TOWARDS SBSTTA-27: POLICY BRIEF
ITEM 9:
BIODIVERSITY AND AGRICULTURE

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ALEJANDRA DUARTE, RESEARCH AND POLICY ASSOCIATE

Summary

Soil biodiversity is a cornerstone of agricultural ecosystems. It underpins fertility, water regulation, nutrient cycling, carbon storage, and resilience to climate change. Yet it remains under-researched and poorly integrated into policies and monitoring frameworks (CBD/SBSTTA/27/8).

The erosion of agricultural biodiversity threatens food and nutrition security, health, and adaptation to climate change, while unsustainable agricultural practices remain a major driver of biodiversity loss globally.

The CBD Programme of Work on Agricultural Biodiversity and related cross-cutting initiatives provide important frameworks, but require stronger integration with the Kunming-Montreal Global Biodiversity Framework (KMGBF) and collaboration with FAO and other partners.

Gender equality, and human rights based approaches must be central to agricultural biodiversity governance, ensuring that Indigenous Peoples, local communities, women, and youth, are supported as agents of transformation.

What is the issue?

Agricultural biodiversity is defined as all components of biodiversity of relevance to food and agriculture, including genetic resources, species, and ecosystem diversity within agro-ecosystems. It spans crops, livestock, fisheries, forest foods, pollinators, soil organisms, and microbial resources.

The Convention on Biological Diversity (CBD) has addressed agricultural biodiversity since COP I (1994). In COP V (2000) Parties adopte the Programme of Work on Agricultural Biodiversity (decision V/5). This includes four elements: ***1. Assessment; 2. Adaptive management; 3. capacity-building, and; 4. mainstreaming***; and three cross-cutting initiatives: ***1. the International Pollinator Initiative; 2. the International Initiative on Soil Biodiversity, 3. and the Biodiversity for Food and Nutrition Initiative***.

At CBD COP 15, Parties adopted the Plan of Action (2020–2030) for the International Initiative for the Conservation and Sustainable Use of Soil Biodiversity (decision 15/28). This plan promotes mainstreaming soil biodiversity into policy, supporting sustainable soil management, enhancing knowledge and capacity, and advancing monitoring and assessment (CBD/SBSTTA/27/8). However, national implementation remains uneven, with knowledge gaps, limited taxonomic expertise, fragmented data, and insufficient financial resources.

Agricultural biodiversity governance also requires alignment with FAO frameworks, including the Global Plan of Action on Plant Genetic Resources, the Global Strategy for the Management of Farm Animal Genetic Resources, and the Global Soil Partnership. Despite these efforts, the decline of agricultural biodiversity continues, and synergies with KMGBF implementation remain underutilised.

Why is it important?

Agricultural biodiversity is essential to food security, nutrition, and human health. It provides direct benefits, such as diverse crops, livestock, fisheries, and pollinators for production, and indirect ecosystem services, including soil fertility, water regulation, carbon sequestration, and resilience to climate change.

Soil biodiversity plays a particularly critical role. Healthy soils host billions of organisms that regulate nutrient cycling, enhance crop productivity, sequester carbon, and reduce erosion. Yet soil biodiversity remains poorly monitored, underfunded, and absent from many national policies. Loss of soil health exacerbates land degradation and undermines ecosystem resilience.

Beyond soils, pollinators are indispensable for global food production, supporting over 75% of crops. Livestock diversity ensures resilience against disease and climate stress, while fisheries and aquatic genetic resources provide protein and livelihoods for millions. Conserving these resources is not only ecological but also social and cultural.

The erosion of agricultural biodiversity has profound equity and rights implications. Women, Indigenous Peoples and Local Communities depend heavily on agrobiodiversity for food, medicine, and livelihoods. Their traditional knowledge, as seed conservation, agroforestry, is vital for adaptation. Yet these groups face systemic barriers, including insecure land tenure, exclusion from decision-making, and limited access to resources and finance. Recognising their roles is essential for effective and just biodiversity governance.

Agricultural biodiversity is also critical for achieving multiple KMGBF Targets:

- Target 1 (spatial planning): integrating agrobiodiversity into landscapes and seascapes.
- Target 2 (restoration): restoring degraded agricultural lands and soils.
- Target 3 (Conserve 30%): conserving agrobiodiversity-rich areas and Indigenous People and local communities territories.
- Target 10 (sustainable agriculture): transitioning to agroecological practices.
- Target 11 (nature´s contributions to people): securing pollination, nutrient cycling, and soil fertility.
- Target 19 (financing): mobilizing resources for sustainable agriculture.

What should be done?

To realise the potential of agricultural biodiversity and soil biodiversity in particular, the following actions are urgent:

Mainstream soil biodiversity into national policies and monitoring systems. Parties should adopt harmonised methodologies for soil biodiversity monitoring, integrate indicators into KMGBF reporting (decision 16/31), and strengthen national soil strategies. Global cooperation with FAO's Global Soil Partnership and the Global Soil Biodiversity Initiative should be expanded.

Promote sustainable and agroecological practices. Governments should support farmers, pastoralists, and fishers in adopting practices such as crop diversification, agroforestry, silvopastoral systems, regenerative agriculture, organic amendments, and sustainable nutrient management. Payments for ecosystem services and restoration incentives can foster uptake of these practices.

Safeguard pollinators, crops, livestock, fisheries, and genetic resources. Strengthen implementation of the International Pollinator Initiative, conserve plant and animal genetic diversity. Special attention should be given to aquatic genetic resources and underutilized species that enhance nutrition and resilience.

Ensure equity, gender equality, and human rights in agricultural biodiversity governance. Embed human rights-based approaches, including Free, Prior and Informed Consent (FPIC), into all agrobiodiversity initiatives. Strengthen the participation of women, youth, and Indigenous People, local communities in decision-making, monitoring, and benefit-sharing. Also, collect and use sex-disaggregated data to track differentiated impacts and contributions.

Invest in knowledge, capacity, and financing. Increase support for taxonomic expertise, soil microbiome research, and traditional knowledge documentation. Financial resources and innovative financing mechanisms also need to be mobilised,

and capacity at the community and institutional levels needs to be built to implement sustainable practices and participatory monitoring systems.

By embedding these measures, agricultural biodiversity can become a cornerstone of food system transformation, climate adaptation, and biodiversity recovery, delivering on the KMGBF vision of living in harmony with nature.

About this brief

This brief outlines Women4Biodiversity's key recommendations for a sustainable, participatory, inclusive, and equitable governance of agriculture in relation to the Convention on Biological Diversity (CBD), and in alignment with the Kunming–Montreal Global Biodiversity Framework (KM-GBF).

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For more information please contact:

Alejandra Duarte
Research and Policy Associate
Women4Biodiversity
alejandra.duarte@women4biodiversity.org

Women4Biodiversity
227/31, Baan Wang Tan
Chiang Mai, 50230
Thailand
info@women4biodiversity.org
www.women4biodiversity.org