Agroecology and Why It Matters

**What is Agroecology?** Agroecology is a science, a practice, and a social movement within the food sovereignty movement. It is the application of the science of ecology to the study, design, and management of sustainable food and farm systems.

Agroecology employs wide-ranging indigenous and newer practices that maintain or move toward highly diversified farms, forests, pastures and ponds. Rather than being capital-intensive, agroecology is labor and knowledge intensive. Agroecological farmers use local, natural materials and processes rather than harmful external chemical inputs, and they reduce or eliminate fossil fuel by using on-farm materials and energy sources. They endeavor to maximize biodiversity and stimulate interactions between different species as part of holistic strategies to build long-term fertility and to secure just and sustainable livelihoods.

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**3 Facets of Agroecology**

1) A scientific research approach involving the holistic study of agro-ecosystems and food systems

2) A set of principles and practices that enhance the resilience and sustainability of food and farming systems while preserving cultural integrity and social relationships

3) A socio-political movement, which focuses on the practical application of agroecology, seeks new ways of considering agriculture, processing, distribution and consumption of food, and its relationships with society and nature

*Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.*

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**Agroecology and food sovereignty are interdependent**

“There is no food sovereignty without agroecology. And certainly, agroecology will not last without a food sovereignty policy that backs it up.”

Ibrahima Coulibaly, CNOP, Mali

Youth from OFRANEH in Honduras tend seedlings.

Photo credit: Steve Pavey
Agroecology at the Farm Level:
When food producers commit to fundamentally redesign the agro-ecosystem (the overall environment where food production takes place) in ways that shift towards optimal ecological processes and diversified food production systems, this is agroecology.

In agroecology, the food producing ecosystem is seen and treated as a complex organism that thrives on the diversity of flora and fauna. Food producers employ approaches that include ecologically-based rotations, multiple cropping, permaculture, agroforestry, and the integration of animals with cropping systems. Applying agroecology, producers begin to achieve greater food sovereignty as they gain independence from off-farm purchases and increase the diversity and quality of products provided by a more diverse agro-ecosystem. To give just one example, a rodent problem might be addressed by encouraging owls to nest on a farm rather than by spreading pesticides.

Scaling Out Agroecology:
Expanding agroecology requires confronting power in the globalized food system, a system in which actors pursue profit through concentration, exclusion and control, and oppose any movement toward agroecology. Not only ecosystems but cultures and social relations are degraded as agri-food corporations extend their reach.

To scale out agroecology, practitioners are prioritizing farmer-to-farmer exchanges, claiming rights to land and water, rebuilding local and regional markets, and saving local seeds and biodiversity while protecting themselves from the forces that try to undermine them.

To engage and learn more, contact the US Food Sovereignty Alliance at info@usfoodsovereigntyalliance.org and visit these sites: www.agroecologynow.com/agroecology-publications and whyhunger.org/our-work/resources/agroecology