Agroecology
What it is and why we need it

- Increases risk of infestation, plagues, and pesticide-resistant pests
- There are no life forms in the soil, which is sterilized, requiring constant chemical input.
- Creates wildlife habitats and maintains predator-prey relationships
- Captures and retains CO2 in system
- Does not pollute waterways
- Embraces complex methods of land stewardship
- Involves local community in the growing process from seed to mouth
- Reduces rural poverty, strengthens local economy, and supports women, who make up 43% of the world's agricultural labor force
- Leads to massive unemployment, rural-urban migration, depressed rural economies, and gross gender imbalances
- Increases nutritional diversity crucial for women and children
- Ability to grow a complete meal on one parcel
- Can double and triple yields from hillside farms and rain-fed agriculture
- Overproduction of subsidized cereal crops
- Destroys wetlands and wildlife habitats

In order to feed our world without destroying it, a holistic type of agriculture is needed, and we have a choice. Here we compare the current high-input industrial system with a renewed vision for agriculture: the agroecological system.
Why do we need Agroecology?

Industrial agriculture has failed to feed the world adequately while using up too many of its resources. Government experts agree that we cannot continue with “business as usual”.

Agroecology provides the much needed new approach, concentrating on farms within their social and environmental context and integrating biology, technology and socio-economics.

What is Agroecology?

Agroecology uses biological principles to increase farm productivity while conserving natural resources, as in organic farming, but also takes into account the wider social and economic context as it affects farmers and rural communities.

Biodiversity – at all levels including crop diversity and rotation. This creates productivity and resilience at the same time as encouraging high levels of wildlife.

Animal welfare – farm animals are kept in ways that allow them to lead a good life, with breeds, diets and living conditions that encourage positively healthy livestock and healthy food.

Low Input – instead of relying on external inputs (such as fertilisers, pesticides, antibiotics, imported feed) which are expensive, fossil fuel intensive and damaging to the environment and human health, agroecology emphasises biological farming and no waste.

Soil Fertility is vital to agroecology, which uses and conserves the huge productive power that lies in well-managed soils. Rotations (longer rather than shorter) help build fertility, as well as helping to control pests, weeds and disease.

Creates Skilled Jobs – managing a farm based on these principles requires an intimate knowledge of the land and climate and how these affect the farm. Agroecology
encourages a new generation to enter farming and to acquire these skills. This in turn restores the agrarian economy and so rebalances the whole.

**Food Sovereignty** – access to food requires people to have control over the way their food is produced.

**Economic viability** – the socio-economic side of agriculture is key to agroecology, both because a farm must be economically viable and because food and farming need to be embedded in the rural economy.

**Healthy diets** – industrial farming has produced increasingly unhealthy diets in many countries, causing huge rises in diet-related ill-health. Agroecology aims to provide adequate food for all, not too much unhealthy food for some.

## The APPG on Agroecology

The APPG on Agroecology aims to increase the understanding of agroecology among parliamentarians and to embed agroecological principles and policies within all relevant departments of government.

### Strategic Goals

The APPG has been set up to raise awareness among parliamentarians, civil servants and key stakeholders of the unsustainable nature of current agricultural practices and methods of food production and the benefits of adopting agroecological practices for people, the environment and all living things.

The APPG aims to become the key source of information on agroecology for parliamentarians, highlighting key research and best practice.

### Programme of Work

The APPG holds monthly meetings while parliament is in session; provides briefings and fact sheets for parliamentarians; advises where relevant on specific Bills as they progress through parliament and alerts and informs parliamentarians about changes to EU policy.
“Agroecology means: agricultural and food production practices, which are economically sound, socially just and promote long-term protection of natural resources.”

*The Centre for Agroecology and Food Security at Coventry University*

“We need to enter The Age of Biology: truly acknowledging that all human endeavours, including or especially politics and economics, must take account of the physical and ecological realities of the Earth. Agroecology is farming that is rooted in this key idea.”

*Colin Tudge, writer and biologist*

“A more radical transformation of agriculture is needed, one guided by the notion that ecological change in agriculture cannot be promoted without comparable changes in the social, political, cultural, and economic arenas that help determine agriculture.”

*Miguel Altieri, Professor of Agroecology, University of Berkeley, California*

“Moving towards agroecological ways of production is needed if we want to feed the world, fight rural poverty and combat climate change at the same time.”

*Olivier De Schutter, United Nations Special Rapporteur on the Right to Food*