REVISTA ARGUMENTUM

Policy Brief

THE NEED FOR AN EARTH-CENTERED APPROACH TO SUSTAINABLE DEVELOPMENT

Towards a United Nations Earth Assembly

Authors
Patrícia Nogueira Rinaldi
Jorge Calderón Gamboa
Juliana Neira
María Estrella Sanchez Corchero
Mariana Ribeiro Santiago
Miguel Ricardo Peña Varón

EXECUTIVE SUMMARY

One of the expected deliverables of the Summit of the Future is to measure sustainable development's actual impact on protecting Nature. Nevertheless, the United Nations (UN) lacks a robust mandate to effectively address the crisis threatening the conditions of life in our Earth system due to the predominance of an anthropocentric perspective that has broken Earth's ecological balance. In this policy brief, we argue that the UN needs an urgent shift to an Earth-centered approach to sustainable development and, for that, we advocate for the creation of a UN Earth Assembly that would serve as a multilateral space with the mandate of mainstreaming such approach across all UN sustainable development efforts for the effective protection of the Nature. This policy brief discusses a two-pillar mandate of this future UN meeting: 1) to expand an Earth jurisprudence, which entails the rights of Nature, as it has been witnessed in Latin America, Europe, and Asia; and 2) to promote ecological economics, moving away from GDP as a measure for development and building an ecocentric economic model that favors agroecology, socioecological justice and social solidarity initiatives.

A fundamental shift to an Earth-centered approach

The Pact for the Future – the final document adopted at the United Nations (UN) Summit of the Future on 22-23 September 2024 with the goal of accelerating the means of implementation of the 2030 Agenda for Sustainable Development – states that "We are deeply concerned about rapid environmental degradation, and we recognize the urgent need for a fundamental shift in our approach in order to achieve a world in which humanity lives in harmony with nature" (United Nations 2024). In other words, the Pact for the Future acknowledges that at the center of environmental degradation is the broken relationship between humanity and Nature, and the global answer to this crisis requires an Earth-centered approach that fosters the crucial interdependence between humanity and Nature, given their shared existence on Earth.

Since 2009, the United Nations (UN) has been working to promote this shift to an Earth-centered approach under the auspices of the UN Harmony with Nature Programme. The Programme has supported the UN General Assembly (UNGA) to advance a holistic approach to sustainable

development, based on the link between human well-being and Earth's ecosystem health and integrity. The UNGA has approved 14 resolutions on "Harmony with Nature" so far, and the Secretary-General has published 13 reports on the topic (United Nations Harmony with Nature Programme 2024). Besides, since 2011, as part of the observation of the International Mother Earth Day on 22 April, the UNGA has held annual Interactive Dialogues with civil society and other stakeholders that are part of the Harmony with Nature Knowledge Network.

The inclusion of harmony with Nature in the 2030 Agenda for Sustainable Development in 2015 was one of the main achievements of the global movement at the UN to promote an Earth-centered approach. Harmony with Nature is not only a vision but a specific target in the 2030 Agenda. Under Sustainable Development Goal 12 – Responsible Consumption and Production – target 12.8 aims to ensure that, by 2030, "people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature".

Currently, the 2022 Kunming-Montreal Global Biodiversity Framework adopted at the COP-15 regarding the Convention on Biological Diversity in Canada is one of the most important international documents supporting an Earth-centered approach as an integral part of implementing the Biodiversity Convention.

Besides, negotiations at COP-28 in 2023 advanced an Earth-centered approach as a non-market mechanism to promote cooperation in climate action, following up on the decision taken at COP-27 to find ways beyond the carbon credit market to reduce greenhouse gas emissions.

Despite this growing awareness of a fundamental shift to an Earth-centered approach, the UN lacks a robust mandate to implement it. That is why multiple stakeholders – Member States from the Global South, civil society, academia, and other stakeholders – are advocating for the creation of a UN Earth Assembly.

Drawing from the latest UNGA resolution on Harmony with Nature (A/RES/77/169, of 28 December 2022), a future UN Earth Assembly would be a multilateral space with the mandate of mainstreaming the implementation of an Earth-centered paradigm across all sustainable development efforts.

