



**PROVISIONING HEALTHY AND  
DIVERSE FOODS TO THE URBAN  
POOR IN NIGERIA**

a practice-based perspective on  
informal ready-to-eat food vending

Kehinde Paul Adeosun

## **Propositions**

1. The narrative of home-based food consumption as the best no longer holds in the context of urban settings in Africa.  
(this thesis)
2. Eating healthy diets is feasible for the Africa urban poor.  
(this thesis)
3. Having experience with quantitative research design facilitates the understanding of qualitative research design.
4. Indigenous people benefit from local knowledge more than from modern science.
5. Understanding PhD supervisors' experiences is a critical task for a PhD candidate.
6. People start eating healthy when food is talked about on social media as intensely as politics.

Propositions belonging to the thesis, entitled

Provisioning healthy and diverse foods to the urban poor in Nigeria: a practice-based perspective on informal ready-to-eat food vending

Kehinde Paul Adeosun

Wageningen, 3 July 2023





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**ABBREVIATION**

IRFV	Informal Ready-to-eat Food Vending
SPT	Social Practice Theory
GIS	Geographical Information System
LGA	Local Government Area
PFV	Processed Food Vendor
TFV	Traditional Food Vendor
UPFV	Unprocessed Food Vendor

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# CHAPTER 1

## INTRODUCTION



In most developing countries' cities, informal ready-to-eat food vending is very prominent and considered the most commonly used food supply channel, particularly among the poor (Fellows et al., 2012). Informal ready-to-eat food vending is an important system of food provision in developing countries that can play a role in access to healthy and diverse ready-to-eat foods among different socio-economic groups (Patel, 2014). It is the cheapest, most convenient, and most available food supply channel and one that fits best into the everyday life of urban dwellers. Informal ready-to-eat foods are receiving increasingly high acceptance, patronage, or engagement among the urban poor because they are affordable and convenient (Mathye and Maliwichi, 2015). Moreover, this system of food provisioning is expanding as the urban population in developing countries keeps on increasing through urbanization. Most urban populace cannot do without the presence of food vending outlets as these are the most available, affordable, and accessible ready-to-eat food supply channel for them. However, according to existing literature, this food supply channel is inadequate in terms of quantity and quality. For example, shortcomings were found in terms of poor hygiene practices and the supply of food that is of low nutritional quality (Mwangi et al., 2002; Story, 2008; Muyanja et al., 2011; Lucan et al., 2014; Kolady et al., 2020). This thesis, therefore, focuses on understanding everyday out-of-home food vending and consumption practices among the urban poor and how the health and diversity of supplied food can be improved.

Nowadays, many individuals and households, particularly among the urban poor, depend on food vending for their daily meals, and their nutrient intake relies mostly on what is available on the menu settings of the out-of-home food provisioning. Thus, readjustments or changes in menu settings are likely to reflect on the nutrient intake of the out-of-home consumers. Hence, as food vending and food consumption intersect in many ways, it is important to better understand the food consumption patterns of out-of-home consumers from the vending's perspective. We need to understand the everyday routine events of food vending in terms of performances, functioning, experiences, and activities as they interrelate with the everyday life of the urban poor and determine the delivery of foods that impact health and well-being.

Previous studies on food vending have analyzed economic and nutritional dimensions, streamlining economic benefits, livelihood support, and anthropometric measurements on the composition and properties of the foods, respectively. However, these perspectives do not generate a complete picture of food vending practices. So far, ready-to-eat food vending in developing countries' urban settings has not yet been studied from a sociological perspective. A sociological perspective, taking a social practice approach, can help us better understand the overall social dynamics of food vending practices and add to the partial analyses done from other perspectives. In this thesis, I argue that a social practice approach allows for a deeper understanding of food vending practices.

