



**RECOGNITION OF AGROECOLOGY IN
THE RIO CONVENTIONS:
potential for scaling up**

SUMMARY REPORT



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This summary is drawn from an analysis of the Rio Conventions conducted by three civil society organisations, members of the Minka International network. They are advocates of an agroecological transition in agricultural and food production systems.



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Preamble

In June 1992, the third United Nations Conference on Environment and Development took place in Rio de Janeiro. This historic summit culminated in three Conventions drawn up by the States Parties, addressing three global issues: climate change, loss of biodiversity and desertification. While these Conventions are primarily concerned with the environment, there are also underlying agricultural and food issues, due to the impact of agriculture on the environment and the need to feed the world within the limits of available resources¹. Agroecology, as a holistic and integrated approach, offers cross-cutting responses to issues facing the planet. However, the inclusion of agroecology within the decisions negotiated by the Rio Conventions is very limited.

As environmental issues become ever more pressing and these international forums come increasingly under the political spotlight, the strengthening of agroecology within the Rio Conventions is fundamental to steering the necessary transformation of food systems. Indeed, these instruments guide government policies and define the environmental financing framework, particularly for international institutions.

In light of the conferences on the three Conventions that will be held towards the end of the year, this paper aims to take stock of the role of agroecology within the Rio Conventions, providing the keys to analysis and putting forward ideas for greater integration of agroecology within these three Conventions.

¹ “Food systems are one of the main reasons we are failing to stay within our planet’s ecological boundaries.” António Guterres, United Nations Secretary-General, December 2020, Address at Columbia University: “The State of the Planet”.

Challenges facing the planet, agroecology and the Rio Conventions

Increasingly alarming findings in the face of worldwide challenges

Almost a decade ago, the United Nations adopted the 2030 Agenda and the Sustainable Development Goals, set out as 17 major goals to be achieved in order to drastically reduce poverty and inequality by 2030, within a context of peace and while preserving the planet. With six years to go, the situation is alarming and more than half the world's population is being left behind².

Agriculture and food systems are at the heart of the challenges facing our planet. Human activities have already transformed 70% of the Earth's land area from its natural state³, and figures revealing the responsibility of agri-food systems in the destruction of the environment are staggering. Indeed, food systems bear a considerable degree of responsibility for massive deforestation of natural ecosystems, the use of fresh water and soil depletion⁴. They are the source of approximately a third of human-induced greenhouse gas emissions⁵, the cause and an aggravating factor in climate change, while also being largely responsible for the loss of biodiversity⁶. Although livelihoods of half the world's population depend directly on agricultural and food systems⁷, systems based on high levels of external inputs and resources continue to fall short of their ambition to feed the world.

Paradoxically, agriculture also suffers greatly from the damage it causes, as it is heavily impacted by soil depletion, climate change and the consequences of biodiversity loss, all of which reduce agricultural output. However, solutions do exist. Agriculture is also an important factor in mitigating climate change⁸, and offers great potential for improving biodiversity and combatting land degradation.

2 "Halfway to the deadline for the 2030 Agenda, the SDG Progress Report; Special Edition shows we are leaving more than half the world behind. Progress on more than 50 per cent of targets of the SDGs is weak and insufficient; on 30 per cent, it has stalled or gone into reverse. These include key targets on poverty, hunger and climate", António Guterres, Secretary-General, "[The Sustainable Development Goals Report 2023: Special Edition](#)", United Nations, 2.

3 UNCCD, 2022, "[Global Land Outlook](#)", 2.

4 FAO, 2018, "[The 10 elements of agroecology: guiding the transition to sustainable food and agricultural systems](#)", 1.

5 This includes methane, particularly from intensive livestock farming, nitrous oxide due to fertilisers, carbon dioxide emitted by changes in land use, production of inputs, mechanisation, processing, transport and food preparation, etc.

6 Biodiversity loss is primarily related to "conversion of natural or semi-natural land into agricultural land uses, followed by the introduction of invasive alien species, including pests and disease". FAO, 2018, "[Sustainable agriculture for biodiversity – biodiversity for sustainable agriculture. Revised version](#)", 9-17.

7 FAO, 2023, "[Estimating global and country-level employment in agrifood systems](#)".

8 These factors include adopting healthy, sustainable diets that are less meat-based, reducing dependence on highly fossil fuel-intensive synthetic inputs, and adopting practices that improve soil health and therefore its capacity to store carbon.

Agroecology, a cross-cutting, multi-sectoral response to challenges facing the planet

Many stakeholders, such as peasant movements, NGOs and academics, support agroecology as a way to transform agriculture to respond to these environmental challenges, along with public health, food security and nutritional issues. Agroecology is a science, a set of practices and a social movement all rolled into one. It is based on the application of ecological principles to agriculture and the use of natural resources and ecosystem services in a regenerative way. It also fosters socially equitable food systems, within which people can exercise choice over what food they eat and how it is produced⁹. It has the advantage of offering inclusive responses to environmental and human challenges, based on local and regional specificities. It offers a consistent approach to mitigate the effects of climate change and adapt to increasingly extreme and intense climate hazards by improving soil health, supporting the development and restoration of biodiversity, as well as food security and efforts to combat inequality¹⁰.

