

Chapter 3

The Food System: A Stranger to the Planning Field



Kameshwari Pothukuchi  and Jerome L. Kaufman

Abstract Planning lays claim to being comprehensive, future-oriented, and public-interest driven, and of wanting to enhance the livability of communities. It is concerned with community systems—such as land use, housing, transportation, the environment, and the economy—and their interconnections. The food system, however, is notable by its absence from most planning practice, research, and education. We present evidence for the limited presence of the food system in planning’s list of concerns by scanning leading journals, texts, and classic writings, and by reporting on a survey of 22 U.S. city planning agencies. We analyze this low level of attention and discuss reasons and ideas for planning involvement to strengthen community food systems.

As a profession, planning lays claim to being comprehensive in scope, future-oriented, and public-interest driven, and of wanting to enhance the livability of human settlements. It is also distinguished by its focus on numerous functional systems that make up the community, including the study of their characteristics and interconnections (Faludi 1973; Levy 1988; So and Getzels 1988). Land use, housing, transportation, the environment, and the economy are systems in which planners through history have been heavily involved, often with a view to linkages within them and between them and other community systems. More recently, the health, education, and energy systems have also garnered attention from planners.

The food system, however, is notable by its absence from the writing of planning scholars, from the plans prepared by planning practitioners, and from the

Reprint of: Kameshwari Pothukuchi & Jerome L. Kaufman (2000) The Food System, *Journal of the American Planning Association*, 66:2, 113–124, <https://doi.org/10.1080/01944360008976093>. (An earlier version of this article was presented at the annual conference of the Association of Collegiate Schools of Planning (November 6–9, 1997, Fort Lauderdale, FL). A session on community food system planning was also organized and moderated by Kaufman at the annual conference of the American Planning Association (April 24–28, 1999, Seattle, WA). This was the first time the APA ever had a panel on food system planning at one of its conferences. The session was attended by about 50 persons.)

K. Pothukuchi (✉) · J. L. Kaufman (deceased)
Department of Urban Studies and Planning, Wayne State University, Detroit, MI, USA
e-mail: k.pothukuchi@wayne.edu

classrooms in which planning students are taught. By the food system, we mean the chain of activities connecting food production, processing, distribution, consumption, and waste management, as well as all the associated regulatory institutions and activities.

We recently taught a rare course for a graduate planning program on planning for a community food system that culminated in a class report titled *Fertile Ground: Planning for the Madison/Dane County Food System* (University of Wisconsin–Madison Department of Urban and Regional Planning 1997).¹ This effort convinced us that the food system was extraordinarily important to the health and vitality of communities. It has led us to probe deeper into several questions:

- Why have planners paid so little attention to the food system?
- Why should the food system become important as a focus of planners' attention?
- What constructive role can planners play in the food system?

In this article, we begin by presenting evidence for the limited presence of the food system on planning's list of concerns. We examine the leading journals in planning, texts used to introduce new planners to the profession, and some classic texts that have extended the boundaries of planning thought and graduate planning curricula. We also report the findings of a survey of 22 U.S. city planning agencies that provide evidence for the limited attention that planning agencies give to the food system. Our survey of planning agencies leads to a discussion of reasons why planners give scant attention to food system issues. We conclude by offering ideas about what planners could do to contribute to and strengthen planning for community food systems.

3.1 Most Planning Literature Ignores Food Issues

Planning texts over the last few decades have provided a comprehensive overview of the planning profession while identifying several central topics. These include physical planning and urban design, land use, economic development, social planning, growth management, real estate development, public infrastructure, environmental planning, urban transportation, housing, historic preservation, and technology planning (Catanese and Snyder 1988; Chapin 1972; Levy 1988; So and Getzels 1988). None of these texts include planning for the community food system, and few of the specializations described allude to the food system.

¹To our knowledge, only two other studies of a community's food system have been conducted by planning programs. The pioneering study was done in 1977 by the graduate planning program at the University of Tennessee–Knoxville. This study, *Food Distribution and Consumption in Knoxville: Exploring Food-related Local Planning Issues*, was developed under the guidance of Professor Robert Wilson. The second study was done in 1993 by students in the UCLA program under the guidance of Professor Robert Gottlieb and was entitled *Seeds of Change* (Ashman et al. 1993).

This paucity of food system discussion has significant implications for the planning of communities. For example, a lack of food system analysis leads planners to fold grocery store development and location into a broader category of commercial retail development without considering the higher priority that food merits among household needs. Failure to systematically devise communitywide plans for composting food wastes results in their being dumped into landfills—thereby making landfills 12–15% larger than they otherwise would be and depriving households and farmers of a valuable organic fertilizer (University of Wisconsin–Madison Department of Urban and Regional Planning 1997).

Even many of the classic texts of planning have given short shrift to the food system, although evidence indicates that food received more attention at some points in history and from some groups of planners than others. Ebenezer Howard's Garden City concept provides the best example by far of systematic attention to food issues (Howard 1960). Garden City proposals addressed many aspects of the food system—production, distribution, collective preparation and consumption, and waste recycling—as integral to the city. Highlights of Howard's proposals include 5000 acres of agricultural land doubling as a greenbelt, appropriate location and flow of raw and processed commodities, collective kitchens and dining halls, and recycling of food waste as fertilizer for farms. These designs sought not only to provide a livable alternative to the grimy, overcrowded, and sprawling older cities, but also to enhance local self-sufficiency. In the Garden City, the links between food and other community systems were understood and addressed in depth.

