

UF/IFAS Extension

The Journey to Sustainability Begins with Education



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“Sustainable Agriculture”

“An Introduction to Its Concepts, Opportunities, and the USDA SARE Program

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Sustainable Agriculture Presentation Outline

- **Sarasota Agriculture Policy Review**
 - Vision statement
 - Conceptual foundation
- **Sustainable Agriculture**
 - Concepts
 - History
 - Models
- **Policy Opportunities**
- **Summary**

Sarasota Agriculture Policy Council Vision Statement

- **Small and large-scale agriculture are important components of the distinctive character of Sarasota County's natural settings and heritage, and their roles are acknowledged in the Apoxsee.**
- **The residents of Sarasota County foresee a sustainable agriculture that is capable of meeting the needs of the current generation of farmers while leaving equal or better opportunities for their future generations and for new farmers.**

Sarasota Agriculture Policy Council Vision Statement

- **Sustainable agriculture provides economically profitable, environmentally sound and socially responsible opportunities that will reduce the ecological footprint of Sarasota County.**
- **To this end, agricultural policies are to be enacted to support sustainable agriculture and community food system development, and for farmland protection.**

Sarasota County Comp Plan Agriculture Policy

- Future Land Use Chapter
Policy 1.3.3
- The county will support the implementation of a sustainable agriculture program
- to promote sustainable agriculture practices on private and publicly owned lands.

Sarasota County Comp Plan Agriculture Policy

- **Future Land Use Chapter
Policy 1.3.3**
- **The program may include but shall not be limited to the following:**
 - **Provisions for community gardens and farms, as well as farmers markets, on county parks . . . and coordination with neighborhood planning**
 - **Incentive-based programs for agricultural lands in all areas that use sustainable farming practices**

Sarasota County Comp Plan Agriculture Policy

- Environment Chapter
Policy 4.7.8
- The County shall support the implementation of Best Management Practices, as provided by the Sustainable Agriculture Programs of the state and USDA for local agriculture . . .

Sarasota County Comp Plan Agriculture Policy

- Environment Chapter
Policy 4.7.9
- Encourage and support the development and adoption of sustainable farming practices in order to:

Sarasota County Comp Plan Agriculture Policy Amendments

- Promote utilization of agricultural commodities and technologies that are better adapted to local growing conditions and less demanding of water resources
- Promote environmental enhancement on all farms and ranches to provide connectivity with adjacent conservation lands
- Promote establishment of wildlife habitat on agricultural lands that will contribute to habitat corridors and ecosystem functions

Sustainable Agriculture

- Where Are Science-Based Sources of Information & Resources?
 - **USDA**
 - **University of Florida/IFAS**
 - **Florida A&M University**
 - **Florida Atlantic University**

USDA



- Sustainable Agriculture Research and Education Program (SARE)
 - Regional and State Offices
 - Sustainable Ag Network of Experts
 - Publications
 - Grants
 - National Continuing Education Program in Sustainable Agriculture
 - Website <http://www.sare.org/>

USDA



National Sustainable Agriculture
Information Service

- Alternative Technology Transfer to Rural Areas (ATTRA)
 - Publications
 - Free expert information service
 - Education
 - Website <http://www.attra.org/>

Short History of USDA Programs in Sustainable Agriculture

- 1991 –USDA/SARE Program created (i.e., renaming of the Agriculture In Concert with Environment (ACE) Program
- 1990 – Farm Bill
 - Sustainable agriculture definition formalized
 - USDA/National Organic Program (NOP) authorized
- 1989 – “Alternative Agriculture” Report Released, National Research Council, National Academy of Sciences

Short History of USDA Programs in Sustainable Agriculture

- 1988 – USDA/Low-Input Sustainable Agriculture (LISA) Program initiated
- 1987 – USDA/National Sustainable Agriculture Information Service (ATTRA) begun
- 1985 – USDA/Alternative Farming Systems Information Center, National Agriculture Library, formed
- 1980 – USDA “Report and Recommendations on Organic Farming” released

Sustainable Agriculture

- What's the relationship between sustainable and organic agriculture?
 - Sustainable agriculture guidelines are administered by USDA/SARE – i.e., a research & education focus
 - Organic agriculture guidelines are administered by USDA/Marketing Service – i.e., one market label for foods grown using sustainable agriculture practices

University of Florida



- Center for Organic Agriculture
 - Research, teaching, extension
- Horticultural Sciences Department
 - Organic Farming Degree Program
- Small Farm & Alternative Enterprise Program
- School of Natural Resources & Education
 - McArthur Agro-Ecology Program at Buck Island