The different ways in which agroecology is expressed in different local contexts make it a multi-faceted option, adaptable to the climatic, economic and social conditions in which it is implemented. Practices based on the principles of agroecology have been used for thousands of years. They began to be studied and conceptualised in the 1980s, and some members of the scientific community now recognise agroecology as a field of study in its own right, along with its potential to address the negative external impacts of agriculture¹¹.

As a strong social movement, agroecology also seeks to combat economic inequalities and the concentration of power in food systems. This social movement firmly places agroecology at the heart of “a political struggle, requiring people to challenge and transform structures of power in society, addressing power imbalances and conflicts of interest, in order to generate local knowledge, promote social justice, nurture identity and culture, and strengthen the economic viability of rural areas¹²”. At the same time, agroecology is becoming an increasingly institutionalised concept in the international arena, and this is reflected in speeches and policies. Collaborative work by the FAO is an example of this, defining agroecology around 10 elements in 2018¹³, followed by the HLPE’s 13 agroecological principles in 2019¹⁴.

Yet despite a solid, scientific knowledge base and multiple daily examples of the relevance of agroecology as a response to challenges facing our planet, governments have yet to make a tangible commitment (beyond rhetoric) to supporting agroecological transformation. Against this backdrop, are their clear guidelines within international instruments such as the Rio Conventions that facilitate the rolling out of food systems that benefit people and the environment?

9 HLPE, 2019, “[Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition](#)”.

10 *Ibid.*

11 Today many calls for scientific projects guide researchers towards research into better comprehension of agroecological processes and their effects on territories around the world (EU – Horizon Europe, Desira etc.).

12 HLPE, 2019, 46.

13 FAO, 2018.

14 HLPE, 2019, 17.

The Rio Conventions and a voluntary approach to environmental issues

The Rio Earth Summit led to the adoption of three international conventions: on climate (UNFCCC), on combatting desertification (UNCCD) and on biological diversity (UNCBD). These Conventions aim to encourage governments to adopt and implement the policies needed to bring about the changes in question. Regular intergovernmental meetings, the “Conferences of the Parties” (COP), adopt decisions to define objectives to be pursued and monitor the progress made by countries in fulfilling their commitments.

Subsidiary bodies, made up of international experts for each Convention, contribute with scientific, technical and thematic insights to signatory parties. The various related texts (reports, studies, recommendations for decision-makers, etc.), provide guidelines for addressing the target issues. Their analyses, points of view and recommendations serve as a reference for the decisions made at the COPs.

	United Nations Framework Convention on Climate Change (UNFCCC)	United Nations Convention on Biological Diversity (UNCBD)	United Nations Convention to Combat Desertification (UNCCD)
Year of adoption	1992 in Rio	1992 in Rio	1994 in Paris
Number of signatory parties	197 Parties	196 Parties	197 Parties
Overall objective	Stabilise greenhouse gas concentrations at a level that prevents dangerous anthropogenic (human-induced) disruption of the climate system	Conserve biological diversity, sustainable use of its components and guarantee the fair and equitable sharing of the benefits derived from the use of genetic resources	Curb land degradation and mitigate the effects of drought in order to improve the resilience of ecosystems and the living conditions of affected populations
Scientific expert body	Intergovernmental Panel on Climate Change (IPCC)	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)	Science-Policy Interface (SPI)
Next COP	COP 29, in November 2024 in Azerbaijan	COP 16, in October 2024 in Colombia	COP 16, in December 2024 in Saudi Arabia
	<i>Various other ad hoc groups produce thematic reference material for each of the Conventions.</i>		

Although the Conventions are largely adhered to by their signatories and measures are gradually taken to implement them, at different paces according to the Parties and the Conventions, their weak point is that they only apply in compliance with existing international agreements and national legislation, with no penalties for non-application. As such, the Conventions take a voluntary approach and propose general recommendations. Implementation is up to the states, who must nonetheless justify their efforts to the Conventions through various mechanisms.

The issues surrounding recognition of agroecology in the Conventions

The recognition of agroecology by the Conventions would contribute significantly to shifting political paradigms at different levels and breaking down the barriers between environmental and agricultural sector policies. Its explicit mention in the Conventions would legitimise its recognition and would enable funding to be channelled.

Therefore, by promoting agroecology as a desirable solution, supported by consensus and political and scientific backing at the highest levels, the Conventions can make it easier to scale up agroecology. Indeed, while the political outcomes of the Conventions are non-binding, they are powerful instruments for constructing narratives that influence public opinion and government policies. The decisions made at the COP steer the financial choices of international institutions, which play an important role in financing global development. This power to act, related to the explicit recognition of agroecology in the Rio Conventions, justifies further research into references to it within these Conventions and in supplementary work and texts.

Modest recognition of agroecology in the Rio Conventions¹⁵

The term “agroecology” does not appear explicitly in any of the three founding texts of the Conventions. This may be explained by the limited use of the term by the international community in the early 1990s. As the term became more widespread and legitimate, it began to appear in some COP decisions, as well as in various supplementary texts.

Agroecology in COP decisions: a very subtle presence

Any direct mention of agroecology varies greatly from one Convention to another. While to date there are no references in the UNFCCC COP reports, this is not the case for the other two Conventions.