Pathways to an Earth-centered approach: Accelerating the SDGs through Earth jurisprudence and ecological economics

A future UN Earth Assembly would focus on creating holistic ways of accelerating the implementation of the 2030 Agenda and its 17 Sustainable Development Goals (SDGs), as their success relies on respecting the principles of harmony with Nature. After all, genuine sustainable development cannot occur without recognizing planetary boundaries and ensuring that economic progress does not come at the expense of ecological degradation and the exploitation of marginalized and vulnerable human communities. In this sense, a future UN Earth Assembly would have a two-pillar mandate: To expand Earth jurisprudence, which entails the recognition of Nature as a subject of rights; and to promote ecological economics, moving away from GDP as a measure for development and building an ecocentric economic model (Rinaldi 2023).

Earth jurisprudence is a legal and philosophical framework composed of different types of legal provi-sions - such as constitutions, laws, and court decisions - that recognize Nature as a living entity that must be respected and protected and whose sustainability must be guaranteed with inherent rights. As it moves away from an anthropocentric view, Earth jurisprudence does not place Nature as a material resource or an economic good at the service of humanity, as it has been done over centuries in environmental law (Berry 2011).

It is important to differentiate environmental law from the rights of Nature. The former generally focuses on protecting the natural environment for the benefit of humans through regulations and laws aimed at minimizing pollution, conserving natural resources or property, and ensuring a healthy environment for people. Therefore, it is necessary to prove the harm to people or property in order to file a claim for environmental damage. This has limited the possibility of achieving legal standing before courts, restricting who can represent the interests

at stake. In this sense, environmental law has not been able to address the need to protect natural entities independently of human interests (Boyd 2017).

In contrast, the paradigm of the rights of Nature transcends this limitation by providing direct and autonomous protection to those entities recognized as rights-holders (such as rivers, mountains, and forests). Rights of Nature stem from recognizing that all living beings and ecosystems play a crucial role in the Planet's balance and deserve legal protection for their intrinsic value, not just for their utility to humans. These rights include, among others, the right to exist, fulfill their functions, and evolve, as well as to their conservation, regeneration, and restoration (Calderón Gamboa 2024 a, 12). Therefore, the rights of Nature approach is both reactive and preventive, as it operates not only when there may be potential harm but also in the current exercise of Natural entities' rights, respecting their existence, conservation, regeneration, and more.

From the perspective of the rights of Nature, humans are considered members of the Planet alongside their environment and the beings with whom they share the Earth. While human rights inherently embrace an anthropocentric perspective, their evolution must facilitate humanity's transition towards an eco-systemic view where every element of Nature, such as rivers, forests, and wildlife, plays a crucial role in maintaining the Planet's balance. Consequently, recognizing Nature as a subject of rights changes the anthropocentric perspective of laws and Nature's relationship to other living beings, opening the door to an ecocentric and sustainable perspective.

Several countries around the world have already recognized the rights of Nature, reflecting a growing global movement towards acknowledging the intrinsic value and legal standing of natural entities. Currently, more than 400 initiatives in 30 countries have proposed and/or granted national legal recognition to Natural entities such as rivers, lakes, forests, mountains, and diverse species and ecosystems on the Planet. New legal structures have been established, including guardian councils, custodians, tutors, representatives, independent scientific commissions, and other entities (United Nations Environment Programme 2023, 115).

In Latin America, Ecuador was the first country to enshrine the rights of Nature in its constitution in 2008, re-cognizing the rights of ecosystems to exist and regenerate. Following Ecuador, Colombia's Constitutional Court recognized the Atrato River as a rights-bearing entity in 2016. North America has also seen progress, with local ordinances in Pennsylvania-USA, granting rights to ecosystems. So far, five local constitutions in Mexican states have recognized the rights of Nature. In Europe, Spain has taken a significant step by recognizing the Mar Menor lagoon as a legal person in 2022, granting it rights to protection, conservation, and restoration. In Asia, Bangladesh's High Court declared all rivers in the country as living entities with legal rights in 2019, aiming to combat pollution and encroachment on these vital waterways. In Oceania, the Parliament of New Zealand passed a law in 2017 granting legal personality to the Whanganui River, sacred to the indigenous Maori peoples. In Africa, the Uganda National Environmental Act (NEA) of 2019 explicitly recognizes that Nature has "the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution" (Calderón Gamboa, Recinos, 2022).

