THE BENEFITS OF AGROECOLOGY FOR CLIMATE

Agroecology Coalition

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)



<u>The IPCC Assessment 6</u> 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 31 IN ANTALYA

COP31 (9-20 November 2026) is focusing on:

- Four main agenda items linked to food security: 1) food-water-climate nexus, 2) finance for women farmers, 3) youth for food and climate, and 4) climate-resilient agriculture.
- The future of the Sharm el-Sheikh Joint Work on Agriculture and Food Security (SJWA)
- The recent developments under the Just Transition Work Programme (JTWP) & Belém Action Mechanism (BAM)
- The updated **Nationally Determined Contributions (NDCs)** developped by countries.
- The launch of the Turquoise Nexus Initiative led by the Turkish Presidency

The guidance tool ***"Food Forward NDCs"*** helps countries to strengthen their NDCs by providing content to identify policy measures, practices and information about their climate change mitigation, adaptation and sustainable development benefits. Concrete food systems and agroecological related measures are also recommended.

Check it here: