# Local and Regional Food Systems Bibliography: Categorizing Key Topics

Dave Campbell, Gail Feenstra, Ryan Galt, Courtney Marshall, Ildi Carlisle-Cummins

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For more information, contact Dave Campbell: dave.c.campbell@ucdavis.edu

# **Project Overview**

This bibliography gathers published literature on local and regional food systems and categorizes the literature by key topics. Our broad purpose has been to understand the range of concerns that have emerged as geographically bounded food systems are envisioned and enacted. We focus primarily on work published since 2000, most of it from peer-reviewed journals.

The bibliography includes articles in four broadly defined categories: 1) underlying definitions and assumptions, 2) strategies linking production, marketing, and consumption; 3) institutional supports, and 4) ethical concerns and social justice issues. Within each of these categories we have identified sub-categories which have become the focus of scholarly attention. Two important caveats should be kept in mind:

- Despite our efforts to be systematic in compiling the bibliography (see our methods discussion), we recognize that this product is not complete or fully comprehensive. The volume of work published on this topic has increased exponentially in recent years and new work appears frequently.
- The key role played by systems thinking in this field makes it difficult to generate discrete analytical categories and to use them to label individual articles. Our working procedure has been to assign any particular article into up to three subcategories, based solely on examining the title and abstract. This is at best an approximate method.

We hope that this beginning attempt to identify work by subfields—which should aid students and scholars working on particular topics—is useful. We see it as a starting point for undertaking more comprehensive studies. It should not be taken to suggest that we can do without a systems perspective that recognizes the interconnections between various topics and concerns.

The bibliography can be downloaded in any of three formats, depending on the needs of users:

- As a PDF file, which can be printed out to produce a full hard copy of the bibliography (keeping in mind that some articles show up in multiple subcategories);
- As an Excel spreadsheet that contains a discrete list of articles and can be sorted by category, author, year of publication, etc.
- As an Endnote file which contains the bibliographic information and also, for a subset of articles in some categories, brief annotations prepared by graduate students taking a UC Davis community food systems seminar.

## Methods

A University of California, Davis (UC Davis) research team conducted an analysis of literature about sustainable local and regional food systems from January-August 2011. While noting the lack of clear boundaries in this field of study, we identified sustainable local and regional food systems as ones that seek to benefit a particular, geographically bounded place or region and are concerned with enhancing the environmental, economic, and/or social impacts of the food system.

With a few exceptions (described below), the primary focus was literature written from 2000-2011, in hopes of documenting the burgeoning interest in the topic over this time period. We limited our scope by excluding articles whose primary focus was agricultural production practices as well as articles that focused on food issues in third world settings. Most articles focus on the analysis of activities and trends within the United States, although some articles from and about Europe and some parts of Asia are included.

# **Developing the Categorization Scheme**

Using an iterative process, the team identified sub-categories that represented important themes in the growing body of research. The idea was to determine which areas of research were more plentiful or where gaps might exist. An initial list of subcategories was identified using the researchers' own knowledge of the field. This list was refined periodically during the research, depending on what themes were present in the articles we had added to our list. Our eventual classification scheme (see "Outline of Categories and Sub-categories") assigns each article to one or more of the following core concerns: 1) definitions and assumptions, 2) strategies linking production, marketing, and consumption, 3) institutional supports, and 4) ethical concerns and social justice issues. Within each of these four areas, we developed a set of sub-categories reflecting key concerns in the articles.

# **The Search Process**

To compile relevant literature, we used three main approaches:

- reading through issues of leading journals in the field since 2000;
- using key search terms in Google Scholar and the Web of Science database; and
- consulting reading lists from UC Davis food system classes and bibliographies.

We tracked articles in an Excel spreadsheet. The spreadsheet contained the following headings: type of media (book, peer-reviewed journal, report, etc.); author; title; year published; source (name of journal, book, report, etc.); relevant subcategories; methodology used to find the article; and the number of times cited (as stated on Web of Science).

Based on the title, the abstract, or both, the team categorized each article under a maximum of three subcategories in the spreadsheet. Since it was too difficult to assign one dominant theme without reading the entire article, we did not rank the categories as

descriptors of the article's focus. For example, if nutrition education was named as subcategory 1, and economic benefit was named as subcategory 2, this was not an indication that nutrition education was the dominant theme.