The term “agroecology” appears for the first time in 2014 in the report issued by the UNCBD COP12 in Pyeongchang. It “invites Parties to raise awareness on best practices of sustainable use, including agroecological approaches with positive impacts on the conservation of biodiversity in order to address pressures on biodiversity¹⁶”.

Two years later, the COP13 in Cancun “encourages Parties to recognize the importance of the traditional knowledge of indigenous peoples and local communities for the sustainability of agriculture that is aligned with their world view (cosmovisión) and upholds diversification and ecological rotation and agroforestry, and to promote community and family farming, alongside agroecology, with a view to promoting sustainable production and improving nutrition¹⁷”.

In Sharm el-Sheikh in 2018, COP14 went one step further and recognised the agroecological nature of indigenous agricultural systems and practices and the potential to find solutions to current unsustainable production and consumption patterns¹⁸. It also encouraged governments to “diversify farming systems and the resulting food resources and habitats of pollinators through home gardens and agroecological approaches, such as crop rotations, intercropping, agroforestry, integrated pest management, organic agriculture, and ecological intensification¹⁹”.

At the Kunming-Montreal COP in 2022, a new Global Biodiversity Framework was drawn up for 2022-2030. During this COP, and in line with previous COPs, agroecology was presented as an innovative approach²⁰ contributing to “the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature’s contributions to people, including ecosystem functions and services²¹”. This recognition is probably one of the clearest and most complete of the Rio Conventions.

With regard to the UNCCD, it was not until 2019, at COP14 in New Delhi, that agroecology was mentioned in two decisions. The first outlined practical recommendations arising from cooperation between the SPI and other scientific panels and encouraged “recognizing the importance and diversity of indigenous and local knowledge and practices, also taking into account agroecological principles and practices²²”.

15 The information in this section is based on a systematic analysis of the decisions taken by the COP since 1992, and an analysis of supplementary texts relating to the three Conventions.

16 UNCBD, 2014, [COP 12](#), Pyeongchang (Republic of Korea), 51.

17 UNCBD, 2016, [COP 13](#), Cancun (Mexico), 3rd decision, 22.

18 UNCBD, 2018, [COP 14](#), Sharm el-Sheikh (Egypt), decision 16, 298.

19 Ibid., 56.

20 It should be noted that this is presented as an innovative approach alongside sustainable intensification and other biodiversity friendly practices.

21 UNCBD, 2022, “[Kunming-Montreal Global Biodiversity Framework](#)”, Montreal (Canada), Target 10.

22 UNCCD [COP 14, decision 20](#)

The second focused on promoting practices to combat drought, and “invites Parties to use a variety of technical approaches, such as sustainable land and water management, agroecological approaches, ecosystem restoration and watershed management, for addressing drought and increasing resilience of ecosystems and communities to extreme weather²³”. Unfortunately, this recognition proved to be short-lived, as agroecology was then completely absent from the decisions made at COP15 in 2022²⁴.

Agroecology in COP supplementary texts: sporadic references

Outside the COPs, the term “agroecology” starts to appear (albeit sporadically) in some supplementary texts relating to the different conventions.

In the UNFCCC, although agroecology does not appear in the COP reports, the IPCC is more forthcoming. In 2022, its report on impacts, adaptation and vulnerability mentions “agroecological principles and practices, ecosystem-based management in fisheries and aquaculture, and other approaches that work with natural processes support food security, nutrition, health and well-being, livelihoods and biodiversity, sustainability and ecosystem services²⁵”. The following year, the Summary for Policymakers of the IPCC report states: “Examples of effective adaptation options include: cultivar improvements, on-farm water management and storage, soil moisture conservation, irrigation, agroforestry, community-based adaptation, farm and landscape level diversification in agriculture, sustainable land management approaches, use of agroecological principles and practices and other approaches that work with natural processes (high confidence²⁶)”.

In 2019, in the IPBES Global Assessment Report on Biodiversity and Ecosystem Services, the term “agroecology” was mentioned alongside «sustainable agricultural practices» in relation to producing and consuming food sustainably²⁷.

In 2022, the Global Land Outlook (GLO), the UNCCD’s flagship publication, highlighted the role of current global food systems in land degradation: “Globally, food systems are responsible for 80% of deforestation, 70% of freshwater use, and are the single greatest cause of terrestrial biodiversity loss.” The report also refers to agroecology as a sustainable alternative, transforming agriculture from the leading cause of degradation to the primary driving force behind land and soil restoration: “many traditional and modern food production practices can enable agriculture to pivot from being the primary cause of degradation to becoming the principal catalyst for land and soil restoration. Fortunately, sustainable alternatives, inspired by agroecological approaches, already exist and are affordable and effective²⁸”.

23 Ibid., decision 23.

24 It should be noted that in 2021, in the run-up to the World Summit on Food Systems, the UNCCD presented a publication introducing agroecological approaches to make food production systems more resilient (see: UNCCD, 2022, “Restoring soil health for nature-positive food production: A pathway for safeguarding human and planetary health”).