Applying a social practice theory lens means recognizing “practices” as the unit of analysis rather than individuals or social structures (Reckwitz 2002; Wertheim-Heck and Raneri 2019). Through this lens, the core activities and series of actions of food vending can be understood. This is important because understanding the different activities, actions, and components of the food vending practice allows for better-informed policies and provides a more solid foundation for practical interventions. There is a need to understand everyday practices of food vending in urban settings in the context of its social (re)organization and interactions. The practice of food vending is formed through the integration of and interactions between different practice elements, (sub) practices, and series of other actions that are inherent in food vending practices. Thus, the nature of the outcome expected in food vending depends on how these elements and actions effectively and efficiently interact together. Moreover, a practice approach allows me to analyze all core components of food vending, something which other perspectives cannot do. With this approach, it is feasible to trace each different component’s activities and connect these with their impact on the outcome of food vending. This thesis aims to fill an existing knowledge gap by exploring how food vending activities, practices, (sub) practices, and operations are organized, emerge, evolve, persist, and are taken up in the context of everyday urban life. It seeks to address this aim through a sociological perspective that focuses on the health of poor urban consumers.

In the remainder of this introduction, I will discuss the rationale of the study, i.e., explain why this study is needed and is of critical importance at this moment. Section 1.2 provides an introduction to the research context. It describes trends towards urbanization and rural-urban migration taking place in the broader context of African cities, i.e., it narrates how these social developments are spurring the activities of food vending in African cities; the organization of daily lives in African cities and the interconnections with out-of-home food vending and consumption practices. Section 1.3 describes how ready-to-eat food provisioning activities in urban contexts relate to provisioning healthy and quality foods by food vending, using a dietary diversity framework. Section 1.4 gives an overview of the governance arrangements and informal food vending practices, taking a nuanced understanding of informality and formality in this sector. Section 1.5 explains the theoretical perspective underpinning this thesis. Finally, section 1.6 discusses Nigeria and the city of Ibadan as a case study when intending to understand informal ready-to-eat food vending practices.

## 1.1 RATIONALE

With the growing population of the urban poor, informal ready-to-eat food vending is positioned in the urban food supply system and is the most used food outlet in Africa

and elsewhere, particularly in the Global South. The United Nations (2019) reported that over 4.2 billion people in the world already live in urban settings and that this number is set to rise to six billion people by 2041. This implies that there will be an increase in the number of people who need to be fed in urban areas in the future. Moreover, the practice of home-prepared food is diminishing in the context of urban settings, including in developing countries (Ecker and Hatzenbuehler, 2022), among the poor, because out-of-home food consumption is increasing (Liverpool-Tasie et al., 2016; Oghotomo, 2017; Margan and Fanzo, 2020; Ahungwa et al., 2022). This is attributed to changes resulting from socio-economic and infrastructural dynamics that have pushed households and individuals to seek alternative food networks to meet their daily food needs. This shift has enabled them to cope with their time-constrained daily life practices. As a response, ready-to-eat food vending is spurring in the city as an informal food supply channel that enables food access for the urban poor. However, this trend has led to serious concerns about the quality and healthiness of the food accessed in this way by the urban populace.

According to Smith (2016), food in city metropolises is overwhelmingly purchased rather than prepared (cooked) by households themselves. A study conducted in Accra revealed that across different socio-economic groups, almost 40 percent of the total food budget goes to purchasing street foods (Maxwell et al., 2000), while a study done in the Philippines also revealed that 20-30% of household expenditure is spent on food outside the home and 20% in Colombia. Low-income groups spent nearly 22 percent of their income on street foods in Ghana (Mensah et al., 2013). An earlier study on street foods in seven countries of Asia and Africa shows expenditures on street foods by poor households ranging from 37% in India (Patel et al., 2014) to 50% in Nigeria (Ogundari et al., 2015; Mbah and Olabisi, 2015). As the rate of out-of-home food consumption is still increasing, it is likely that higher shares of household income will be spent on street food in the coming years.

Food and nutrition security of urban dwellers has become a serious concern for the government, development practitioners, researchers, and non-governmental agencies in cities in developing countries (Acquah and Kapunda, 2016; Kasimba et al., 2021). Previously, attention on food and nutrition security was focused on rural households (Haysom, 2015). However, urban areas with mixed socio-economic classes, including people living in slums, together with the poor, middle-income, and high-income earners, are faced with challenges of food insecurity and malnutrition. The situation is becoming even more complex as more poor people are migrating to urban areas without securing a substantive sustainable source of income or access to adequate housing infrastructure.