In later years, Lewis Mumford (1961) and Benton MacKaye (1962) were among the staunchest advocates of a regional and comprehensive view of planning. They urged a view of city systems from the frameworks of equity, vitality, and regional and sectoral comprehensiveness. They called for urbane cities rather than cities determined simply by market forces. For example, Mumford (1961) wrote,

The planning of cities cannot be confined to "housing, work, recreation, and circulation," the standard planner's definition. The whole city must rather be conceived mainly as a theater for active citizenship, for education, and for a vivid and autonomous personal life. (plate 61)

Yet even Mumford and MacKaye made little note of the importance of planning for local food systems. It is difficult to imagine any of the above goals being realized without secure, ongoing, and socially acceptable access for all citizens to high quality, nutritious food. To be fair, they did express concern for the loss of agricultural land surrounding cities, and for the accompanying loss of both urban coherence and regional self-reliance. This oblique reference to food issues conveys neither the significance of food as a community issue nor the importance of its links to other systems. Clarence Perry's neighborhood concept embraced the need for ready access to retail food outlets, including a grocery store, meat market, restaurant, bakery, delicatessen, and confectionery (So and Getzels 1988). However, the concept did not elaborate on how these outlets were connected to other food-related urban activities such as wholesale trade, transportation, and waste management.

The major planning journals have followed this same general pattern of overlooking food system issues. We found no article containing a discussion of community food systems in the U.S. in any of the major journals—the Journal of the American Planning Association (JAPA), the Journal of Planning Education and Research (JPER), and the Journal of Planning Literature (JPL).² This is striking. Discussions of community food issues generally are rare in the American Planning Association's Planning magazine as well.³

More recently, feminist planners have given some attention to community food issues because of women's roles in household food procurement, preparation, and service. Their analyses have provided a critical look at the design of neighborhoods from the perspective of these roles (Wekerle 1985), cities (Hayden 1986a, b), and the food sector's role in women's economic development (Tinker 1994, 1997), for example. Feminist design proposals document apartment complexes with food coops, collective kitchens and dining rooms, community gardens, and other arrangements that better mesh women's roles with sectors of the community's food system (Franck and Ahrentzen 1989; Hayden 1981). Valuable as these perspectives are, they still provide only a limited view of the food system and prescribe limited interventions in it.

3.2 A Survey of 22 Planning Agencies

To supplement our search of the planning literature, in 1997–1998 we undertook a survey of planning agencies to explore the extent of their involvement in food system planning. We selected city planning agencies in 22 U.S. communities,⁴ most of

²Take JAPA, for instance: In the years 1987–1999, it has carried at least 23 articles on housing, 31 on economic development, 17 on transportation, 20 on environmental and sustainability issues, 14 on energy and infrastructure, 13 on urban design, and 26 on land use and management. While planning journals have carried articles on issues that pertain indirectly to urban food concerns—predominantly farmland preservation—rarely are these concerns articulated explicitly from a food systems perspective (Alterman 1997; Bowler 1997; Daniels 1991, 1997; Daniels and Nelson 1987; Heimlich 1989; Nelson 1992; Sanyal 1987).

³In the past twelve years, the exceptions have included three articles—one each on urban public markets, street vendors, and community gardens (Deering and Ptucha 1987; Houstoun, 1993; Knack 1994)—aside from the more typical ones addressing farmland preservation (e.g. Guskind 1988; Knack 1990; Popper and Popper 1987). A significant portion of a 1984 issue was devoted to local food issues. It featured problems that cities faced with respect to food access and affordability, and documented initiatives that some municipalities were undertaking to address these problems.

⁴The communities surveyed were Albuquerque, NM; Austin, TX; Baltimore, MD; Chicago, IL; Cincinnati, OH; Des Moines, IA; Hartford, CT; Knoxville, TN; Los Angeles, CA; Madison, WI; Milwaukee, WI; Missoula, MT; New Orleans, LA; Orlando, FL; Philadelphia, PA; Pittsburgh, PA; Portland, OR; San Antonio, TX; San Francisco, CA; Seattle, WA; St. Paul, MN; and Syracuse, NY.

Table 3.1 Planners’ involvement in the food system, top 10 issues

| | Agencies reporting | Significant | Moderate | Minimal |
|-----------------------------------------------------------------------------------|-----------------------|-------------|-------------|-------------|
| Issue | Involvement | Involvement | Involvement | Involvement |
| Location of supermarkets, grocery stores, fast food outlets, and food wholesaling | 20 | 8 | 6 | 6 |
| Design of food outlets | 18 | 8 | 5 | 5 |
| Community gardens | 12 | 1 | 4 | 7 |
| Studies of impact of food sector on local economy | 11 | 1 | 4 | 6 |
| Farmers’ markets, food festivals, etc. | 10 | 3 | 6 | 1 |
| Food issues addressed in neighborhood plans | 10 | 0 | 4 | 6 |
| Food related economic development | 10 | 4 | 2 | 4 |
| Food issues addressed in comprehensive plans | 6 | 0 | 2 | 4 |
| Hunger prevention programs | 5 | 0 | 2 | 3 |
| Agricultural land preservation | 3 ^a | 0 | 2 | 0 |

^aOne agency official did not rate the significance of the activity

which either had a food policy council ⁵ or an active and broadly focused food organization such as the San Francisco League of Urban Gardeners (SLUG) or the Hunger Task Force of Milwaukee (HTFM). Using a questionnaire that listed 18 different food system issues, we conducted a phone inquiry of senior planners in each agency.

