

*“Agroecology is the study, design, and management of ecological interactions in agricultural ecosystems to **improve agricultural production and benefit the local biodiversity.**”*

By understanding ecological relationships and processes, agricultural systems can be manipulated to improve production **with fewer negative environmental or social impacts and fewer external inputs.**



Agroecology takes into account the needs of the ecosystem and people in it!

WHAT IS A SUSTAINABLE AGRICULTURE?



- ⊗ maintains the natural environment and using **ecological principles for sustained farming practices**

- ⊗ **poly-cropping**, or planting many crops together (ex: planting rows of corn, bean, and squash together rather than in separate plots, like in mono-cropping)

- ⊗ **diversity** is maintained and even increased over time

- ⊗ nutrients from each intercrop plant provide different **nutrients to the soil**, thus increasing its fertility
- ⊗ **less energy** is required from the farmer because the agriculture system sustains itself
- ⊗ using ecological principles increases **bio-diversity**
- ⊗ **this type of agriculture is aligned with nature and uses the principles of nature to sustain itself (there's nothing better than that!)**

AGROECOLOGY is opposed to CONVENTIONAL AGRICULTURE

■ CONVENTIONAL AGRICULTURE:

<ul style="list-style-type: none">- alters or changes the natural environment	
<ul style="list-style-type: none">- mono-cropping, or planting one crop (<i>ex: only corn is grown in a field</i>)	
<ul style="list-style-type: none">- diversity is eliminated in order to maintain uniformity	
<ul style="list-style-type: none">- uses insecticides and pesticides to keep insects and animals from eating the crops; these chemicals are not only poisonous to insects, animals and humans, they also pollute ground water, streams, rivers, and oceans	
<ul style="list-style-type: none">- uses inorganic fertilizers to provide nutrients to the soil	