Despite the increasing concerns about food vending in terms of food safety, quality, nutrition imbalance, and hygiene, the interest of consumers seems mostly on convenience and availability (Trafialek et al., 2018; Bezares et al., 2023). For instance, about 80% of Nigeri-

ans from all socio-economic categories rely to some extent on street food consumption (Ahungwa et al., 2022). In a study in Puerto Rico, about 54.4% of people consumed street foods (Bezares et al., 2023), while about 57.1% of all socio-economic groups consume street foods in India (Patel et al., 2014). Likewise in Ghana, about 69.8% of people engage in street food consumption (Hiamey and Hiamey, 2018). This implies that the food vending sector is responsible for the nutrient intake of this large group of people who engage with food vendors constantly. Moreover, the social lives of these people possess characteristics that prompt them to engage themselves with food vending, such as workplace and family dynamics, and their daily mobility demands (Thornton et al., 2013; Burgoine and Mon-sivais, 2013; Ahungwa et al., 2022). Therefore, it is important to better understand how informal ready-to-eat food vending practices are taken up, maintained, and persist in the context of the social and everyday life dynamics of city life and the kinds of food present in menu settings. Investigating this is important as food consumption and provisioning coexist with the everyday life of people in urban areas and influence their food sourcing as well as their consumption preferences and patterns. Furthermore, understanding the social dynamics of food vending and consumption in urban settings can enable the food system to aid the delivery and consumption of more nutritious and balanced diets.

Although important, so far street food vending in urban areas has not received adequate attention from urban authorities and policymakers. It is a neglected issue, and this situation is enhanced by the lack of research on its importance and on how to integrate it into urban planning and development (Arimah and Adeagbo, 2000). Therefore, this thesis aims to contribute to our understanding of the social dynamics related to the food vending supply system in urban settings and how policy applications and interventions can be better tailored to support the improvement of ready-to-eat food vending practices. Thus, my focus is on trying to understand the food vending experiences, functioning, performances, and practices concerning the provision of healthy and diverse foods in the context of urban settings. To achieve this objective, the empirical research for this thesis was carried out in Ibadan, Nigeria.

## **1.2 URBAN DEVELOPMENT DYNAMICS AND FOOD ACCESS**

In many major cities across developing countries, the population is growing due to rural-urban migration, urban extension, and infrastructural development (Hubbard and Onumah, 2001; Karamba et al., 2011; Crush et al., 2016; Tull, 2018). For instance, over 4.5 billion people, or 55% of the world's population, live in urban areas (UN, 2018; UN DESA, 2018). According to the United Nations (UN) (2016), in lower- and middle-income countries, 40% of the population is living in urban areas, and in low-income countries, this is 31%. By 2050, these countries are expected to reach, on average, an urban population

of 57% and 48%, respectively. Moreover, complex infrastructural dynamics have further compounded the complexity of access to food in urban areas and promoted the tendency of people to shift their food consumption patterns. This mostly affects the urban poor as they are increasingly changing their food consumption practices from home-based to out-of-home (Tsuchiya et al., 2017; Swai, 2019; Tawodzera, 2019; Kolady et al., 2020; Wegerif, 2020). This development can be explained by the economic limitations of the urban poor, which make it difficult to navigate infrastructural and demographic dynamics. These limitations also make them vulnerable to the urban challenges of having inadequate access to infrastructures and other social amenities. For instance, in a study conducted in India, about 64.2% of poor consumers take their breakfast, 14.9% of poor consumers take their lunch, and 13.4% of consumers take their dinner from street food vendors on a daily basis (Patel et al., 2014). In Nigeria, about 60% of consumers engage with food vendors on a daily basis (Mbah and Olabisi, 2015; Leshi and Leshi, 2017). Hence, urban development dynamics contribute to a growing number of street food vending activities in many cities in developing countries (Obienusi et al., 2014; Omari and Omari, 2019; Panicker and Priya, 2020; Vignola and Oosterveer, 2022).