Our survey found that these city planning agencies are at best only lightly involved in the food system arena. In most cases, when they do get involved, their role is reactive rather than proactive and piecemeal rather than comprehensive. Table 3.1 shows the 10 issues with the highest level of involvement. Other issues included mapping of food sector activities, sustainable agriculture, community supported agriculture, food cooperatives and distribution alternatives, nutrition and health education, food safety, food impacts on environment and solid waste, community food security, and other—an open category.

⁵Food policy councils (FPCs) exist in about 15 communities in the United States and Canada. The first one was created in Knoxville, Tennessee, in 1981. Most were established since 1990, typically emerging out of informal coalitions of activists in hunger prevention, sustainable agriculture, and community development. Cities with FPCs are as diverse as Hartford, CT; Austin, TX; St. Paul, MN; Los Angeles, CA; and Toronto, ON, Canada. Sanctioned by local governments, FPCs are usually composed of representatives of different segments of the food system community, e.g., members of farm, hunger prevention, retail food, nutritional education, and sustainable agriculture organizations, as well as some government officials. Central venues for considering a wide range of food issues at the local level, they vary in their structures, functions, and resources. Almost all try to monitor their city’s food system and work to get various rips and tears in that system mended. Most of them pursue the goals of a more equitable, effective, and ecologically sustainable food system.

Twenty of the 22 agencies said that within the past 5 years they had dealt with issues relating to the location of supermarkets, grocery stores, fast food outlets, and food wholesaling activities within their normal land use planning and zoning responsibilities. Eighteen said they had dealt with design issues related to food outlets in the context of carrying out the agency's zoning and, occasionally, design review responsibilities. Yet in both situations, only 8 respondents ranked the planning agency's involvement in those activities as significant. Most planners' responses to open-ended questions indicated that they handled issues related to location, design, or regulation on a case-by-case basis, highlighting the lack of a systematic approach to food system issues.

Food system issues were addressed in neighborhood plans in only 10 of the 22 communities; only 6 communities addressed them in comprehensive plans. However, only 3 of the former group and none of the latter indicated that food issues were treated in a significant way. Other communities reported only moderate or minimal involvement in food issues.⁶ Twelve communities also indicated that their planning agency had been involved in community gardens, with only 1 reporting significant involvement. Only one agency indicated any involvement in sustainable agriculture, and none in community supported agriculture or in alternative mechanisms of food distribution. A similar pattern of very low involvement, if any, held for nutrition and health, food safety, food sector impacts on the environment, and community food security issues.

3.3 Reasons for Limited Attention

The most interesting responses were the reasons planners gave for their low levels of involvement in food system issues. We grouped their responses into seven categories.

1. *It's not our turf.* Several planners felt that the food system only indirectly touched on the built environment, the primary area that their agencies worked on. One planner put it this way: "Food system issues affect planning only as land use, zoning, and location decisions." Another said, "We as a department don't have any involvement in food system issues unless it's a zoning issue. We only look at

⁶In fact, such involvement can actually have consequences for access by all community residents to nutritious and affordable food. In a couple of cases, respondents reported that their agencies had helped prevent or delay supermarket development in neighborhoods as a result of historic preservation regulations or neighborhood opposition to the development. Another planner reported that "the department is being asked to help close down soup kitchens because of their negative impacts on neighborhoods. The kitchens attract people with serious social problems, and crime and vandalism are a problem." She continued that her department was taking action "without judging whether the kitchen is needed or not." These cases point to instances in which planning agency involvement, far from being positive or even indifferent, may actually undermine some residents' access to food.

land uses.” Still another said, “Planners are more focused on physical development than social service issues, which the food system falls under.”

2. *It's not an urban issue; it's a rural issue.* These planners perceived food issues to fall principally in the domain of rural policy, centered on agriculture, farms, and food production. Because farms are located outside cities, food issues get lower priority from these city planners. They did not recognize other parts of the food chain— e.g., food processing, wholesaling, retailing, consumption, and waste disposal. One respondent said, “Planners are extremely involved where agriculture is important. Agriculture has never been important around our city. Therefore it would be inappropriate to pay attention to something that doesn't exist.” Another said, “There's no agricultural land [in our city] and no opportunity to become more involved in food issues.” Still another replied, “Our city is in an agricultural area, but the city doesn't deal with agriculture or farming issues.”
3. *The food system is driven primarily by the private market.* Planners partly justify their role by claiming competence in dealing with public goods, such as air and water, and with services in which the private sector is unwilling to invest, such as public transit, sewers, highways, and parks. These planners saw the food system as being dominated by the private sector, thereby limiting the planner's role. Comments reflecting this point of view were as follows: “The food system is primarily the domain of the private sector”; “In our community, the food system is privately run; the public sector cannot lead”; “How much is produced is up to the private sector; cities cannot control what is produced and distributed. It is up to the market and the federal government to determine.”
4. *Planning agencies aren't funded to do food system planning.* Unlike the areas of transportation, housing, the environment, and economic development, for which federally funded programs exist at the community level, similar programs for food issues were not known to be available. As one respondent said, “Planning agencies are not funded to deal with food issues like they are for transportation, housing, and economic development.”
5. *What's the problem? If it ain't broke, why fix it?* Planners often deal with issues arising from perceived market failure, for example, providing more affordable housing. Some of the respondents believed that the food sector is responding well to market forces. Comments like the following reflected this view: “The food system seems to take care of itself; everywhere you go there are food stores”; “The food system works pretty efficiently—food comes in on trucks and then goes to stores”; “Residents are not bringing food-related concerns to the planning department, so there doesn't seem to be any problem”; “Considering other problems we deal with, food is not a big issue.”