## Step 1: Searching key journals in the field

The first search method was to identify journals most likely to contain articles about sustainable local and regional food systems. The following journals were targeted and searched: *Community Development, Rural Sociology, Agriculture and Human Values, Journal of Environmental Hunger & Nutrition, Renewable Agriculture and Food Systems (formerly American Journal of Alternative Agriculture)*, and *Journal of Agriculture, Food Systems, and Community Development.* The team looked through every volume and issue in the above-mentioned journals from the years 2000-2011, and read the title of every article written. If an article title seemed relevant, the abstract was read to help identify the appropriate categories to assign. We also searched the article's bibliography, adding any pertinent article (based on scanning the title and without regard to year published).

## Step Two: Utilizing Search Engines

The most exhaustive search method was to use key search terms in both Google Scholar and the Web of Science, targeting only articles written from 2000-2011. The researchers identified appropriate keywords for each of the subcategories (see "Search terms and related categories"). The two databases required different search terms because Google Scholar searches yield many more articles per search term.

For example, using the search term "social movement and 'sustainable food'" under the years 2000-2011, the Web of Science database only identified 4 articles while Google Scholar identified 3,440. All 4 articles ascertained in the Web of Science fell under the researchers' parameters of an appropriate article and were added to the database. Only 6 out of the 10 articles on the first page of Google Scholar fell under the researchers' parameters of an appropriate article. Therefore, we tailored the search terms depending on the database being used, using more specific search terms for Google Scholar to narrow the scope while using more generalized search terms for the Web of Science.

Because they appear readily after every Web of Science search, the team read every abstract of articles found in that database. In addition, every article in the Web of Science database displayed a list of all of the articles that cited that particular article. We read the abstract of each of these cited articles to determine whether to add it to the list. In contrast, Google Scholar articles were usually categorized using only titles, at least initially. Not until the researchers' attempts to improve data quality (see below) did the team eventually read the majority of abstracts.

# Step Three: Searching Existing Course Reading Lists

The remaining approach was to examine the reading lists of UC Davis graduate level food systems classes, along with related bibliographic materials. Because they had

already been identified as important works in the field, we added these articles regardless of the year they were published.

# Efforts to Improve Data Quality

Because the categorization scheme changed somewhat during the search process, many articles originally added to the bibliography early in our work needed to be re-categorized after our category list was finalized. In addition, some articles originally included needed to be culled. The latter occurred because our inclusion parameters were deliberately broad early in the process, and grew more refined as the work continued. To accomplish these two goals, the team read the abstract of each article, and often skimmed the body of the article if it was deemed necessary to get a better idea of whether to include the article and, if so, how to most properly categorize it.

# **Outline of Categories and Sub-categories**

### I. DEFINITIONS AND ASSUMPTIONS

### A. Definitions of regional/local/sustainable food systems

### B. Assumptions about constraints/opportunities posed by conventional systems

### **II. STRATEGIES LINKING PRODUCTION, MARKETING, AND CONSUMPTION**

### A. Economic and business development

- 1. Consumer behavior/demand
- 2. Direct marketing
  - a. Community supported agriculture
  - b. Farmers markets
  - c. Farm stands
  - d. Farm to restaurant
  - e. Farm to institution
- 3. Regional food systems marketing (campaigns, branding, etc.)
- 4. Venues for local foods processing and distribution
- 5. Economic benefits of regional food systems
- 6. Agritourism
- 7. Values-based supply chains

### **B.** Gardens

- 1. School gardens
- 2. Home gardens
- 3. Community gardens
- C. Urban farms
- **D.** Civic agriculture

### E. Changing cultural values around food consumption

### F. Energy and environment

- 1. Waste/recycling
- 2. Food miles

### **III. INSTITUTIONAL SUPPORTS**

## A. Regional food systems planning

- 1.) City and regional planning and/or foodshed planning
  - a. Community food system assessments/local food system
  - indicators
  - b. Farmland preservation

### B. Policies, regulations, and governance mechanisms or processes

- 1. Local (including food policy councils)
- 2. State/regional
- 3. Federal (Farm Bill, etc.)