25 IPCC, 2022, “[Climate Change 2022: Impacts, Adaptation and Vulnerability](#)”.

26 IPCC, 2023, “[Climate Change 2023, Synthesis Report, Summary for Policymakers](#)”.

27 “Options for sustainable agricultural production are available and continue to be developed, with some having more impacts on biodiversity and ecosystem functions than others {6.3.2.1}. These options include integrated pest and nutrient management, organic agriculture, agroecological practices, soil and water conservation practices, conservation agriculture, agroforestry, silvopastoral systems, irrigation management, small or patch systems and practices to improve animal welfare”. “Promoting sustainable agricultural practices, including good agricultural practices, agroecology, among others, multifunctional landscape planning and cross-sectoral integrated management”. IPBES, 2019, “[Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services](#)”, 42; 45.

28 UNCCD, 2022.

Recognition of agroecology has been slow, despite its proven relevance

Having examined the Conventions over the past 30 years, it is clear that, although recognition of agroecology is gradually gaining ground in terms of positions taken, it is still not widely recognised. Agroecological practices are one of the solutions identified (among others), however its systemic approach, comprising political, social and cultural dimensions, is not promoted as a model for transforming society in order to meet, or help meet, the objectives set by the Conventions. For example, agroecology could be interpreted as a comprehensive approach in reports by COP13 and 14 of the UNCBD, yet in the Kunming-Montreal Global Biodiversity Framework and the IPBES 2019 report it is only presented as one sustainable agricultural practice, among others. Could this be considered a step backwards? The fact that agroecology was no longer mentioned in the UNCCD texts at COP15 would also suggest that this is the case.

However, from the more specific perspective of global issues, agroecology offers tangible solutions in terms of:

- **Mitigation and adaptation to climate change.** Agroecology contributes to mitigating climate change by reducing emissions from the production of synthetic inputs and loss of soil carbon due to conventional practices, while encouraging carbon storage. At the same time, agroecology is an effective solution - by its very nature - for adapting to climate variations. This is a priority for vulnerable groups, the very people who are least responsible for greenhouse gas emissions²⁹.
- **Development and restoration of biodiversity.** By diversifying and combining different crops, integrating crop growing with livestock farming, agroecology supports ecosystems and biodiversity by promoting ecosystem services. By drawing on in-situ³⁰ genetic diversity, agroecology supports the natural adaptation of ecosystems and, through its integrated system, agroecology reduces the pressure on ecosystems and supports biodiversity. In addition, by encouraging habitat continuity, agroecology also contributes to the development and protection of biodiversity³¹.
- **Combating land degradation.** Agroecology naturally helps to improve soil fertility³² and increases biodiversity³³ and therefore the resilience of ecosystems³⁴. It preserves water resources³⁵, protects against violent winds, drought and erosion³⁶, etc. Thanks to ecological intensification, it is also possible to avoid changing land use³⁷, while encouraging the development of additional services such as the supply of firewood and aromatic and medicinal plants and providing a high-quality living environment³⁸.

29 Climate Action Network Submission to the Sharm-el-Sheikh joint work on implementation of action on Agriculture and Food Security, 2023.

30 The term «in-situ» refers to where genetic resources exist within ecosystems and natural habitats, in the surroundings where they have developed their distinctive properties.

31 FAO, 2019, "[The State of the World Biodiversity for Food and Agriculture - in brief](#)"; FAO, 2018, "[Sustainable agriculture for biodiversity - biodiversity for sustainable agriculture](#)"; FAO, 2018, "[The 10 elements of agroecology : guiding the transition to sustainable food and agricultural systems](#)".

32 Particularly by enriching organic matter (manure, compost, ramial chipped wood (RCW), green fertilisers, alluvium, etc.)

33 Soil fauna, adapted local varieties, spontaneous varietal diversity, pollinating insects, etc

34 The literature indicates that one of the major factors in resilience is diversity, whether of genetic resources, production facilities, marketing channels, etc. (Altieri, Nicholls, Henao, Lana, 2015, «Agroecology and the design of climate change-resilient farming systems», *Agronomy for Sustainable Development*, no.35, 869-890).

35 In particular by maintaining a microclimate and soil humidity (tiered cultivation, LCD techniques, etc.), and protecting groundwater from pollution (reduction of fertilisers, soil structure, etc.).

36 By planting hedgerows, trees and ensuring permanent soil cover.

37 Agroecological intensification is a farming method based on the sustainable use of ecosystem services. It makes it possible both to achieve high yields and enhance the natural functions of agroecosystems over a given area (Cari, 2022, «[Agroecology, a boon for achieving the objectives of land degradation neutrality](#)», Désertif'actions)

38 Ibid.

Yet how can we explain the difficulty of including agroecology in the three Conventions? There are several possible explanations for the limited references to agroecology in the Conventions:

- The term “agroecology”, originally coined by social and peasant movements, remains divisive, and its implementation inherently upsets the major established interests, who are capable of organising to influence negotiations. Due of the consensual nature of the Conventions, which seek to find the lowest common denominator between the Parties, direct references to agroecology are left out as they do not achieve the necessary consensus.
- Although instruments exist that include definitions of agroecology, such as the FAO’s 10 elements of agroecology and the HLPE’s 13 principles of agroecology, our understanding of the concept of agroecology is still open to debate and interpretation. The fact that it cannot be encapsulated in a replicable model is both a strength (its flexible application in a variety of contexts) and a drawback (all the more difficult to reach a consensus on exactly what it involves and how to promote it politically).

