



FACT SHEET

Agriculture/Natural Resource Extension

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* Sustainable Agriculture * Definitions and Concepts

This Fact Sheet is dedicated to the topic of Sustainable Agriculture. This subject may or may not be familiar to you. The purpose of this article is to introduce you to some of the different voices that are explaining the definitions and concepts of sustainable agriculture. This subject is timely as agriculture, both nationally and locally, is expanding its role as stewards of the earth and providers of food and fiber within the context of our society's initiatives towards sustainability. I encourage you to read the following excerpts and websites of different agriculture organizations to fully understand the scope of Sustainable Agriculture when forming your own conclusions.

What Is Sustainable Agriculture?

1) 1990 USDA Farm Bill

(United States Congress, 1990. *Food, Agriculture, Conservation, and Trade Act of 1990, Public Law 101-624*. Title XVI, Subtitle A, Section 1603. Washington, DC: US Government)

"Sustainable agriculture means an integrated system of plant and animal production practices having a site-specific application that over the long term will:

- Satisfy human food and fiber needs.
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends.
- Make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls.
- Sustain the economic viability of farm operations.
- Enhance the quality of life for farmers and society as a whole."

The Journey to Sustainability Begins With Education

2) USDA Sustainable Agriculture Research and Education (SARE) Program (<http://www.sare.org>)

“The best way to communicate the meaning of sustainable agriculture is through real-life stories of farmers who are developing sustainable farming systems on their own farms. Around the world, farmers and ranchers are experimenting with a different form of agriculture, a more sustainable way of producing and distributing food and fiber. Their approaches are so varied that they defy a 25-word description. Instead, sustainable agriculture encompasses broad goals, and farmers and ranchers develop specific strategies for achieving them. Using a great variety of farming strategies allows producers to meet their needs: in their operations, their environments and their communities.

The primary goals of sustainable agriculture include:

- a) Providing a more profitable farm income
- b) Promoting environmental stewardship, including:
 - (i) Protecting and improving soil quality
 - (ii) Reducing dependence on non-renewable resources, such as fuel and synthetic fertilizers and pesticides, and
 - (iii) Minimizing adverse impacts on safety, wildlife, water quality and other environmental resource
- c) Promoting stable, prosperous farm families and communities”

3) ATTRA –the National Sustainable Agriculture Information Service (<http://attra.ncat.org>)

“Sustainable agriculture is one that produces abundant food without depleting the earth’s resources or polluting its environment. It is agriculture that follows the principles of nature to form systems for raising crops and livestock that are, like nature, self-sustaining. Sustainable agriculture is also the agriculture of social values, one whose success is indistinguishable from vibrant rural communities, rich lives for families on the farm, and wholesome food for everyone.”

4) UF School of Natural Resources and Education, Agroecology Program (<http://snre.ufl.edu/programs/agroecology.htm>)

“The concept of sustainable agriculture is a response to the decline in the quality of the natural resource base associated with modern agriculture. The sustainability concept has prompted major adjustments in conventional agriculture to make it more environmentally, socially and economically viable. The School of Natural Resources and Environment is involved in a collaborative effort in land and water management to find ways that agriculture and natural environmental systems can support each other. The focus of this research is to identify practices that will lead to sustainable agricultural systems in harmony with the natural environment and compatible with urban-industrial development.”

The Journey to Sustainability Begins With Education

5) UF/IFAS Sustainable Agriculture, Agricultural Ecology and Cover Crops Program

(<http://agroecology.ifas.ufl.edu/>)

“The concepts of sustainable agriculture are to better maintain environmental health, economic profitability, and social and economic equity. Achieving this ideal can be difficult, since so many elements affect the function and integrity of agroecosystems. Central to all sustainable systems is the issue of time. Success is measured over generations or even centuries. Understanding the ecosystem and function of alternative agricultural systems is essential in making a smooth transition towards sustainable agriculture. While sustainable agriculture is an ideal goal that many people aspire to, achieving this may be extremely difficult in practice since sustainable agriculture involves many different elements and dimensions, some of which may come into conflict with one another.”

6) National Campaign for Sustainable Agriculture

(<http://www.sustainableagriculture.net>)

“. . . food and agricultural systems and rural communities that are healthy, environmentally sound, profitable, humane and just

- a) More independent farmers and ranchers producing good food, making a good living and protecting the environment;
- b) Thriving communities connected through sustainable food production, processing and distribution systems based on fair and open markets;
- c) Dignified livelihoods and living wages for all workers in the farm and food sector;
- d) A safe, secure food supply;
- e) Access for everyone in our society to nutritious, healthful and affordable food;
- f) Farming and ranching practices that produce quality food and other products, while preserving open space, abundant wildlife, and other forms of biodiversity.

7) Kerr Center for Sustainable Agriculture

(<http://www.kerrcenter.com>)

“Core values for sustainable agriculture include:

- a) the family farm structure of agriculture
- b) a fair playing field
- c) public research for the public domain
- d) the enhancement and protection of natural resources
- e) respect for nature
- f) local food systems and better communities

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8) American Society of Agronomy

(American Society of Agronomy, 1989. "Decision reached on sustainable ag." Agronomy News. January, pg 15, Madison, Wisconsin)

"A sustainable agriculture is one that, over the long term, enhances environmental quality and the resource base on which agriculture depends; provides for basic human food and fiber needs; is economically viable; and enhances the quality of life for farmers and society as a whole."

9) United Nations. 1992 Earth Summit. Agenda 21. (Agenda 21 is a program related to sustainable development. It is a comprehensive blueprint of action to be taken globally, nationally and locally by organizations of the UN, governments, and major groups in every area in which humans impact on the environment. The number 21 refers to the 21st century.)

Chapter 14. . . . "the capacity of available resources and technologies to satisfy the demands of this growing population for food and other agricultural commodities remains uncertain. Agriculture has to meet this challenge, mainly by increasing production on land already in use and by avoiding further encroachment on land that is only marginally suitable for cultivation.

Major adjustments are needed in agricultural, environmental and macroeconomic policy, at both national and international levels, in developed as well as developing countries, to create the conditions for sustainable agriculture and rural development (SARD). The major objective of SARD is to increase food production in a sustainable way and enhance food security. This will involve education initiatives, utilization of economic incentives and the development of appropriate and new technologies, thus ensuring stable supplies of nutritionally adequate food, access to those supplies by vulnerable groups, and production for markets; employment and income generation to alleviate poverty; and natural resource management and environmental protection."

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