Urban developments are changing the city food system in such a way that an increasing part of the urban population will depend on purchased ready-to-eat foods. Urban, ready-to-eat food supply channels include local street food vending outlets, fast-food selling points, and expensive large restaurants. Nowadays, more and more people are changing their consumption patterns towards more out-of-home food practices due to social changes that are impacting daily life dynamics, and this is becoming a concern in terms of access to healthy and diverse foods (Patel et al., 2014; Oghotomo, 2017; Margan and Fanzo, 2020). For instance, rural-urban migration (mostly by the poor) is increasing on a daily basis, causing a nutrition transition as migrants are left with choosing among what is available and affordable for them in their new and unfamiliar urban contexts (Karamba et al., 2011; Zezza et al., 2011; Baviskar, 2021). This means that out-of-home food vending controls to an important degree the food access, nutrient intake, and diets of poor out-of-home consumers. Complex urban developments and infrastructural dynamics are leading to serious concerns about food security and the quality of nutrient intake in urban areas. The urban poor are especially vulnerable to poor diets and low consumption of fruits and vegetables because they face challenges in accessing healthy foods (Steyn et al., 2014; Miller et al., 2016; Afshin et al., 2019; Kalmpourtzidou et al., 2020).

Presently, eating out has further compounded the situation as previous studies have found shortcomings resulting from food vending where food is sold with inadequate variety, menu settings with few fruits and vegetables, and nutritional imbalance with vendors offering mostly high-calorie and high-fat foods and meals (Mwangi et al., 2002; Steyn et al., 2014; Kimani-Murage et al., 2014; Lucan et al., 2014; Morgan, 2015; Seguin et

al., 2016; Kolady et al., 2020; Bezares et al., 2023). This has a serious impact on the diets of regular out-of-home consumers as they are limited to what is available on the menu settings of food vending outlets and have little control over what is provided by the food vendor. Thus, an increase in out-of-home food consumption changes consumers' access to healthy food (Monteiro et al., 2018).

According to Story et al. (2008) and An (2016), out-of-home, ready-to-eat food provisioning with a low diversity of food groups leads to poor nutrient intake of its consumers. Previous studies on street food vending revealed that food vending promotes unhealthy and imbalanced food menu settings in terms of the composition of nutrients and food diversity (Mwangi et al., 2002; Steyn et al., 2014; Kimani-Murage et al., 2014). Generally, depending on street food vending means being provisioned with low-diversified food items and food items from a low number of food groups (Mwangi et al., 2002; Story, 2008; Steyn et al., 2014; Global Panel report, 2017). Out-of-home food provisioning outlets usually lack fruits and vegetables in their menu settings despite such foods being recommended all over the world as healthy food consumption (Seguin et al., 2016). Other studies also found street food vending to be associated with issues of food poisoning, unhygienic handling of food, and unhealthy food (Morland and Filomena, 2006; Bodor et al., 2010; Khonje and Qaim, 2019; Abrahale et al., 2019). Increasing eating out (e.g., street foods) is also found to be a risk factor for higher fat intake. A study from Nairobi showed that street food vendors in the lowest-income areas sold the highest proportions of refined sugars and starches, and the lowest proportions of fruits, vegetables, legumes, and nuts (Mwangi et al., 2002; Lucan et al., 2014). Still, the social dynamics underpinning this and how it exactly evolves are yet to be studied (Sharkey et al., 2012; Valdez et al., 2012; Nguyen and Powell, 2014; Hill et al., 2016). Therefore, improving food safety and nutrient intake as well as the food supply system in urban areas needs urgent attention taking ready-to-eat food vending as a key entry point (Gathri et al., 2016). Therefore, more attention should be given to what is on the menu of food vendors and how this can be changed to address malnutrition and over-nutrition among the poor in urban areas.