This finding prompts us to adopt a broader perspective on agroecology, over and above searching for references to the term by name. In its place, we need to examine the presence of the principles that define agroecology within the Conventions. Indeed, the adoption of agroecology in its most integrative and systemic vision, would clearly entail major systemic change, through the revision of economic agreements and global trade frameworks. It would appear that in the Conventions, a more likely strategy involves introducing an agroecological approach “from the bottom up”, by encouraging a “small steps approach” through the incorporation of certain agroecological principles.

Agroecology principles reflected in the conventions: a wide range of opportunities

Although the presence of the term “agroecology” has symbolic value, the use of the term does not reflect the only opportunities offered by the Conventions to bolster agroecology. It would therefore be useful to examine the three Conventions from a different perspective, to identify factors that could pave the way for agroecology to be taken into account as a framework of values and actions.

To determine the indirect presence of agroecology within the three Conventions, we can look at the key elements included in the definition of agroecology. The HLPE³⁹ offers a concise set of 13 agroecological principles: recycling; reducing the use of inputs; soil health; animal health and welfare; biodiversity; synergies (managing interactions); economic diversification; co-creation of knowledge (embracing local knowledge and global science); social values and diets; fairness; connectivity; land and natural resource governance; and participation⁴⁰.

Bearing in mind the interdependence and synergies between agroecological principles, and for the sake of brevity, this paper focuses on three concepts that encompass several agroecological principles: (1) nature-based solutions, (2) inclusiveness and (3) building resilience.

Emphasising nature-based solutions within the Conventions

Based on their definition adopted by the fifth session of the United Nations Environment Assembly, nature-based solutions are “actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits⁴¹”.

Nature-based solutions can be broken down into three types of action, which can be deployed on their own or in combination at local level: preserving functional ecosystems in good ecological condition; improving the management of ecosystems for sustainable use by human activities; restoring degraded ecosystems or creating new ones. These three types of action are also at the core of the concept of agroecology and are in line with several of the principles of agroecology, as defined by the HLPE and in particular the principles: 3-soil health, 5-biodiversity, 12-land and natural resource governance⁴².

It should be noted that the popularity of this term is due to two key factors. Firstly, its very vague nature, which allows each stakeholder to take it on board. Secondly, the lack of social and political dimensions makes it consensual, although it does not enable the necessary in-depth transformation of food systems to be set in motion. At this juncture, the aim is to demonstrate the similarities between agroecology and this approach, while highlighting its limits and pitfalls⁴³.

Regarding the UNFCCC, COP28 (2023) called on the Parties to speed up the use of nature-based solutions and ecosystem-based approaches. It also underscored that adaptation measures should be based on the

39 While the FAO’s agroecology elements reflect a major political consensus, the 13 HLPE agroecological principles have strong scientific legitimacy. These two sets of principles are very similar; however, agroecology stakeholders often prefer to reference the 13 HLPE principles as they are more operational in nature and leave less room for interpretation.

40 HLPE, 2019.

41 UNEP, 2022, “[UN Environment Assembly concludes with 14 resolutions to curb pollution, protect and restore nature worldwide](#)”.

42 HLPE, 2019.

43 This paper does not seek to conduct a semantic analysis of the term “nature-based solutions”, which is severely questioned by civil society, because it has been seized by other stakeholders with conflicting interests. For an in-depth analysis of this issue, refer to IPES Food study : <https://ipes-food.org/report/smoke-mirrors/>

“best available science” and traditional and Indigenous knowledge based on nature and ecosystems⁴⁴. The Global Stocktake, the most important political document to emerge from COP28 in 2023, and the first major negotiated text of the UNFCCC to mention food⁴⁵, encourages the implementation of nature-based solutions and ecosystem-based approaches, alongside other solutions such as sustainable agriculture and land use management⁴⁶. In another section, it urges countries to raise their ambitions and accelerate progress towards achieving the 2030 targets, in particular by accelerating the use of ecosystem-based adaptation and nature-based solutions⁴⁷.

Within the UNCBD framework⁴⁸, nature-based solutions are at its core, even if ex-situ conservation of biological diversity is recognised as a necessary complement to in-situ conservation⁴⁹. Furthermore, the subsidiary body responsible for issuing scientific, technical and technological opinions (SBSTTA) recognises that “nature-based solutions with biodiversity safeguards are an essential component of ecosystem-based approaches to climate change adaptation, mitigation and disaster risk reduction⁵⁰”.

Within the framework of the UNCCD, nature-based solutions were introduced in 2019, at the COP14 ministerial round tables, during which several countries mentioned them as a “response to environmental and social issues⁵¹”. Following COP14, the Convention was tasked with examining this subject of nature-based solutions by drawing up a report on the coherence and alignment between sustainable land management, ecosystem-based adaptation, ecosystem-based disaster risk reduction and nature-based solutions⁵². The following year, the G20 meeting led to the launch of a global initiative to reduce land degradation and improve the conservation of land habitats⁵³. One of the objectives of this initiative is to promote nature-based solutions and sustainable agricultural practices to restore land. In 2022, at COP15, the Parties introduced nature-based solutions in the decision to strengthen relationships with other relevant conventions and institutions⁵⁴.