These legal advancements represent a shift towards more sustainable and ecocentric legal frameworks across diverse regions. Also, they can accelerate the achievement of the SDGs that emphasize the relationship between humanity and Nature, such as SDG 2 (Zero hunger and sustainable agriculture), SDG 3 (Good health and well-being), SDG 6 (Clean water and sanitation), SDG 7 (Affordable and clean energy), SDG 11 (Sustainable cities and communities), SDG 12 (Responsible consumption and production), SDG 13 (Climate action), SDG 14 (Life below water) and SDG 15 (Life on land). By allowing fair treatment to all human and non-human entities, the rights of Nature extend the social justice framework to the non-human world in a relational manner, that is, via socioecological justice (Yaka 2018, 8).

Every element of Nature plays a crucial role in maintaining the Planet's balance. Therefore, when implementing the aforementioned SDGs, it is essential to grant value and protection to Natural entities for their own sake, not just based on their usefulness to humans (Gaia Foundation and the Mother Earth Indigenous Council 2012).

The ongoing movement of Earth jurisprudence has facilitated and been complemented by ecological economics, a discipline that studies the relationships between ecosystems, societies, and the economic subsystem. More specifically, it analyzes the impact of

producing goods and services on ecosystems and focuses on ecological and social sustainability. The objective is to achieve a balance between the development of human beings and the regeneration capacity of Nature (Costanza 1989). For that, ecological economics advocates for a transformation towards an equitable and ecologically sustainable society, respecting the rights of people and Nature and biological and cultural diversity within planetary boundaries.

Ecological economics proposes a paradigmatic change from neoclassical economics, which places a rational and individualistic human being at the center of economies and profit maximization as a goal of economic activities. For neoclassical economists, the economic system is a closed circuit not influenced by Nature and her ecosystems. Natural elements are seen as resources if they have a market price, such as minerals or energy; or as "non-economic" goods, if they do not have a market price, such as the air. The main economic strategies presented by neoclassical economics to reduce the ecological footprint have focused on applying the compensation principle ("polluter pays") and creating economic incentives, such as payments for ecosystem services, green bonds, etc.

However, evidence shows that economic incentives are insufficient since they have unintentionally encouraged some regions to increase their deforestation rate. According to the REDD+ program (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries)*[1]*, only those countries that reduce their deforestation can introduce carbon credits in the REDD+ market. Thus, if a region has historically protected its forests, it cannot introduce credits into the market. As a consequence, the REDD+ program has unintentionally encouraged some regions like Brazil to increase their deforestation rate to introduce a high number of carbon credits (Marco 2022).

Furthermore, as long as natural capital remains cheap compared with produced or human capital, and access to Nature is not effectively restricted, economic incentives will be insufficient to increase the efficiency of natural resources despite and precisely because of technological advances that allow human beings to harm Nature.

In contrast to neoclassical economics, ecological economics considers the biophysical limits of Planet Earth and presents the economy as a subsystem of the larger socioecological system, moving towards an ecocentric economic model. In simple terms, this model places Nature as a subject alongside families (if considered as a natural person) or companies (if a legal personality is considered a person). In both cases, there is the coverage of a tutor or legal guardian of Nature, such as indigenous peoples or local communities, or a mixed body of institutional-academic-social representatives.

An essential aspect of ecological economics is its critique of using Gross Domestic Product (GDP) as the main indicator of economic progress since it does not take into account the long-term consequences of economic growth in ecosystem degradation and, in some situations, the impossibility of ecosystem restoration. GDP was originally meant for wealthy nations to budget for pressing issues, such as depressions and war. Today, it measures not only economic activity within a country but is also often used as an indicator of well-being despite its inaccurate representation of the economic realities of many people and its disregard for ecological health.

Arguments against using GDP growth as an indicator of overall success, not only of economic expenditure, are not new. Simon Kuznets, who developed this indicator in the 1930s, warned that it should not be used to measure welfare. In the 1960s, he alerted again that in measuring economic growth, the quality and quantity of growth should be differentiated, as well as the costs and returns (Vanham 2022).

