AGROECOLOGY AND BIODIVERSITY

BIODIVERSITY AND FOOD SYSTEMS

- Food systems are responsible for **70% of terrestrial**
- **and 50% of freshwater biodiversity loss** (WWF, 2021)
- **25%** of plant and animal species are at risk of **extinction**, 1 million species could disappear within decades (KPGBF)
- **12 plant species** and **5 animal species** provide **75%**
- **of the global food supply**
- **Wheat, rice and corn** make up **+50% of the world's staple foods** (Biovision)
- **Wheat** is consumed in **97% of countries, while rye, yam, sweet potato, cassava, sorghum, and millet** have experienced **notable declines** in consumption (Kinver, 2014)
- **87% of the $540 billion** in annual global agricultural subsidies **are detrimental for biodiversity, e.g. pesticides** (FAO, UNDP, 2021)

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AGROECOLOGY AND UN BIODIVERSITY CONVENTION

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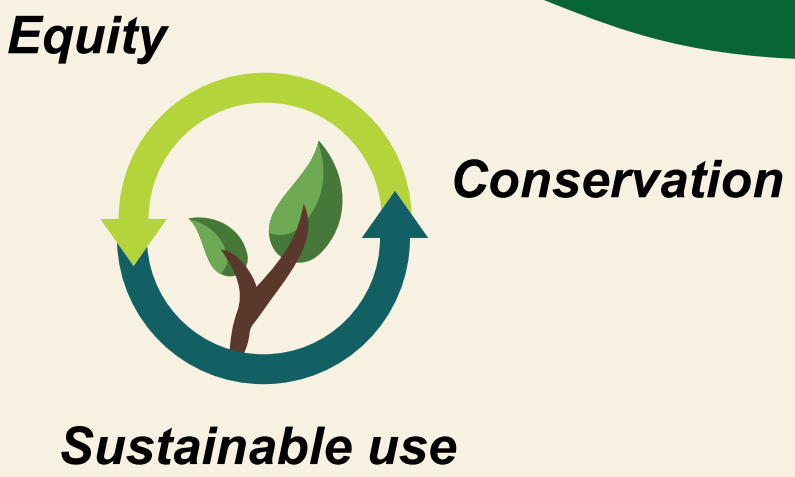
Agroecology plays a vital role in supporting the **three core objectives** of the **Convention on Biological Diversity**



Recognition of agroecology is **gradually gaining ground** in the Rio Conventions, but, it is **more needs to happen**.

This year it is particularly important for food systems, and specifically agroecology, to be **integrated into National Biodiversity Strategies and Action Plans (NBSAPs)** which countries are due to submit this year in line with their biodiversity goals.

AGROECOLOGY BENEFITS ON BIODIVERSITY

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While industrial intensive farming invests in monocultures, **agroecology is biodiverse!**

Maintain and enhance **diversity of species, functional diversity and genetic resources** and thereby maintain overall **agroecosystem biodiversity** in time and space at field, farm and landscape scales.

Agroecology Principle: Biodiversity
HLPE - CFS

Diversification is essential for the agroecological transition as it improves food security and nutrition while conserving, protecting and enhancing natural resources.

Agroecology Element: Biodiversity
FAO

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AGROECOLOGY AND BIODIVERSITY IN PRACTICE

- **Diverse nutritious crops** and **locally adapted breeds and varieties**
- **Conservation of forests** around farms, conversion of field edges into **woodlands**
- **Multi-year crop rotation**
- **Multi-habitat approaches** (e.g., land use diversity at landscape level)
- **Biological soil fertility** and **health measures**
- Measures to **enhance pollinators**

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Economic diversification:
households benefit from multiple income sources linked to biodiversity (e.g. crop-rotation and intercropping, fruit trees, beekeeping...)

Co-creation of knowledge:
the local knowledge of indigenous populations on biodiversity is promoted

Social justice, governance and participation:
agroecology involves guardians of biodiversity such as women, youth and indigenous people in the governance of land and natural resources

Social values and diets:
traditional diets, rooted in diverse cultivated species and varieties, are supported