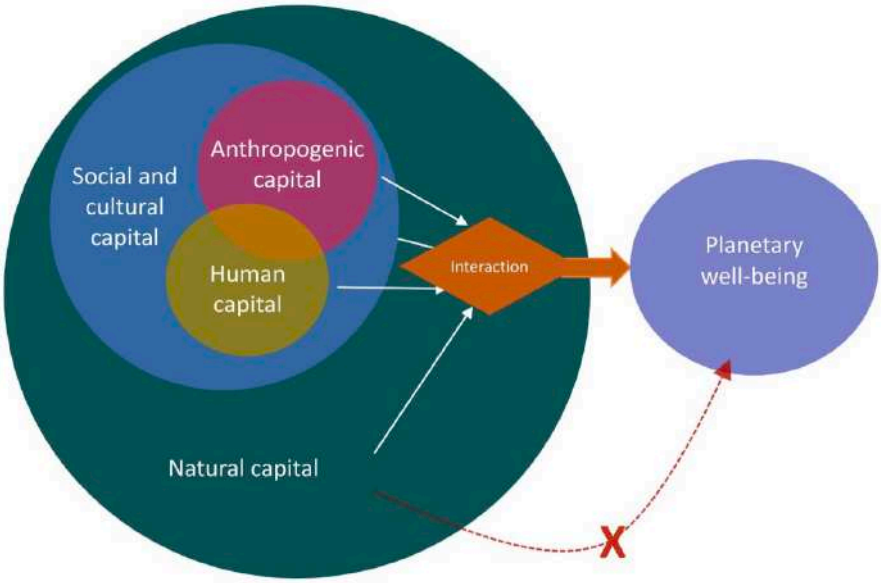

Figure 2 – The interaction of different types of capital in planetary well-being
Authors' analysis based on Constanza et al., 2014

Let's note that in the now full world, the widely used indicator of GDP gives more and more wrong signals regarding the sustainability of development. For example, GDP can increase while the share of the natural component decreases. The result is a dangerous illusion for decision-makers that economic development is possible without the natural resource base and ecosystem services. Indicators of regional and global states and trends in planetary well-being, at least as they relate to wildlife, are often proposed as summary indices of planetary well-being. The state of populations and species can serve as a good indicator of the integrity of the processes required to meet the needs of different living systems (JYU.Wisdom community, 2021).

Secondly, from the perspective of planetary well-being, the authors of the Earth Charter Index have rightly put the value category in the

leading position. We believe that the four pillars model of sustainability is implemented through the institutional imperative, which is connected to the economic, social, and ecological imperatives through the categories of care, justice, and democracy (Figure 1), consonant with the Earth Charter pillars: (1) Respect and Care for the Community of Life; (2) Ecological Integrity; (3) Social and Economic Justice; (4) Democracy, Non-violence and Peace (Saraph et al., 2021). We should support the initiative of the authors of the Earth Charter Index, which states that these dimensions should be the foundation for developing a system of indicators.

Third, the understanding that the sustainability imperative consists of striving for consensus in achieving environmental, social, economic, and institutional imperatives makes it possible to graphically represent the Earth Charter Index as a quadrangle, with the four axes measuring the Earth Charter pillars in terms of importance: low, medium, and high. Ecological Integrity is seen as the resultant, basic dimension, while the dimensions "Respect and Care for the Community of Life" and "Social and Economic Justice," "Democracy, Non-violence, and Peace" characterize ethically motivated action toward planetary well-being. This view provides a better understanding of the structure of the Earth Charter Index as it applies to each country or region. This is useful both for international assessments and comparisons and for policy decisions at the country level, identifying issues of interdependence of the state of the Living Planet on care, justice, and democracy and finding similar situations elsewhere in the world.

Fourth, the Earth Charter Index must be clear and unambiguous. Only in this way can it adequately reflect the processes taking place and the state of planetary well-being in a form that is easy to comprehend and demonstrates changes over time. In this, we must certainly agree with the authors. At the same time, there is also the danger of oversimplification since most of the currently widely used country indicators focus on measuring processes and phenomena in an empty world when the developers did not think about planetary well-being.

Fifth, we should agree with the authors of the Earth Charter Index that the index should not become an unfair competition in a marketing sense, namely, as a tool to assess who contributes more to the preservation of our common planet, livable and prosperous. The Earth Charter Index should be a recognized "peace index" that is not used in manipulation by various political forces. The imperatives of responsibility for planetary well-being,

like Kant's categorical imperative, are all above the immediate interests of various political groups.

Conclusion

Thus, recognizing the importance of planetary well-being in a full world as the most important reference point for sustainable development implies clarifying the indicators used. This is because most of the concepts and corresponding system of indicators are rooted in anthropocentric ideas of an empty world when nature forgave people many mistakes.

The Planetary Well-Being Index proposed by the International Earth Charter expert panel is the first international initiative to move beyond anthropocentrism through attention to preserving the Earth system and the ecosystem processes that underpin all well-being. In the face of high levels of uncertainty and risk, the emphasis is rightly on the ethical dimensions, the pillars of the Earth Charter. We hope that the publication of the Earth Charter Index will generate a wide-ranging, lively discussion of the ethical dimensions of sustainable development, both in expert circles, in politics and business, and in broader public circles. In any case, the first and most difficult step on this path has already been taken.

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Notes

[1] The Sustainable Development Impact Summit, held in the context of the UN General Assembly on September 21–24, 2020, stated: "Putting the world back on a path of sustainable, equitable, and inclusive growth will require more than a global recovery; it will require a Great Reset of social and economic systems." https://www.weforum.org/events/sustainable-development-impact-summit-2020

[2] Resource materials on The Earth Charter Index: Measuring the Contributions of Countries to Planetary Well-being https://earthcharter.org/library/resource-materials-on-the-earth-charter-index-measuring-the-contributions-of-countries-to-planetary-well-being

[3] More detailed information available online: https://www.upf.edu/en/web/focus/dret/-/asset_publisher/Si4lcpbUF35j/content/id/241922512/maximized#.YDzxaU6Sk2w

[4] Holism (in a broad sense) is a philosophical and scientifical notion about the problem of the relationship of a part and the whole, based on the qualitative uniqueness and priority of the whole in relation to its parts (Nikiforov, 2010).

[5] Teleology in its various forms can be found in Stoicism, Neoplatonism, Leibniz's concept of pre-established harmony, Schelling's doctrine of the "world soul," Hegel's objective idealism, Neo-Kantianism, Neo-scholasticism, personalism, etc. because goal setting is a key moment in the management of any activity.

[6] https://www.un.org/millenniumgoals/

[7] The best definition of institutions was given by D. North as the "rules of the game" in society, or human-made restrictive frameworks that organize the relationships between people. Such institutions (formal and informal) emerged as the behavioral response of people with only partial rationality to (real or imagined) threats to their security (North, 1997).

[8] The New Agenda and the Sustainable Development Goals were adopted at the UN Conference in September 2015 http://www.un.org/sustainabledevelopment/ru/summit/

[9] The view of a person as a rational hedonist and utility maximizer is characteristic of neoclassical economics. Neoclassical economists believe that human economic activity is directed toward the satisfaction of needs in accordance with Maslow's pyramid. Thus, from the point of view of neoclassical theory, man is recognized as a being absolutely rational and fully informed.

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16

Establishing Rights of Nature as indicator of Planetary Well-Being

Tineke Lambooy and Ebba Hooft Toomey

Introduction

We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.

(Earth Charter Preamble)

Pursuant to the recommendations of the World Commission on Environment and Development in 1987 and the Earth Summit in 1992, the civil society document the 'Earth Charter' has been developed (The Earth Charter, 2000). It declares our responsibility to one another, to the greater community of life, and to future generations to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. The Earth Charter contains the common values brought forward by wise people from many parts of the world and various cultures to serve as guidelines for action. It has and still does receive broad support around the world. The Earth Charter values are presented in four pillars: (i) respect and care for the community of life; (ii) ecological integrity; (iii) social and economic justice, and (iv) democracy, nonviolence, and peace. When these values are put into practice and drive the actions and policies in a country, they can contribute to planetary well-being of people and other living organisms.

The Earth Charter International (ECI) has been exploring the possibility to develop an 'Index' to measure 'Contributions of Countries to Planetary

Well-being' through the lenses of the four pillars of the Earth Charter (hereinafter: the Earth Charter Index). It is envisioned that this new Index will enable leaders, policymakers, and citizens to visualize how much their country contributes to keeping the planet habitable and thriving, while seeking economic progress and human well-being. The hope is that by bringing visibility to their contributions, it will inspire countries to act and take decisions towards planetary well-being.

James Lovelock was one of the first scientists who focused on Planetary well-being. His 'Gaia theory' states that 'living and nonliving parts of the Earth form a complex interacting system that can be thought of as a single organism'.(Bach E., n.d.) The theory is named after the Greek goddess Gaia. Considering that the Earth's biosphere regulates the Earth's environment and its capacity to sustain life, Lovelock argued that the damage people have inflicted on ecosystems and the planetary biodiversity reveals humanity's lack of respect for our planet and that it is doubtful whether it has the capacity to minimize the effects of the addition of greenhouse gasses in the atmosphere. (Lovelock J., 2007)

Like Lovelock, the Earth Charter emphasizes in its Preamble that, *'We are one Earth community with a common destiny'*, that, *'Earth, our home, is alive with a unique community of life'* and *'The protection of Earth's vitality, diversity, and beauty is a sacred trust'*. The first Earth Charter pillar promotes respect for Earth and life in all its diversity (1.a. 'Recognize that all beings are interdependent, and every form of life has value regardless of its worth to human beings') and to care for the community of life with understanding, compassion, and love (2.a. 'Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm'). The second pillar on ecological integrity stipulates to *'Protect, and restore the integrity of Earth's ecological systems, with special concern for biological diversity and natural processes that sustain life'* (clause 5). The third pillar calls to *'Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being'*, an especially significant action as Indigenous peoples protect 80% of the world's remaining biodiversity. (Garnett S. T. Et al., 2018)

Finding ways to measure how countries live up to the values promoted under the Earth Charter pillars is essential to providing a holistic index that reflects Planetary well-being. The Earth Charter is unique among international declarations because of the focus that is placed on the Earth,

the community of life, and humanity's place and responsibilities toward the Earth. (Lubbers R. F. M., Genugten W. J. M. & Lambooy T. E., 2008)

Therefore, in this contribution, I first discuss relevant existing indexes and identify a clear gap, which is our limited ability to measure respect and care for the community of life and sense of responsibilities toward the Earth. As a result, I then discuss possible metrics, focusing on Rights of Nature (RoN). I will elaborate on the various forms of RoN, among others analyzing the various forms of rights established and acknowledged (which imply responsibilities and obligations of people towards Nature) as well as different forms of governance introduced for RoN and the role of Indigenous peoples. A metric which includes RoN provides insight into the values expressed in the Earth Charter, including the first pillar's recognition of the intrinsic value of Nature and our responsibilities towards it (clauses 1.a. & 2.a.); as well as the value of the second pillar for ecological protection (clause 5.); the value of the third pillar to recognize and preserve traditional knowledge and spiritual wisdom (clause 8.b.); and the fourth pillar to strengthen democratic institutions, inclusive participation, and justice (clause 13.)

Existing Indexes

The development of the Earth Charter Index would benefit from the repurposing and inclusion of existing data sources and evaluations to both avoid repeating the same work and to ensure the finite resources and time available for index development are placed in areas with the greatest lack of information. Consequently, I review here extant indexes whose inclusion would strengthen an Earth Charter Index.

First, there is the Planetary Boundaries framework, developed by Johan Rockström et al. and evaluated in 2009, 2015, 2022, and finding in 2023 that Earth is beyond 6 of 9 Planetary Boundaries. (Richardson K., Rockström J., Owen G., Steffen W., Liverman D., Wasson R. J. & Cornell S. E., 2003) In their studies, they identified nine processes that regulate the stability and resilience of the Earth system and proposed 'quantitative planetary boundaries within which humanity can continue to develop and thrive for generations to come'. These boundaries indicate the tipping points for each of the examined geo-physical perspectives. As the boundaries affect each

other, crossing one can start a chain of events that can lead to a collapse of ecosystems and large-scale abrupt or irreversible environmental changes. This framework has generated enormous interest within science, policy, and practice and is widely used and respected as a means of understanding the key systems thresholds. The Planetary Boundaries provide a meaningful contribution to the second pillar of the Earth Charter, ecological integrity.

Second, there are the United Nations Sustainable Development Goals (SDGs) and their associated indicators. I refer to the ecological indicators that support the SDGs 6 and 13-15: Clean Water and Sanitation; Climate Action; Life Below Water; and Life On Land.(United Nations, n.d.) An 'Inter-Agency Expert Group (IAEG) on SDG Indicators' has developed a global indicator framework for the goals and targets, which was adopted by the General Assembly on 6 July 2017. (United Nations, n.d.) Since countries have committed to keep track of their progress in fulfilling the SDGs, they must collect data and other information on the boundaries and said SDGs. These data could be used for the Earth Charter Index, in particular regarding the topic of ecological integrity (second pillar of the Earth Charter).

Third, alongside these indexes are assessments of regulation and/or participation in international treaties on the environment. Many international treaties have been agreed upon by nations with the purpose of maintaining ecosystems and biodiversity. Of great importance in this field are the Convention on Biological Diversity, the Ramsar Convention on Wetlands, the UNESCO World Heritage Convention, the Convention on International Trade in Endangered Species, the United Nations Convention on Law of the Sea, the International Convention for the Regulation of Whaling, and several conventions relating to the Arctics among which the Agreement on the Conservation of Polar Bears, Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, and the Antarctic Treaty. These Conventions place a burden on nations to implement the promises made therein. Hence, national governments, and if delegated to lower-level authorities, the latter, are responsible to comply with the conventions and put them into practice. For the Earth Charter Index, focusing on the ecological values discussed in the Introduction of this chapter, it is important to categorize which countries have legally committed to which conventions. The UN and other organizations offer overviews thereof. Signing and ratifying an international convention does not automatically imply that the nation also observes its commitments, but

in view of the EC values under clause 13 of the Fourth Pillar and those in 'The Way Forward' as well as the SDG 16 (Peace, Justice and Strong Institutions), it does seem important to include in the Index some indicators that reflect a country's commitment to international environmental agreements.

Fourth, many countries have appointed protected areas or national parks - under various names or labels - aimed at preserving ecosystems that are often the habitats of endangered species. In Europe, the European Union (EU) has appointed 'Natura 2000' areas which concern important nature areas in the EU territories. The intention was and is that such areas need to be connected so that wildlife can travel along the Natura 2000 areas. EU Member States need to protect the areas and the wildlife. The EU Commission describes it as: "*Natura 2000 is a network of core breeding and resting sites for rare and threatened species, and some rare natural habitat types which are protected in their own right. It stretches across all 27 EU countries, both on land and at sea. The aim of the network is to ensure the long-term survival of Europe's most valuable and threatened species and habitats, listed under both the Birds Directive and the Habitats Directive.*" (European Commission, n.d.)

While Natura 2000 includes strictly protected nature reserves, most of the land remains privately owned. The approach to conservation and sustainable use of the Natura 2000 areas is much wider, largely centered on people working with nature rather than against it. Member States must ensure that the sites are managed in a sustainable manner, both ecologically and economically. Although the Natura 2000 appointments are embodied in hard law, by summer 2022, many of these areas are not connected to others or not well protected or maintained. The EU Commission monitors this and designed a 'Natura 2000 Barometer' with information per country. (European Environment Agency, n.d.) It also developed the 'The Natura 2000 Viewer', which is an online tool showing all Natura 2000 sites. (European Environment Agency, n.d.) Key information on designated species and habitats, data on population sizes and information on conservation status can be found therein. At the same time, the Barometer provides statistics per country on the number of Natura 2000 sites, the land area in km2 and the marine area in km2 as well as statistics concerning the whole EU. As this information concerns important ecological areas in the 27 EU countries, the Barometer offers valuable information regarding Planetary Well-being for the Earth Charter Index.

Finally, there are many additional existing assessments of ecological integrity including the Living Planet Index, the IUCN Red List, the IPCC reports, water and air quality assessments, environmental and carbon footprints, and measurements of total protected or restored areas.