Example Additional FL Programs in Sustainable Agriculture

- Florida A&M University
 - Marketing & Small Farmer Outreach Program
 - Extension, research, teaching



- Florida Atlantic University
 - Agroecology Program
 - Multi-disciplinary & agency research projects

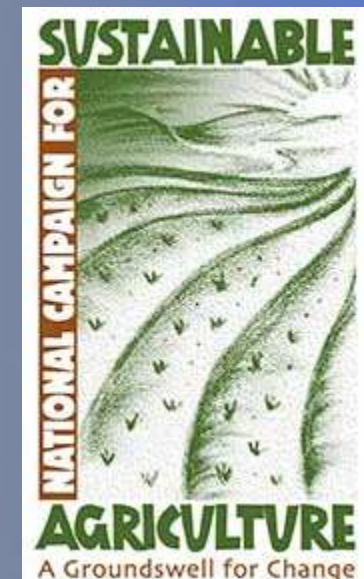


Example Additional National Programs in Sustainable Agriculture

- Sustainable Agriculture Working Group (SAWG)
 - Regional
 - Grass-roots coalitions
 - Educational
- National Campaign for Sustainable Agriculture
 - Policy education
 - Grass-roots coalition



<http://www.ssawg.org/>



http://www.sustainableagriculture.net/site/PageServer?pagename=NCSA_Home

- What is Sustainable Agriculture ?
- How is it different than conventional agriculture ?

Sustainable Agriculture

1990 Farm Bill Definition

- Satisfy human food and fiber needs
- Enhance environmental quality and the natural resource base
- 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."

Sustainable Agriculture

- Response to Conventional Agriculture Issues
- Response to Farmland Losses
- Response Initially from Small Farmers, Rural Communities, Environmentalists, and Agriculture Ecology & Rural Scientists.

Conventional Agriculture Issues

- Industrial Approach
- Monoculture Specialization
- High External Inputs & Exports
- Environmental & Health Costs
- Market Centralization
- Loss of Family Farms and Rural Communities
- Corporate Farming

What is Sustainable Agriculture?

- Recognition of the whole systems nature of food, feed, & fiber production
- Balancing concerns of
 - environmental soundness
 - social equity
 - economic viability
- Functional interactions between agroecological & social/economic systems

Sustainable Agriculture

Example Economic Goals

- **Reduce Production Costs**
- **Diversify Farming Enterprises**
- **Strengthen Local Economy**

2002 Sarasota Agriculture Economic Value and Potential

	\$ Millions
Consumed Food Total Value	815.8
Categories:	
Home consumed food	458.7
Away from home consumed food	351.5
Out of town consumed food	5.6

Agriculture Total Market Value	17.8
Categories:	
Floriculture	8.3
Fruits	4.9
Cattle/calves	3.6
Misc small livestock	1.0
Vegetables	N/R

- Large potential for local food economic development

Data provided by Ken Meter of Crossroads Resource Center; & by FL Farm Bureau

Sustainable Agriculture

Example Environmental Goals

- **Conserve Natural Resources**
- **Prevent Pollution**
- **Preserve Biodiversity**
- **Manage functional agricultural ecosystems**

Sustainable Agriculture

Example Social Goals

- **Preserve Family Farms and Agricultural Heritage**
- **Improve Farm Laborer Conditions**
- **Strengthen Community Food Systems**
- **Produce Wholesome Foods**

Sustainable Agriculture

Example Concepts

- Stewardship of Both Natural and Human Resources
- Systems Perspective
- Interdisciplinary Efforts in Research and Education
- Making the Transition to Sustainable Agriculture Is a Process
- Achieving the Goals of Sustainable Agriculture Goal Are the Responsibility of All Participants in the Local Food System

Sustainable Agriculture

Steps to Achievement of Goals

- Develop Local Markets & Food Systems
- Protect Your Profits; Value-Added Products
- Build a Healthy Soil
- Protect Water Quality On and Beyond the Farm
- Manage Pest Ecologically; Use Minimal Pesticides
- Maximize Biodiversity on the Farm
- Protect Farmland

Sustainable Agriculture Example Models

- Edible Landscaping & Gardening
- Community & School Gardens
- Small Rural & Urban Agriculture
- Community Supported Farms (CSA)
- Ecological-based and/or Organic Farms