## C. Education and training

- 1. The university's role (e.g. student farms, university curriculum, and faculty research/public scholarship)
- 2. Training programs
- 3. Tapping local knowledge/networks for sharing ideas, learning
- 4. Nutrition education

## **IV. ETHICAL CONCERNS AND SOCIAL JUSTICE ISSUES**

- A. Labor
- B. Race/ethnicity/gender/class
- C. Food security/justice
- **D.** Local control/democracy
- E. Social movements
- F. Critique of localism

# Search terms and related categories

The research team used the following search terms in Google Scholar and the Web of Science to find pertinent articles. The "0" after several of the search terms notes that the search term did not produce any relevant articles for the research team. The team used a wildcard (\*) for many of their search terms to access a wider cast of articles. For example, the search term "home garden\*" produces articles about home gardens, garden, gardener, or gardening.

### I. DEFINITIONS AND ASSUMPTIONS

A. Definitions of Regional/Local/Sustainable Food Systems Google Scholar- Local food definition Google Scholar- Locavore Google Scholar- Sustainable food definition Google Scholar- Scale and alternative agrifood Web of Science - Scale and alternative agrifood Web of Science- Scale and sustainable regional food Web of Science- Local sustainable food and definition Web of Science- Local food and define Web of Science- Perception and local food\* Web of Science- locavore

B. Assumptions about constraints/opportunities posed by conventional systems – *this* category was built primarily from course syllabi and bibliographies with no searches conducted on Web of Science or Google Scholar

## II. STRATEGIES LINKING PRODUCTION, MARKETING, AND CONSUMPTION

A. Economic and Business Development Google Scholar- Economic development and "sustainable food system" Google Scholar- business development and "sustainable food" Web of Science- economic development and "sustainable food" Web of Science-economic development and "sustainable agriculture" Web of Science-rural development and "sustainable food" Web of Science-rural development and "sustainable agriculture" Web of Science-business development and "sustainable food"

Consumer behavior/demand
 Google Scholar- Consumption and local food
 Google Scholar- Consumer and "sustainable food"
 Google Scholar- Consumer demand and "local food"
 Web of Science- Consumer and local food preference
 Web of Science- Consumer demand and "local food"
 Web of Science- Consumer and sustainable food consumption
 Web of Science- Gender and sustainable food consumption (also used to search for articles about "gender")
 Web of Science- Race and local food consumption (also used to search for article about race)
 Web of Science- Ethnicity and local food consumption (also used to search for articles about ethnicity)

2. Direct Marketing Google Scholar- Direct marketing and sustainable food Web of Science- -direct marketing and food

### a. CSA

Google Scholar- community supported agriculture Web of Science-"community supported agriculture" b. Farmers Markets Google Scholar- farmers' Markets Web of Science - farmers' market c. Farm Stands Google Scholar- "Farm stand \*" Web of Science - farm stand and sustainable food (0)

#### d. Farm to restaurant

Google Scholar- "farm to restaurant" <u>Web of Science -farm to restaurant</u> e. Farm to Institution Google Scholar- Farm to school Google Scholar- Farm to Institution Google Scholar- Farm to Hospital Google Scholar- "farm to table" and sustainable <u>Web of Science - "farm to school"</u> <u>Web of Science-farm to table</u> Web of Science-farm to table

3. Regional Food Systems Marketing (campaigns, branding, etc.) Google Scholar- local food campaign Google Scholar- local food marketing Web of Science- regional food marketing Web of Science-local food campaign Web of Science- local sustainable food marketing

4. Venues for Local Foods Processing and Distribution
Google Scholar - Local food\* processing
Google Scholar -Local food\* distribution
Web of Science - Processing local food\* and sustainable
Web of Science - Distribution sustainable local food
Web of Science - Distribution local food
Web of Science - Local food process\* and sustainable
Web of Science - SME and food

5. Economic Benefits of Regional Food Systems Google Scholar- economic benefit\* and regional food system\*

#### 6. Agritourism

Google Scholar- agritourism and "sustainable agriculture" Google Scholar- Sustainable farm tourism Google Scholar- Farm tourism and "sustainable agriculture" Web of Science -agritourism and "sustainable agriculture" Web of Science-farm tourism and "sustainable agriculture" Web of Science-tourism and "sustainable agriculture" Web of Science-tourism and "sustainable agriculture"