While there are a diverse number of existing metrics which could be incorporated into an Earth Charter Index, there is a clear gap in the assessment of the Earth Charter's first pillar. The Earth Charter breaks the first pillar, respect and care for the community of life, into four values 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. Within the Charter's pillars, many of the values, such as justice, human rights, democracy, and material sustainability, have options available for their measurement under current indexes, such as those discussed previously. We are good at measuring values and their expression within our own society and at scientifically measuring ecosystems but, we lack an ability to measure humanity's diverse ways of morally valuing Nature as promoted by the first pillar of the Charter.

Rights of Nature

When it comes to respect for Earth, life, and diversity through recognizing 'that all beings are interdependent and every form of life has value regardless of its worth to human beings' there is a notable gap in existing indexes, which regularly do not consider the moral standing and rights of the natural environment in their assessment nor do they consider the extent to which we recognize our responsibilities towards Nature. Consequently, I introduce Rights of Nature (RoN) here as a way to begin measuring these values and discuss the multidimensionality of RoN cases to illustrate factors which could be taken into account in a future index.

RoN is a movement of legal initiatives which seeks to recognize Nature's rights and Nature's voice in the legal system. RoN transform Nature from an object to a subject in law. Generally, RoN creates a legal personality for a river, a forest, an ecosystem or a species and creates a right to/of petition for anyone to start a legal action on behalf of an object of Nature. (Lambooy

T., 2021) As the law can give rights to all kinds of entities, granting or acknowledging legal rights of objects of Nature is not in itself revolutionary or even unusual. For example, states, provinces, municipalities, companies, cooperatives, church communities, sport clubs, foundations, and trade unions are all nonhuman entities that have acquired rights and duties under the law. (Chapron G., Epstein Y. & López-Bao J. V., 2019) One clear strength of RoN compared to other forms of environmental protection according to Guillaume Chapron et al. is that "*If species rights were recognized, species or their representatives could seek restitution when harmed even when they are not explicitly protected by regulations and when their needs conflict with human needs. This may be interpreted as an attempt by one interest group to impose its will on others; however, as with other types of rights, nature rights can lead to a remedy when regulations fail to correct injustices.*"

For example, establishing the legal personality of a river means that this river has a voice in the legal system. Hence, it can go to the authorities or a court in the event damaging activities take place and claim that the authorities stop them and organize repair activities. Legal personality can also entail that the river acquires a formal role in the decision-making process in regard of that river, e.g., whether or not a dam should be constructed for producing electricity for human beings and industry, and if so in which manner. The river – represented by its legal guardians - can in that case initiate a study concerning the ecological consequences for the river and its ecosystems. This can then play a role in the decision. Depending on the scope of the competencies that have been established with granting RoN to the river, it will be the river that ultimately takes the decision, or the river has a veto right to stop the plans, or at least it will have a right to be consulted. The river's mandate and perspective will be safeguarding Nature.

Together with several other academics, we conducted a study to collect information about more than 400 RoN initiatives worldwide spread over approximately 40 countries. (Plutzer A., Lambooy T., Jeurissen R. & Kim E., 2022) The study and the data were published in the Journal of Maps in June 2022 in an open access mode. Figure 1 (world) and Figure 2 (United States) show all initiatives that have been identified and analyzed in this study. More than half of the initiatives have been adopted, and a large share of the other half concerns initiatives that are under consideration or in progress. The data collected for this study comprise all legal and policy

documents in relation to the examined 400+ initiatives. They are being used by the UN Harmony with Nature program that supported the study. All data are included in an open access database called the Eco Jurisprudence Monitor, which is kept up to date by the NGO GARN (Global Alliance for Rights of Nature). (EcoJurisprudence, n.d.)

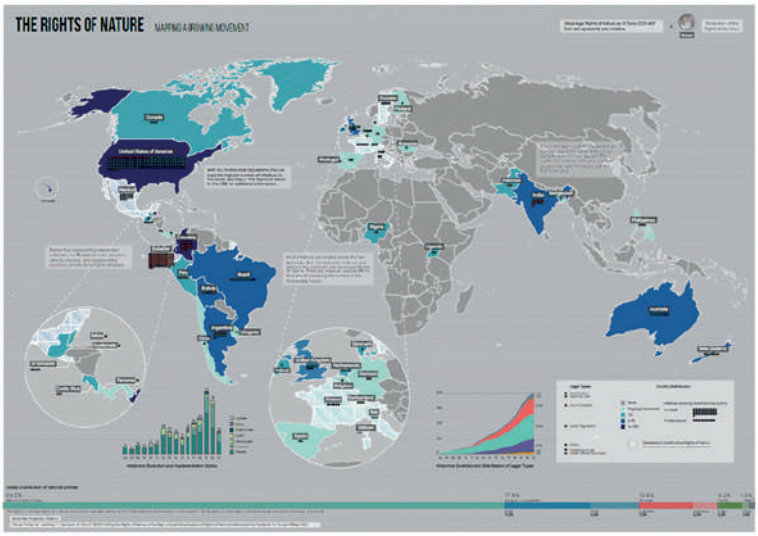

Figure 1. Rights of Nature initiatives around the world

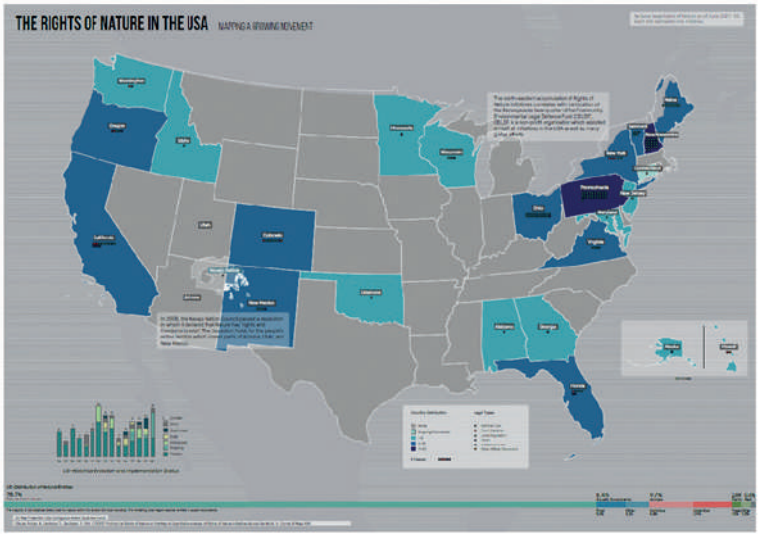

Figure 2. Rights of Nature initiatives in the United States

I suggest that the information in the database on RoN be used as an indicator for the Earth Charter Index. This indicator represents the extent to which a legal system recognizes *'that all beings are interdependent, and every form of life has value regardless of its worth to human beings'*. Furthermore, the specific wording of a RoN initiative gives insight into the degree to which a country *'Accepts that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm'* (clause 1.2.a) and if a country takes on the responsibility to *'Protect, and restore the integrity of Earth's ecological systems, with special concern for biological diversity and natural processes that sustain life'* (clause 2.5).

RoN initiatives diversely address the identified values of the Earth Charter. A first key difference among RoN initiatives is the subject of the law, which can pertain to a specific species, a specific natural entity (e.g. a river or a mountain) or to a whole ecosystem. For example, the White Earth Band of the Ojibwe on the North American Great Lakes recognizes the rights of Manoomin, a local species of rice. According to the Rights of the Manoomin Ordinance, *"Manoomin possesses inherent rights to exist, flourish, regenerate, and evolve, as well as inherent rights to restoration, recovery, and preservation. These rights include, but are not limited to, the right to pure water and freshwater habitat; the right to a healthy climate system and a natural environment free from human-caused global warming impacts and emissions; the right to be free from patenting; as well as rights to be free from infection, infestation, or drift by any means from genetically engineered organisms, trans-genetic risk seed, or other seeds that have been developed using methods other than traditional plant breeding."* (Ehite Earth Band of Ojibwe, 2018)

Simultaneously, in the Great Lakes region, the Menominee tribe has recognized the inherent rights of a natural entity, containing many individual species, the Menominee River. *"The Menominee River possesses inherent and legal rights including the right to naturally exist, flourish, regenerate, and evolve; the right to restoration, recovery, and preservation; the right to abundant, pure, clean, unpolluted water; the right to natural groundwater recharge and surface water recharge; the right to a healthy natural environment and natural biodiversity; the right to natural water flow; the right to carry out its natural ecosystem functions; and the right to be free of activities or practices, as well as obstructions, that interfere upon these rights."* (Menominee Indian Tribe of Wisconsin, 2020)

The tribal initiatives on the Great Lakes, and others like it, such as various

RoN initiatives involving the Maori people in New Zealand, are distinct from other RoN laws in how they relate to the existing dominant local world view. In the case of the initiatives previously discussed, they function to affirm and enforce through the legal system a world view which already recognizes the inherent value and the rights of Nature and its subsidiaries. In contrast, an initiative such as the "Blaine Township Corporate Mining and Democratic Self-Government Ordinance" which recognizes the RoN, functions to challenge the dominant worldview. "*Natural communities and ecosystems possess inalienable and fundamental rights to exist and flourish within the Township of Blaine. Ecosystems shall include, but not be limited to, wetlands, streams, rivers, aquifers, and other water systems.*" (Community Environmental Legal Defense Fund, 2006)

The Blaine Township Ordinance targets a specific industry, mining, and attempts to change the status of Nature and local communities to have greater rights within the legal system in order to minimize the harm caused by the extractive and utilitarian mining practices of corporations. Whether a RoN initiative enforces or challenges a worldview is a second key distinction which could be considered in an Earth Charter Index.

A third difference to be considered in the development of an index is the jurisdiction of a law. The Ojibwe and Menominee initiatives discussed are Tribal law while the Blaine Township Ordinance is a local form of governance in the United States.

Constitutional Rights of Nature initiatives also occur, including the Constitution of Ecuador which states, "*Nature or Pacha Mama, where life is reproduced and carried out, has the right to have its existence and the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes fully respected... Nature has a right to restoration... The State shall apply precautionary and restrictive measures for activities that may lead to the extinction of species, the destruction of ecosystems or the permanent alteration of natural cycles. The introduction of organisms and organic and inorganic material that may permanently alter the national genetic heritage is prohibited.*" (Constitution of the Republic of Ecuador, 2008)

Besides RoN that have been included in the Constitution, Tribal law and municipality law, there are also RoN that are part of national law. For example, New Zealand recognises the legal personality of the Whanganui River as *'an indivisible and living whole, comprising the Whanganui River*

from the mountains to the sea, incorporating all its physical and metaphysical elements'. (Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, New Zealand Legislation) New Zealand also recognizes the Mount Taranaki *'as a living being and indivisible whole'*, affirming that *'it is a living, indivisible whole incorporating the peaks, to be referred to by their Tupuna names, including Taranaki, Pouakai and Kaitake'* and *'encompasses all of the physical and metaphysical elements of Nga Maunga from the peaks through to all of the surrounding environs'.* (Anima Mundi Law Initiative n.d.) Under Australian law, the Birrarung Act *'recognizes the intrinsic connection of the traditional owners to the Yarra River and its Country and further recognizes them as the custodians of the land and waterway which they call Birrarung'*. (Yarra River Protection (Wilip-Gin Birrarung Murron) Act 2017, Victoria Government Legislation) Clearly, these RoN have been inspired by and refer to Indigenous worldviews, of the Maori and Wurundjeri people respectively.

Another example of RoN becoming part of national law concerns the Mar Menor Act in Spain.(EcoJurisprudence, n.d.) Legal personality has been granted to the saltwater lagoon the Mar Menor after severe pollution took its toll, the ecosystem was collapsing/collapsed and thousands of tons of dead fishes washed ashore on beaches that normally would be used by tourists. A citizens' legislative proposal to grant to the Mar Menor legal personality (article 1, see Box 1) and rights (article 2) was adopted in the national Spanish parliament with more than 90% of the votes in 2022. The Preamble emphasizes the responsibilities of people towards the ecosystem, "*The recognition of the rights of the ecosystem of the Mar Menor lagoon and its basin means complying with our international commitments, such as the Paris Agreement of 2015 on Climate Change, and fulfilling the demands of the new geological period that our planet has entered, the Anthropocene. In the 21st century, the serious ecological damage caused by the human development model forces us to expand our responsibility to look after the environment."*

The adoption of the Act was followed up by the establishment of a foundation to speak on behalf of Mar Menor, which comprises citizens, ecological experts and public representatives. By 2024, the Spanish state has invested large funds in improving the sewage systems to restore the ecological value of the Mar Menor. In Spain, this law has not been proposed by Indigenous people but by people with a Western worldview. They were worried about the pollution and losing the ecosystem.

Box 1	**Act Mar Menor (Spain)**
Article 1.	Legal personality to the Mar Menor and its basin shall be granted, being henceforth formally recognised as a subject of law.
Article 2.	1. The Mar Menor and its basin shall be recognised as a legal entity with rights that require the ecosystem be protected, preserved, maintained or, where relevant, restored by regional and central governments and residents of the Mar Menor´s surroundings. The Mar Menor shall also have the right to exist as an ecosystem and to evolve naturally, which shall include all the natural characteristics of the water, the communities of organisms, the soil and the terrestrial and aquatic subsystems that form part of the Mar Menor lagoon and its basin. 2. The rights mentioned in the foregoing paragraph are as follows: a) *Right to exist and to evolve naturally*: The Mar Menor is governed by a natural order or ecological law that enable its existence as a lagoon ecosystem and as a terrestrial ecosystem in its catchment area. The Mar Menor is governed by a natural order or ecological law that enables it to exist as a lagoon ecosystem and as a terrestrial ecosystem in its basin. The right to exist implies respect for this ecological law, in order to ensure the balance and regulation capacity of the ecosystem in the face of the imbalance caused by anthropic pressures coming mainly from the catchment area.

Article 2.	b) *Right to protection*: The right to protection implies limiting, stopping and not authorizing those activities that pose a risk or harm to the ecosystem. c) *Right to conservation*: The right to conservation requires actions to preserve terrestrial and marine species and habitats and the management of associated protected natural areas. d) *Right to restoration*: The right to restoration requires, once damage has occurred, remedial actions in the lagoon and its catchment area that restore natural dynamics and resilience, as well as associated ecosystem services.

RoN initiatives have also led to the recognition of the legal personality of natural entities by courts. An example is the Colombian Supreme Court of Justice that declared the Colombian Amazon as *'an entity subject to rights, entitled to protection, conservation, maintenance and restoration by the State and the territorial entities that comprise it.'* (International Union for Conservation of Nature, 2018). The Supreme Court of Argentina has acknowledged the legal personality of Sandra, an orangutan, who lived in a zoo (Jurist, 2014). The High Court of Bangladesh has recognized the legal personality of the River Turag and other rivers in Bangladesh. (Asif S.M., n.d.)

A fourth relevant difference in RoN initiatives is the types of rights and whether they are being legally established/granted or acknowledged/recognized. The previous RoN examples already illustrate a difference in rights and their wording. The Blaine Township Ordinance is the least specific, referring only to the right to exist and flourish. More detailed RoN initiatives include rights such as to thriving, to preservation, to restoration, to regeneration, to live with dignity, to live in freedom, to a stable climate, to a healthy climate, to be free from pollution, and additional ecosystem/species specific rights such as aquifer recharge rates or specific habitat preservation.

Consequently, an Earth Charter Index would benefit from including RoN databases and evaluations of RoN initiatives to consider key differences

such as the subject of the law (species, natural entity, or ecosystem), the jurisdiction of the law, the types of rights either recognized/granted or acknowledged/established, how the initiative relates to the local worldview (challenging or enforcing dominant values), and how the local communities were and are involved in the management of the natural entities that have acquired RoN. An analysis of RoN also provides secondary insight into two additional values stated in the Earth Charter. The Earth Charter's third pillar emphasizes the importance of recognizing and preserving 'the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being' (clause 8.b). RoN can recognize and enforce traditional knowledge, as illustrated with the examples of the Maori in New Zealand, the Wurundjeri People on the Yarra River in Australia, and various tribes in the USA (Ojibwe, Menominee, Navajo, Klamath).The concept of introducing RoN in our democratic societies also supports the goals of the Earth Charter stipulated in the fourth pillar, in which the Charter refers to rights and access to justice (13. 'Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice'). Therefore, an assessment of RoN provides various insights into multiple values expressed in the Earth Charter.