Sustainable Agriculture

Urban CSA Farm Example



Direct Marketing



School Fieldtrips



Urban Setting



Biodiversity



Diversified, Organic Production



<http://www.fairviewgardens.org/>

Sustainable Agriculture Organic Farm Example



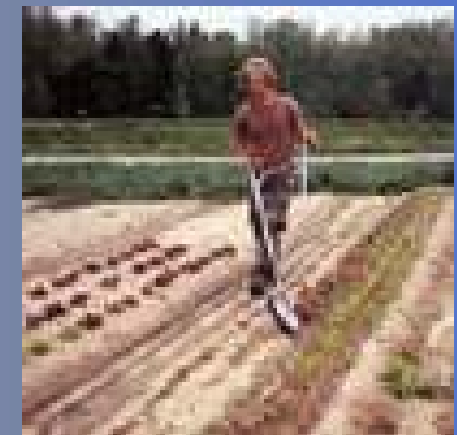
Direct Marketing



Appropriate
Technologies



Multiple Cropping



<http://www.maplespringgardens.com/>

Sustainable Agriculture Integrated Farm Example



Agro-ecotourism



Winery



Ecological Vineyard Management

<http://www.fiorelliwinery.com/>

How Does a Community Support Sustainable Agriculture?

- Food and Agriculture Policy Council Approach
- Community Food System Assessment Approach
- Public/Private Initiatives Approach

Food and Agriculture Policy Council Approach

- Public/private collaboration of diverse food system stakeholders and state government agencies
- Democratic process of policy development and implementation
- Scale neutral, e.g., municipality to state level
- Initiated by government commission and/or grassroots groups

Community Food Security Coalition's North American Food Policy Council
<http://www.foodsecurity.org/FPC/>

Sarasota Ag Policy Council

- Formed in 2005 to represent the diversity of the community food system of Sarasota County
- Provided recommendations for new agriculture policies in Comprehensive Plan of Sarasota County (see <http://sarasota.extension.ufl.edu/AG/agpolicy.shtml>)
- Development of implementation recommendations is currently underway
 - Incentives need to be identified, such as market-driven, profitable approaches (e.g., food purchase policy; property tax rebates, etc.)
 - Using expanded public participation and outreach

Community Food System Assessment Approach

What's Cooking in Your Food System?

A GUIDE TO COMMUNITY FOOD ASSESSMENT

WRITTEN BY RAMI POTRUSUCHI, HUGH JOSEPH, HANNAH BURTON, AND ANDY FISHER

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- Examines a broad range of food issues and links to community goals
- Designed to inform and build support for practical action
- Planned & systematic process
- It's an assets-based approach
- Focuses on a geographically defined place
- Involves collaboration of a diverse group of community members
- **One of new agriculture policies of Sarasota Co.**

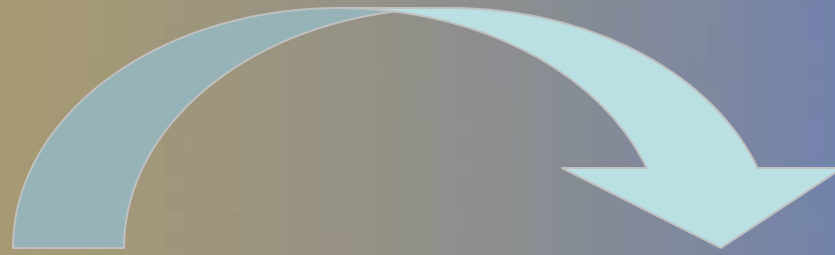
Source: www.foodsecurity.org/CFAGuide-whatscookin.pdf

Current Agribusiness System

“Agricultural
Supplies”



Food production
(largely technological and
removed from society)



Global Food Distribution
(nonrenewable energy)

