Food Geography: A Primer

Matthew N. O. Sadiku
Department of Electrical & Computer Engineering, Prairie View A&M University, Prairie View, TX USA

Uwakwe C. Chukwu
Department of Engineering Technology, South Carolina State University, Orangeburg, SC, USA

Janet O. Sadiku
Juliana King University, Houston, TX, USA

Received 4th Feb 2023, Accepted 5th Mar 2023, Online 4th Apr 2023

ANNOTATION

Food is any substance consumed for nutritional purpose. It supplies energy to the human body. Food’s study is now embedded within disciplinary subfields such as cultural, political, economic, social, and development geographies. It has become integral to geographical questions of health, gender, race, and the environment. The geography of food may be regarded as an emerging and growing subfield within human geography. It deals with issues of production and consumption of food, and especially global patterns. The paper provides an overview of food geography.

KEYWORDS: food, food geography, food inequalities.

INTRODUCTION

Food is something we all think about, talk about, and need for survival. It is no secret that Americans love their food, especially fast food (burger, pizza, coffee, barbecue, ice cream, and much more). The rise of the fast food industry in the 1950s tempted Americans with juicy hamburgers and crispy French fries. Food has been and always will be a prime component of the American identity [1]. For some Americans, good food is about enjoyment, health, the environment, and justice.

Throughout history, human societies have struggled to ensure that all people have access to adequate food to lead active and healthy lives. Despite great global effort, food remains a pressing challenge which has significant implications for security. For this reason, food and agriculture have risen in prominence on the international policy agenda. The poor distribution of food globally is an enduring and evolving problem. Global population is expected to be at around 9 billion around 2050. Are we prepared to feed that many people? Concerns about the ability of the industrialized food system to provide nutritious, equitable food for the world's population has increased in policy community. Food has received greater attention from both the physical sciences and the social sciences because it is a bridge between the natural and social worlds.
Although geographers have long been interested in hunger and food insecurity, it was not until recently that they themselves have turned their attention to food in a wider sense.

**WHAT IS FOOD GEOGRAPHY?**

The geography of food is a field of human geography. It focuses on patterns of food production and consumption on the local to global scale. It shows a pattern that reflects the dominance of developed countries over developing countries. It shows the irony of how developing countries can be both exporters of food yet importers of food aid.

Food production is influenced by two main drivers: the physical environment and human capacity. Irrespective of the system of production and the technology employed, it is widely recognized that the nature of the political support mechanisms in place to support food production and trade in food is a vital determinant of who gets what with respect to food [3]. The rising flow of agricultural products from the Global South to the Global North has introduced the concept of “food miles,” with extensive distances being covered to convert farm produce from the Global South (developing countries) to food products consumed in the Global North (developed world). Food miles is a measure of the distance that food travels from its source to the consumer. This can be given either in units of actual distance or of energy consumed during transport.

New York-based photographer Henry Hargreaves and food stylist Caitlin Levin created an interesting mapping project. They have created maps of countries using famous delicacies from each region. An example of such a map for the United States is shown in Figure 1 [4], while that of Africa is in Figure 2.

**APPLICATIONS**

The geography of food consumption covers a large field. It covers food production, food consumption, food service, food access, food delivery, fast food, and food around the world. Food geography allows comparison of food production and consumption of different nations or regions.

*Food Production:* This was the first element of food to receive extensive attention from geographers [2]. Global food consumption is apparently uneven, with areas such as Sub-Saharan Africa still having some of the lowest rates of caloric intake per capita. Canada, USA, and Europe consume the highest amount of calories. The disparity is due to lack of access of particular foods.

*Food Consumption:* Geographers have written much about the production of food and relatively few contributions to the study of food consumption. The earliest studies of food consumption were made by statisticians and economists, who were concerned about the living standards of the working class in the late eighteenth and nineteenth centuries. Although we know that fruit and vegetables are healthier than candy and snacks, we tend to eat processed foods, thereby choosing the less healthy options.

*Digital Food Access:* This could be a game-changer for people who struggle with brick-and-mortar food access barriers. Food now meets people where they are. Over one-third of US adults have used delivery apps to order from a restaurant or store in the past year.

In many metropolitan areas, broadband adoption gaps are a distinct geographic barrier to digital food access. Studies find that 90% of people living in these low-income, low-access tracts have at least one digital food access option. The country’s most well-known food delivery companies are Amazon, Instacart, Uber Eats, and Walmart [5].
Digital Food Services: These are now available to almost all people. 93% of America’s population has access to rapidly delivered fresh groceries. Competition and choice are also common. The massive growth of digital food services is redefining how Americans get their food. Digital food delivery service is more prevalent in American neighborhoods than broadband subscriptions.

Food Around The World: Every tourist loves and appreciates the prospect of eating the traditional food around the world. The more we eat our way around the world, the better our understanding of the world becomes. A sample of the food around the world is shown in Figure 3 [6], while a sample food in North American is shown in Figure 4 [6]. Figure 5 shows a sample African food [7].

Fast Food Geography: This is best illustrated with fast food industry in Kenya. The stability of the supply chain have kept KFC, McDonald’s and Burger King waiting. That leaves the fast food market to African-held companies like Steers, which is based in South Africa. The delivery person uses motorcycle, which is cheaper than cars [8].

BENEFITS AND CHALLENGES

Agriculture now heavily relies on technological advancements such as machinery, pesticides, and GMOS. Advances in technology have made agriculture more efficient, increasing food production and lowering prices. This technology has also made it so food can last longer. However, machinery and pesticides contribute to air pollution, burning of fossil fuels, and water pollution. Industrial agriculture can also harm the soil due to over tilling, and strip it of its natural nutrients. The global food systems crisis is marked by social, economic, and environmental inequity. It is no secret that more developed societies are more wasteful societies. Obesity is a major societal problem, a problem that is increasingly associated with the availability of ultra-processed convenience food.

European guidelines to prevent cardiovascular diseases also recommend regulating the location and density of fast-food restaurants as a preventive measure.

CONCLUSION

Food is central to human survival. Food geography looks at the global pattern of food production and consumption. As far as geographies of food is concerned, food links consumers with unknown and distant others, creating connections from farm to fork. More information about food geography can be found in the books in [9-17] and the following related journals:

- Journal of Agriculture, Food Systems and Community Development
- Antipode: A Radical Journal of Geography
- Canadian Food Studies

REFERENCES

1. “You are what you eat: U.S. food geography,”
   https://blog.richmond.edu/livesofmaps/2017/10/06/you-are-what-you-eat-u-s-food-geography/

2. “Geography of food,” Wikipedia, the free encyclopedia
   https://en.wikipedia.org/wiki/Geography_of_food#:~:text=The%20geography%20of%20food%20is,local%20to%20global%20scale.
3. “The geography of food: An article selection,”

4. A. Buczkowski, “With these maps made out of food the world geography is much easier to digest,” September 2017,

5. C. George and A. Tomer, “Delivering to deserts: New data reveals the geography of digital access to food in the U.S.,”

6. “Traditional food around the world: 50 famous dishes you have to try,”
   https://www.travlinmad.com/blog/traditional-food-around-the-world

7. “Collection of delicious African food stock illustration,”

   https://triviahappy.com/articles/fast-food-geography-discover-kenya-through-steers


15. M. Kneafsey et al., Geographies of Food: An Introduction. Bloomsbury


![Figure 1. US map using famous delicacies from each region [4].](image1)

![Figure 2. Africa map using famous delicacies from each region [4].](image2)
Figure 3. A sample of the food around the world [6].

Figure 4. Sample food from North America [6].
Figure 5. Sample food from Africa [7].