In addition to the responses above, we identified two other categories that were indirectly suggested in the comments of those we contacted.

6. *Who is addressing the community food system with whom we can work?* Because of the diffuse nature of local government involvement in food system issues, planners, who link up regularly with professionals in other agencies, are able to identify few people with whom to share information, exchange views, negotiate,

or collaborate on food system concerns. The need for more professional connection was highlighted in our interview with a planner who rated his agency's involvement in the food system as high and who credited his collaboration with a colleague in the local health department who was involved in the local food policy council. The lack of a focal agency or department for food issues in city government reduces such opportunities for collaboration among planners and thus hurts their ability to understand and articulate food-related planning concerns.

7. *We don't know enough about the food system to make a greater contribution.* As a result of the "invisibility" of the connections between food and other planning activities, planners feel burdened by what they perceive to be additional responsibilities suggested by the need to attend to food issues. Of the 93 planning schools in North America, no school, to our knowledge, offers a food system specialization. More common among the specializations relating to community systems are the ecology, land use, economic development, housing, and transportation (Fisher et al. 1996). Only 12% of the planning schools have a rural planning specialization. Although agricultural issues likely would be covered in this specialization, these are different from community food issues. Furthermore, few urban and regional planners specialize in rural planning. The most telling comment about the inconceivability of food system planning to some planners was: "If someone in the planning agency suggested we do planning for the local food system, he'd be looked at as if he came from Mars."

Finally, we asked the planners we interviewed, "Do you think planners should get more involved in food system planning in the future?" Compared to the responses that showed limited involvement in the food system in the past, views on future involvement were more affirmative: 38% responded "yes," another 38% responded "it depends," and only 25% responded "no." Also hopeful was the variety of rationales suggested by those responding affirmatively, mirroring somewhat our own views on the significance of the food system to cities:

- "Food is essential."
- "Food issues are a public good that transcends the market."
- "We're realizing more the need for holistic planning to go beyond the built environment; social issues like food are related to the built environment."
- "It is a critical part of neighborhood revitalization."
- "We need to get more involved in nutrition issues—it's important for healthy residents in healthy cities."
- "We need to recognize food as an important aspect of our local economy."
- "Better access of low-income inner-city residents to less expensive, quality grocery stores needs to be achieved."

Our respondents also identified four major food system concerns that could most immediately benefit from planning attention: agricultural land preservation; land use and zoning related to food access, especially location of retail food outlets in low-income neighborhoods; integrating food issues into economic development

activities; and documenting and mitigating the environmental impacts of the food system. These concerns have received planning interest and involvement, and may offer opportunities to integrate food system thinking into planning.

3.4 The Importance of Food System Issues

There are both conceptual and practical reasons why planners should devote more attention to the food system. A committee of the Association of Collegiate Schools of Planning (ACSP) issued a report, “Anchor Points for Planning’s Identification” (ACSP Strategic Marketing Committee 1997). This report identified six generic themes that anchored planning’s identity as a discipline. Two of these themes are relevant to this discussion:

- a focus on improvement of human settlements
... with emphasis on making places better serve the needs of people (p. 223), and
- a focus on interconnections among distinct community facets, incorporating linkages among physical, economic, natural, and social dimensions, linkages among sectors, e.g., transportation and land use, housing and economic development, etc., and public and private enterprises (p. 223).

It is difficult to believe that planners who espouse these beliefs could disregard the food system. Air, water, food, and shelter are among the essentials of life. Clearly, it would be extraordinarily difficult to have high-quality human settlements without safe and adequate air, water, food, and shelter. Planners have been involved in efforts to improve the quality of air and water through pollution control programs, and more comprehensively in shelter planning.⁷ But the fourth essential, food, has been virtually ignored by planners. Food is unique among human needs in its basic connections, among others, to land; in the centrality of its wholesomeness and nutrition to health; and in the social, economic, eco-logical, and political implications of the locations of its sources. To be truly concerned about improving human settlements, planners need to incorporate food issues into their working models.

The second theme highlights the claim that planning’s special identity comes from its particular attention to links among functional sectors, between the public and the private sectors, and among multiple perspectives on community life. Links with the food system, though, are omitted by planners for each of these three categories. Yet, the food system is certainly a “distinct community facet” that needs to be interconnected to other sectors.