Nevertheless, almost a century after its formulation, sustained GDP growth has become central to economic policy and a pillar of development, including the 2030 Agenda and its 17 SDGs. At least 20 indicators to evaluate the implementation of the 2030 Agenda are based on GDP. More specifically, SDG 1 (No poverty), SDG 7 (Affordable and clean energy), SDG 8 (Decent work and economic growth), SDG 9 (Industry, innovation and infrastructure), SDG 10 (Reduced inequalities), SDG 11 (Sustainable cities and communities), SDG 12 (Responsible consumption and production), SDG 14 (Life below water) and SDG 17 (Partnership for the Goals) encourage indiscriminate economic growth when it is widely evidenced that the expansion of GDP results in

[1] The "plus" in REDD+ stands for other sustainable activities related to forest management and conservation and forest carbon stocks.

environmental degradation, air pollution, and the depletion of natural resources (Kallis et al 2018).

As part of the preparatory meetings for the Summit of the Future, the UN Secretary-General released a policy brief entitled "Valuing What Counts: Framework to Progress Beyond Gross Domestic Product" to encourage the international community to create complementary indicators to measure not only human well-being but also planetary sustainability. In this sense, ecological economics offers a fruitful framework for devising new mechanisms to implement the SDGs by using other indicators that value the relationship between economics and Nature. Existing indicators such as the Human Development Index (EHDI) or the Genuine Progress Indicator (GPI) aim at combining GDP with other variables such as poverty reduction and environmental protection, but they still depart from an anthropocentric perspective. Therefore, the UN must encourage a new index that considers the rest of the species in a more biodiverse way.

By combining Earth jurisprudence with ecological economics, the fundamental shift to an Earth-centered approach would promote real sustainable development. Instead of focusing on the intergenerational conservation of the environment, an Earth-centered approach would embed political, legal, social, cultural, and economic relations within the ecological limits of the Earth. For that, it is necessary to guarantee fair treatment to all living beings and ecological systems in relation to human agency and action to protect the Planet and achieve sustainable development as envisioned by the 2030 Agenda.

There are significant experiences worldwide in implementing the 2030 Agenda and its 17 SDGs based on Earth jurisprudence and ecological economics. Drawing from the experience of the writers as experts from the UN Harmony with Nature Knowledge Network, three best practices will be presented: Agroecology; socioecological justice in relation to water security; and solidarity economy.

Agroecology

All humans alive today have in common that we share the Earth and we all must eat. Our industrial food system, one of the main emitters of greenhouse gases, destructors of habitats, and polluters of waters and soils, does not focus on food production to feed people but on commodities to fuel GDP growth. Globally, about a third of food production goes to waste, evidencing that it is not a matter of production efficiency. In this sense, achieving SDG 2 (Zero hunger and sustainable agriculture) requires an Earth-centered perspective in which our food systems feed people and protect Nature. This requires a transformation where corporations are held accountable for the damage their industrial non-food monocultures cause, monocultures are phased out, and investment in proven sustainable ways of simultaneously producing healthy food while restoring biodiversity is guaranteed.

A growing field and practice called agroecology focuses on synthesizing traditional and Western science while democratizing food supply chains and feeding people. It also aims to reduce dependency on external input and markets, support family and traditional farmers, and restore and preserve ecosystems (Gliessman 2022). In Latin America, agroecological techniques such as agroforestry have returned life to ecosystems and fed people healthy and local foods (Nair et al. 2021). Increasing evidence shows that agroecology allows a reconceptualization of SDG 2 in terms of food sovereignty, which goes beyond promoting sustainable techniques to ensuring plural sustainable agriculture based on local food cultures and specific needs.

Socioecological justice in relation to water security

Water is a natural good essential for all forms of life, the sustenance of ecological integrity, and both biological and cultural diversity. Water bodies shape diverse human-Nature relationships, encompassing a set of values (i.e., intrinsic, instrumental, relational) and ontologies that go well beyond the hegemonic and narrow Western view of water as an economic good (Perez et al. 2024).

