

AGROECOLOGY & LAND DEGRADATION NEUTRALITY

Context

Land Degradation Neutrality (LDN) is an innovative approach based on the implementation of nature-based solutions while relying on ecosystems to address global challenges. Promoted from its outset by the UNCCD, LDN involves several types of actions that can increase biodiversity and improve the health and productivity of soils, both above and below the ground. Among these actions, two types are prioritized: i) sustainable land management to avoid and reduce land degradation and ii) land restoration and rehabilitation. Whether it is to avoid and reduce land degradation or to restore land, agroecology has many advantages. Agroecology helps fight against degradation factors but also goes beyond by integrating holistic approaches favorable towards the development of territories.

Drivers of land degradation: pressures and threats

Generally speaking, land degradation is the result of anthropogenic pressures exacerbated by natural processes and is often amplified and closely linked to climate change and biodiversity loss. These pressures include:

- The expansion of agricultural land and the urbanization at the expense of natural areas and forests;
- Deforestation, overexploitation of wood and the disappearance of vegetation cover, especially of endemic plants;
- Overexploitation of natural resources and mismanagement of water resources;
- Pollution linked to inappropriate agricultural practices, uncontrolled wastewater discharges into the wadis and the use of chemicals and fossil fuels causing pollution and salinization of the groundwater;
- Overgrazing and soil deterioration by inappropriate mechanized ploughing to the shallow soils in drylands.

Arguments from the field

To combat the levers of land degradation, agroecology presents major assets, some of which have been identified from initiatives and field experiences and are shared here.

Agroecology allows to improve soil fertility

- The planting of *Acacia albida* between palm trees in oases to create a microclimate that maintains soil moisture and provides organic matter;
- The provision of ramial chipped wood (RCW) and composting of organic waste to fertilize soils lacking organic matter.

Agroecology allows to enhance biodiversity

- Surrounding cultivated areas with wooded strips of various species, giving priority to local species and species with high melliferous, fodder and wood-producing value to promote the economic value of this biodiversity;
- The protection and restoration of forests through reforestation with native species adapted to climate and the creation of small businesses based on non-timber forest products (NTFP) to improve the socio-economic conditions of the populations.

Agroecology allows to better manage water resources

- Knowledge of evapotranspiration to avoid water wastage and to ensure a better use of the resources;
- The reuse of treated wastewater in the irrigation of wooded areas, to avoid its discharge into the wadis, and to reduce the pollution of groundwater.

Agroecology allows to limit the expansion of agricultural spaces

- Agroecological intensification of agricultural areas to improve incomes despite the small areas available;
- The articulation between agriculture and livestock to optimize the available spaces, to limit the conflicts over land use, and to allow the sharing of the benefits.

Messages from civil society

To facilitate the deployment of agroecology, all stakeholders must become aware of their capacities to bring change.

Donors and international organizations

- Facilitate access to funding for agroecological practices (grants and subsidies) to contribute to LDN;
- Strengthen support for agroecology-based initiatives as an approach to achieving LDN within the three Rio conventions (UNCCD, UNFCCC and UNCBD) and other international and regional organizations.

Governments

- Establish (technical and financial support) policies that support agroecology and family farmers;
- Integrate the three dimensions (avoid, reduce, and restore) into LDN action plans and promote agroecological systems.

Research and education

- Integrate agroecology training at the university level and in agricultural training centers;
- Increase the area of experimental plots dedicated to agroecology to improve the available technical references.”

**AGROECOLOGY
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NOW!**

We target Sustainable Development Goals (SDGs) 15 (Life on Land), while contributing to knowledge and development practices aimed at achieving SDGs 1, 2, 3, 5, 6, 12 and 13.