7. Values-based supply chains Google Scholar-Value based supply chain and community food system Google Scholar- food hub and value based supply chain (0) Google Scholar- "value based supply chain" (0) Google Scholar- "alternative supply chain" and food Web of Science -alternative supply chain and food Web of Science -supply chain and regional food Web of Science-values based supply chain Web of Science-short supply chain (0) Web of Science-short food supply chain Web of Science-supply chain and local foods Web of Science-supply chain and local food Web of Science-supply chain and local food

## **B.** Gardens

1. School Gardens Google Scholar- School Garden Web of Science -school garden 2. Home Gardens Google Scholar- "Home garden\*" Google Scholar- Home garden\* and food Web of Science- Home garden\* Web of Science- Home garden\* and food

3. Community Gardens <u>Google Scholar- Community Gardens</u> Web of Science -community gardens Web of Science-vertical gardening and urban agriculture (0) Web of Science-roof top gardening and vegetable Web of Science-vegetable and roof gardens Web of Science-roof gardening Web of Science-roof gardening

#### C. Urban Farms

Google Scholar- urban agriculture Google Scholar- urban farm\* Web of Science- urban farms Web of Science-"urban agriculture"

### **D.** Civic Agriculture

Google Scholar- Civic Agriculture Web of Science- "civic agriculture"

#### E. Changing cultural values around food consumption

(Note: Used some of the same search terms as consumer demand, like consumption and preference of local food)Google Scholar- values and local food consumptionGoogle Scholar- ethics and local food consumptionWeb of Science- ethical concern and "sustainable food" consumption (0)

Web of Science - ethics and local food consumption Web of Science -values and local food consumption

### F. Energy and environment

1. Waste/recycling Google Scholar- Compost\* and "sustainable food" Google Scholar- "Food waste" and compost Google Scholar- "Food waste" and "sustainable agriculture" Web of Science -food scraps recycling Web of Science-compost sustainable food Web of Science-food waste cafeteria Web of Science-food waste and sustainable

2. Food miles Google Scholar- "food mile\*" and "sustainable food" Google Scholar- "food miles" Web of Science- "food miles"

### **III. INSTITUTIONAL SUPPORTS**

#### A. Regional Food Systems Planning

2.) City and Regional Planning and/or Foodshed Planning
Google Scholar- food shed
Google Scholar- food systems planning
Web of Science- food systems planning
Web of Science-urban planning and sustainable agriculture
Web of Science-planning sustainable food system
Web of Science- foodshed

a. Community Food System Assessments/Local Food System Indicators Google Scholar- "community food system assessment" Google Scholar- indicators and sustainable agriculture Google Scholar- indicators and community food systems (0) Web of Science- "community food assessment" Web of Science- community food system assessment Web of Science- "food system assessment" (0) Web of Science- indicator\* and sustainable regional food system\* Web of Science- indicator\* and local food\*

### b. Farmland Preservation

Google Scholar- farmland preservation Google Scholar- farmland preservation and civic agriculture *Google Scholar- farmland preservation and sustainable agriculture* Web of Science- Farmland preservation and "sustainable agriculture" Web of Science- Land trust\* and "sustainable agriculture" Web of Science- Conservation easement\* and "sustainable agriculture" Web of Science- Agricultural district and "sustainable agriculture" (0) Web of Science- Purchase of development and "sustainable agriculture" Web of Science- Zoning and "sustainable agriculture" (0) Web of Science- Transfer of development and "sustainable agriculture" Web of Science- Viability and "sustainable agriculture" Web of Science- Tax relief and "sustainable agriculture" (0) Web of Science- Right to farm and "sustainable agriculture" (0) Web of Science- Farm preservation and "sustainable agriculture" Web of Science- Farm preservation and local food\* Web of Science- Farm preservation and regional food\*

B. Policies, Regulations, and Governance Mechanisms or Processes Google Scholar- Governance and "sustainable food" Google Scholar- Governance and "sustainable agriculture" Google Scholar- Policy and "sustainable agriculture" Google Scholar- Farm bill and "sustainable agriculture" Google Scholar- Food Policy Councils

Google Scholar- Food Policy

Web of Science- governance and local food\*

Web of Science-governance and regional food\*

Web of Science -Farm bill and sustainable agriculture

Web of Science- Agriculture policy and "sustainable agriculture"

Web of Science -Food policy council and sustainable

Web of Science- Food policy council

1. Local (including Food Policy Councils)

2. State/regional

3. Federal (Farm Bill, etc.)

## C. Education and Training

1. The University's Role (e.g. student farms, university curriculum, and faculty research/public scholarship)

Google Scholar- University and "sustainable food"