⁷One could also make a case for systems treatment for clothing—another basic human need that, like food and shelter, is mediated by geography and culture. Indeed, proponents of bioregionalism and sustainability argue that all human needs be treated from an integrated perspective that respects regional ecology and cultural identity and builds community self-reliance (see, for example, Houghton and Hunter 1994).

Whether or not planners are aware of the connections within the food system and between the food system and other community systems, these links are many and significant. This provides the practical reason for planning agencies to get more involved in the food system. Consider, for example, the following ways that food issues are embedded in the lives of community residents and the health of the community.

- Food sector establishments such as restaurants, fast food outlets, supermarkets, specialty food stores, taverns, and food wholesalers are an important part of any city's economy. For example, in 1992, retail and wholesale sales for food sector activities accounted for approximately 25% and 24% respectively of all sales in Dane County, WI (U.S. Bureau of Census 1992a, b).
- Many city residents are employed in the food sector. Of all retail jobs in 1992 in Madison, WI, 13,000 or 53% were food sector jobs (U.S. Bureau of Census 1992a).⁸ A higher percentage of lower-income residents in cities also depend for their livelihoods on lower paying jobs in food stores and eating places.
- City households spend from 10 to 40% of their income after taxes on food purchases for the home and meals outside the home (Senauer et al. 1991). Poorer households spend a larger percentage of their incomes on food than do more affluent households.
- Food waste is a significant portion of the household, commercial, and institutional waste streams. Including food packaging, food wastes make up close to a third of the total waste that ends up in many city landfills (University of Wisconsin–Madison Department of Urban and Regional Planning 1997).
- City water pollution problems are exacerbated when chemical fertilizers and pesticides are used on farms in the city's region. Dairy farming in the Madison area, for example, contributes to high nitrate and atrazine concentrations in the area's drinking water. High phosphorous concentrations cause eutrophication of area lakes (University of Wisconsin–Madison Department of Urban and Regional Planning 1997).
- Many health problems are food related—whether due to inadequate or unbalanced diet, or excessive intake. Among older Americans, malnutrition has reached epidemic proportions. A 1993 national sample of physicians, nurses, and administrators estimated that one fourth to one half of elderly patients suffer from malnutrition. Nutrition screening programs in a wide variety of institutional and community settings have reported elder malnutrition risk rates ranging from 25 to 85% (Wellman et al. 1996).
- Household and individual trips to grocery stores and other food outlets contribute a significant portion to urban transportation volume. San Franciscans, for example, made approximately 4 million trips to shop for food and non-food

⁸A number of statistics in this listing are derived from *Fertile Ground* (University of Wisconsin–Madison Department of Urban and Regional Planning 1997), the report of the graduate planning workshop conducted by the authors.

items in 1990 (23% of all trips), the bulk of them—about 86%—in private automobiles (Purvis 1994).

- Because the poor have fewer cars, the quality of a city's transit system becomes a major factor affecting their ability to access affordable food stores. Car ownership rates in central cities are often much lower than the average for the metropolitan area (Ashman et al. 1993).
- When affordable housing is in short supply in a city, poorer residents may be at greater risk of hunger. This is because they place a higher priority on rent than on food, given the graver short-term consequences of rent default over reduction of food intake.
- A sizable number of lower-income residents living in cities depend on emergency sources of food available in food pantries, soup kitchens, and food banks that are largely invisible to middle- and upper-income residents. Estimates indicate that the use of the emergency food system is on the rise as a result of welfare reform. After remaining stable for several years, the number of people visiting food pantries in Milwaukee rose 14% in 1996 to 42,000 a month. And the number of people receiving hot meals rose 20% (DeParle 1997).

In other words, the food system is too important for planners to ignore.

3.5 How Can Planners Strengthen the Food System?

Planners have the professional expertise and community-oriented and interdisciplinary perspectives that potentially could strengthen community food systems and food system planning. Given the conceptual and practical reasons for planners' involvement in community food issues, they could take the following steps to better integrate food-related concerns into their everyday activities. The suggested activities are incremental in their level of complexity and commitment to community food system planning. Some activities might be carried out within planning departments as they are currently structured and without additional staff, but others might require greater cooperation with other city departments and/or specialized staff. All would benefit from a special unit—like a food policy council—created to place greater emphasis on community food issues.⁹

⁹In another article, the authors suggest three municipal institutions that might provide a greater focus on community food issues—a potential city department of food, a food policy council, and the city planning department (Pothukuchi and Kaufman 1999).

3.5.1 Compile Data on the Community Food System

One of the principal activities of planners is to collect, compile, analyze, and interpret data on important community issues to guide future public and private investments. Planners could conduct such preliminary data gathering on the various activities related to the food system in their own communities—production, processing, wholesale and retail distribution, food service, consumption, disposal, and associated regulatory activities. These basic statistics could paint a broad picture of the condition of the community's food system. These data could also be used to raise the awareness of other professionals and public officials with whom planners regularly collaborate on the community's food system, and provide a basis for future planning that is better informed about community food issues. Information on basic indicators such as employment, sales and value added, wages, and food expenditures and consumption are readily available from the censuses of industry, retail, wholesale, agriculture, and other databases compiled by various public, private, and nonprofit sources.