Conclusion

The development of an Earth Charter Index must include a variety of factors to evaluate the diverse values expressed within the Charter. As I discuss in this chapter, for many of the Earth Charter values there are existing metrics available. Specifically, as it concerns the environment, there are many ways available to measure the natural environment. Existing metrics include the Planetary Boundaries, the United Nations Sustainable Development Goals, international treaties, and protected areas. However, there is a gap in these metrics' ability to measure the recognition of the intrinsic value of Nature and our corresponding responsibilities for stewardship, recognized in Earth Charter pillar 1. Therefore, I present Rights of Nature (RoN) as an initial metric for the extent to which countries recognize Nature's intrinsic value. RoN initiatives represent a government's legal recognition of Nature's value, by transforming it from a subject to an object of law and recognizing several additional rights inherent to Nature. RoN initiatives also

provide a measure of other values expressed in the Earth Charter. First, an assessment of the status of RoN in a country can provide insight into the amount of environmental protection legally established. Second, because a number of the initiatives are championed and implemented by Indigenous people, an analysis of the initiatives which takes this into consideration can provide an idea of the extent to which Indigenous stewardship and knowledge is recognized and protected within a country. Consequently, RoN would strengthen the Earth Charter Index. When forming a country specific metric, consideration should be given to the subject of the law, the jurisdiction of the law, the specific rights recognized or provided, and how the law interacts with the local worldview. The creation of a RoN metric would not comprehensively address the gaps in existing information, however, it provides an important and insightful first step in assessing the absence or existence and the degree of the recognition of Nature's intrinsic value.

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17

Lifestyles: Critical Reflections and Perspectives from the Earth Charter

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Abstract

This chapter offers a critical reflection on dominant lifestyles and their impacts on planetary well-being, questioning the anthropocentric development model that has led to deep socio-environmental crises. Drawing from diverse cosmovision's and the ethical framework of the Earth Charter, it argues that current global challenges—climate change, inequality, biodiversity loss—are not only systemic, but also rooted in a worldview that has dissociated humanity from nature, transforming life into an object of exploitation.

Through case studies of the Hunza, Mennonite, Rapa Nui, and Purépecha communities, as well as concepts such as *Buen Vivir*, *Vivir Sabroso*, and *Healthy Living*, the chapter explores alternative, biocentric lifestyles grounded in reciprocity, dignity, and ecological interdependence. These ways of living emphasize the need to recover ancestral knowledge, embrace cultural diversity, and reevaluate modern metrics like development indicators and economic growth, which often reduce life to quantifiable data devoid of meaning or context.

Ultimately, the text invites a transition toward sustainable, plural, and culturally rooted lifestyles guided by the values of the Earth Charter—respect, care, justice, and peace. It advocates for rethinking education, science, and governance through a transdisciplinary and ethical lens, recognizing that the future of life on Earth depends on our ability to "Live"—not just survive—with awareness, humility, and a renewed sense of belonging to the web of life.

Introduction

In recent years, global concern about Planetary Well-being has intensified. In response, the Earth Charter has served as an ethical framework to rethink the concepts of well-being and sustainable living beyond anthropocentric approaches. This chapter emerges from the need to explore how communities, regions, and societies contribute—qualitatively and meaningfully—to the well-being of the planet and all its inhabitants.

Drawing on diverse experiences, dialogues, and reflections—particularly those inspired by the Earth Charter—this work examines the socio-environmental and cultural crises we face today. It advocates for a biocentric worldview, aligned with thinkers like Leonardo Boff and Enrique Dussel, that calls for profound transformations in consciousness and behavior to build more inclusive, just, and peaceful societies.

Planetary well-being is inseparable from human well-being. It is shaped not only by material and social conditions but also by access to natural and spiritual resources that sustain life. These dimensions must harmonize to nurture justice, peace, and democracy across ecosystems and societies.

Nature itself teaches us interdependence. Just as cells in a living organism work in harmony, ecosystems and species co-exist in a delicate balance. Humanity, as a conscious member—not master—of this system, has a responsibility to preserve that harmony. As Dussel reminds us, "we have life in charge," a call not for domination, but for humble care and stewardship.

Recognizing the Earth as a closed and complex system means acknowledging that each region offers unique conditions that shape local lifestyles. These ways of living—when aligned with interdependence and respect for life—are fundamental to the integrity of the planet and the flourishing of future generations.

Context: What are the Main Evidence of the Planetary Crisis?

Human development has historically depended on the overexploitation of natural resources, prioritizing the production of goods and wealth without regard to the planet's limits. Since the Industrial Revolution, ecosystems

have been subjected to extreme extraction practices, resulting in pollution, biodiversity loss, and the depletion of vital resources. Today, the challenge of sustaining a global population nearing 8 billion is compounded by the destruction of environmental systems that once supported life in balance.

This crisis manifests in desertification, forest fires, ocean acidification, and the accumulation of greenhouse gases, leading to a climate emergency marked by intensified natural phenomena and forced migration of species. The planet's deterioration has long been warned by scientists and environmental advocates, emphasizing the urgent need to restore harmony in a world where all beings are interconnected and interdependent.

One of the root causes of this crisis is the prevailing anthropocentric worldview that equates well-being with material possession, reinforcing a development model that separates humans from nature. This perspective has contributed to rising poverty, inequality, and marginalization, particularly in regions where basic needs remain unmet, and social problems such as illiteracy, insecurity, and forced migration are exacerbated.

Ancient civilizations, particularly in Mexico, offer alternative visions rooted in respect and spiritual reverence for nature. In many traditions, natural elements are seen as sacred, essential for peace, fertility, and happiness. These worldviews invite us to renew our relationship with nature and question dominant narratives of progress and success based on consumption and accumulation.

Although the 1992 Earth Summit sparked global commitments to sustainable development—defined as meeting present needs without compromising future generations—progress has been inconsistent. Efforts to integrate sustainability into policies, institutions, and education have increased, but they remain insufficient in the face of accelerating socio-ecological degradation.

The environmental dimension of sustainability calls for urgent conservation of ecosystems, protection of the ozone layer, and reduction of greenhouse gases. Equally essential is the social dimension, which demands inclusive participation from all sectors of society—youth, indigenous peoples, civil organizations, and governments—to formulate effective and just public policies, especially at the local level.

Despite efforts across sectors, the dominant development model continues to valorize growth over balance, leading to irreversible ecological damage. As Enrique Dussel (2022) suggests, it is necessary to embrace a Biocentric Vision that places Life at the center, acknowledging the intrinsic value and interdependence of all beings within a complex, closed planetary system.

This paradigm shift entails reimagining solutions from the local level through transdisciplinary approaches that honor diverse knowledge systems and cosmovision's. It requires addressing food insecurity, pandemic threats, and health inequities, all of which are symptoms of a deeper crisis of disconnection and disregard for the sacredness of life.

Although sustainability is globally recognized as a pathway to well-being, it often remains a theoretical ideal rather than a lived reality. As Pérez Z. A. (2017) reminds us, the principle of intergenerational justice is an aspiration—a utopia that orients our collective efforts. True sustainability must be understood as a dynamic and evolving process shaped by time, context, and complexity.

Within this framework, the 2030 Agenda for Sustainable Development and the Earth Charter offer converging visions. The Earth Charter, recognized by UNESCO (Resolution 40C/20, 2019), provides values and principles that complement the Sustainable Development Goals, encouraging a holistic, ethical, and educational foundation to guide humanity toward justice, harmony, and the flourishing of all life.

What Do We Understand by Lifestyle?

In light of the complex socio-environmental crisis, it becomes necessary to reflect not only on well-being, but also on the lifestyles that shape it. Communities throughout history have developed diverse ways of living to maintain a balance between physical, mental, and social health—ways often linked to their harmony with ecosystems, geography, and climate. According to the WHO (1999), these patterns are influenced by family, education, media, and sociopolitical realities, and are subject to continual change and adaptation.

However, dominant modern lifestyles—shaped by a capitalist and hegemonic model—promote excessive consumption and impose ever-

shifting material "needs." These lifestyles associate personal value with the possession of goods whose utility is increasingly ephemeral, accelerating environmental degradation and deepening social inequalities. Natural resources are seen as infinite assets, consumed without regard for their exhaustion or the well-being of future generations.

Lifestyles are plural and exist across personal, familial, communal, cultural, and national scales. They are shaped by the interaction of various factors—education, behavior, culture, and interests—and must be understood as dynamic and interrelated, rather than isolated or rigid categories (Mendoza, 1994). In this sense, the growing push for homogenized consumer behavior driven by market logic undermines cultural diversity and ecological sustainability.

Yet, the promise of these "modern" lifestyles remains inaccessible to the majority of the world's communities. In striving to join the globalized model of living, many lose their traditional forms of life. This disconnection from ancestral roots calls us to imagine and construct new, context-sensitive lifestyles that are responsive to the specific needs and possibilities of each community—rural or urban, central or remote—and which recognize the value of cultural and ecological diversity.

A clear and inspiring example comes from indigenous peoples who maintain lifestyles deeply rooted in respectful, reciprocal relationships with nature. These original ways of living—based on care, preservation, and responsible use of resources—demonstrate the possibility of sustaining life as part of a larger whole: the Community of Life. Their wisdom offers critical guidance for redefining our place in the world and recovering more harmonious, ethical, and sustainable ways of living.

Modern Trends to Standardize Lifestyles

Throughout the history of humanity and in all areas of the Earth, lifestyles have flourished with the aim of *Living Together* and sharing with all beings in their territory, trying to meet their full needs, where health, comfort and security are fundamental and allow them to live in community, and enjoy their happiness and joy of existing. These lifestyles can be understood by different virtues and attitudes, manifested in customs, which define the

human behaviors that characterize their way of life and their development.

It is evident that a standardized definition of lifestyle cannot exist since it will depend on who defines it, on the cosmogony and the environment, among other factors. Such is the case of some authors, such as Casimiro et al. (1999), Gutiérrez (2000), Mendoza (1994) and Sánchez Bañuelos (1996), who have explored various definitions, highlighting that of Casimiro et al. as *"the behavior of a person, both from an individual point of view and from their group relationships, which is built around a series of common behavioral patterns"*

International organizations have also attempted to define the concept, with the goal of globalizing it. For example, the World Health Organization (WHO), which in its Glossary of health promotion (1998) defines the concept of lifestyle as *"a way that is based on identifiable behaviors patterns, determined by the interaction between individual personal characteristics, social interactions, and socioeconomic and environmental living conditions".*

Across the planet, lifestyles have been outlined that range from the natural expressed by the original communities, abruptly passing to an approach defined by the capitalist, neoliberal and materialist system, characterized by high consumption, with high environmental impacts that have an effect on an incalculable ecological value, to more holistic, frugal and harmonized lifestyles with nature, which try to rescue again the cosmogonies of the original peoples, having great relevance according to their environments in the different regions of the world. All with their own characteristics, according to their cosmogony, their beliefs, and the climatic characteristics and the local and regional ecosystems.

Four Lifestyles: The Hunza, the Mennonites, the Rapa Nui and the Purépecha Communities

We cannot standardize lifestyles or propose a single system of measurement. This can be seen by using four distinct communities as examples: the Hunza of Pakistan, the Mennonites of northern Mexico, the Rapa Nui of Chile and the Purépecha of Michoacán, Mexico. These lifestyles, shaped by unique environments and circumstances, illustrate the diversity in ways of living across the planet.

The Hunza people are known for their exceptional longevity and health, with life expectancy ranging from 100 to 130 years. They live in the Himalayas, far removed from materialistic systems and the pressures of globalization. Their lifestyle is characterized by "organic cultivation," a diet rich in fresh fruits and vegetables, and practices like "temperance" (avoiding negative thoughts), daily exercise, and therapeutic fasting. Key values in their community include "health, tolerance, collaboration, teamwork, solidarity, respect, and care."

The Mennonites, found in various countries like Mexico, Bolivia, and Canada, lead an intentionally isolated life, rejecting modern technology and living according to their interpretation of the New Testament. They practice "respectful agriculture" and avoid political instability, valuing "non-violence, spirituality, respect, work ethic, discipline, peace, and order." Their communities are individualistic and competitive in commercial and agricultural activities, with each member accumulating wealth through personal effort and efficiency.

The Purépecha community of Michoacán is at risk of losing their traditional lifestyle due to

globalization pressures. They maintain a deep connection with nature, reflected in their music, food (based on maize, beans, and fish), and craftsmanship. Their lifestyle is centered around "respect and care" for the environment, which provides their livelihood. The core values of this community are "culture, respect, obedience, care, freedom, and health."

The Rapa Nui people of Easter Island offer a lifestyle based on the concepts of Tapu (absolute obedience to laws for self-care) and Umanga (mutual aid without expectation of repayment). During the COVID-19 pandemic, they rediscovered a self-sufficient way of living, focusing on "self-production" and community collaboration. Their lifestyle, rooted in respect for ecosystems and community-oriented practices, illustrates the possibility of prioritizing the well-being of others.

These examples underscore the diversity and value of indigenous lifestyles, which offer alternative models for living in harmony with nature. These ways of life have inspired modern concepts such as "Well-being, Good Living, Live Joyfully, Live Better, and Healthy Living." The document stresses the importance of recognizing the contributions of indigenous cultures and their relevance in creating sustainable lifestyles.

"Models of Living": Bienestar (Well-being), Buen Vivir and Vivir Bien (Good Living), Vivir Sabroso (Live Joyfully), Vivir Mejor (Live Better) and Vida Saludable (Healthy Living)

The idea of *Bienestar* (Well-being) has been approached from multiple fields. The Dictionary of the Royal Spanish Academy (2021) defines it as the "set of things necessary to live well. A comfortable life or supplied with everything that leads to having a good time and with peace of mind. State of the person in which the proper functioning of his somatic and psychic activity becomes sensitive to him." Meanwhile, Fernández López, Fernández-Fidalgo, and Cieza (2010), in their study published in *Revista Española de Salud Pública*, describe it as "a globalizing concept that encompasses what is related to health and what is not related to it, such as autonomy and integrity," adding that well-being and Quality of Life (QoL) are interchangeable "just by reversing the point of view: objective vs subjective."

The concept of *Buen Vivir* (Good Living), grounded in Andean cosmovision's, proposes a holistic view of existence. Ecuador's *Plan Nacional para el Buen Vivir* (2009–2013) defines it as "the satisfaction of needs, the achievement of a quality of life and death with dignity, loving and being loved, the healthy flourishing of all, in peace and harmony with nature and the indefinite prolongation of human cultures." It includes the expansion of individual and collective freedoms and capacities, allowing people to pursue life goals meaningfully and without exercising domination over others.

Closely related is *Vivir Bien*, which the Government of Bolivia (Ministry of Foreign Affairs, 2022) describes as "life in its fullness. It is knowing how to live in harmony and balance, in harmony with the cycles of Mother Earth, the cosmos, life and history, and in balance with all forms of existence... You cannot Live Well if others live badly, or if Mother Nature is damaged. Living Well means understanding that the deterioration of a species is the deterioration of the whole." This perspective emphasizes interdependence, collective well-being, and the ethical responsibilities toward nature and others.

Vivir Sabroso (Live Joyfully), a concept elevated by Colombia's Vice President Francia Márquez, expresses a lifestyle rooted in dignity, peace, and justice. As she explains, it "is the possibility that people do not live in fear, it is the possibility that people can live in their territories in a calm and

peaceful manner," and "it refers to living in dignity, it refers to living with guaranteed rights" (CNN interview, 2022). This concept reclaims joy and cultural identity in the face of historical exclusion and violence, affirming the right to live fully and without fear.

Vivir Mejor (Live Better), promoted in Mexico from 2007 to 2012, framed a vision of social policy oriented toward *Sustainable Human Development*. It sought to expand people's capacities without compromising the future of upcoming generations. The strategy focused on three main actions: (1) strengthening education, health, and housing access—especially for children; (2) building a social protection network to shield vulnerable families; and (3) promoting formal employment. As stated in the *Sectoral Program of the Ministry of Social Development*: "Living Better is more than a set of actions and policies. Living Better is the legitimate aspiration of the entire Mexican population."

Vida Saludable (Healthy Living), articulated in the *Guide to Healthy Environments and Lifestyles in Lenca Indigenous Communities* (2016, Honduras), emphasizes a way of life where "the healthy environment is the physical, social and cultural space where people live daily and where social relationships are established that determine a way of living and being." A good healthy lifestyle involves harmony in diet, physical activity, sex life, rest, hygiene, recreation (especially in nature), spiritual peace, and the relationship with the environment.