Google Scholar-"student farm"

Google Scholar- "public scholarship" and "sustainable food"

Google Scholar- faculty research and "sustainable food"

Web of Science- University and regional sustainable food\*

Web of Science- University and regional food system

Web of Science- University and sustainable food

Web of Science- "student farm"

Web of Science- university research and local food\*

Web of Science- public scholarship and sustainable agriculture

Web of Science- public scholarship and civic agriculture

Web of Science- public scholarship and regional food system (0)

Web of Science- faculty research and regional food system

Web of Science- Regional food system and curriculum

Web of Science- Sustainable food system and curriculum

#### 2. Training programs

Google Scholar- Beginning farmer and "sustainable agriculture" Google Scholar- Incubator, farmer, and "sustainable agriculture" Web of Science- Sustainable agriculture incubator (0) Web of Science- Beginning farmer and sustainable Web of Science- Farmer training sustainable agriculture Web of Science- Limited resource farmer\* and sustainable agriculture Web of Science- Farm\* education and sustainable agriculture

3. Tapping local knowledge/Networks for sharing ideas, learning Google Scholar- Local knowledge and sustainable agriculture Google Scholar- Networks and "sustainable food" Web of Science- Local knowledge and sustainable agriculture Web of Science- Network\* and sustainable agriculture

4. Nutrition Education Google Scholar- Nutrition sustainable agriculture Google Scholar- Nutrition sustainable food systems Web of Science -nutrition and sustainable food Web of Science-nutrition and "sustainable food system"

### **IV. ETHICAL CONCERNS AND SOCIAL JUSTICE ISSUES**

Google Scholar- Social Justice Food Systems Web of Science- -"sustainable food systems" and social justice Web of Science-justice and regional food systems Web of Science-sustainable food system\* and equit\*

A. Labor

Google Scholar- Farm Worker Social Justice Google Scholar- Organic Farm Workers Rights Google Scholar- Food industry labor and "sustainable food system" Web of Science-farm workers and sustainable Web of Science-farm workers and organic agriculture
Web of Science-farm labor and regional food systems
Web of Science-farm worker and local food\*
Web of Science-farmworkers and sustainability
Web of Science -Labor rights and sustainable agriculture
Web of Science- Labor and sustainable agriculture
Web of Science-Food industry worker\* and sustainable
Web of Science-Food Industry worker\* sustainable food and wage
Web of Science-Labor and sustainable agriculture

### **B.** Race/Ethnicity/Gender/Class

Google Scholar -Gender and "sustainable agriculture" Google Scholar- Gender and "Sustainable food" Google Scholar- socioeconomic and "local food" and sustainable *Google Scholar- race and "local food\*" and sustainable* Google Scholar- racialized "local food" Google Scholar- Ethnic\* and "local food" and sustainable Web of Science- -whiteness and sustainable food system Web of Science-ethnicity and beginning farmer (0) Web of Science-ethnicity and sustainable food Web of Science-ethnic sustainable agriculture Web of Science-race and food justice Web of Science-race and "sustainable agriculture" Web of Science-race and local food\* Web of Science-women and sustainable food system (0) Web of Science-women and local food\* Web of Science-gender and sustainable food consumption Web of Science-gender and farmers and sustainable Web of Science- socioeconomic and "local food" and sustainable

#### **C. Food Security/Justice**

Google Scholar- Community Food Security and Sustainable Food Systems Google Scholar- Community Food Security Google Scholar- "food justice" and local food Web of Science-food justice Web of Science - "community food security"

#### **D.** Local Control/democracy

Google Scholar- Democracy and "sustainable food" Google Scholar- Local control and "sustainable food" Web of Science- -food sovereignty Web of Science- Democracy and "sustainable food" (0) Web of Science- Local control and "sustainable food" (0)

#### **E. Social Movements**

Google Scholar- Alternative agrifood movement Google Scholar- Social movement and sustainable agriculture Google Scholar- Social movement and "sustainable food" Google Scholar- "local food" and sustainable Web of Science-Alternative agrifood movement Web of Science- Social movement and sustainable agriculture Web of Science- "local food" and sustainable (0) Web of Science – "local food"

**E.** Critique of Localism- no search terms conducted on Google Scholar or Web of Science