SDG 6 (Clean water and sanitation) focuses on clean water and sanitation for humans, which is fair enough. Nevertheless, water also depends upon a vital web of relations with other natural entities since it is produced, regulated, and to some extent cleaned by healthy terrestrial and aquatic ecosystems, which is implicit in SDG 13 (Climate action), SDG 14 (Life below water) and SDG 15 (Life on land).

Practices based on socioecological justice in relation to water security provide an Earth-centered approach to SDG 6 by focusing on fairer access to water for human needs and uses and for the existence and welfare of all non-human beings and ecological entities now and in the future.

The ongoing research on water security in the Andean upper basin of river Cauca in southwest Colombia (https://www.watersecurityhub.org/) is an example of such practices. This project includes the complexity of plural valuation systems in current water management discourse and practice, moving the focus from water as mostly a technical and managerial issue to an intricate web of vital relations between humans and all living beings in specific territories where water becomes essen-tial for life but most importantly for a worthy human-Nature relationship.

The pictures below display different situations of water injustice in Colombia. Firstly, heavy pollution of the river Cauca has reduced the amount and quality of fisheries, thus affecting the livelihoods of several riverine communities and their cultural heritage. Secondly, climate change and logging have reduced water quantity and quality in many vital streams for small rural communities and their livelihoods. By considering these inequities from the standpoint of socioecological justice, it may be possible to come up with innovative and more equitable solutions that take care of both water and people in a relational manner, thus making SDG 6 a more attainable and fair goal.

Source: Salcedo (2021)

Fisherman struggling for his livelihood in the upper river Cauca, Colombia.

Source: Ruiz (2019)

Community members taking care of their rural water supply system in La Habana village, Colombia.

Solidarity economy

A solidarity economy encourages the collaborative action between members of a cooperative and/or association through self-management, reorganizing working relationships in a non-hierarchical way, and rescuing the vulnerable to act horizontally, both in urban and rural regions (Singer 2002). Therefore, solidarity economy offers a holistic approach to SDG 8 (Decent work and economic growth) and SDG 10 (Reduced inequalities), moving away from GDP and aligning economic activities with the protection of Nature, fostering the rights of Nature and ecological economics in their activities.

Besides, universities play a crucial role in supporting cooperatives and associations as extension or outreach projects focused on the solidarity economy, thus engaging in SDG 17 (Partnership for the Goals). One example of best practice in solidarity economy is the extension incubator called INSOL, organized by the University of Marília - UNIMAR, in São Paulo, Brazil. INSOL/UNIMAR offers free-of-charge support to vulnerable people interested in organizing themselves into associations for collaborative production that respects Nature through a solidarity economy.

The solidarity incubator INSOL/UNIMAR has supported three initiatives:

1) "*Pertencer no Espectro*" (Belonging in Spectrum), an association that seeks to carry out pluralist actions and projects where Autistic people have opportunities to grow and reach their potential in contact with Nature, conscious of the need for experiences, education, and promotion of Nature preservation as part of the development needs of the Autistic person. This initiative addresses SDG 4 (Quality education), and, more specifically, target 4.7, about ensuring education for sustainable development and sustainable lifestyles.

2) "*Doce Futuro*" (Sweet Future), an association that promotes the practice of agroforestry, the recovery of native forests, and the breeding of native stingless bees, which are natural pollinators. Initially, the project was conceived to recover an area affected by fires in the city of Marília/São Paulo by planting trees of precursor species. Today, the project's mission is to advocate the rights of Nature. This initiative focuses on SDG 15 (Life on land), protecting and restoring terrestrial ecosystems, and reversing land degradation.

3) "*Trevo Veg Cosméticos*" (Trevo Veg Cosmetics), a family brand made by women, which produces and sells natural, handmade, vegan, sustainable, and animal cruelty-free cosmetics. The initiative also raises awareness about the harm of traditional cosmetics, selling the products at more affordable prices to vulnerable people. This initiative aims not only at SDG 4 and target 4.7, but also SDG 5 (Gender equality), SDG 8 (Decent work and economic growth), and SDG 12 (Sustainable production and consumption).

Source: INSOL/UNIMAR Archive

INSOL/UNIMAR legal team offers free-of-charge support to people interested in engaging in solidarity economy initiatives.