This comparative overview reveals two essential points. First, there is no single or universal lifestyle to be imposed or idealized; instead, lifestyles emerge from specific social, cultural, ecological, and historical contexts. Second, any attempt to measure or evaluate a lifestyle must use qualitative indicators adapted to each community's worldview, territory, and relational dynamics. These models show that to live well means to do so in connection—with nature, with others, and with oneself—guided by values rooted in dignity, interdependence, and sustainability.

The Earth Charter and its Usefulness in the Construction of Indicators

Given the context described above, it is important to consider the development of indicators that can be applied at individual and community levels to understand the impacts and benefits of a given lifestyle. It is

also necessary to explore alternative worldviews and new paradigms, considering missing elements, and to develop corresponding indicators based on initiatives like the Earth Charter and the 2030 Agenda. These two frameworks complement each other due to their holistic nature, and because both have reports tracking their progress and the implementation of their objectives and indicators.

It is urgent to rethink the concept of development (not associated with economic growth) that incorporates clear objectives and tangible results for living. From our analysis, it appears that we have adopted an erroneous concept of well-being, one shaped by modernity, driven by the ambition for wealth and consumption, and built on sustainability arguments and criteria that are incomprehensible to many, including decision-makers. These criteria are based on immediacy, triviality, and a disregard for the intrinsic value of living beings and the responsibility to care for nature, all while ignoring the consequences of these decisions for future generations.

Recognizing, describing, or evaluating the crisis we face is complex, as are the factors that have caused it. Defining the elements and indicators required to measure individual, community, national, or planetary well-being demands the development of critical, complex, and systemic thinking. However, it is evident that Earth is responding strongly, and we must act.

We urgently need to develop new paradigms, reconsider how we understand and communicate the concept of sustainability as a purpose of a lifestyle, and engage citizens in raising awareness and acting, including the measurement and evaluation of progress through the ethical framework provided by the Earth Charter. In this sense, we believe that a thorough review is required of how the Earth Charter is disseminated, internalized, and implemented, so that we can appreciate the importance and impact it holds for the various actors involved in these matters.

The Earth Charter: An Inspiring Ethical Framework for Lifestyles

From the perspective of the Earth Charter, its principles and values are transversal to the diverse lifestyles described throughout this chapter. All of them share a vision of humanity that recognizes itself as part of nature and the broader community of life—living in harmony, respect, and care

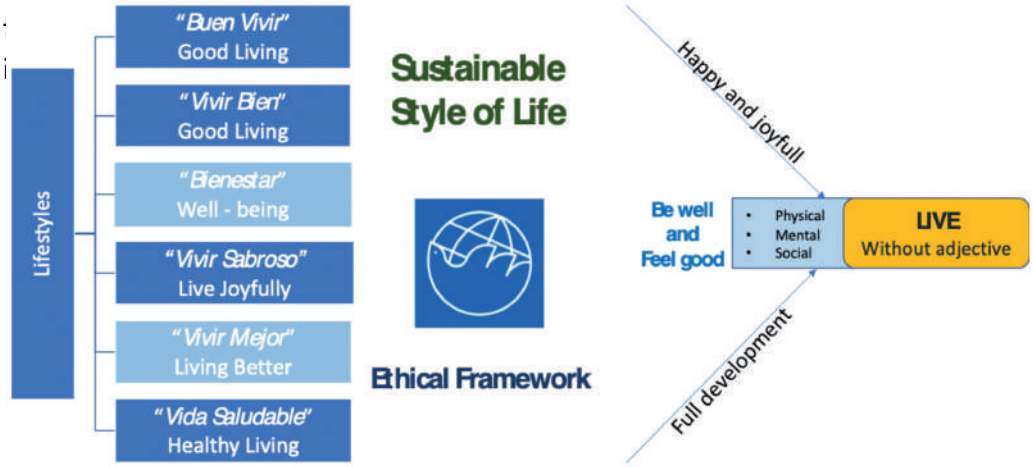

Figure 1. The Tranversal Effect of the Earth Charter on Lifestyles

"In this sense, the Earth Charter (2000) is fundamentally focused on promoting the transition to sustainable lifestyles and human development that shows respect and care for the community of life in a coherent way, as the result of development processes. The Universal Declaration recognizes that ecological protection, poverty eradication, equitable economic development, respect for human rights, democracy and peace are interdependent and indivisible... It transversely reflects six dimensions of development (social, economic, environmental, political, cultural and spiritual) ... and proposes an ethical framework configured by values expressed in principles... such as respect, care, integrity, justice, tolerance, inclusion, compassion, democracy and peace..." (Castillo, M., 2022).

These principles ethically shelter and harmonize the key components found across different sustainable lifestyles. Social, philosophical, scientific, and political movements that support the Earth Charter agree that it contributes to shaping a sustainable way of living. Its 4 pillars and 16 fundamental principles guide behavior and relationships, functioning as an applied ethical framework intended to critically influence both individual and institutional development practices.

Although the Charter does not define "sustainability" per se, it provides key tools to foster a sustainable lifestyle—one rooted in respect, care, cooperation, hospitality, fraternity, and solidarity. These attitudes

emerge from the internalization of Earth Charter values, shaping people into *CAPAS con S* (in Spanish): Creative, Loving, Peaceful, Autonomous, and Sustainable. Such lifestyles strengthen our resilience, compassion, and commitment to all life.

A sustainable lifestyle, from this biocentric view, is one in which all human dimensions are permeated by the Earth Charter's values: living with respect for the community of life, maintaining ecological integrity, practicing social and economic justice, and making decisions that are inclusive, non-violent, and contribute to peace and health. This aligns with a worldview where all life is at the center of thought, feeling, and action.

Leonardo Boff (2021) notes that "the main characteristic of a sustainable lifestyle is the fraternity that is accompanied by simplicity... a way of being that sets aside everything that is superfluous... leads us to be content with enough and to share with others." He adds that such a lifestyle deepens our unity with Mother Earth and all beings, fostering a *planetary consciousness* that sees life, humanity, Earth, and the cosmos as part of a single complex and interrelated reality.

This view resonates with Eduardo García (2022), who affirms: "Well, I think that everyone can have or develop their own lifestyle. The diversity that we have suggests so. What I propose are only general criteria: loving, serving, enriching, beautifying and permanently strengthening nature, our fellow human beings and ourselves... guided by the awareness that nature and the Cosmos have assigned us an Ecological Functionality."

The WHO Health Promotion Glossary (1998) supports this vision: "Lifestyle is a way of living that is based on identifiable patterns of behavior, determined by the interaction between individual personal characteristics, social interactions and socioeconomic and environmental living conditions." It also emphasizes that "there is no 'optimal' lifestyle to which all people can subscribe. Culture, income, family structure, age, physical ability, home and work environment will make certain forms and conditions of life more attractive, feasible and appropriate."

Finally, ETNIAS (2018) defines a desirable lifestyle as one that "is based on each attitude, each behavior and each activity carried out by a person or group of them with the same purpose of being happy and fully developing in a determined territory." This includes respecting and enriching ecosystems,

and reminds us that various worldviews and cosmovision's teach us that multiple lifestyles are connected to sustainability when inspired by the universal values of the Earth Charter: respect and care for the community of life, ecological integrity, social and economic justice, inclusive decision-making, and peace.

What Do We Mean by Crisis of Civilization? – Preliminary thoughts

The profound environmental, social, and economic crises we face today compel us to rethink how we inhabit the Earth—not only as a physical space, but as a living, interconnected system, Gaia. Inspired by Ana Patricia Noguera (2012), this reflection invites us to rediscover the poetic, spiritual, and embodied relationship with our common home: to listen to its language, to let it inhabit us through ritual, dance, and song.

To speak of a crisis of civilization is not merely to describe external events—climate change, inequality, war, or pandemics—but to name the deep roots of disconnection and disharmony that underlie them. It is a crisis of meaning, of relationship, of the very way we conceive of ourselves in the world and how we relate to nature and others.

These symptoms—pollution, loss of biodiversity, social fragmentation—are manifestations of a deeper rupture: a crisis of thought and knowledge. As Enrique Leff (2008) states: "It is fundamentally and in essence a crisis of knowledge with which we have built and destroyed the world and our lifeworld's... the human being has dissociated himself from nature, from its meaning and its essence."

From this disassociation emerges a dangerous worldview: anthropocentrism. The idea that humans are separate from—and superior to—nature has normalized domination, exploitation, and the commodification of life. We no longer relate to beings as kin, but as objects, measured by their utility and exchange value.

Reification is the transformation of subjects into objects. Nature is no longer alive, but "resources." Forests are seen as carbon sinks, not sacred ecosystems. Animals are "livestock." Even human beings are objectified. This logic fuels destructive practices such as deforestation, extractivism,

and market-based "solutions" like carbon credits.

This way of thinking is not neutral. It justifies domination, inequality, and ecological collapse. And it shapes how we perceive ourselves: as separate from, and entitled to control, the rest of the web of life. As Ana Patricia Noguera reminds us, this is not how our ancestors saw the world.

Indigenous knowledge teaches that we belong to the Earth. The Hopis, Kunas, Uwas, Aymaras, Mapuches and many other people's call the Earth "Mother," and their resistance is not to reclaim property, but to remind us: "we belong to the land" (Noguera de Echeverri, 2012). This is not just a metaphor—it's a radical reorientation of being.

We are part of nature. Our bodies are made of the same elements as all life: water, minerals, sunlight. When we die, we return to the Earth, completing the cycle. This understanding fosters reverence, humility, and responsibility. It invites us into a biocentric vision—where Life, not human supremacy, is at the center.

Biocentrism transforms our worldview. We stop seeing ourselves as separate and start living in reciprocity. Just as the heart cannot be removed from the body without death, humanity cannot separate itself from nature and expect to thrive. Gaia is a living system; all beings are interdependent.

In this context, concepts like sustainable development or well-being are insufficient if they remain rooted in the same exploitative paradigms. The real question is: do these alternatives encourage us to question not only our consumption, but the ethical roots of our relationship with the Earth?

Do they teach us to love the water, the air, the forests—not for their usefulness, but for their intrinsic value? Do they help us see that we are threads in a vast web of life, where every being matters and has a right to exist? If not, they risk becoming more of the same—repackaged models of domination.

This is why words matter. Language reflects and shapes consciousness. Terms like "natural capital" or "environmental services" hide the sacredness of life beneath economic logic. To truly change course, we must change how we speak, think, and relate to the world.

Buen Vivir (Living Well), rooted in Andean and Amazonian wisdoms, offers

a transformative alternative. As Eduardo Gudynas (2011) proposes, it challenges the ideology of progress, growth, and utility, placing instead reciprocity, harmony, and fullness of life at the center.

David Choquehuanca, former Bolivian Foreign Minister, described Buen Vivir as "recovering the experience of our peoples... the Culture of Life... in complete harmony and mutual respect with Mother Nature, with the Pachamama, where everything is life."

In Aymara culture, *Suma Qamaña* refers to "living and coexisting well," while *Qamir Qamaña Qapha* expresses the "sweetness of being"—material and spiritual richness, dignity, and a good heart. These concepts reflect holistic aspirations beyond economic indicators.

In Quechua, *Sumak Kawsay*, often translated as Buen Vivir, means "life in fullness." *Sumak* signifies ideal and beautiful realization; *kawsay* means dignified life, lived in balance and harmony. These expressions resist reduction and invite plural, intercultural understandings of well-being.

Buen Vivir is not a fixed doctrine. It is a platform for dialogue, encounter, and mutual learning between diverse knowledges. It resists hegemonic reduction and invites us to reimagine the world with humility and imagination (Gudynas, 2011). Its ethical foundation aligns deeply with the Earth Charter.

To Live, simply to Live—without adjectives—may be our greatest challenge. Living not defined by possessions, but by presence. Living as awareness of the health of the ecosystem as inseparable from our own. Living as interconnected, evolving beings in a web of relationships.

Can we truly Live without first healing our worldview? To do so means embracing a biocentric ethic, recovering the unity between humans and nature, and pursuing a dignified life in fullness, peace, and balance. As the Earth Charter reminds us, the choice is ours.

Final Considerations

The final considerations of this text are diverse, controversial and under construction; we can, however, synthesize them into six main reflections:

1. We should not standardize a single lifestyle, nor its evaluation, since these are diverse and multicultural.

2. The indicator systems to achieve an index are schemes in decline that only generate privileged information.

3. The evaluation in a participatory and inclusive way based on the perception of each community is an alternative to know and evaluate *Well-being*, and other lifestyles, in a meaningful way.

4. The lifestyles of the original peoples must be our compass to re-understand the current models derived from the globalization of the capitalist system.

5. The change of the patterns of production and consumption towards more harmonic processes, of respect and care towards the community of life is no longer under discussion. We either change them or very soon humanity will suffer the consequences that are already beginning to be felt, where the risk of extinction of the species is latent; and,

6. That our choice may be to Live, without adjective.

First Reflection:

Social and environmental problems, evidence of the crisis of our civilization, are closely linked to the lifestyle that, especially since the industrial revolution, has become dominant. In a so-called search for *Well-being*, this lifestyle imposes a unique model characterized by the possession of goods as an emblem of power and personal success, mostly temporary material goods, an extremely destructive illusion derived from the capitalist system.

Although the most important purposes of the scientific and technological advances materialized essentially from the 20th century have been progress and to improve the living conditions of humanity, they have also favored the standardization and globalization of a unique lifestyle, based on a model of hegemonic capitalist development, with very high costs in ecological terms, with growing imbalances and loss of habitats and biodiversity, and in social terms with the increase in inequalities, the loss of the spiritual dimension and the erosion of the ethical frameworks that govern lifestyles on the planet.

In this sense, it is of great value to share the words of Ana Patricia Noguera, *"The reduction of the varieties, events and diversity of nature to physical-chemical-mathematical formulas in modernity, represents the triumph of reason over life, but also the loss of the earth as the place of mythical-poetic origin of the human. At the same time that our culture found the most subtle and effective way to dominate nature to place it under its domain, it lost the land as well as inhabiting itself"* (Noguera de Echeverri, A. P. 2012).

Second Reflection:

To design a system of indicators to evaluate lifestyles often means reinforcing a development model that is already exhausted. The model relies on quantitative, abstract, and depersonalized data—cold averages that reduce reality to figures, becoming incomprehensible and meaningless to most people. As Ana Patricia Noguera reminds us, "Having reduced her to an object, since she is a wonderful, indecipherable and mysterious enigma. Having believed that science could explain life, when in reality life cannot be captured in a mathematical formula, in data, in quantification. The tragedy of this civilization has been to have believed that nature, as well as the land, were its property, when we humans are the ones who owe ourselves to the land" (Noguera de Echeverri, 2012).

Well-being cannot be accurately measured without recognizing the natural and cultural environments specific to each community. Lifestyles arise from the basic and interrelated conditions of all living beings, not solely from human-centered indicators. Any meaningful evaluation of the crisis we face must embrace systemic, viable, and context-sensitive indicators that reflect the real complexity of ecosystems and local realities—including individual experiences, traditional knowledge, spirituality, and historical memory.

Although indicators have been developed to assess sustainability—sometimes with both quantitative and qualitative dimensions—they often remain rooted in anthropocentric and economistic logic. Biodiversity is valued, but usually in terms of its utility to humans, not for its intrinsic worth or the rights of non-human beings. This instrumental view weakens the ethical depth needed to protect life in all its expressions.

Consequently, we must envision new paradigms anchored in a renewed ethical awareness—one where human being feel and act as part of the LIFE of the Planet. Only by recognizing our interdependence with all living systems can we build meaningful alternatives that move beyond measuring and toward truly understanding what it means to live well, in harmony with the Earth.

Third Reflection:

Participatory and inclusive evaluation based on the perception of each community is a possibility to get to know more closely, and evaluate, each lifestyle. In this sense, a holistic, ethical, and spiritual proposal is the Earth Charter, framed in the principles and values that comprise it. These characteristics make it an alternative for qualitative evaluation, an important reference both for its conceptual contributions and for the experiences accumulated over the last 24 years in various regions of the world, in which citizen participation has been a fundamental component for its adoption.