It is important to realize that most of the out-of-home consumers have a particular food vendor they eat and patronize regularly. This is mostly attributed to trust in terms of cleanliness and hygiene practices whereby less attention is given to the monotonous menu settings (Choi et al., 2013; Gupta and Gupta, 2018). However, why and how this occurs is yet to be further unraveled. This involves better understanding the everyday routine practices of food vending practitioners and their customers. Better understanding food vending and consumers' practices allows us to see the actions and elements of practices and (sub)practices that are responsible for how food vending becomes embedded in everyday food routines. This research goal departs from the mostly used economic and nutrition perspectives that focus on livelihoods, income generation (Patel et

al., 2014; Charma et al., 2015; Githri et al., 2016; McKay et al., 2016; Petersen and Charman, 2018; Dai et al., 2019; Tawodzera, 2019; Resnick et al., 2019), nutritional properties and diet composition (von Holy, 2006; Namugumya and Muyanja, 2011; Steyn et al., 2014; Leshi and Leshi, 2017), and food safety (Dipeolu et al., 2007; Omemu and Aderoju, 2008; Chukuezi, 2010). I intend to complement this knowledge through better understanding the ways in which food vending provisioning and consumption practices interact in the context of changing urban contexts and dynamics. An empirically grounded understanding of practices is crucial to frame policy approaches and interventions to support the food vending sector.

### 1.3 URBAN DAILY LIVES AND FOOD VENDING AND CONSUMPTION

Food consumption is part of everyday life and consists of different practices in the context of urban settings. Therefore, consuming food out-of-home is done frequently and on a daily basis. Accessing food through informal ready-to-eat food vending is embedded in the changing lifestyles (particularly urban daily life dynamics) of low-income urban residents. Daily life in urban contexts requires the integration and coherence of the range of social practices that an individual embraces and that span their daily engagements (Spaargaren and van Vliet, 2000), i.e., a bundle of practices. Everyday life activities of work, traveling, and domestic engagements are transforming in line with urban infrastructural and socio-economic developments and are related to increased reliance on convenient ready-to-eat foods. For example, daily mobility often involves long commutes in traffic to business locations (Coveney and O'Dwyer, 2009). So, the practice of eating out is highly dependent on other elements such as mobility routines whereby a (perceived) lack of time prompts the decision to eat out (Pfeiffer et al., 2017). Furthermore, out-of-home food consumption also results from the question of whether a household possesses sufficient adequate kitchen implements and cooking utensils, as well as how the kitchen is structured and which cultural norms are drawn upon, including the methods of cooking used. Furthermore, as more women take up formal jobs that demand most of their time, street foods become an ideal choice for cheap and labor-free meals (Dawson and Canet, 1991; Steyn et al., 2014). These situations are more and more common in urban areas. However, it remains unclear how such daily life contexts and practices coexist, intersect, and interlock with out-of-home food vending and consuming in urban settings. Even though different studies have explained urban life, so far they have insufficiently analyzed its role in shaping the food consumption patterns of the urban poor and the pivotal role of food vending in this context (Thornton et al., 2013; Burgoine and Monsivais, 2013).

## 1.4 INTERSECTION BETWEEN FOOD PROVISIONING AND CONSUMPTION

Food provisioning and food consumption intersect in the sense that food must be prepared before making it available for consumption. Regarding out-of-home food provisioning, food vending therefore plays a key role in what is available to out-of-home consumers. There are important choices to be made by the food vendors on what is available to consumers, and this is sometimes influenced by the food vending environment, the vendors' association, and the governance arrangements of local institutions. Therefore, the focus in this thesis is on understanding informal ready-to-eat food vending practices influencing food consumption among the urban poor. This choice is made because any changes in food vending will likely influence the consumption pattern of out-of-home consumers. The thesis focuses on food vending to understand different organizational activities within its practices and the impact it has on the diets available to consumers.