Source: INSOL/UNIMAR Archive

The association 'Belonging in Spectrum' carries out activities where Autistic people reach their potential in contact with Nature.

Source: INSOL/UNIMAR Archive

The association 'Sweet Future' advocates for the rights of Nature through agroforestry and the breeding of native stingless bees.

Source: INSOL/UNIMAR Archive

The association 'Trevo Veg Cosmestics' raises awareness about the harm of traditional cosmetics to Nature.

Click here to watch the institutional video presenting the initiatives supported by the solidarity incubator INSOL/UNIMAR on YouTube

Recommendations towards a United Nations Earth Assembly

The 2030 Agenda for Sustainable Development and its 17 SDGs aim to transform the relationship between humans and the natural environment, promoting a more balanced and sustainable world for present and future generations. However, the anthropocentric approach of the 2030 Agenda has made its policies and means of implementation inefficient in preserving and respecting Nature. That is why UN Member States, civil society, and other stakeholders must include an Earth-centered approach to sustainable development in the implementation of the Pact for the Future and truly recognize the rights of Nature and ecological economics as action-oriented measures to guarantee the existence of all human and non-human entities.

Drawing from the Pact for the Future, the UN should lead, in the following years, the creation of a UN Earth Assembly that would serve as the legitimate and diverse multilateral space to create and implement policies and indicators based on the harmony with Nature paradigm. In more practical terms, a future UN Earth Assembly would promote an Earth-centered framework in policies and actions for sustainable development, making explicit the need to care for and respect all forms of life and natural entities, such as ecosystems. This is the only way to take the protection of the Planet seriously and put the realization of the SDGs back on track.

The following recommendations highlight how the UN can prioritize the paradigmatic change to an Earth-centered perspective in the implementation of the Pact for the Future and beyond through three transitions:

1

Transition from the SDGs to the Socioecological SDGs

The UN needs an urgent and fundamental shift from an anthropocentric to an Earth-centered approach to sustainable development. For that, the UN needs to expand the notion of "leaving no one behind" presented in the 2030 Agenda, including and recognizing all natural entities as part of the concept of sustainable development. For that, it is necessary to transition from the SDGs to the Socioecological SDGs, guiding development goals by an ecocentric approach and measuring them through ecological indicators.

2

Transition from environmental law to the rights of Nature

Considering the limitations of environmental law in protecting the environment for both humans and natural entities, the UN should transition to the rights of Nature to effectively address the root causes of the environmental crisis and climate emergency outlined in the Pact for the Future. The rights of Nature integrate ecological considerations into development planning, ensuring that Nature protection is a core component of socioeconomic strategies. Recognizing the rights of Nature in the implementation of the Pact of the Future would enable the UN to facilitate greater global cooperation and commitment to protecting ecosystems, promoting a broader vision of sustainable development worldwide.

3

Transition from GDP to practices based on ecological economics

Moving away from GDP as a measure of development is urgent if the UN wants to measure and value what really matters in terms of improving quality of life and ensuring well-being for humanity in harmony with Nature. Therefore, it is crucial to transition to a new economic model based on ecological economics that limits market-based approaches to Nature, focuses on the degrowth of the most polluting industries, caps growth to a sustainable scale, and differentiates economic growth to ensure fair distribution. For that, practices such as agroecology and solidarity economy are key to overcoming current individualistic, competitive, and extractivist economic practices by reorganizing society and the economy towards more egalitarian and non-hierarchical ways of working in harmony with Nature.

Sources consulted

Berry, T. (2011). Rights of the Earth: We Need a New Legal Framework Which Recognises the Rights of All Living Beings. In: Burdon, P. (ed.). *Exploring Wild Law*: The Philosophy of Earth Jurisprudence. Mile End: Wakefield Press.

Boyd, D. R. (2017). *The Rights of Nature*: A Legal Revolution That Could Save the World. ECW Press.

Costanza, R. (1991). *Ecological Economics*: the science and management of sustainability. Columbia University Press.

Gaia Foundation and the Mother Earth Indigenous Council (2012). *Declaration of Principles for the Conscious Evolution of Mother Earth*. Written by Jorge Calderón Gamboa, 21 December.