This oncoming at the local level of each community, with qualitative approaches and with the support of the Earth Charter, represents both a challenge and an opportunity facing the quantitative indicators obtained through the application of Agenda 21, the Millennium Goals and particularly the goals established in the Sustainable Development Goals of the 2030 Agenda.

Fourth Reflection:

We need to turn to see the stories of the native peoples, who preserve and put into practice their traditions to stay united to the land... as Ana Patricia Noguera reminds us, *"environmental thinking seeks to approach-affect each other in different ways like other cultures or better, cultures-others, relate to the land. These cultures-others only have in common that they declare themselves earth, children of the earth, emerging from the earth. Their law of origin is the earth. Their great mother, their protector, their wise counsellor... she speaks [...]. The music, which according to Ciorán "comes*

from crying, since it was born from nostalgia for paradise" evokes the language of the earth. It evokes its indecipherable mysteries, its rhythms, its silences, its chords, its dissonances. She, the music, is a place, Oikos, a niche, an abode; like the land-house, music is a beautiful way to feel life-death" (Noguera de Echeverri, A. P., 2015). This conception of inhabiting the earth is undoubtedly a very important reference in these reflections, because they represent the fundamental bases of what instead of calling development, we name as Noguera proposes, *flourishing of life*.

Fifth Reflection:

With a projected global population of 8.5 billion by 2030 (United Nations, 2024), we face a world in deep crisis: widespread poverty and hunger, degraded ecosystems, growing extinction of species, and alarming threats to food security, water access, and peace. These challenges demand urgent transformations in the ways we live, produce, and relate to the Earth.

Lifestyles must align with each community's cosmogony and converge toward new, creative modes of production and consumption—ones that respect all living beings and avoid turning the planet into a dumping ground. It is imperative to reduce overexploitation and waste, acknowledging Earth as our only shared home, not an unlimited resource.

Meanwhile, socio-environmental conflicts continue to escalate, affecting sovereignty, dignity, and well-being, and displacing entire communities. In this process, ancestral lifestyles are being lost, eroding cultural memory and putting at risk the transmission of traditional knowledge that holds the key to coexistence in harmony with nature.

In this context, education, science, and technology carry both a profound responsibility and a transformative potential. We must reimagine them through a transdisciplinary and intercultural lens—one that values traditional wisdom and guides us toward *Buen Vivir* on Earth. Social organization, political leadership, and international cooperation are also essential to support and evaluate these transitions, ensuring that development truly fosters the flourishing of all life in harmony, peace, and happiness.

Sixth Reflection:

Live without qualifying, live, live and live...

The changes in the concepts and forms of development, progress and growth throughout the recent history of humanity, as well as the natural and cultural conditions in each region of the world, have somehow shaped the forms or lifestyles, and in general they have been given an adjective, such as Good Living, Live Joyfully, Live Better, Healthy Living, and even Well-being, among others. However, we ask ourselves, why does Living need an adjective? The concept of Living must be universal, considering everything that exists and lives on the planet, since it is the manifestation of the interactions of countless elements in the biosphere that characterize Planet Earth, Gaia.

From the philosophical point of view, shared by the Earth Charter, Living means sense and purpose, it means that we, human beings, are capable of paying conscious attention to our body, -as the closest expression that our being has to nature-, to our mind and therefore, to our thoughts, and to our soul. It also means that we are multidimensional, sentient and spiritual beings. For this reason, the concept of Living is broad, complex, systemic and evolving... so, it is possible to think that putting a label on it limits and conditions it, and that our aspiration can be simply, even if it is anything but simple, Living.

Living gives life to our awareness of being and existing and encourages hope and love for our common home.

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18

The Old Economy Blinds The Netherlands for Planetary Well-Being: How to Integrate Our Planet and Future Generations into Dutch Democracy

Veronique Swinkels and Alide Roerink

"Caring for Earth, our home with its unique community of life"

What we mean by 'planetary well-being' is very well expressed in the Earth Charter as a whole, and specifically in the paragraph 'Earth, Our Home':

> *"Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depends upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples."*
>
> (Earth Charter Preamble).

Although the term planetary well-being is not mentioned in the document, the Earth Charter can very well serve as the way forward.

Most reports on the Dutch implementation of the sustainable development agenda paint the picture that, overall, the Netherlands is 'doing well'. We argue the opposite. The Netherlands scores poorly on the central tenets of the sustainability agenda: balance between economy, social welfare and healthy ecosystems; and the principle of leaving no one behind. The

commitment to the 'old' dominant economic system continues to be at the expense of nature and biodiversity, at home and abroad. The degradation of ecosystems affects the quality of life of people here, now, elsewhere, and later.

Consumption of raw materials is as high as ever. It is precisely this footprint that is a major 'driver' of global inequality and ecosystem degradation. The Dutch government has created policies to make our economy more sustainable, our society more inclusive, and for corporate social responsibility. But these policies are characterized by a high degree of non-commitment.

Ideas and successful experiments that fit a new model of society are still running up against rules and patterns that stand in the way of change. Too often, the national government is the inhibiting factor that prevents the transition movement from gaining momentum.

How to gain momentum for planetary well-being?

> *"We must deepen and expand the global dialogue that generated the Earth Charter, for we have much to learn from the ongoing collaborative search for truth and wisdom."*
>
> (Earth Charter, The Way Forward)

With this lens in mind, we initiated a series of online dialogues. Part of the dialogues took place in the liminal period of the COVID pandemic. We reached out to members of our own networks and others with as many different perspectives and backgrounds as possible. We tried to create a safe and brave space to reflect and assess the current times, and to imagine the future beyond COVID.

While we worked on the synthesis of the dialogues, we identified four key areas for collective attention. We believe that a focus on these areas can inform the further development of Earth Charter based indicators for planetary well-being and create momentum:

- Eco literacy and Rights of Nature
- Dialogue that takes the interests of future generations into account

as a foundation for civic participation in governance

- New and unexpected collaboration and partnerships
- Economic models based on indigenous wisdom and a vision on the place of humans as part of the wider community of life.

I. Eco literacy and rights of Nature

> *Respect Earth and life in all its diversity.*
>
> (Earth Charter, Principle 1).
>
> *Integrate the knowledge, values and skills needed for a sustainable life into formal education and lifelong learning.*
>
> (Earth Charter, Principle 14).

In this area we came to the following potential Earth Charter based indicators: 'Eco literacy to gain knowledge about Earth', 'Reinforce the commons', 'Bio-diversity at the basis of decisions', 'Rights of Nature' and 'Media as a partner for Nature'.

Eco literacy - In the Netherlands most people lack sufficient knowledge about Earth and how all life is connected. Our planet has many supportive and interrelated ecosystems that together ensure that there is in principle enough water, air and food for the entire community of life. Modern societies have lost sight of the coherence and awareness of the connections.

It is considered to be basic knowledge to be able to read and write, but insights in deep ecological processes on which all life depends, is not part of our learning. Ignorance is a great danger.

It would be a big step forward when in all educational settings eco literacy is integrated. Non-governmental organisations offer wonderful educational opportunities in the informal sector. But it should also be part of formal education. Cooperative *Learning for Tomorrow* in The Netherlands is working hard on this. One of the participants of the dialogues stated: *"Sustainability should not be seen as an extra subject; it is about preparing our children for the future. Sustainability must become part of every subject and transcend disciplines and years of study. In doing so, we look integrally*

at education, according to the Whole School Approach".

Reinforce the commons – Water is an example of a 'common', a public good, that is perceived in the dominant economic system and used by many as a commodity. Both fresh and salt, below ground and above ground water. The shift must be about the transition from commodity to 'the commons.'

One of the participants stated: *"The main cause of water scarcity is our (Dutch) food production system: 60 to 70% of our water consumption comes from agriculture. More than 60% of our agricultural land is not used directly for human food, but for cattle feed for our meat production. We will have to eat much less meat. This is where SDG-6 starts directly with ourselves and with our daily food choices".*

The Dutch Water Partnership is active, gathering stakeholders to find social and technological solutions for climate adaptation. What is needed is also a broad water coalition that focuses on the value of water. The Lab for Future Generations (incubated in the Worldconnectors network) published a vision on the Value of Water, to raise awareness in The Netherlands on this issue.

Biodiversity at the basis of decisions – The nitrogen crisis in the Netherlands shows the need for transformation. Food production must change; across the board we use too much water, too much CO2 is released, space is taken up, we face biodiversity loss, the impact on health and other spheres of life comes at the cost of food elsewhere. Can we put biodiversity, as the multi-stakeholder Delta Plan on Biodiversity proposes, much more at the basis of our decisions?

There are some examples of regional development in The Netherlands in which agriculture and nature conservation do not run against each other; on the contrary. A good example is *WIJ-land*, in which farmers, ecologists and other actors work together. Among them is also *Commonland*. We see farmers in the news and the streets in The Netherlands resisting change towards sustainability, but we also see farmers as part of a positive solution. More and more farmers, consumers and retailers work together in regional labs and cooperatives. A big step forward would be the introduction of the true price, both for food products as for eco services (such as regenerating the soil and wildlife protection) caring farmers can provide for.

Rights of Nature – Another strategy that was stressed in the dialogues was

granting rights to nature. A way to ensure that soil, air and water cannot simply be abused, used up and polluted. With reference to the rights of nature, proactive initiatives have emerged, also in The Netherlands. Among them inspiring examples as 'the Wood that owns itself' at Estate Landgoed Zonheuvel in Doorn and the decision of the city council of Eijsden-Margraten to give rights to nature in this municipality. Another example is the proposal coming from the Lab Future Generations and supported by many to grant the endangered area of the 'WaddenSea' a legal entity of its own and appoint guardians to ensure its protection. With her book and the start of a new Dutch foundation on Nature's Rights, Jessica den Outer provides leadership for this fast-growing movement.

The 'Stop Ecocide' campaign was also brought to the table in the dialogues. It should be supported because it works towards acceptance of crimes against nature to be legally prosecuted at the level of the International Criminal Court.

Media as a partner for nature - Overall media have the power to frame and magnify events. In addition to education, they can be the actors who join in the fight against eco illiteracy and shape the stories about what society can look like in the future. How do we ensure that the media are properly positioned to play a role in countering fake-news? Investigative journalism could contribute.

II. Dialogue that takes the interests of future generations into account - as a foundation for civic participation in governance.

Principle 4 of the Earth Charter indicates: *"...safeguard the rich treasures and beauty of the Earth for present and future generations."*

In this area we came up with the following potential Earth Charter based indicators: Civic participation, Integrating future generations, and broadening democracy.

Civic participation in policy development and political decision-making processes requires transparency and inclusiveness. The underlying values should be justice and agency. There is a tension between individual and collective interests, as well as between short- and long-term plans. In the short term, the benefits, and costs of the transition towards a sustainable

society and a healthy environment will also be different for different people.

A priority is to make it easier to set up citizens' initiatives, to obtain funding, and to acquire knowledge about how ideas can be introduced into democratic processes. How can the 'softer' voices be heard more? What forms of hybrid governance can emerge that do justice to the fact that citizens and governments are in control together? If we want all voices to be heard, they first must be represented.

Crucial is that civic participation is inclusive and diverse: ensuring that people of different gender identities, cultural and ethnic backgrounds, 'class', religion, age, etc. are invited to the dialogue. Experiments with different forms of dialogues are going on in various places in the Netherlands. Awareness is growing that having a good dialogue to prepare decisions is a crucial part of improving policies. And that a good dialogue contains certain characteristics which must be consciously brought into the process. Think of transparency and concrete agreements on what the policy consequences of conducted dialogues are. Dutch former minister and Earth Charter International advisor Jan Pronk called for the threefold; concretizing, politicizing, and mobilizing. *"Without politicization, it remains talking and that leads to disappointment for groups which do not feel heard."*

The good news is that a citizens' council on climate change is launched, with a mandate from the Dutch parliament. The outcome will be presented in 2025.

Integrating future generations in decision making is the starting point for future generation-suitable policy. Not with a 15-year horizon but with a horizon of 7 generations ahead.

Ask people what they think is important for their own 'legacy', then the reference is often made to what we wish for our children and grandchildren. Or to leave the world more beautiful than they when we came. The Lab Future Generation, together with a broad group of partners, works on proposals to have Dutch policy assessed for its effects on future generations. This should become a standard part of policy assessment. An Ombudsperson for Future Generations, following the example of Wales and Hungary, can monitor this and give unsolicited advice.

Broadening democracy – Conducting the Dialogue is one side of the coin,

then making widely supported democratic decisions is the other side. At every level of decision-making there should be room for participation and representation from society. Voting once every four years is no longer enough to do justice to the complexity of society in finding solutions. And creating support. This broadening democracy is still at the beginning of its development. Other possibilities, including for strengthening European democracy, will have to be discussed further. There is some movement, experiments are being started with citizens' councils, children's councils and stakeholder consultations. Especially in the area of environmental law a lot needs to be learned about participation and it is important to increase the quality of the consultation.

III. New and unexpected collaboration and partnerships

> *To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny.*
>
> (Earth Charter, Preamble)

In this area we came to the following potential of Earth Charter based indicators: new and unexpected collaboration and partnerships with youth.

New and unexpected collaboration – in the context of an integral approach – was emphasized as key in almost every dialogue. What we are looking for is cooperation in such a way that the entire 'organizational ecosystem' is strengthened. By this we mean all parties and individuals who contribute to achieving the Earth Charter and the SDGs. And there is also a need to find new forms of collaboration with which the input of various actors (NGOs, social implementing organizations, individuals, self-employed, commercial companies, social enterprises, government) can be facilitated.

Current organizational and governance tools are no longer applicable. If we want companies to solve some of society's problems, it is important to be able to set up the company that fits in with this. Social entrepreneurs ask for specific rules in order to be able to work on their mission, for instance to come up with solutions for shortage of water in areas of desertification. We can look again at the organizational power of cooperatives. This legal form of organization is interesting for various social and ecological

purposes and cooperatives are proving valuable in getting very different parties supporting a common goal. This raises the question of how we can strengthen the role of citizens and how hybrid forms of private/public/personal ethical business models can contribute to change.

Partnership with youth – Young people can bring change. How can young leaders be heard and included in partnerships for change? And how do we make sure that they are not just symbolically included to join in. From the dialogues: *"If we want young people on board, concrete action is important. They don't just come to talk about it, it's too urgent in their own lives. And there really will have to be visible change because otherwise the gap between the generations will become too big. After the Paris negotiations, young people stood up for real climate change. They say to governments: you have to do what you promised. And that has changed a lot at the basis of society. That is hope. Many young entrepreneurs want to contribute.".*

How do we ensure that young professionals with good ideas and passion don't run into a big blind wall during their first work experience? Qualities for sustainable leadership are therefore needed both in the current senior management as well as in the young professionals who want to start working with sustainability early in their career. The inclusion of concrete qualifications in vacancy and assessment requirements seems to be a good step. These requirements (e.g. the candidate has an affinity with sustainability and is also rewarded within his position for results on sustainability) could also apply nicely to governmental and political positions.

Steps are also being taken in The Netherlands in several training programs to create a league of young professionals with a sustainable mindset. The SDG Professional project is an example in which the Worldconnectors, SDG Houses and The Royal Tropical Institute work together and offer internships and knowledge. Earth Charter International, Cambridge, Erasmus and other trainers offer inspiring Sustainability Leadership programs. A Dutch initiative, The Undercover Activist, provides training for young professionals on workplace activism.

IV. Economic models based on indigenous wisdom and a vision of us as humans as part of the community of life.

> *Economic activities should, at all levels, fairly and sustainably promote human development.*
>
> (Earth Charter, Principle 10).

In this area we came to the following potential for Earth Charter based indicators: systems change, true pricing and ownership of the energy transition.

Systems change – The most fundamental of all changes is the need for systems change in which the goals and underlying values of the current capitalist system are critically questioned and de-mystified to transition into a sustainable, inclusive, and future proof system.

We should move from the idea of humans as 'homo economicus' to 'Indigenomics'; an economy based on indigenous wisdom and the awareness that the 'invisible hand' is not money or capital, but the interdependent connections of all living beings, of which we humans are part. The concept of Indigenomics is coined by Carol Ann Hilton, Earth Charter International Council member.

SDG-8 about decent work & economic growth, refers to economic growth as an indicator of sustainable development. This is contrary to the principles of 'indigenomics' and the Earth Charter. More and more actors in society argue for a more balanced set of indicators in which prosperity is directly linked to planetary well-being. The Bhutanese Gross National Happiness Index teaches us how this could look like.