### 1.4.1 Ready-to-eat food vending

Informal food provisioning and consumption entails the provisioning and consumption of ready-to-eat foods prepared outside the home of the consumers. Informal ready-to-eat food vending (which is also referred to as street food vending in this thesis) involves different categories of people selling mostly self-prepared Nigerian meals, industrially processed products like fruit juice, bread, and snacks, and unprocessed food like fruits (FAO, 2005; Nakisani and Ongori, 2013; Steyn et al., 2014; Ogah et al., 2015). Informal ready-to-eat food outlets are located at strategic points within communities. These are: (i) food prepared in small or cottage-scale factories and brought to street food stalls for sale; (ii) food prepared at the home of the vendor and brought to street food stalls for sale; and (iii) food prepared and sold at street food stalls (Martins, 2006). Ready-to-eat food vending is usually operated by individuals or families. It is generally small in size; requires relatively simple skills, basic facilities, and small amounts of capital (Warshawsky, 2016).

Out-of-home ready-to-eat foods are a source of socially and culturally accepted, cheap, convenient, and often tantalizing food items prepared for both urban and rural populations worldwide (Namugumya and Muyanja, 2011). Street foods are cheap and readily available due to the kinds of raw material inputs used in their preparation, the location of vendors, the low-cost seating facilities, the nature of ownership (most outlets are owned by individuals or families), and the word of mouth used for promoting the foods (Ndumbaro, 2014; Albuquerque et al., 2022). Street food vending is among the many survival strategies adopted by poor urban households to maintain and further expand their base of subsistence income, especially when facing an economic crisis (Acho-Chi, 2002). Street foods have also served to mitigate hunger and starvation that would have resulted from an inability to prepare food at home.



### 1.4.2 Ready-to-eat food vending and consumption: health and quality of food provisioned

Ready-to-eat food vending contributes significantly to the diet of people living in low-income and middle-income countries (Hill et al., 2016). Currently, out-of-home food consumption is raising serious concerns among the government, food system practitioners, and policymakers about the wholesomeness of the food and its adequacy in terms of nutrient composition, nutrient intake, and nutrient combinations, and, in general, the health of the diets of urban poor consumers. These are concerns for the urban poor who mostly engage with informal ready-to-eat food vending for their daily food consumption to cope with their everyday life challenges.

So far, most existing literature on food vending has taken a nutritional perspective by analyzing the nutrient composition, food properties, nutrient intake (von Holy, 2006; Namugumya and Muyanja, 2011; Leshi and Leshi, 2017), and food safety among the consumers (Dipeolu et al., 2007; Omemu and Aderoju, 2008; Chukuezi, 2010). Other studies have taken an economic perspective and looked at the role of informal food vending in income generation, employment, and livelihood support (Chicho-Matenge and Nakisani, 2013; Charma et al., 2015; Petersen and Charman, 2018; Tawodzera, 2019; Resnick et al., 2019). However, a sociological understanding of informal food vending is yet missing in the literature. Such an approach would provide us with the empirical and theoretical foundations to better understand the different components of food vending and how they interact together to shape practices in the context of the wider setting of urban life. By analyzing everyday routine practices using a social practice theoretical lens, this thesis aims to fill this gap.

### 1.4.3 Dietary diversity as proxy for health and quality food provisioned

In this thesis, I am making use of a regularly used tool to measure dietary health and the quality of food, which is dietary diversity, and applying it at the yet underexplored level of the food vendor. Dietary diversity is a qualitative measure of the variety of foods that individuals or households have access to and is used here as a proxy for nutrient adequacy of individuals' diets (Kennedy et al., 2011; Kennedy et al., 2013; Muthini et al., 2020). Dietary diversity is based on calculating the number of food groups being provisioned or consumed and is widely recognized in the literature as a measure of nutrient adequacy and balanced diets (Poorrezaeian et al., 2015; Habte and Krawinkel, 2016; Larson et al., 2019; Mehraban and Ickowitz, 2021). According to this literature, different food items are categorized into twelve different food groups as proposed by the Food and Agriculture Organization of the United Nations (FAO, 2011; Kennedy et al., 2013; Chegere et al., 2020). These twelve food groups are: Cereals; White tubers and roots; Legumes, nuts, and seeds; Vegetables; Meat; Eggs; Fish and other seafood; Fruits; Milk and milk products; Oils and

fats; Sweets; and Spices, condiments, and beverages. The use of dietary diversity scores is considered an adequate reflection of the quality of the food available to households (Ruel, 2003).

