

Industrial Agriculture vs. Sustainable Agriculture:

How They Compare...

	INDUSTRIAL AGRICULTURE	SUSTAINABLE AGRICULTURE
<p>STEPS TO A HEALTHY, ENDURING AGRICULTURE:</p> <p>1 Create and conserve healthy soil</p>	<ul style="list-style-type: none"> ■ Soil quality declining– soil erosion a chronic problem, organic matter not replenished, microbial activity damaged by farm chemicals, soil compacted by farming practices ■ Conventional tillage, conservation tillage combined with heavy chemical use 	<ul style="list-style-type: none"> ■ Soil quality a central concern– soil protected from erosion by cover crops, residue, low-impact tillage, and conservation measures such as windbreaks; organic matter continually added, farming methods and smaller sized machinery keep soil loose and friable ■ Conservation tillage techniques combined with biofriendly management to cut use of chemicals
<p>2 Conserve water and protect its quality</p>	<ul style="list-style-type: none"> ■ Water is mined from dropping aquifers, agricultural chemicals degrade water supplies and threaten aquatic life ■ Conservation structures and areas take a back seat to more production 	<ul style="list-style-type: none"> ■ Farming methods conserve water and soil moisture and protect surface and ground water from pollutants and sediment ■ Conservation is a top priority: terraces, buffer strips, riparian buffers and other conservation structures, practices, and areas incorporated into the farm.
<p>3 Manage organic wastes so they don't pollute</p>	<ul style="list-style-type: none"> ■ CAFOs concentrate large amounts of animal wastes in one place, overloading the ability of the area to utilize it and also increasing chances of spills and water pollution 	<ul style="list-style-type: none"> ■ Animal wastes provide nutrients for growing crops without polluting watersheds; smaller numbers of animals are raised on integrated farms where they are part of a diversified system

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4 Select plants and animals adapted to the environment	<ul style="list-style-type: none"> ■ With large amounts of inputs, farmers can raise non-adapted crops ■ Genetic engineering further narrows genetic diversity 	<ul style="list-style-type: none"> ■ Farmers raise animals and plants adapted to the existing environment ■ Time-honored, traditional breeding programs look to preserve genetic diversity
5 Encourage biodiversity	<ul style="list-style-type: none"> ■ Monoculture is the norm: farms are plowed fence row to fence row, wild “unused” areas are put into production, only the most productive few crop varieties or livestock breeds are raised 	<ul style="list-style-type: none"> ■ Diversity is the norm: of habitats, livestock, crops, wild plant and animal species, and of genetics within crop and livestock species
6 Manage pests with minimal environmental impact	<ul style="list-style-type: none"> ■ Therapeutic approach—chemicals are used routinely to control pests 	<ul style="list-style-type: none"> ■ The use of toxic chemicals for pest control is minimized and ecologically-based, benign management and cultural practices used
7 Conserve non-renewable resources	<ul style="list-style-type: none"> ■ Powered by finite fossil fuels: fertility and pest control needs filled by agricultural chemicals ■ Use of fossil fuels encouraged ■ Food production is centralized in a few regions which specialize in certain crops which are shipped around the nation and world 	<ul style="list-style-type: none"> ■ Powered by the sun; fertility and pest control largely provided by cycling of plants and animals in the system using rotations, cover crops, trap crops, resistant crops ■ Renewable energy resources (biofuels, solar) substituted when possible and conservation of fossil fuels encouraged ■ Food production is decentralized to encourage local, biodiverse, environmentally-adapted food systems which save fossil fuels

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<p>8 Increase profitability and reduce risk</p>	<ul style="list-style-type: none"> ■ Small and medium-sized farms are marginalized, pressure is on farmers to increase the size of their operations ■ The farm is viewed solely as an agribusiness ■ Short-term profit is the focus ■ Because of low prices, farm families on small- and medium-sized farms depend largely on government payments and non-farm income for support ■ Profitability undermined by dependence on expensive inputs such as fertilizer and pesticides 	<ul style="list-style-type: none"> ■ Small and medium-sized family farms generate equitable returns so that farmers can protect natural resources, stay in business over the long-term, and have a good quality of life ■ The farm is viewed holistically, with the quality of life of the farm family one part of a whole ■ Long-term consequences of farming methods are given equal weight to short-term profit ■ Free on-farm resources utilized to the maximum for fertility and pest-control
<p>9 Ensure Equity for Farmers and Give Farm Families a Good Quality of Life</p>	<ul style="list-style-type: none"> ■ Large corporations control farmers and markets through contracts and vertical integration ■ Uncompetitive practices the norm ■ Large farmers favored over small in contracts and pricing ■ Health risks for farm families increased because of pesticide use and polluted water ■ Few farmers needed ■ Poverty rates very high in rural areas and accepted as inevitable 	<ul style="list-style-type: none"> ■ Free markets prevail and farmers have control over how they farm ■ Contracts fair to both big and small operations and give farmers maximum flexibility and rights ■ Use of health-threatening chemicals minimized ■ More farmers on the land essential to stewardship of the land ■ A prosperous farming class essential to democracy and social well-being

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<p>10 Develop Strong, Vibrant, and Resilient Rural Communities</p>	<ul style="list-style-type: none"> ■ Rural communities seen as a source of cheap labor ■ Rural communities targeted as sites for polluting industries ■ Social well being of rural communities not important; migration to urban areas encouraged ■ Economic decay of rural communities seen as inevitable and not of concern to urban America 	<ul style="list-style-type: none"> ■ Rural communities a source of skilled, well-paid labor ■ Rural communities a place where value-added, farmer-owned, entrepreneurial enterprises thrive ■ Rural communities provide a nurturing, supportive environment for residents ■ Rural communities attract non-polluting industries ■ Revitalized rural communities essential to the social and economic health of the country