True pricing – Companies that can only keep their business model running because the social and environmental costs are falling elsewhere, represent a declining business. What they do is neither fair nor sustainable. The True Price Foundation, incubated in the network of Worldconnectors, is working hard to highlight what it means to stop externalising social and ecological costs of production processes. This may sound utopian now, but the estimate is that the true price will become mainstream within 10 years. Investors and banks are already pre-sorting and disinvesting from certain industries. There are overviews in circulation in which investors accurately indicate the risk profile of certain industries and the time frame to withdraw

from them. Polluters are challenged more and more also to compensate, and consumers and employees are increasingly demanding sustainability, including true pricing.

From the dialogues it was clearly stated that it is urgent for Dutch companies to show their true colours and really stand up for the connection between recovery and sustainability.

The current economic system generates conflicts, exclusion, inequality and discrimination and often leads to scattered communities and weak institutions. Changing the economic system is a condition in order to weave a culture of peace in building strong and inclusive organizations.

Basic income is seen by more and more people as a key for change and a new social contract in which the starting point is security of livelihood. Contribution to society through valuable work will remain important, also with a basic income. One of the participants: *"Corona demonstrates the ethical and practical relevance of decent work. An economic growth model based on non-decent work, poor payment below the minimum subsistence level, is a vulnerable model."*

How can we strengthen this discussion about a form of basic income and where are the most important barriers now? This discussion was being conducted by many different smaller parties and in a fragmented way. Collaboration is needed to achieve a shared aspiration and agenda. It is also important to link this perspective to the future of work. In the meantime, a group of members of our network took the initiative to come up with a pilot project for a basic income in The Netherlands.

Ownership of the energy transition – The energy transition already has a major impact on our society in the short term. Whose energy and energy infrastructure is it? Part of the transition to 'renewable' energy is taking place with public money and in public spaces. Citizens must and want to be involved. But where is the debate taking place and which actors dominate the choices? This is particularly relevant now that we see that large international data centres are making use of 'our' sustainable energy resources and that there may not be enough left for citizens. What is the position of these companies, who earns from them, and do subsidies end up in the right place? There are also major concerns about the choices that may have to be made in the future in the event of scarcity or failure. Who decides who gets what? Soon it will turn out that the 'essential'

infrastructure of a data centre for example takes precedence over the rights of citizens. There is a need for good coordination of an integral renewable energy-plan, which also includes developments of communities that want their energy off-the-grid. From the dialogue: *"In any case, the next energy generation will become much more decentralized."*

Conclusion

Turning consciousness into action for a thriving Earth community is urgently needed, obviously also in the Netherlands.

The two biggest trends that emerged from the Dutch Dialogues are about changing the basic assumptions underlying the economic models that are now commonplace and increasing inclusive civic participation to come up with future proof solutions and decisions.

The aim is to stop the destructive and degrading trends that continue to harm and deteriorate all life on Earth. And to turn it around and support regeneration.

Citizens, especially in the context of unusual collaborations can call for systemic change. At the same time citizens work on the transition in citizens' initiatives and local communities. It would help when they enjoy a broader support base. More people and networks are needed that base their activities and lifestyles on the ethical framework of the Earth Charter. This also requires inner development skills and that is why we invite everyone to formulate a personal agenda, using the Earth Charter as compass.

It seems to be an unruly agenda that we must tackle together without the promise of quick solutions. It may interfere deeply with patterns and expectations of comfort and short-term personal gain and the way individuals, companies and governments are accustomed to work.

The greatest gift we can offer ourselves is to stay connected, continue the dialogue and to be open to new insights and life changing experiences.

Change - it starts with us.

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19

Assessing Planetary Well-Being Using Earth Charter Principles

Brendan Mackey

Introduction

The Earth Charter opens with the observation that "We stand at a critical moment in Earth's history, a time when humanity must choose its future." The fact that this statement is now over 20-years tells us that the Earth Charter is not some kind of historical document but rather that it remains as relevant as ever given. The moment we find ourselves in now has reached a point of criticality: we are at the brink of planetary scale breakdowns that bring very real risks of irreversible loss and damage to much of what we value in humans and nature. How quickly the global gestalt has changed! The new millennium brought with it the promise of a post-cold war era of international cooperation and the hope that the existential threat of nuclear war would fade into history. The resulting "peace dividend" could then be invested in promoting a more prosperous and peaceful world. Alas, the world took a different turn and the 2000's saw worsening global conditions as planetary boundaries – the safe environmental envelope for humans and the greater community of life – become increasing breached (Steffen et al., 2015, 2018) and the world increasingly suffering from the combined impacts of the climate and biodiversity crises (Barber et al., 2020). Since the start of the 20th century, the world has been free from the violence caused by war for only very short periods of time (PWM, n.d.), while some 615 million people still live in extreme poverty (*World Poverty Clock*, n.d.). Patterns of production, consumption and reproduction remain unsustainable and are failing to deliver justice for all, and we are falling short of meeting even the 2030 Sustainable Development Goals.

At the same time, the world has never been more connected as our lives become increasingly entangled and interdependent through the growing web of communications, finance, trade and travel. Our well-being and that of future generations are irrevocably tied to the outcomes of our individual and collective actions and how these aggregate at the planetary level. Science has now made it clear that the emergence and sustaining of life is a planetary process (Smith et al., 2016)[– a truth known by Traditional Knowledge keepers for millennia - Earth is indeed literally our mother having given birth to the life processes from which our species evolved, and we are truly part of the same tree of life that makes us members of the greater community of life with whom we share Earth as home.

Who is responsible?

When it comes to planetary well-being, every person, community, organization, corporation and governments at all levels, have responsibility for promoting a more peaceful, just and sustainable world. However, not everyone shares the same power, authority and capacity to influence, nor have the same impacts on Earth's ecological integrity. Rather, some share a greater responsibility than others. As Earth Charter Principle 2 states (a) *Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people and (b) Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.* Multiple-actors therefore can be identified that are focal points for governance or globally significant environmental and social-economic justice impacts including (1) the United Nations, (2) National Governments and (3) multinational corporations.

The United Nations is the main governance mechanism we have for negotiating international agreements between national governments on matters of global concern, including avoiding trans-boundary harm and aggregate impacts on the global commons – especially the global commons that are the atmosphere and the "deep blue" oceans - and matters of universal concern such as human rights and world heritage. However, such is the extent of economic globalization and the inequality in global wealth (where the richest 10% of the population takes 52% of global income and the poorest half earns a mere 8.5% (Chancel, L. et al., 2022)),

we must also consider the responsibilities of corporations when evaluating contributions to planetary well-being (Brou et al., 2021).

The Earth Charter as an evaluation framework

The Earth Charter provides a comprehensive framework for evaluating significant actors' contributions to planetary well-being. The overarching mission of the Earth Charter as stated in the Preamble is to help bring about a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. The Charter comprises four main themes, 16 major principles and 61 supporting principles. The Preamble also notes that these are interdependent principles for a sustainable way of life and serve as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions can be guided and assessed. Therefore, in considering the role of the Earth Charter here we must look below the four themes and dig deep into all the principles for guidance as to appropriate measures.

It is helpful to distinguish between goals, principles, criteria and indicators. Goals can be thought of here in terms of the outcomes we seek. Principles provide guidance as to what is the right and wrong course of action in a given context. Criteria are the conditions that must be met to comply with the principles, while indicators are the specific things we can measure either quantitatively or qualitatively. The four main themes can be thought of as the goals or outcomes that would arise would the Earth Charter principles be given full affect and therefore define planetary well-being can be defined from an Earth Charter perspective:

- Protect and care for the community of life
- Ecological Integrity
- Social and economic justice
- Democracy, non-violence and peace

Each main theme contains four major principles which provide further ethical guidance. Each major principles in turn have a varying number of supporting principles which here we can think of criteria. Various indicators

can then be identified to help measure the contribution of major actors to an Earth Charter-defined state of planetary well-being. Not all the criteria (i.e., supporting principles) will have a readily identifiable indicator while for some there will be an obvious and available data source. As a first step to stimulate further discussion, I focus here on an indicative sub-set.

Theme I – Respect and care for the community of life

> *Principle 1. Respect Earth and life in all its diversity.*
>
> *Subprinciple 1a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.*

There has been remarkable progress in recent years in the legal recognition of the 'Rights of Nature' in national constitutions and law. Since 2006, governments around the world have adopted legal provisions (statutory laws and court rulings) recognizing 'Nature' as a subject with inalienable rights. Rights of Nature legal provisions now exist in Brazil, Bolivia, Colombia, Ecuador, India, Mexico, New Zealand, and the US at the subnational level (Kauffman et al., 2018). A relevant indicator therefore at the level of national governments would be whether a country had recognized the Rights of Nature in their constitution and other legal provisions. For those countries that have, an additional indicator would be the number of government or judicial decisions where the Rights of Nature have been given priority over destructive development proposals.

> *Principle 3. Build democratic societies that are just, participatory, sustainable, and peaceful.*
>
> *Principle 3a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential.*

In December 1948, the United Nations passed a resolution for the Universal Declaration of Human Rights (UNDHR), setting a standard of rights to be universally protected (U.N., n.d.). In December 1966, the UN General Assembly adopted the International Covenant on Economic Social and Cultural Rights (ICESCR), and the International Covenant on Civil and Political Rights (ICCPR). Together, the UDHR and these two Covenants are

known as the International Bill of Human Rights. National governments have an obligation to respect, protect and fulfill these rights. Human rights treaty bodies have been established as committees of independent experts that monitor implementation of these human rights treaties. In addition, international NGOs such as Human Rights Watch publish annual assessments of human rights and summarizes human rights conditions in over 100 countries and territories (Human Rights Watch, 2023). These monitoring mechanisms provide an appropriate source of data for evaluating a country's human rights record.

Theme II - Ecological Integrity

> *Principle 5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.*
>
> *Principle 5b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.*

The International Union for the Conservation of Nature (IUCN) has established the World Database on Protected Areas (WDPA) which is the most comprehensive global database on terrestrial and marine protected areas. It is a joint project between the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN), managed by the UNEP World Conservation Monitoring Centre (UNEP-WCMC). WDPA contains information on the full range of protected areas including national parks, world heritage areas and Indigenous and community conservation areas (IUCN, n.d.). The percentage of a country's land and sea area that is managed as a protected area is a direct measure of extent to which this principle is being operationalized. However, also relevant here is the ecological condition of the protected areas and the efficacy of conservation management in managing threatening processes. Additional indicators can also be drawn from the Convention on Biological Diversity Global Biodiversity Framework which has four 2050 goals and 22 2030 targets; including Target 3 to conserve 30% of land, waters and seas in protected areas.

Principle 5f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.

Principle 7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being.

Principle 7b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.

Aside from nuclear war, the great existential threat to planetary well-being comes from human influenced climate change due to the greenhouse gas emissions from burning fossil for energy and from deforestation and degradation. To give effect to this principle requires that all nations reduce emissions to a level that avoids dangerous climate change, as per the goal of the U.N. Framework Convention on Climate Change. At subsequent negotiated agreements, especially the Paris Agreement and the Glasgow Climate Pact, the world community has agreed that this would require limiting global warming to 1.5°C above pre-industrial levels. Each of 197 countries have agreed to contribute to this goal and to increase their mitigation ambition over time as needed. Countries are also required to submit annual greenhouse gas inventories reporting on net emissions from all sectors. Therefore, all the data are available for assessing the extent to which countries are meeting their Paris Agreement mitigation targets. This requires countries to be phasing out fossil fuel use and relying increasingly on renewable sources such as solar and wind.

Theme III – Social and Economic justice

9. Eradicate poverty as an ethical, social, and environmental imperative.

a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required.

Principle 10. Ensure that economic activities and institutions at

all levels promote human development in an equitable and sustainable manner.

Principle 10a. Promote the equitable distribution of wealth within nations and among nations.

There are a number of web based publicly available databases that provide statistics on indicators of poverty; for example, the World Bank Poverty and Inequality Platform (PIP, n.d.) provides annual statistics on a set of indicators including: poverty rate at $1.90 a day (% population); poverty rate at national poverty; and GNI per capita (Atlas method; US$); and inequality trend. Nations also report on progress in meeting the 2030 Sustainable Development Goals which includes data on targets and indicators related to 17 goals including good health and well-being, clean water and sanitation, quality education, reducing inequalities and zero hunger.

11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.

11a. Secure the human rights of women and girls and end all violence against them.

The World Economic Forum publishes the Global Gender Gap Index (WEF, n.d.) which benchmarks the evolution of gender-based gaps among four key dimensions (Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment) and tracks progress towards closing these gaps over time. The 2021 index benchmarked 156 countries. The methodology measures scores on a 0 to 100 scale and scores can be interpreted as the distance to parity.

12b. Affirm the right of indigenous peoples to their spirituality, knowledge, lands and resources and to their related practice of sustainable livelihoods.

The Unites Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was adopted by the General Assembly in 2007. It establishes a universal framework of minimum standards for the survival, dignity and well-being of the Indigenous peoples of the world and it elaborates on existing human rights standards and fundamental freedoms as they apply

to Indigenous peoples (UNDRIP, n.d.). These standards could be developed into a set of indicators for assessing a country's track record regarding affirmation of the rights of Indigenous peoples.

Theme IV - Democracy, non-violence and peace

> *13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice*

Anumber of organisations annually report on national level indices regarding the quality of democracy. For example, the Democracy Matrix is funded by the German Research Foundation (DFG) and is being conducted by the Chair of Comparative Politics and German Government at the University of Würzburg(Lauth et al., 2023; Lauth, H-J., 2021). The Democracy Index is an index compiled by the Economist Intelligence Unit (EIU), the research division of the Economist Group, a UK-based private company which publishes the weekly newspaper The Economist (EIU, n.d.).

> *Principle 16. Promote a culture of tolerance, nonviolence, and peace.*
>
> *Principle 16c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.*

There was considerable debate on this issue during the drafting of the Earth Charter and the global consultation process. Some argued that the Earth Charter should be proposing full disarmament on the basis that ethically war is wrong and there should be a principle that is aspirational in this regard. However, the consensus view led to the current formulation which if implemented, would nonetheless represent a monumental shift in global geopolitics and massive winding back of the industrial-military complex. In considering how this principle could be monitored, an important debate would be stimulated on what constitutes legitimate defensive capabilities and actions. Some relevant indicator data are beginning to become publicly available such as the Global Militarisation Index of the Bonn International Centre for Conflict Studies which compares, for example, a country's military expenditure with its Gross Domestic Product (GDP) and its health expenditure (GMI, n.d.).

Principle 16e. Ensure that the use of orbital and outer space supports environmental protection and peace.

This is perhaps one of the Earth Charter's more prescient principles in that 20-years ago the exploitation of orbital and outer space for commercial and national security aims was still very much "early days" and much remained in the realm of speculative fiction. Now, orbital space has become massively exploited by corporations, and both inner and outer space are foci of national defence systems. Monitoring the space activities of major countries and corporations is in its infancy but the scale of this issue is growing fast. For example, since 2017 there were over 1,700 active satellites in orbit around Earth with a at least another 3,000 satellites planned to be launched with two-thirds for commercial organizations and one-third for civilian and military agencies in over 60 countries (Lal, B. et al., 2018). A major issue for global governance of planetary well-being in the coming decade is whether orbital and outer space will be viewed by the world community as an extension of the global commons or not (Goehring, J.S., 2021) and if not, will it be assumed to "territory" that can be "annexed" by national governments and freely exploited by corporations.

Toward an integrated assessment

There are a number of ways in which the different measures obtained from the selection of criteria (i.e., the Earth Charter's principles) and possible indicators discussed here could be used to give an overall assessment of a country's contribution to planetary well-being.

One focus can be on the relative contribution of each country and changes over time. Small island developing states (SIDS) for example, would have a miniscule contribution to aggregated impacts in absolute terms compared to those of the G7 countries. Therefore, it is important to assess each country's contributions in context and identify their achievements, barriers to progress and sustainability challenges. Such analysis can also help reveal where capacity building is most needed. Another useful approach would be to select the indicators values for a set of related Earth Charter principles and compare each country's performance. From this perspective, there is little value in ranking countries based on a total, aggregation of criteria performance.