44 UNFCCC, 2023, [“Global Goal on Adaptation”](#), Dubai (United Arab Emirates), Section 14.

45 Food is mentioned twice in the preamble and four times in the adaptation section.

46 UNFCCC, 2023, [“Global Stocktake”](#), Dubai (United Arab Emirates), Section 55.

47 Ibid., Section 63.

48 UNCBD, 2019, SBSTTA 23/2 Recommendation, COP 23, Montreal (Canada).

49 United Nations, 1992, [Convention on Biological Diversity](#).

50 UNCBD, 2019.

51 UNCCD, 2019, [COP14](#), New Delhi (India).

52 Walz, Nick, Higuera Roa & al., 2021, “Coherence and Alignment among Sustainable Land Management, Ecosystem-based Adaptation, Ecosystem-based Disaster Risk Reduction and Nature-based Solutions”, United Nations University - Institute for Environment and Human Security.

53 UNCCD, “G20 Global Land Initiative”, <https://www.unccd.int/our-work/flagship-initiatives/G20-Initiative>, last consulted on 21 June 2024.

54 UNCCD, 2022, [COP 15](#), decision 8, Abidjan (Côte d’Ivoire).

Ensuring fairness, participation and social responsibility: the role of inclusion in the Conventions

Leave no one behind is a core value of the United Nations, as set out in the 2030 Agenda for Sustainable Development (2030 Agenda) and the Sustainable Development Goals (SDGs)⁵⁵. The FAO adopts this principle in its determination to eradicate “poverty, discrimination, inequalities, and vulnerabilities undermining the potential of individuals and communities”, which are key for building “sustainable, equitable, and inclusive agrifood systems⁵⁶”. The HLPE principles defining the foundations of agroecology, particularly illustrate the concepts of inclusion, fairness, participation, social responsibility: 8-co-creation of knowledge, 9-social values and diets, 10-fairness, 11-connectivity, 12-land and natural resource management, 13-participation⁵⁷.

Within the UNFCCC, the Koronivia Joint Work on Agriculture (KJWA), emphasised in its final text at COP 27 in 2022 the “importance of smallholder farmers, food security and equity⁵⁸”. At COP28 (2023), another important political decision established a framework to guide governments’ adaptation efforts. In this decision, they opted to address the theme of food, and section 9 of the text urges the Parties to raise their ambitions and encourage adaptation action, by “increasing sustainable and regenerative production and equitable access to adequate food and nutrition for all⁵⁹”. This openness to inclusiveness, through the prism of food security and nutrition, which also appears in the Preamble to the Paris Agreement (2015)⁶⁰, has no operational dimension, however, and remains relatively non-binding for the Parties.

The UNCBD comprises two pillars: the conservation and sustainable use of biological diversity, to protect the ecosystems on which present and future human societies depend, and the fair and equitable sharing of the benefits arising from the use of genetic resources. Each of its pillars⁶¹, as well as many UNCBD articles, COP targets and objectives, are human rights-based.

Firstly, the UNCBD strives for inclusiveness in biodiversity management, by ensuring the fair and equitable sharing of benefits (monetary and non-monetary⁶²) arising from the use of genetic resources⁶³, research findings and the commercial use of genetic resources⁶⁴. This sharing must take place not only between the States Parties, but also within countries with the «custodians of biological diversity»,⁶⁵ i.e. the Indigenous and local communities that are the holders of genetic resources and shared traditional knowledge, particularly women⁶⁶.

Then, the UNCBD values the role played by women and Indigenous communities the conservation and the sustainable use of biological diversity, by recognising the need to ensure their full participation at all levels of political decision-making regarding the conservation of biological diversity and its application, and to ensure that their rights are respected.

55 UNSDG, «Universal values. Principle 2: Leave no one behind”, <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind>, last consulted on 21 June 2024.

56 FAO, “Inclusivity in agrifood systems”, <https://www.fao.org/inclusivity-in-agrifood-systems/en>, last consulted on 7 June 2024.

57 HLPE, 2019.

58 CarbonBrief, 2022, “[COP27: Key outcomes for food, forests, land and nature at the UN climate talks in Egypt](#)”.

59 UNFCC, 2023, “[Global Goal on Adaptation](#)”, Dubai (United Arab Emirates), section 9.

60 “[Recognizing the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change](#)” (United Nations, 2015, Paris Agreement).

61 For example, the first pillar corresponds to the «Diversity» (FAO, 2018) and «Biodiversity» (HLPE, 2019) principles. The second pillar is reflected in the principles «Human and social values», «Responsible governance» (FAO, 2018), «Equity», «Land and natural resource governance» and «Participation» (HLPE, 2019).

62 UNCBD, 2012, Nagoya Protocol, Montreal (Canada), Preamble §6 and Nagoya Protocol, article 5.

63 UNCBD, 1992, Preamble §12, article 1; UNCBD, 2012.

64 UNCBD, 1992, article 15; UNCBD, 2012, article 5.

65 Ibid.

66 The position of Indigenous peoples is also recognised through the obligation to obtain their prior informed consent before acquisition, sharing or transfer of genetic resources and/or traditional knowledge. Mutually agreed terms must also be established (UNCBD, 2012, articles 6, 7, 17, 18), taking into account their customary law, protocols and procedures (UNCBD, 2012, article 12), with the latter having the right to identify the legitimate holders of their traditional knowledge within their communities (UNCBD, 2012, Preamble §24).