Accessing diverse diets has shown to be important in improving nutritional outcomes ranging from anthropometric scores (nutrient properties and composition of foods) to iron deficiency (Arimond and Ruel, 2004; Balarajan et al., 2011). According to the United States Department of Agriculture (USDA), dietary guidelines, and the Food Guide Pyramid, dietary diversity is one of the characteristics of a healthy diet (Poorrezaeian et al., 2015). The dietary diversity score is an easy and cost-effective indicator for evaluating diet quality and reflects the consumption of various foods between and within the different food groups (Azadbakht and Esmailza-deh, 2011). Higher dietary diversity is expected to result in better nutrient sufficiency and an adequate intake of vitamins and minerals, leading to better physical and mental health (Mirmiran et al., 2003). There is now widespread recognition that those consuming more diverse diets are less likely to be deficient in the range of nutrients that are essential for optimal human functioning (Smith and Haddad, 2015; Zanello et al., 2019).

Dietary diversity scores have been validated as a measurement tool of nutrient adequacy and food security using a 24-hour recall (Verger et al., 2019), in which respondents outline their food intake over the previous 24-hour period. Fongar et al. (2019) show that 7-day household dietary diversity scores are significantly correlated with individual 24-hour recall scores. Several other studies have also used the 7-day household recall as a proxy for dietary diversity (Arimond and Ruel, 2004; Jones, 2015; Sibhatu et al., 2015; Mehraban and Ickowitz, 2021).

Dietary diversity has commonly been measured from the perspective of food consumption (Codjoe et al., 2016; Agrawal et al., 2019; Bellows et al., 2020; Kundu et al., 2020). However, it can also be applied in the context of ready-to-eat food provisioning. This is because what is available on the menu-settings is consumed directly by consumers. This situation is further compounded by the fact that most consumers prefer to engage a particular food vendor regularly, and this choice is likely to be based on their routinized daily life dynamics. Hence, if the number of food groups available is limited, the diets of such out-of-home consumers will likely be negatively affected. The decision on which types of food to provision resides completely within the discretion of the food vendors, and they consider factors such as making a profit and patronage in determining their menu-settings. Different activities do take place in the food vending outlets, among these is the provisioning of different menu-settings. The provision of different meals consists of a series of actions that take place along the food vending chain. In that regard, investigating the practices that underscore the provisioning of dietary diversity in the context of food vending is indispensable.

## 1.5 GOVERNANCE ARRANGEMENTS AND INFORMAL FOOD PRACTICES IN THE URBAN AREAS

Governance arrangements, including actors and tools, provide various support structures, for example, through the provision of effective public policy strategies, coordination, and leadership (Oosterveer, 2015) to everyday actions. Governance arrangements on food provisioning are heterogeneous with respect to actors, organizations, and functioning (FAO-UN, 2016). According to the 2017 Global Food Policy Report (IFPRI, 2017), urban food governance is increasingly important because cities have a growing role to play as urban populations expand across the world, leading to increasing urban problems such as poverty, food insecurity, and malnutrition. In these urban areas, households may shop across a range of formal and informal retailers. Poorer households tend to rely more on informal ready-to-eat food vending, while wealthier households shop more frequently at supermarkets and official restaurants (Skinner, 2018; Battersby and Watson, 2018). Hence, a broad approach to food governance can help to identify relevant actors that engage with food vending practices.