A second focus could be on considering what we could call the "planetary well-being majors", that is, those countries that make the most positive/ negative aggregate contributions. This approach is used when considering the role of corporations in the worsening climate crisis where studies have revealed that 100 fossil fuel producers are responsible for 923 billion tonne of CO2_e and 52% of global industrial greenhouse gas emissions since the industrial revolution (Griffin, P.D., n.d.). When it comes to countries, the top "greenhouse gas majors" defined in terms of historical cumulative net anthropogenic emissions on a regional basis are those from North America (23%), Europe (16%) and then Eastern Asia (16%) (IPCC, 2022).

A third focus could be calculating an overall planetary well-being index. This index would need to be based on a subset of principles and indicators for which there were values for every country. For those, it should be feasible to convert each country score into an interval scale (e.g., 1-100). Or, depending on the data types, it might only be feasible to generate an ordinal scale for each country; i.e., a ranked categorical scale such as "1 (worst) – 2 (bad) – 3 (OK) – 4 (good) – 5 (excellent). In generating an overall index and country ranking, it would be most important to provide a narrative which interprets the results for the reader and addresses the "so what" questions: what do the results mean? How can they be used to help improve a country's contributions? Factors such as inequality of wealth between and within countries, and historic legacies from colonisation, would also have to be taken into account.

Another factor that warrants close attention is ensuring that indicators capture the environmental and social footprint of a country beyond its national borders. This is the basic concept behind ecological footprint analysis (Wackernagel, M. Et al., 2006). A country might appear positive in relation to its domestic activities but be "exporting" its environmental impacts or causing human rights infringements elsewhere.

It is important to stress that Earth Charter's principles are considered to be all equally importance and interdependent. This means that when combining them, or a subset of them, into a single index, they would logically be given equal weight. However, it is important to recognize that countries will perform better on some indicators and worse on others. Furthermore, their combined effect which should be taken into account. For example, Australia, my home country, would score high on an indicator for principle 5b as it has about 20% (some 152 million hectares)

of its territory in its national protected area network, with around 44% an indigenous protected area (NRS, n.d.). However, Australia also has a shocking record in terms of endemic species extinctions with 100 plant and animal species having become extinct in the 230 years since Europeans colonised Australia including 38 plants, 34 mammals, 9 birds, 4 frogs, 3 reptiles and 1 fish (Murphy et al., 2019). Therefore, Australia would rank low on an indicator for principle 5c that took into account species extinctions as well as percentage in a protected area.

To conclude, the Earth Charter provides a comprehensive ethical framework for assessing the contribution of key actors, including countries and corporations, to planetary well-being. The primary and supporting principles, which are written in the form of ethical imperatives, provide clear "hooks" for identifying relevant criteria, indicators and sources of data. From an Earth Charter perspective, planetary well-being is conditional on all four ethical commitments: protect and care for the community of life; ecological integrity; social and economic justice; democracy, non-violence and peace. If we seek to measure and assess the contribution of countries, corporations, or any other community and organization, then we need to look for indicators that inform us on all four themes. Ultimately, as the Charter's last principle suggests, planetary well-being is an outcome of right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.

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20

The Conditions for Planetary Well-being

Leonardo Boff and Mirian Vilela

Planetary well-being can only be properly understood and achieved within the new conditions created by the many changes that have taken place on Earth and the threats that weigh upon it. We are now in a new geological era—the Anthropocene—where the greatest threats to life stem from human activities carried out without proper restraint or care for nature.

Threats to the Earth and Life Systems

We will not list them all, but three are especially important:

- **The increasing global warming** and its extreme effects. The goal set by the 2015 Paris Agreement was for all states to work to ensure global temperature rise would not exceed 1.5°C by 2030. However, according to studies, we already surpassed that limit in 2024 (World Meteorological Organization, 2024). Earth is retaining more heat than expected. As UN Secretary-General António Guterres stated: "We are on a highway to climate hell with our foot on the accelerator" (Guterres, 2022). The effects may be disastrous for both the life system and the Earth system.
- **The threat of nuclear war** among the major military powers, whose effects could deeply damage the biosphere and the foundations for the survival of the human species (Jacobsen, 2024).
- **The worsening of Earth Overshoot,** meaning that all non-renewable natural goods and services essential to the maintenance and reproduction of life are being depleted. In 2024, Earth Overshoot Day occurred at the end of August; in 2025, it came earlier—at the end

of July. This means that in just seven months, we consumed what we should have used in an entire year (Global Footprint Network, 2025). How can we make it to December? The Earth, a living superorganism, reacts to increased warming with more viruses and more extreme events. Our way of inhabiting Earth causes damage on a planetary scale and can render life unsustainable. We know that we have surpassed six of the nine planetary boundaries (Richardson, 2023).

The Meaning of Planetary Well-being

Even within this grim scenario, we must ask: to what extent can and must humanity and all nations collaborate toward possible and desirable planetary well-being? Here, Pope Francis's warning in his encyclical *Laudato Si'*, on the care of our Common Home (Pope Francis, 2015), addressed to all humanity, not only to Catholics, is relevant: "We must all undergo a global ecological conversion" (n.5). Without this willingness to change, we will not overcome the aforementioned threats and may reach a point of no return.

We could face the collapse of our civilization and even our very existence on this planet. In *Fratelli Tutti* (Pope Francis, 2021), the same pontiff was emphatic: "We are in the same boat: either we all save ourselves, or no one is saved" (n.34).

Nevertheless, we hold on to the hope expressed in the Earth Charter (2000): "Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions" (Preamble).

But first, we must clarify what is meant by "planetary well-being." The answer cannot be anthropocentric, as if human beings were the center of everything and the only ones with intrinsic value. On the contrary, humanity is one link in the chain of life, part of nature, and a conscious member of this broader community. Thus, planetary well-being must be understood not as limited to human well-being, but as encompassing all living beings and Earth's natural systems. As the Earth Charter affirms: we must "recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings" (Principle 1.a).

On an infrastructural level, well-being means fair access to basic goods: water, food, health, housing, energy, safety, and communication. **On a**

social level, it means the ability to live a materially and humanly fulfilling life with dignity and freedom, in an environment of cooperation, solidarity, and peaceful coexistence.

This kind of well-being—which aligns with the common good—applies to all countries and peoples. But since we are part of nature and could not live without it, well-being must include the biotic community, ecosystems, and all species and living beings, who must be respected as rights-bearing entities. As the Earth Charter says, we form a "community of life." Well-being also includes respect for the abiotic world—landscapes, mountains, rivers, lakes, and oceans—since we are part of the great Earth community with all of them.

Because everything is interconnected, **cooperation** is the lifeblood that nourishes planetary well-being. The planet, understood as a living super-entity that systemically integrates physical, chemical, and biological components, can only experience well-being if it becomes sustainable as a whole—maintaining balance among all its elements and continually renewing and regenerating itself.

A Pathway to Planetary Well-being

The Earth Charter's conclusion offers us a roadmap to a possible planetary well-being, where it says:

> "As never before in history, common destiny beckons us to seek **a new beginning. This requires a change of mind and heart**. It requires a new sense of **global interdependence** and **universal responsibility**... so we may achieve a sustainable way of life at local, national, regional, and global levels"
>
> (*The Way Forward*).

Let us analyze each part.

From the "Dominus" Paradigm to the "Frater" Paradigm

To say we need "a new beginning" echoes the historian Eric Hobsbawm, who warned at the end of *The Age of Extremes:*

> "We do not know where we are going. But one thing is certain: if humanity is to have a future, it cannot be by prolonging the past or the present. If we try to build the third millennium on that basis, we will fail. And the price of failure, the alternative to changing society, is darkness"
>
> (Hobsbawm, 1994).

In other words, the dominant paradigm, developed by the founding fathers of modernity —Descartes, Galileo, Newton, and Francis Bacon —can no longer offer solutions to the crises it itself created.

It was rooted in the will to power—the drive to conquer and dominate peoples, continents, social classes, nature, and life. It saw the human being as *dominus*—lord and master of nature. Humanity did not consider itself part of nature or alongside other beings, but above and outside of it, free to exploit it at will.

This *dominus* paradigm brought undeniable advancements, from antibiotics to global communication networks. But it also created the principle of self-destruction: with the arsenal of weapons already built, we could exterminate all human life and many other species, severely damaging the biosphere. Einstein is credited with the observation: **"The thinking that created the problem cannot be the same thinking that solves it. We must develop new ways of thinking."**

Technoscientific thinking, essential for our complex societies, cannot by itself resolve our current crises. It's an illusion to think that by filing down the wolf's teeth, we eliminate its voracity. The problem isn't in the teeth—it's in the nature of the system itself. In short, our dominant way of inhabiting Earth and our careless, excessive relationship with other living beings and natural rhythms cannot save us. Hence the importance of the Earth Charter's call for "a new beginning" if we wish to remain under the gentle light of the sun on this small, beautiful planet.

As an alternative to *dominus (owner and lord)*, projected by many, but especially by Pope Francis in its Encyclical *Fratelli Tutti* (2020), is the

paradigm of the **human being as *frater***—brother and sister among all humans and with all other beings of nature. We are part of nature and always in community with other beings, forming the "community of life." Science shows we share the same genetic code present in all living organisms. That is why The Earth Charter affirms this spirit of kinship with all life (Preamble).

All life forms—emerging from the original cell 3.8 billion years ago, from dinosaurs to hummingbirds to us—are made of the same 20 amino acids and 4 nitrogenous bases. We are, in fact—not just metaphorically—siblings. This was confirmed by scientific decoding of the genetic code in the 1950s (Watson, 2003).

The *frater* paradigm implies a new, respectful, and caring relationship among all humans and with nature. Transitioning from one paradigm to the other will not be easy, but it is necessary. It aligns with the logic of the universe and the desires of peoples: we are all interconnected and depend on one another for our existence and survival. This applies to both cosmogenesis and anthropogenesis.

Change of Mind: Earth as Gaia

The new paradigm requires a new view of Earth, one that moves beyond the dominant classical view based on physics and mathematics, which saw Earth as a lifeless, purposeless object (*res extensa*, in Descartes's terms). Since the 1970s, Earth and life sciences, cosmology, and astrophysics have offered a new vision.

James Lovelock was a pioneer, comparing the physical and chemical makeup of Earth to that of Mars and Venus. He concluded that Earth is a living entity, organizing all its systems to sustain life. He named it **Gaia**, after the Greek goddess of life (Lovelock, 1988).

Even earlier, the Russian W. Vernadsky (1926) argued for understanding the whole planet ecologically and for seeing the biosphere as integral to Earth. His foundational book was titled *The Biosphere* (Vernadsky, 1998).

This view goes beyond the still-dominant belief that Earth is like a treasure chest full of infinite resources. That illusion underpins the myth of endless

growth. But both "infinities" are false. Earth is a small, old, overexploited planet with limited natural goods and services—and thus cannot support limitless extraction.

The Earth Charter, echoing the best scientific knowledge, affirms: **"Earth, our home, is alive with a unique community of life"** (Preamble). Pope Francis's encyclical on care for our Common Home says the same. The term "Common Home" has entered in the ecological, pedagogical, and political language as an expression of the new phase of Earth and humanity, the planetary phase. That is, the webs of relationships of all kinds that intertwine the planet, effectively making it the Common Home of all peoples, nature included.

This is the new mindset, and Earth vision, we must adopt if we are to realistically speak of planetary well-being. As it stands, Earth is a Common Home in ruins and devastated by the industrialist voracity that has taken over all countries. No wonder the Earth Charter dramatically calls for us to **"form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life"** (Preamble). It emphasizes, as do the papal encyclicals: **"We must care for the community of life with understanding, compassion, and love"** (Principle I.2).

If we do not develop a planetary ethic, an ethic of care, respect, and shared responsibility, it will be hard to ensure planetary well-being. From the astronauts' perspective (the Overview Effect), we understand that Earth and humanity are one. They have the same origin and share the same destiny. Humanity itself is Earth (*humus)*, which, is that portion of Earth that at a certain point in evolution, began to feel, think, love, and care. That was when in the evolutionary process, the human, man and woman, emerged. The new *frater* paradigm is based on this new awareness of Earth as Gaia, the Great Mother, Pachamama.

Planetary well-being requires us to protect forests, waters, biodiversity, soils, and subsoils—home to quintillions of microorganisms that sustain Gaia's vitality. We cannot heal Earth's wounds with mere band-aids, but with friendly, regenerative relationships that restore her lost balance.

Change of Heart: The Recovery of Cordial Intelligence

The paradigm of modernity is fundamentally based on instrumental-

analytical reason, which underlies the technoscientific project. This has become the main tool for the domination of nature and of marginalized or colonized peoples.

The exclusive and excessive use of intellectual reason has produced a kind of lobotomy in human beings, rendering them incapable of feeling the suffering for the poor, the most vulnerable, and the wounds inflicted upon Mother Earth. This paradigm has repressed cordial and emotional intelligence under the pretense that it would hinder objective analysis. However, new epistemologies and hermeneutics—especially following the advances in quantum physics—have convinced us that all knowledge, no matter how objective it aims to be, always involves the human subject with their emotions and interests. That is why intellectual reason must always be complemented by cordial or sensitive reason.

We now know that cordial and sensitive reason (limbic brain) emerged millions of years before intellectual reason (neo-cortical brain), when mammals first appeared in the course of evolution. In them, love and care for their offspring became manifest.

We human beings are rational mammals who combine **logos** (rationality) with **pathos** (sensitivity and heart). Cordial and sensitive reason governs the realm of virtues such as love, empathy, solidarity, ethics, and spirituality.

Today, if we want planetary well-being, we must recover our sensitivity and the dimension of the heart. We must establish a bond of affection with all beings, starting with human beings—regardless of race, color, culture, religion, or sexual orientation, as indicated in Principle 12 of the Earth Charter—but also with the rest of nature: plants, animals, waters, mountains, and landscapes.

Cordial reason enriches intellectual reason and moves the human being to a true passion for the Earth and everything it contains. It also opens us to simultaneously hear the desperate cry of the poor and the wounded cry of the Earth. In this way, we become more human—that is, more sensitive, more supportive, more tender, and more fraternal (Boff & Hathaway, 2009).

A Sense of Global Interdependence: A Requirement for Planetary Well-being

One of the foundational theses of the new cosmology and also of ecology is the fact that all beings are interwoven in webs of reciprocal interrelationships. All co-evolve together, each helping the other—not just through natural selection—so that all may continue to exist within the cosmogonic process. Every being, no matter how insignificant it may seem, has its place and fulfills a role in relation to the whole.

The same principle applies to human and planetary well-being: it only truly exists if everyone is willing to collaborate and internalize the real interdependence that governs all ecological, cultural, social, political, community, and personal factors.

Here we come up against the great obstacle of the modern and neoliberal paradigm: excessive individualism. In this paradigm, the concept of the common good and planetary well-being has been cast aside. In its place, competitiveness, profitability, flexibility, and the dominance of the market have taken over— including access to common goods essential for life, such as water, a natural, vital, and irreplaceable common good, or seeds. Both have been transformed into commodities and given a price on the market. Only those who can pay get to eat and drink. The general global trend is the privatization of all public goods. As privatization spreads, it also legitimizes private gain at the expense of the common good and collective well-being.

Our shared destiny—whether tragic or blessed—depends on whether we develop and adopt a sense of interdependence among all beings, not only among humans but also with our environment and with nature.

This global interdependence could be ensured if we had—what does not yet exist and must be urgently constructed—a global social contract and a global Earth governance system, to address issues that concern both human and environmental realities. A global problem requires a global solution, articulated from a pluralistic center (of nations and peoples). This is the lesson we must learn from the changes occurring on planet Earth and within global societies.

The Sense of Universal Responsibility

Correlated to the principle of global interdependence is that of universal responsibility. Responsibility implies being aware of the harmful or beneficial effects of our personal and collective actions on others (including future generations) and particularly on nature. Technoscience, detached from an ethical sense, has waged a veritable war against Gaia, overexploiting all ecosystems in the soil, subsoil, air, rivers, and oceans.

In this war, we human beings have no chance of winning, because Earth is far more powerful than the all the will of our techno-scientific and industrialist culture to dominate.

The innate tendency of the industrialist and capitalist mode of production is to continue exploiting the planet's resources until it becomes uninhabitable for all. In this case, we can even consider the hypothesis that Earth may no longer want us on its face, as humans threaten the existence of all other living beings and life in its diversity.