Calderón Gamboa, J. F.; Recinos, J. D. (2022). Inter-American approaches to the protection of the right to a healthy environment and the Rights of Nature and potential contributions to the European human rights system. *Journal of Human Rights and the Environment*, Vol. 13.

Calderon Gamboa, J. F. (2024 b). *Informe sobre los Derechos de la Naturaleza en México*: balance y retos. Due Process of Law Foundation – DPLF, in press.

Gliessman, S. R. et al. (2022). *Agroecology*: Leading the transformation to a just and sustainable food system. Boca Raton: CRC Press.

Kallis, G. et al. (2018). *Research on Degrowth*. Annual Review of Environment and Resources, Vol. 43, p. 291-316, October.

Nair, P. K. R. et al. (2021). *An introduction to agroforestry*: four decades of scientific developments. Cham: Springer Nature Switzerland.

Marco, J. (2020). *Desafíos económicos para una gobernanza en Armonía con la Naturaleza*. Discusiones sobre Ambiente para el Desarrollo No.4, Environment for Development Initiative (EfD), Facultad de Economía - Universidad de los Andes.

Perez, M. et al. (2024). *Water plural values, water management, and water security in Latin America*: A critical reflection from current literature. (In final review to be submitted to Water Alternatives).

Rinaldi, P. N. (2023). *The need for an Earth-centered approach to sustainable development*: Towards a United Nations Earth Assembly. Global Governance Forum, 30 November.

Singer, P. (2002). *Introdução à economia solidária*. São Paulo: Fundação Perseu Abramo.

United Nations (2023). *Valuing What Counts*: Framework to Progress Beyond Gross Domestic Product. Our Common Agenda Policy Brief 4, May.

United Nations (2024). *Pact for the Future, Global Digital Compact, and Declaration on Future Generations*. Summit of the Future Outcome Documents, September.

United Nations Environment Programme (2023). *Environmental Rule of Law:* Tracking Progress and Charting Future Directions. Nairobi: UNEP.

United Nations General Assembly (2022). *Harmony with Nature*. Resolution adopted by the General Assembly on 14 December 2022, A/RES/77/169.

United Nations Harmony with Nature Programme (2024). *UN Documents on Harmony with Nature*. Official website Harmony with Nature, United Nations.

Vanham, P. (2022). *A brief history of GDP - and what could come next*. World Economic Forum, 12 December.

Yaka, Ö. (2018). *Rethinking Justice*: Struggles For Environmental Commons and the Notion of Socio-Ecological Justice. Antipode, Vol. 51, Issue 1, p. 353-372, September.

About the authors

PATRÍCIA NOGUEIRA RINALDI

Patrícia Nogueira Rinaldi is an Associate Professor of International Relations at the College of Campinas (FACAMP, Brazil) and Director of its Center of Studies and Research in International Relations (CERI-FACAMP). She holds a Ph.D. (2018) and a Master's Degree (2010) in Political Science at the State University of Campinas (UNICAMP). Her research areas are International Cooperation for Development and International Organizations, with a view from the Global South. She is an expert of the UN Harmony with Nature Knowledge Network and conducts research and advocacy initiatives dedicated to strengthening an Earth-centered approach in the implementation of the 2030 Agenda.

Email: patricia.rinaldi@facamp.com.br

Social media: @prof.patriciarinaldi | www.linkedin.com/in/patrícia-nogueira-rinaldi/

JORGE CALDERÓN GAMBOA

Jorge Calderón Gamboa is an Independent Expert of the UN Programme - Harmony With Nature and the MICI - IDB; International Consultant; Professor at the UN-Mandated University for Peace in Costa Rica, and founder of the Co-Evolution Foundation. He was a Senior Coordinating Attorney at the Inter-American Court of Human Rights (2007-2019). He was also a Senior Judicial Clerk (Secretario de Estudio y Cuenta) at the Mexican Supreme Court of Justice (SCJN 2019 - 2023). He was a Visiting Lawyer (Seconded Jurist) at the European Court of Human Rights in Strasbourg, France, and Deputy Visitor at the Human Rights Commission of Mexico City (Ombudsperson). He is a lawyer in Mexico (LL.B), and an LL.M. in International Legal Studies at the American University, Washington College of Law (AU-WCL). He has specialized in Environmental Protection at the Center of Constitutional Studies in México (CEC).