Using these data, planners could describe the food system's impact on their local economy in terms of employment, wages, sales, and value added. They could estimate the value of local food exports and imports and begin to delineate strengths and weaknesses in their area's food system. They could inventory activities in the "conventional food system" exemplified by grocery retail outlets and eating and drinking places; the "emergency food system" embracing free and subsidized meal programs and vouchers; and the "alternative food system" that seeks to promote sustainable food system activities—including chemical-free agriculture, reduction and recycling of wastes, urban food production, and greater connection between local farmers and consumers.

These and related investigations of the community's food system could also help dispel some of the previously discussed misconceptions expressed in the comments of the planners we surveyed. For example, they could assess the numbers of community residents who are chronically dependent on the emergency food system, or at risk of hunger, for whom the "conventional" or market sector in food activities simply does not work. They could also illustrate the many ways in which the food system, as an urban system, is intricately connected to other systems in which planners are actively involved.

3.5.2 Analyze Connections Between Food and Other Planning Concerns

Planners are interested in and devote much attention to the links between systems. Identifying the interconnections between food and other planning concerns may be a next step. These connections could help identify categories in which data may need to be collected on a regular basis—such as number and types of trips

specifically for food procurement—and emerging community concerns that need greater short- and long-range planning.

For example, land use planners could identify the existing impacts of food system activities on the community's land use patterns and vice versa. They could analyze trends in the location, number, size, distribution, associated land use requirements, and relationship to neighborhoods of food entities such as grocery stores, community gardens, and pantries and free meal sites.

Local transit availability for low-income residents, and its connections to grocery stores, and the extent of trip generation by food shopping might also be addressed.¹⁰ Geographic Information System (GIS) capabilities could be brought to bear on these spatial analyses. Environmental planners could examine the impact of local food production, distribution, and consumption patterns on the quality of the community's air, water, and soil, or simulate the effects of future growth on the availability of agricultural land. Neighborhood planners could conduct food-specific needs and resource analyses in low-income neighborhoods. They could help analyze household expenditures on food relative to other needs and the impact of housing costs on the food security of households. Economic development planners could analyze the extent to which economic development may be stimulated by encouraging food-related businesses, or simulate the effects of food-related economic trends such as plant closures (especially of food processing plants), higher gas prices, drought, and so on, on the access of residents to quality and affordable food.

3.5.3 Assess the Impact of Current Planning on the Local Food System

An assessment of current planning and policymaking on the local food system will be especially valuable to document how planning impacts low-income groups' access to affordable food. For example, land use policies that allow community gardens to be paved and developed, policies that restrict grocery store development based on a need to maintain the historic character of neighborhoods, or activities to close soup kitchens because of neighbors' fear of criminal activity may negatively impact low-income residents' access to nutritious and affordable food. Economic development policies to attract larger supermarkets may put smaller, neighborhood grocery stores out of business. On the other hand, they may also make available a greater variety of food at lower prices. These policies need more careful analysis for their impacts on local businesses and those households with lower mobility that may not have access to larger supermarkets located at the periphery. Policies to encourage housing development on the urban fringe may also affect local food

¹⁰ Currently, data on trips and trip generation do not disaggregate retail categories by food and other retail. Hence we have no way of distinguishing between trips to purchase food from grocery stores and those to the local shoe, hardware, or department store.

production. Land use, transportation, neighborhood, social, and environmental planners may wish to examine the impact of their policy recommendations on the access to and affordability of quality food for all residents.

Each community would have to identify the effects of dominant trends salient to its food system. For example, older urban communities may experience problems with food access to low income residents as a result of abandonment by retail operations. At the same time, community gardens in abandoned lots offer a potential source of fresh produce for these neighborhoods (plus opportunities for neighborhood revitalization). Planners here may need to formulate land use and zoning policies to support urban food production and economic development policies to foster grocery store development in these neighborhoods.

Rapidly growing suburban communities, on the other hand, may experience loss of surrounding farmland, as farming is no longer able to compete with development. People in these communities may also find themselves driving longer distances for groceries. Planning for the food system in these communities may involve policies to curb farmland loss, sustain agriculture, and to connect local farmers with local consumers via farmers markets and other alternative modes of distribution.

3.5.4 Integrate Food Security into Community Goals

Strategic and comprehensive planning in communities are often based on overarching community goals such as livability, sustainability, economic vitality, healthy communities, and local self-reliance. This step envisions the inclusion and integration of a community food security goal in these larger community goals. At its most basic, community food security embodies the notion that all residents have access at all times to affordable, high-quality food through conventional (and not charity-based) sources and through means that are environmentally, economically, and socially sustainable.¹¹

Planners are in a unique position to engage the community in a dialogue about the meaning and goals of a food secure community. This may lead to the development of specific strategies relevant to the community and the modification of existing activities to achieve a more food secure community. Strategies may include the development of tools to assess future planning from a framework that is informed about community food security. Conceivably, the social, economic, and

¹¹ The Community Food Security Coalition, a national coalition of organizations working towards community food security, has recently formed to advocate for policies and programs to support community food security initiatives nationwide and to educate communities about community food security. In large part due to its activities, the U.S. Department of Agriculture (USDA) set up a community food projects competitive grant program in 1995 to fund creative community efforts to link food to community development activities. In 1999, the USDA also set up a new office, the Community Food Security Initiative, to support this class of food security activities more broadly. Browse for more information on the community food projects or for more information on the Community Food Security Coalition.

environmental impact statements now commonplace in evaluating proposals for new development will include a food security component. Strategies could also include ongoing evaluation of the implementation of food security goals and objectives.