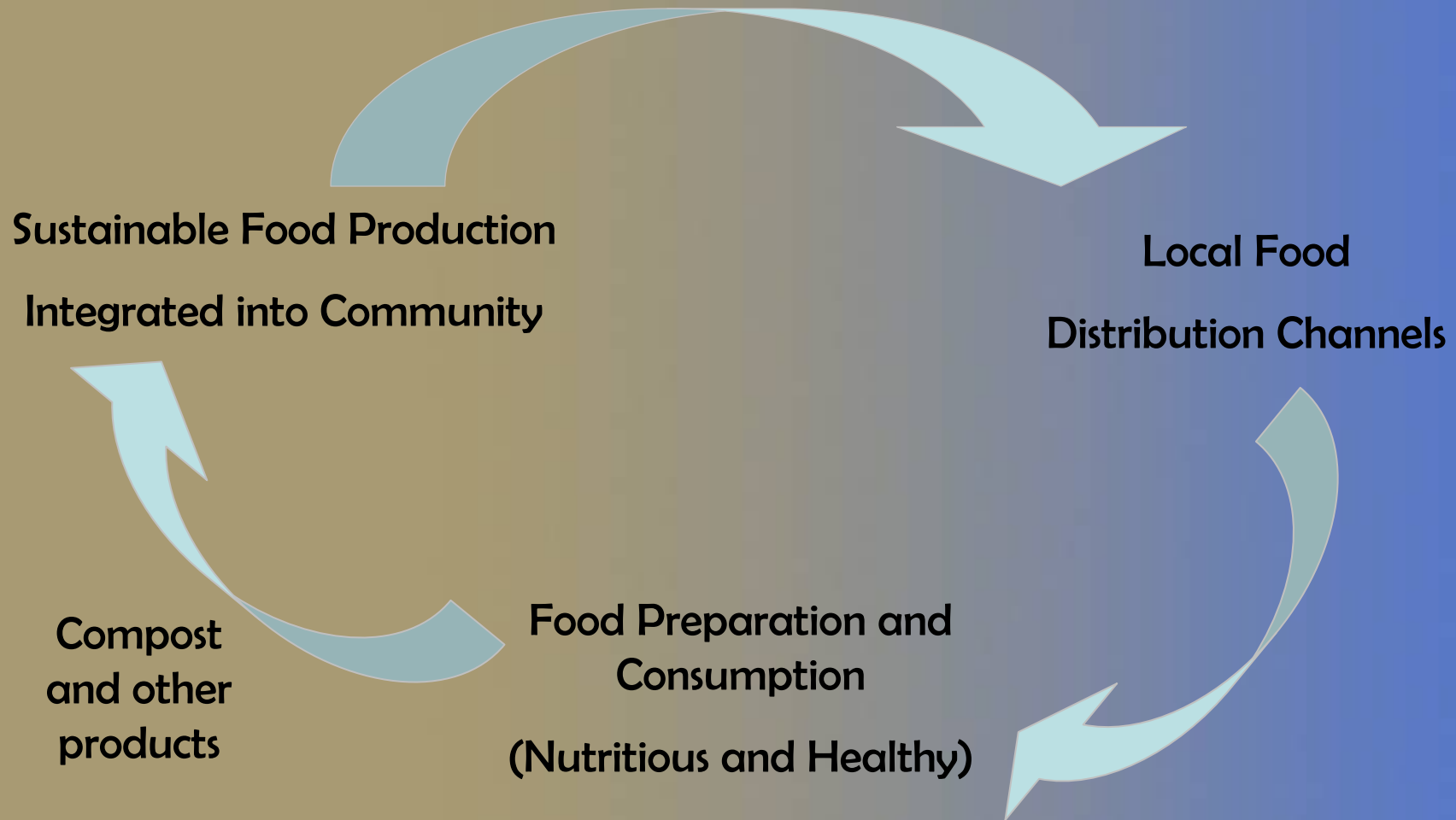
Food Preparation and
Consumption
(fast and cheap)



“waste
products”



Sustainable Agriculture System



Public Initiative Example

- **Geraldson Community Farm (CSA), Bradenton, FL**
 - Project of West Coast Florida RC&D
 - partnership with Manatee County
 - response to community assessment of local ag preservation and foods needs
 - Based on promoting
 - sustainable & organic agriculture
 - entrepreneurial local agriculture economic development
 - agriculture heritage preservation



<http://fwcrd.org/projects/geraldson.html>



Private Initiative Example

- **Localecopia Project, Palm Beach County, FL**
 - Project of Breakers Hotel, West Palm Beach
 - corporate policy for local foods purchasing
 - committee structure, including local farmers
 - UF/IFAS Extension partnership
 - Based on promoting
 - local agriculture economic development
 - sustainability and conservation
 - renewable energy applications



<http://www.localecopia.org/>

Summary

- **Sustainable Agriculture**
 - Response to Agriculture Issues
 - Goals
 - Economic
 - Environmental
 - Social
- **Sustainable Agriculture Programs**
 - USDA/SARE and ATTRA
 - UF/IFAS
- **Community Opportunities**
 - Sarasota Ag Policy Council
 - Community Food System Assessment
 - Private/public initiatives