Lastly, the UNCBD is based on the principle of solidarity, between inhabitants of the same planet, by recognising the special needs of developing countries⁶⁷ and the need for financial and technical support for these countries⁶⁸, and also by supporting an intergenerational equity approach, which seeks to meet the needs of the present without compromising the ability of future generations to meet their own needs⁶⁹. The inclusive narrative of the UNCBD paves the way for agroecology.

In 2019, at COP14, the Parties to the UNCCD adopted a historic decision to recognise “that responsible land governance is a fundamental component of sustainable land management”.⁷⁰ The adoption of this decision was the outcome of an advocacy campaign initiated by civil society in 2015, with the gradual support of several Parties and observers to the Convention. This decision encourages Parties to observe the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security⁷¹, in their actions to combat desertification and drought, and to achieve Land Degradation Neutrality (LDN). This decision further reinforces the concepts of fairness, social responsibility and inclusiveness within the UNCCD by calling on Parties to recognise legitimate land tenure rights, including customary laws, and to promote fair and inclusive local dispute resolution mechanisms. The decision also calls for the legal recognition of women’s equal rights to use and own land, as well as promoting measures to address their needs and concerns to combat desertification.

In order to support countries in implementing this decision, the UNCCD and the FAO have produced a technical guide⁷² on the inclusion of voluntary guidelines on land tenure in achieving LDN. At COP15 in 2022, the Parties were encouraged to refer to and adopt the appropriate measures outlined in the guide to take greater account of legitimate land rights in action plans, legal frameworks, etc⁷³.

A study on the differentiated impacts of desertification and drought on women and men was also conducted in order to develop policy recommendations⁷⁴. It concludes that women and other disadvantaged groups are much more vulnerable to climate shocks due to their limited access to resources to cope with and recover from the damage caused. It recommends equal and meaningful participation of women and men in land and natural resource governance at national and landscape levels. Similarly, it recommends financial mechanisms that include measures to improve women’s access to available financing⁷⁵.

67 UNCBD, 1992, Preamble §16, §17, §19, articles 12, 16, 17.

68 UNCBD, 1992, articles 8, 9, 18, 20; UNCBD, 2010, COP 10, decision X/2, Preamble §10, Montréal (Canada). These countries are referred to here in the broadest sense: developing countries, least developed countries, small island developing states, the most vulnerable countries from an environmental point of view, as well as countries with economies in transition.

69 UNCBD, 2022, COP15, decision 15/4, section C, 7, Montréal (Canada).

70 UNCCD, 2019, COP14, decision 26.

71 The voluntary guidelines on land tenure drawn up by the FAO were approved by the Committee on World Food Security (CFS) in 2012.

72 UNCCD, 2022, COP15, decision 27.

73 FAO & UNCCD, 2022, “[Technical Guide on the Integration of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security into the Implementation of the United Nations Convention to Combat Desertification and Land Degradation Neutrality](#)”.

74 UNCCD, 2022, “[Study on differentiated impacts of DLDD on women and men: Summary for decision makers](#)”.

75 Ibid.

Building resilience of communities, populations and ecosystems

Enhanced resilience of people, communities and ecosystems is key to sustainable food and agricultural systems⁷⁶. The resilience in question is related to “the capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation⁷⁷”. Resilience is the objective of a series of HLPE agroecological principles: 3-soil health, 4-animal health, 5-biodiversity, 6-synergies, 7-economic diversification.

According to the literature, one of the major factors in resilience is diversity⁷⁸, whether in genetic resources, production units, marketing channels, etc. Agroecological systems, in which diversity is a key principle, are therefore more resilient⁷⁹.

In the context of the UNFCCC, COP 28 (2023) was marked by the United Arab Emirates declaration on sustainable agriculture, resilient food systems and climate action, which aims to commit states to include agriculture and food systems in their nationally determined contributions⁸⁰ and other national plans before COP30 in 2025. Although it is not an official COP document, it has been signed by 159 Parties to the Convention and stipulates that agriculture and food systems must adapt and transform as a matter of urgency and that adaptation and resilience measures must be scaled up⁸¹.

Resilience is also a major concern for the UNCBD. Firstly, the resilience of biodiversity is one of the Convention’s fundamental concerns. For example, in the Kunming-Montreal Global Biodiversity Framework⁸², the first objective is the resilience of all ecosystems and biodiversity⁸³. Resilience of communities is also one of the Convention’s core concerns, and subsequent COP reports recognise that a large number of local communities and Indigenous peoples are closely and traditionally dependent on biological resources. The conservation and sustainable use of biological diversity is therefore of the utmost importance in meeting food, health and other needs of the world’s growing population. As such, access to and sharing of genetic resources and technology are essential⁸⁴. Lastly, the resilience of human societies is also taken into account in Target 10 of the Kunming-Montreal Global Biodiversity Framework⁸⁵, which states that the sustainable management of agricultural, aquacultural, fisheries and forest areas is essential for the resilience of all production systems that depend on ecosystems and biodiversity.

