

THE BENEFITS OF AGROECOLOGY FOR CLIMATE



INTERGOVERNMENTAL PANEL
ON CLIMATE CHANGE (IPCC)



The IPCC Assessment 6 reports with high confidence that the “adoption of agroecology principles and practices will be highly beneficial to maintaining healthy productive food systems under climate change.”



CLIMATE CHANGE ADAPTATION



In promoting **farm diversification** and the use of seeds adapted to local context, **agroecology has positive impacts on climate adaptation** (Source CGIAR).

It is **more resilient to face extreme climatic conditions** (drought, high temperatures, flooding), as some crops continue to thrive even if others fail due to climate disruptions. Therefore, agroecology **builds climate-resilient communities**.

It also **improves ecosystem services**, including pollination, pest control, nutrient cycling, water regulation and soil fertility



CLIMATE CHANGE MITIGATION



Agroecology contributes to reducing greenhouse gas emissions, mainly by increasing soil organic matter through increased carbon sequestration (Source: Wezel & al) and by reducing the use of synthetic fertilizers (Source: FAO and Biovision), resulting in closed nutrient cycles and healthy soil.

By refraining from using synthetic inputs, **agroecology spares energy used for input production.**

In promoting **local consumption and short supply chains through local markets**, agroecology requires **less energy** to transport food products.

Agroecology fosters **animal health**, selecting resilient, locally adapted breeds, which lowers the risk of disease (exacerbated by climate change) and strengthens animals' resilience to climate variability.

CLIMATE CHANGE MITIGATION



Agroecology acts at **various levels** (plot, farm, region, food system) and **reduces communities' vulnerability**.

Climate change does not impact everyone equally; small scale producers often lack access to expensive infrastructure. Global South nations are particularly susceptible to climate impacts, as their agricultural sectors largely depend on natural conditions (e.g., 94% of African farmland lacks irrigation, increasing their vulnerability to rainfall variations).

Agroecology promotes **healthy, culturally and seasonally adapted diets** based on identity and quality, contrasting with the industrial model of highly processed foods, which contribute substantially to GHG emissions

Agroecology fosters **horizontal knowledge exchange** that incorporates **adaptation and mitigation strategies**, based on indigenous knowledge and scientific research. For instance, warning systems have been developed that blend rural communities' perceptions and observations on climate with scientific data and projections.

UNFCCC COP 30 IN BELÉM



There is a urgent need to change our current food systems if we want to limit global warming to 1.5 degrees Celsius.

COP30 is focusing on:

- The Global Goal on Adaptation (GGA) and National Adaptation Plans (NAPs)
- Unresolved issues linked to Non-Market Approaches (NMA)'s Article 6.8
- a new Gender Action Plan is for adoption
- Sharm el-Sheikh Joint Work on Agriculture and Food Security (SJWA)'s food systems reports review
- the new Just Transition Work Programme (JTWP) & Belém Action Mechanism (BAM)
- updated **Nationally Determined Contributions (NDCs)** to be submitted by countries.

Check it here:

The guidance tool “***Food Forward NDCs***” helps countries to strengthen their NDCs by providing content to identify policy measures and practices and information about their climate change mitigation, adaptation and sustainable development benefits.