Such an integration of food security goals into the larger community agenda may also result in specific forms of interaction between local municipal agencies (perhaps even the development of a city department of food), between urban and rural areas, between different levels of government, and between public, private, and non-profit agencies.¹²

3.5.5 Educate Future Planners About Food System Issues

Planning schools also need to incorporate more systematic training on food system planning and even offer specializations on the topic. Planning academics could acquaint themselves with the basic frameworks, research, and data sources on community food systems and food security. The state of such frameworks and sources is currently evolving and would only benefit from their incorporation into planning curricula. Food system research could also gain from the interdisciplinary and policy-oriented perspectives that planners are best able to contribute. Student projects that reveal more about the community's food system and its connections with other planning concerns, and that engage the public in dialogue on community food goals could also be introduced in graduate planning schools.

3.6 Conclusions

Community food system issues are low on the agenda of practicing planners, planning scholars, and planning educators. We documented this contention by analyzing the scholarly literature and surveying a group of practicing planners. We also discussed why planners pay limited attention to community food system issues. This low level of involvement is perplexing because the food system is a significant metropolitan system, and because planning claims to promote quality and livable settlements that meet basic needs and is concerned with connections between community systems.

Our conclusions about the low level of involvement by planning agencies in food system issues, to be sure, are based on a relatively small sample of planning agencies and the assumption that the planners we interviewed by phone were knowledgeable about their agency's level of involvement in food system planning. Because

¹² While city departments charged with responsibility for planning for various urban sectors (such as transportation, parks and recreation, economic development, and housing) exist, no city in the U.S. has a department of food.

we interviewed senior level planners in each agency, who presumably were informed about the broad range of activities in which their agencies were engaged, we have confidence in the accuracy of their assessments. Furthermore, the communities we contacted already had a focal point for mobilizing attention to community food security issues—focal points like a food policy council or a community-based non-profit group engaged in advocacy and programmatic initiatives related to community food security.

Our study suggests that the food system is there and yet not there. We feel that a conceptual hole exists in an area which planners continually impact both directly and indirectly. This article helps to fill that hole, by (1) explaining why the food system has a low priority among planners; (2) illuminating specific ways the food system affects the economy, employment base, environment, and health of communities; and (3) suggesting directions planners may take to strengthen community and regional food systems and food system planning.

At worst, a lack of focus on food means that planners' activities may undermine community food security. Yet food is a basic human need. As planning educators, we have started to "see" the food system and have become sensitive to the need to fill the conceptual holes related to food systems issues. Despite the omission of food from the community planning agenda, we are encouraged by our belief that planners have much to contribute to strengthening local food systems and food system planning. Indeed, the emerging "healthy cities" and sustainability movements in urban planning have raised the importance of goals related to healthful food consumption and regional self-reliance in food. Together with the community food security movement, these efforts might well result in more active and systematic involvement in the food system by planners in the new millennium.

Acknowledgements The authors wish to thank Julie Sontag, graduate student in the Department of Urban and Regional Planning at the University of Wisconsin–Madison, for her assistance in conducting the survey.

References

- Alterman R (1997) The challenge of farmland preservation: lessons from a six-nation comparison. *J Am Plan Assoc* 63:220–243
- Ashman L, Dohan M, De la Vega J, Fisher A, Hippler R, Romain B (1993) Seeds of change: strategies for food security for the inner city. UCLA Graduate School of Architecture and Urban Planning, Los Angeles
- Association of Collegiate Schools of Planning, Strategic Marketing Committee (1997) Anchor points for planning's identification. *J Plan Educ Res* 16:223–225
- Bowler C (1997) Farmland preservation and the cluster zoning model. *J Am Plan Assoc* 63:127–128
- Catanese A, Snyder J (eds) (1988) *Urban planning*, 2nd edn. McGraw-Hill, New York
- Chapin FS Jr (1972) *Urban land use planning*, 2nd edn. University of Illinois Press, Urbana
- Daniels TL (1991) The purchase of development rights: preserving agricultural land and open space. *J Am Plan Assoc* 57:421–431