Since its adoption, the UNCCD has sought to bolster the resilience of populations and ecosystems, by aiming to reduce their vulnerability to land degradation and drought. The UNCCD is making progress in recognising the importance of resilience, and the framework is becoming clearer with regard to land degradation, but especially in the context of combatting drought. For example, the UNCCD’s 2018-2030 strategy includes the objective to mitigate, adapt to, and manage the effects of drought in order to enhance resilience of vulnerable populations and ecosystems. Between 2018 and 2019, the Science-Policy Interface worked on the links between sustainable land management and mitigating the impacts of drought across several types of land use (crops, pastures, forests). In its report, it concludes that land management offers the potential to mitigate the effects of drought and enhance the resilience of populations and ecosystems.

76 FAO, “Resilience: enhanced resilience of people, communities and ecosystems is key to sustainable food and agricultural systems”, <https://www.fao.org/agroecology/knowledge/10-elements/balance/en/>, last consulted on 21 June 2024.

77 See: Pachauri, Allen, Barros & al., 2014, “Climate change 2014: synthesis report. Contribution of Working Groups I, II and III to the fifth assessment report of the Intergovernmental Panel on Climate Change”, IPCC.

78 Altieri, Nicholls, Henao & Lana, 2015.

79 Semi-natural cover, diversified landscapes and crop diversity play an essential role in ensuring the stability of production against hazards, particularly climate change, which affects agriculture. (MacLaren & al., 2022, “Long-term evidence for ecological intensification as a pathway to sustainable agriculture”, Nature Sustainability).

80 The national contributions determined are the measures that States set themselves to reach the treaty’s objectives.

81 UNFCCC, COP28UAE, “COP28 UAE Declaration on sustainable agriculture, resilient food systems, and climate action”, <https://www.cop28.com/en/food-and-agriculture>, last consulted on 21 June 2024.

82 UNCBD, 2022.

83 This concern is also reflected in Target 8.

84 United Nations, 1992, [Convention on Biological Diversity](#).

85 UNCBD, 2022.

Strengthening the position of agroecology in the Rio Conventions: striking a balance between symbolic presence and development opportunities

Reference to the term “agroecology” in the texts stemming from the three Rio Conventions is still relatively modest and limited. Some of the principles of agroecology are mentioned and recognised in the recommendations made to the Parties, as well as in the decisions taken at the COPs. This symbolic recognition is worth highlighting, as it provides an interesting entry point for defending agroecology as a whole.

The transformative scope of agroecology lies in its systemic vision, based on the consideration of all its principles. This systemic approach is currently lacking in the three Conventions, which risks limiting agroecology to a few cultivation practices that can be used in conjunction with other innovative practices⁸⁶. The organisations involved in promoting agroecology must therefore work to ensure that it is not treated as just another farming practice, but rather that it is recognised as a coherent set of principles designed to steer food system change. With this in mind, civil society organisations involved in the Rio Conventions can draw on the definitions of agroecology as a set of principles developed by the HLPE and/or the FAO (all of which have been approved by UN Member States). The inclusion of these principles in the Conventions’ reporting and evaluation frameworks would constitute a major step forward.

Agroecology can provide structuring solutions to the issues addressed by the three Conventions and strengthen their synergies. It would be particularly relevant to bridge the gap between the Conventions in order to address the issue of agricultural and food systems, through policy guidelines that integrate the challenges of land, climate and biodiversity. The beginnings of this approach can be seen with the UNCBD⁸⁷, which no longer considers the protection of biodiversity and ecosystems in isolation⁸⁸. Various actors, including civil society organisations, along with the Parties themselves (particularly within the UNCCD⁸⁹), have called for greater synergy between the three Rio Conventions, in order to shape the future of our planet.

Building bridges between the different environmental issues is important, however highlighting the interdependence of food systems with health, agricultural and social challenges is also crucial. While the Rio Conventions were drawn up to meet environmental goals, the issues of agriculture and food have gradually emerged and are now being given serious consideration. In this respect, by offering a coherent approach, agroecology offers multiple co-benefits not only for the environment, but also for agriculture and health. For those involved in promoting agroecology, we must use this opportunity to promote a far-reaching agroecological transformation of food systems. However, the pathways to achieving the future we aspire to are still complex and a matter of debate among a wide range of stakeholders. There is still a long way to go...

86 “Despite its transformative potential and conceptual maturity, agroecology is not used as an overarching framework for food system change in the three governance spaces studied here, nor are its multiple dimensions systematically referenced. Though references to agroecology have become more widespread, there are growing concerns that emerging global policy spaces and influential development actors are stripping the term of its political dimensions.” (IPES Food, 2022, «Smoke and mirrors: Examining competing framings of food system sustainability: agroecology, regenerative agriculture, and nature-based solutions», 4).

87 UNCBD, 2022, COP15, decision 15/4, target 8, 10 and 11.

88 UNCBD, 2022, COP15, decision 15/4, target 2, 3 and 12.

89 “Promote opportunities that support, as appropriate and applicable, the long-term goals of the Paris Agreement and the development of an ambitious post-2020 global biodiversity framework, taking into consideration land-based solutions for climate action and biodiversity conservation and the mutually supportive implementation of the three Rio conventions” (UNCCD, 2019, COP 14, New Delhi Declaration).