It is not without reason that we mentioned earlier that we are in a new geological era, the Anthropocene. That is, it is humans, not some passing meteor, who pose the greatest threat to life on our planet. The decimation of species by the thousands each year has led many to speak of a Necrocene—that is, the massive loss of life perpetrated by the human species. There is also talk of the Pyrocene, due to the large and recurring fires in many parts of the planet. If this veritable ecological Armageddon occurs, Earth will continue to revolve around the sun, but without us.

This universal responsibility must take into account the principles of prevention and precaution. Prevention occurs when we are able to control the effects of our practices and interventions in nature so that they are not harmful to the atmosphere, the biosphere, society, and nature as a whole. The precautionary principle should be adopted "when knowledge is limited...and actions should be guided to avoid the possibility of serious or irreversible environmental damage" (Principle 6 of the Earth Charter).

It was the philosopher Hans Jonas's merit to delve deeper into the "principle of responsibility" (the title of his book) as a fundamental condition for our continued existence on this planet (Jonas, 1979). Such universal responsibility presupposes a heightened level of awareness about the risks that plague the Earth system and the life system. It is in this precise context that he

refers to "fear" and even "dread" as factors that compel us to change our behavior and to unconditionally assume the principle of responsibility.

Humanity, upon collectively realizing that it could disappear, either through a globalized nuclear war or through very serious disturbances to the Earth's balance (terrifying extreme events, earthquakes, tsunamis, devastating typhoons, droughts, floods, etc.), may find itself forced to take drastic measures to guarantee universal responsibility and thus ensure its life and avoid civilization collapse.

A Sustainable Way of Life in All Areas

The outcome of this entire process must lead us to a true paradigm shift—"a new beginning," as referred to in the Earth Charter (*The Way Forward*), a "new way of living at the local, national, regional, and global levels" (*The Way Forward*).

Notice that it does not use the dominant mantra in our culture and in global policies: "development." Given the global situation, the type of development that is pursued (and measured by Gross Domestic Product) is completely unsustainable (Boff, 2015).

The prevailing vision of development is unsustainable because it is based on two false premises: that Earth's resources are unlimited and thus allow for unlimited growth/development. The Earth Overshoot Day data referenced earlier renders the idea of unlimited growth/development entirely illusory.

It is also worth noting that the Gross Domestic Product (GDP) only accounts for material goods and services that have market value. However, what truly matters for human beings—such as love, friendship, peace, solidarity, peaceful coexistence, care for nature, and reverence—are invaluable, intangible goods, and yet they are not counted in GDP (according to the dominant narrative, woe to the country whose GDP does not show positive growth rates!). A wise example is the small country at the foot of the Himalayas—Bhutan—which created the Gross National Happiness (GNH) index. The first values considered are personal well-being, social well-being, and the rate of peaceful coexistence. Economic well-being is only the 13th item.

This is not about denying development, which is essential for the development of developing and least developed countries, that need to progress in all areas to meet the needs of their people (better production, food sufficiency, sanitation and road infrastructure, healthcare, and education). But the flaw in the modern paradigm is placing the economy above politics and life, and politics above ethics, within the capitalist mode of production. In this model, profit occupies the central position, governed by fierce competition and individual accumulation, achieved through the ruthless exploitation of all ecosystems. Economy and the market become the axial realities shaping society, disrupting social relations to the point of creating a double injustice: a social one with millions thrown into poverty and misery and an ecological one, through the devastation of ecosystems due to dominant industrialist greed.

The Earth Charter, in proposing to "generate a sustainable way of life," offers a saving and achievable alternative—provided we start from the bottom up, from the territory, by valuing bioregionalism, where real sustainability can be achieved. In the territory, the well-being of the people is realized, as it is there that real integration between human beings and nature can occur. Participatory relationships among all will prevail, and a socio-ecological-cultural democracy will be established, with a circular economy in harmony with nature's rhythms—not destructive of them. The network of these new phenomena, already underway in various parts of the world, contributes significantly to planetary well-being and anticipates a more hopeful future for all.

When humanity becomes truly aware that it lives in a single Common Home—the *Magna Mater* of the ancients, the *Pachamama* of the Andean peoples, and *Gaia* for moderns—with nature included, and feels the interdependence among all, including with other beings, and experiences a universal responsibility to care for this sacred inheritance, bequeathed by the Universe or by the Being that gives life to all beings (God), then all the conditions for planetary well-being will be met.

This is the trend of the universal evolutionary process, which includes our planet and lies within human possibilities. If we all cultivate goodwill—the only virtue that has no defect, for otherwise it wouldn't be "good"—this project will cease to be a dream and become a viable utopia: a less cruel world, in which it is much easier to live with care and love.

We have established above the theoretical frameworks for planetary well-being. In the following section, we suggest concrete points with which we could measure and verify planetary well-being.

Indicators That Can Be Used to Measure Our Contribution to Planetary Well-being

The act of measuring something helps us focus our attention on it and seek ways to improve it. Just as the instruments we use today to measure the so called "progress" or "development" did not exist 100 years ago (as they were created from a particular perspective and are now globally used to influence decisions), we can also create new tools with a different outlook—tools that broaden our vision by evaluating countries' progress from new angles.

And why not envision that, in the near future, these new instruments of measurement and/or comparison— that can be created today—will be used by future generations in mainstream decision-making processes, thereby generating significant changes?

In this context, it is urgent to discuss and seek ways to answer the question: **How could we measure or compare our contribution—and more specifically, the contribution of each country—to planetary well-being?** We could use existing indicators and data sources for this task, but look at them from a new perspective.

What indicators could be used for this major task, if we take the Earth Charter as our guide? Below is a set of **8 indicator categories** we propose—not as an exhaustive list, but as a stimulus to help us reflect on the topic:

1. Air, Water, Food – the Essentials for Life

The most basic needs for any living being, in order of priority, are: clean air, access to water, and food (which require healthy, fertile, pesticide-free soil and ecosystems). Therefore, we should measure and highlight which countries contribute the least to air and water pollution (and also those

with the worst air quality), those that respect, care for, and protect their water sources, aquifers, and watersheds, and those that ensure healthy soil for food production, allowing their populations access to pesticide-free food. This requires effective legislation, implementation, and monitoring.

2. Basic Services and Poverty Reduction

Next, we should make visible the countries where the population has the greatest access to housing, sanitation, and safe basic education—and where the fewest people live in poverty. This relates to **Principle 9 (a, b, c)** of the Earth Charter.

3. Waste Generation and Consumption

Solid waste production is a key indicator of how much a country—and its population—contributes to or hinders planetary well-being. It reflects patterns of consumption and production and affects soil (and sometimes air) contamination if not properly managed—which is the case in most parts of the world. We should therefore highlight the countries with the highest and lowest levels of solid waste production, both in total and per capita, to raise awareness among citizens and institutions and move toward zero waste. This requires not only measurement but also education, legislation, and enforcement. This relates to **Principle 7 and 7a** of the Earth Charter.

4. Energy Sources

What sources of energy does each country use? This is a key indicator of its contribution to planetary well-being. Therefore, we should include data on the percentage of clean and renewable energy usage, and how much each country invests in these sectors. For example, how much does a country use and invest in the development of clean vs. polluting non-renewable energy? This reveals the ethics, awareness, and commitment to the common good among decision-makers. This is linked to Earth Charter **Principle 7b**.

5. Forest Cover

We should track countries with large, forested areas, those with the lowest (or no) deforestation rates, and those that are actively reforesting. These three interrelated data points should be made visible in this analysis.

These aspects also relate to countries' contributions to global warming—i.e., how much they do or do not help reduce greenhouse gas emissions (CO2, methane), and their per capita ecological footprint.

6. Biodiversity

Indicators of biodiversity include identifying megadiverse countries and those that best protect their biodiversity and ecosystems. These indicators align with **Principles 1, 2, 4, and 5** of the Earth Charter.

7. International Cooperation

Which countries care beyond their own borders and invest in international cooperation? We could use data on contributions to **Official Development Assistance (ODA)**—international support from developed countries to foster economic and social development in developing countries. This includes financial resources (grants, concessional loans), technical assistance, and projects aimed at poverty reduction, healthcare, education, infrastructure, and the environment. This aligns with Earth Charter **Principles 2b, 8a, 9c, and 16a**, and the understanding that the more knowledge and power one has, the greater is the responsibility to contribute to the common good.

8. Peace and Militarization

Lastly, we could use indicators related to peace—countries with fewer internal conflicts, less engagement in wars, and lower military spending. It's not only about identifying countries that have or have had wars but also those that profit from them through arms production and trade, even if they are not at war themselves. These indicators relate to **Principles 16,**

16c, and 16d of the Earth Charter.

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We leave these examples of indicators as a starting point for constructing a new narrative and new tools for measuring and making visible our contributions to planetary well-being—using the Earth Charter as a lens. Such exercise and measurement tools can eventually foster the understanding that the main drive of our countries' economies and action ought to be to contribute to planetary well-being.

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Afterword

A Call to Courage and Commitment through the Lens of the Earth Charter

Michael J. Bracken
Chair, Earth Charter International Board

The essays gathered in this volume are not merely reflections on planetary well-being; they are milestones in a long and urgent journey toward a civilization that honors the Earth as the source and sustainer of life. Together, they challenge us to reframe our deepest assumptions — about progress, value, security, and even the meaning of well-being itself. They remind us that the health of humanity is inseparable from the health of the planet, and that our moral horizon must extend far beyond the span of a single generation.

Guided by Visionary Voices

We have been guided through multiple ways of seeing and knowing. Francisco Rojas Aravena, in his Foreword, urges us to "build new insights" that bridge the well-being of people and planet. Fritjof Capra and Jeremy Lent illuminate the structural principles of an ecological civilization, revealing how systems thinking and cultural transformation are inseparable. María Fernanda Espinosa calls us to rebuild our relationship with nature as an act of survival, not sentiment. Ricardo Young, with strategic clarity, explains the promise of the Earth Charter Index as a way to measure whether our aspirations are matched by action.

Reimagining Our Place in the Fabric of Life

Kazuo Takahashi sketches a planetary perspective that transcends the boundaries of nations. Carol Anne Hilton offers a vision of "indigenous economic futurisms" rooted in reverence and reciprocity. Marcello Hernandez-Bianco and Robert Costanza show how ecosystem health is the essential foundation of human well-being, while Edgar Gutiérrez offers the living example of Costa Rica's choices as a gift to the world. Georgy and Marina Fomenko remind us that ethics is not a complement to policy but its essential core.

The Guiding Compass of the Earth Charter

The Earth Charter emerges in these pages as more than a historic declaration. It is a moral compass for the 21st century — one that calls us to respect and care for the community of life, to safeguard ecological integrity, to advance social and economic justice, and to deepen democracy, nonviolence, and peace. As Mirian Vilela has so often reminded us, it is both a vision and a call to action, rooted in shared values as much as in practical strategies.

Three Commitments for the Path Ahead

The contributions in this book suggest three essential commitments:

1. To think in systems — recognizing that every policy, every economic decision, every cultural norm is part of a larger web of cause and effect.

2. To root our actions in ethics — ensuring that strategies for sustainability are anchored in principles of justice, reciprocity, and respect for all beings.

3. To act together — across disciplines, sectors, and borders, knowing that the scale of our challenges demands a scale of cooperation we have rarely achieved.

These are not abstract imperatives. They can be lived daily — in how we consume, how we vote, how we educate, how we design our communities, and how we define success in our institutions.

A Threshold Moment

We stand now in a rare and fleeting moment when the choices we make will shape the conditions of life for centuries to come. Future generations will ask not what we hoped for, but what we did. Did we have the courage to honor the whole Earth community? Did we widen the circle of care to include the most vulnerable, human and more-than-human alike? Did we act as if the fate of Earth truly depended on us — because it does? There is also the exciting potential for developing new measurements and indices to assess countries' progress, using the Earth Charter as a unifying framework for evaluating true well-being and planetary stewardship.

A Shared Vision of Promise

And so, let us imagine together — a dawn where rivers run clear and unchained, where forests breathe without fear, where children everywhere inherit skies unburdened by our neglect. Let us see ourselves not as passengers on this planet, but as gardeners of a shared and sacred home, planting seeds of justice, compassion, and reverence in every act. The horizon of promise is already aglow; it awaits only the courage of our steps, the joining of our hands, and the steadfast beating of hearts that know we are because the Earth is, and in its well-being, we will find our own.

About The University for Peace

The University for Peace (UPEACE) is a global academic institution established by the United Nations General Assembly through Resolution A/35/55 of 1980. It was established as an international entity with functional and financial autonomy. The mandate and mission of the University is to provide humanity with an international institution of higher education for peace, with the aim of promoting a spirit of understanding, tolerance, and peaceful coexistence among human beings, stimulating cooperation among peoples, and helping to overcome obstacles and avert threats to world peace and progress, in accordance with the noble aspirations proclaimed in the Charter of the United Nations, as established in the *Charter of the University for Peace*, which is the International Agreement signed at the time of its founding in 1980. It has activities in various regions of the world and is headquartered in San José, Costa Rica.

The University for Peace attaches great importance to education and research aimed at building a foundation for peace and progress, reducing the hatred and prejudice that fuel violence, conflict, terrorism, and war. The statutes of UPEACE call for *contributing to the universal task of educating for peace through teaching, research, postgraduate training, and the dissemination of knowledge, which is fundamental for the integral development of the human person and society through the interdisciplinary study of all issues related to peace.*

In order to ensure its academic freedom, the University has its own statutes—also approved by the UN General Assembly—and an International Council made up of experts in peace, security, education, society, and other fields, who guide and direct it. UPEACE has a permanent observer sit at the General Assembly in New York and the Human Rights Council in Geneva. The Secretary-General of the UN, currently António Guterres, is the Honorary President of the University and its Rector is Dr. Francisco Rojas Aravena.

About The Earth Charter

The Earth Charter is a declaration of fundamental ethical principles for building a just, sustainable and peaceful global society in the 21st century. It seeks to inspire in all people a new sense of global interdependence and shared responsibility for the well-being of the whole human family, the greater community of life, and future generations. It is a vision of hope and a call to action.

The Earth Charter is a product of a decade-long, worldwide, cross cultural dialogue on common goals and shared values. The Earth Charter project began as a United Nations initiative, in the early 90s, but it was carried forward and completed by a global civil society initiative. The Earth Charter was finalized and then launched as a people's charter in 2000 by the Earth Charter Commission, an independent international entity.

About Earth Charter International and its Education Center

Earth Charter International (ECI) coordinates the Earth Charter global movement offering information, networking, and education opportunities to turn conscience into action. It has an Education Center, established in 2005, that offers a variety of online and on-site education programmes that highlight the importance of incorporating sustainability values and principles into decision-making and education.

The Earth Charter Center on Education for Sustainable Development forges new paths in education for sustainable development, global citizenship education, and emerging leadership. It coordinates a UNESCO Chair on Education for Sustainable Development and works to contributes to the implementation of UNESCO Resolutions adopted in 2003 (32C/17) and 2019 (40C/20) which, recognize the Earth Charter as an important ethical framework for sustainable development, and encourages Member States to use the Earth Charter in Education for Sustainable Development processes, particularly in the implementation of the ESD for 2030 framework.

The Earth Charter International (ECI) has invited various thought leaders to share their views and understanding of Planetary Well-being, particularly focusing on how countries' contributions to Planetary Well-being might be measured through the lenses of the Earth Charter.

What sparked out interest was the vision of a new instrument, probably in the form of an Index, that could draw the attention of leaders, policymakers, and citizens on how much their country, or countries in general, contribute or not to Planetary Well-being.

Making these contributions visible, measurable, and more explicitly comparable could eventually inspire decisions aimed at moving the needle in a positive direction.

This collection of chapters offers valuable insights into this idea and presents some examples, as well as elements to envision a possible future instrument – one that offers a new lens to which seek or assess "success or progress."

It is also an invitation for more individuals, researchers, and institutions to engage in this quest, and to explore key questions such as:

- How can we envision and measure the contributions of countries to Planetary Well-being?
- How can we inspire decisions and actions that are driven by a commitment to Planetary well-being?
- What values and principles found in the Earth Charter, and through correlated indicators, that should be used to measure contributions to Planetary Well-being?

What if we could make it happen?

What if we could create a new narrative of "progress" and new ways of measuring it?

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