- Daniels TL (1997) Where does cluster zoning fit in farmland protection? *J Am Plan Assoc* 63:137–144
- Daniels TL, Nelson AC (1987) Is Oregon's farmland preservation program working? *J Am Plan Assoc* 52:22–32
- Deering R, Ptucha G (1987) Super marketing. *Planning* 53:27–29
- DeParle J (1997) Cutting welfare rolls but raising questions. *New York Times*, p 1
- Faludi A (1973) *A reader in planning theory*. Pergamon, New York
- Fisher PS, Contant CK, Moraski JM, Vorites JA, Graduate Program in Urban and Regional Planning, University of Iowa (eds) (1996) *Guide to graduate education in urban and regional planning*, 10th edn. Association of Collegiate Schools of Planning, Iowa City, IA
- Franck K, Ahrentzen S (eds) (1989) *New households, new housing*. Van Nostrand Reinhold, New York
- Guskind R (1988) New Jersey says "enough". *Planning* 54:24–30
- Haughton G, Hunter C (1994) *Sustainable cities*. Jessica Kingsley, London
- Hayden D (1981) *The grand domestic revolution: a history of feminist designs for American homes, neighborhoods, and cities*. MIT Press, Cambridge, MA
- Hayden D (1986a) *Redesigning the American dream*. W. W. Norton, New York
- Hayden D (1986b) What would a non-sexist city be like? Speculations on housing, urban design, and work. In: Bratt RG, Hartman C, Meyerson A (eds) *Critical perspectives on housing*. Temple University Press, Philadelphia, pp 230–246
- Heimlich RE (1989) Metropolitan growth and agriculture: farming in the city's shadow. *J Am Plan Assoc* 55:457–466
- Houstoun LO Jr (1993) *Streetwise*. *Planning* 59:20–22
- Howard E (1960) *Garden cities of tomorrow*, 4th edn. Faber and Faber, London
- Knack RE (1990) Selling cluster planning. *Planning* 56:20–23
- Knack RE (1994) Dig these gardens. *Planning* 60:20–24
- Levy J (1988) *Contemporary urban planning*. Prentice-Hall, Englewood
- MacKaye B (1962) *The new exploration: a philosophy of regional planning*. University of Illinois Press, Urbana
- Mumford L (1961) *The city in history: its origins, its transformations, and its prospects*. Harcourt Brace Jovanovich, New York
- Nelson AC (1992) Preserving prime farmland in the face of urbanization: lessons from Oregon. *J Am Plan Assoc* 58:467–488
- Popper DE, Popper FJ (1987) The Great Plains: from dust to dust. *Planning* 53:12–19
- Pothukuchi K, Kaufman JL (1999) Placing food issues on the community agenda: the role of municipal institutions in food systems planning. *Agric Hum Values* 16:213–224
- Purvis CL (1994) San Francisco Bay Area 1990 regional travel characteristics (Working Paper No. 4). Metropolitan Travel Commission, Oakland
- Sanyal B (1987) Urban cultivation amidst modernization: how should we interpret it? *J Plan Educ Res* 6:197–207
- Senauer B, Asp E, Kinsey J (1991) The food industry: an overview and implications of consumer trends. In: Senauer B (ed) *Food trends and the changing consumer*. Eagan Press, St. Paul, pp 269–311
- So F, Getzels J (eds) (1988) *The practice of local planning*. International City Management Association, Washington, DC
- Tinker I (1994) The urban street food trade: regional variations of women's involvement. In: Chow EN, Berheide CW (eds) *Women, the family, and policy: a global perspective*. State University of New York Press, Albany, pp 163–187
- Tinker I (1997) *Street foods: urban food and employment in developing countries*. Oxford University Press, New York
- U.S. Bureau of Census (1992a) *Census of retail trade, 1992*. U.S. Government Printing Office, Washington, DC

- U.S. Bureau of Census (1992b) Census of wholesale trade, 1992. U.S. Government Printing Office, Washington, DC
- University of Tennessee–Knoxville, Graduate School of Planning (1977) Food distribution and consumption in Knoxville: exploring food-related local planning issues. Author, Knoxville
- University of Wisconsin–Madison Department of Urban and Regional Planning (1997) Fertile ground: food system planning for Madison/Dane county. Author, Madison
- Wekerle G (1985) From refuge to service center: neighborhoods that support women. *Social Focus* 12:79–95
- Wellman NS, Weddle DO, Kranz S, Brain CT (1996) Elder insecurities: poverty, hunger, and malnutrition. *ADA HungerLine* 1–3 [On-line] Available: <http://www.fiu.edu/~nutreldr/Elder_Insecurities.htm> (Date Accessed: January 6, 1999)

Kameshwari Pothukuchi Kameshwari (Kami) Pothukuchi is Distinguished Service Professor of Urban Studies and Planning at Wayne State University. Her research explores food systems' linkages to planning, public health, economic development, social justice, sustainability, and higher education. She has lectured nationally and internationally, including in Canada, Germany, the Netherlands, Australia, and the United Kingdom. In 2008, Pothukuchi founded SEED Wayne, a campus-community collaborative to help build sustainable food systems in Detroit. She has also served as a co-founder and first vice-chair of the Detroit Food Policy Council, co-chair with Jerry Kaufman and Deanna Glosser, of the American Planning Association's Food Planning Steering Committee (2005–2014), and a two-term board member of the Community Food Security Coalition.

Jerome L. Kaufman Jerome (Jerry) Kaufman, FAICP (1933–2013), laid the foundation for the study, pedagogy, and practice of food systems planning in the profession of urban planning. Kaufman taught at the University at Wisconsin-Madison from 1971 to 2001, when he retired and was accorded Emeritus status. Prior to joining the University of Wisconsin-Madison, Kaufman worked for the American Society of Planning Officials (ASPO), the predecessor to the American Planning Association. Among many community and professional leadership positions, Kaufman served as the president of the board of directors of Growing Power (2000–2010) and president of the Association of Collegiate Schools of Planning (1991–1993).

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