Email: coevolution.org@gmail.com

Social media: @CalderonGamboa | www.linkedin.com/in/jorge-calderón-gamboa

About the authors (cont.)

JULIANA NEIRA

Juliana Neira is a Ph.D. candidate at the University of Vermont, USA, and Fellow at Leadership for the Ecozoic, the Institute for Agroecology, and the Gund Institute for Environment. She is from Bogotá, Colombia, and migrated to Florida, USA as a teenager. Juliana has a Bachelor's in Biology, a Master's in Sociocultural Anthropology, and experience as an environmental science teacher in secondary schools. Presently, Juliana is doing participatory fieldwork for her Ph.D. in the south of Brazil, employing critical concepts in ecological economics, economic geography, and political ecology to study alternative food economies. She is interested in learning how agroecology as a paradigm spreads throughout supply chains and affects more just and sustainable local food systems.

Email: juliana.neira@uvm.edu
Social media: www.linkedin.com/in/juliana-neira-juliana

MARÍA ESTRELLA SANCHEZ CORCHERO

María Estrella Sanchez Corchero is a Research Professor and Assistant Doctor of Contemporary Economics and Economic Policy in the Department of Economics and Management of the Faculty of Economics and Business at the University of the Basque Country. She holds a Ph.D. degree in Economic Anthropology and a degree in Economics and Business Sciences, specializing in International and Development Economics, and a Master's degree in Economic Analysis, Chinese Studies (focus on Economics), Digital Teaching, and Pedagogical Adaptation. She is an expert in Ecological Economics of the UN Harmony with Nature Knowledge Network and the EQA (European Quality Assurance Spain); and an expert in Economics related to the Housing Market. She is a member of the UNESCO Chair on Sustainable Development and Environmental Education (UPV-EHU); the World Association of Ecological Economy; the International Network of Biomimicry; the Governing Board of the Basque College of Economists; and the Advisory Council of the Aspasia Foundation.

Email: mariaestrella.sanchez@ehu.eus
Social media: www.linkedin.com/in/Estrella 星 Sánchez Corchero 桑切其

MARIANA RIBEIRO SANTIAGO

Mariana Ribeiro Santiago is a professor in the Postgraduate Law Program at the University of Marília, coordinator of the extension project "Incubadora Solidária - INSOLUNIMAR", at the University of Marília, and editor-in-chief of the journal Argumentum. She holds a Post-doctorate in Law at the Justus Liebig Universität Giessen (Germany) (2018), a doctorate (2012), and master's degree (2004) in law at the Pontifical Catholic University of São Paulo and a law degree (1999) at the Federal University of Bahia. She is an expert of the UN Harmony with Nature Knowledge Network. She is also an author of books and legal articles and a Lawyer in Sao Paulo, Brazil.

Email: marianasantiago@bs-advogados.com
Social media: www.linkedin.com/in/mariana-ribeiro-santiago-18591116b

MIGUEL RICARDO PEÑA VARÓN

Miguel Ricardo Peña Varón is Professor of Environmental Science and Engineering at Institute Cinara in Universidad del Valle, Cali, Colombia. He earned his M.Sc (1996) and Ph.D (2002) degrees at the University of Leeds, UK. He undertook a Master of Arts programme on Philosophy (2012) at Universidad del Valle, COL. He is a researcher in the areas of ecological engineering applied to the solution of environmental pollution problems; he also works on environmental health issues, specifically on the topic of pollution and its impact on human health. In the last ten years, he started a new area of research on environmental ethics as a framework for the analysis of conflicts in the Society-Nature relationship. Prof. Peña has been associate editor of scientific journals in the water and environmental fields and has authored and co-authored several scientific papers and book chapters on his areas of expertise. He is currently the CoPI for Colombia in the International project Hub in Water Security and Sustainable Development funded by UKRI under the GCRF scheme.

Email: miguel.pena@correounivalle.edu.co
Social media: www.linkedin.com/in/miguel-r-peña-varón-a738532b