The nature of governance arrangements around food practices differs depending on the category of the markets. For instance, formal markets are those that are regulated through formal governance structures where licensed sellers can publicly advertise their locations and prices, such as hypermarkets, supermarkets, and official restaurants (Wertheim-Heck and Raneri, 2019; Downs et al., 2020). On the other hand, ready-to-eat food vending is a prevailing and distinctive component of the broad informal sector. Informal practices can be found in two key food vending sectors, namely food retailing and ready-to-eat food vending. Informal food retailers are resellers who often trade in raw food materials that they purchase either in formal or informal markets and then move these closer to the final consumer to increase their convenience (Wertheim-Heck and Raneri, 2019; Trivette, 2019; Down et al., 2020; Ambikapathi et al., 2021). According to Wertheim-Heck and Raneri (2019), the informal food vending sector entails self-organized unlicensed food retail businesses. However, many scholars argue that in the food sector, the formal and informal should not be completely separated because they intersect and are linked in various ways (Chen, 2012; Meagher, 2013) and, as we may expect, including in their governance. Nevertheless, the informal food vending sector's governance structure seems to be different from formal food vending as the formal food sector is standardized and officially registered, while informal food vending is neither standardized nor officially registered. Overall, informal ready-to-eat food vending systems and their governance are not well understood, despite constituting one of the most commonly used urban food provisioning systems.

Cities' governance structures may be better poised to address these challenges more nimbly than national governments. In developing countries' cities, different actors at both

local and state levels are concerned about food vending practices, considering various informal food outlets as contributing to the goal of achieving food security. However, as of yet, the role of informal food providers in contributing to dietary diversity and food security of urban people has insufficiently been analyzed. Moreover, government officials often still fail to recognize the contributions of street foods to the economy and food consumption (Ruel et al., 2017). The informal food vending sector has either been criminalized or ignored, and several attempts by the government to eradicate it in the past have proved abortive as it keeps expanding (Brown et al., 2015; Bénit-Gbaffou, 2016; IFPRI, 2017; Fourie, 2018; Young and Crush, 2019; Tawodzera, 2019). According to Schatzki (2002), governing agencies (individuals and organizations) are distributed throughout social life, involving different practices and arrangements. In cities, there are government structures, policies, and regulations that interplay with everyday practices. Recognizing the continued existence of informal food vending may shift the government's attention from eradication to a more nuanced approach to understand the practices and find a way they can be supported and supervised (Kazembe et al., 2019). This is because street food vending and informal trade are especially important sources of livelihood, food security, employment, and financial independence for women and poor households, who are the primary sellers of street foods and perishable goods, such as fruits and vegetables (IFPRI, 2017). Therefore, drawing insights from a broad governance perspective, this study will discuss policies, regulations, mechanisms, and strategies that support or shape the institutionalization of informal ready-to-eat food vending practices.

## **1.6 THEORETICAL PERSPECTIVE: SOCIAL PRACTICE APPROACH TO UNDERSTAND FOOD VENDING AND CONSUMPTION**

This study investigates the structure, operation, and roles of informal ready-to-eat food vending in a Nigerian city. The overarching aim is to advance the debate on the capacity of informal ready-to-eat food vending-centered food systems to increase access to diverse diets among the urban poor. The study will inform improvements in accessing dietary diversity among low-income urban residents. It is underpinned by a social practice theory (SPT) approach as a tool to understand everyday food practices of the urban poor, as well as the challenges they face and the opportunities to institutionalize solutions. This choice is innovative, as so far other perspectives have been employed to understand food vending, including economic perspectives focusing on livelihoods and income generation using econometric models (Dipeolu et al., 2007; Ogundari et al., 2015; Petersen and Charman, 2018; Khonje and Maim, 2019) and nutritionist perspectives closing in on nutrient composition and food safety (Mwangi et al., 2002; Muyanja et al., 2011; Namugumya and Muyanja, 2011; Raaijmakers et al., 2018). Furthermore, studies were carried out by public health specialists and urban planners relying greatly on rational choice theory (IPES-Food,

2017; Clary et al., 2017). However, recent developments in social sciences give greater importance to the social and material context in which individual behavior occurs and on how unconscious, unreflective, and repetitive processes shape human action (Shove, 2010; Cohn, 2014). Practice theory is suitable for this study because it views food provisioning and consumption from the perspective of everyday social dynamics influencing and influenced by people's situated actions and the wider social contexts in which they occur.

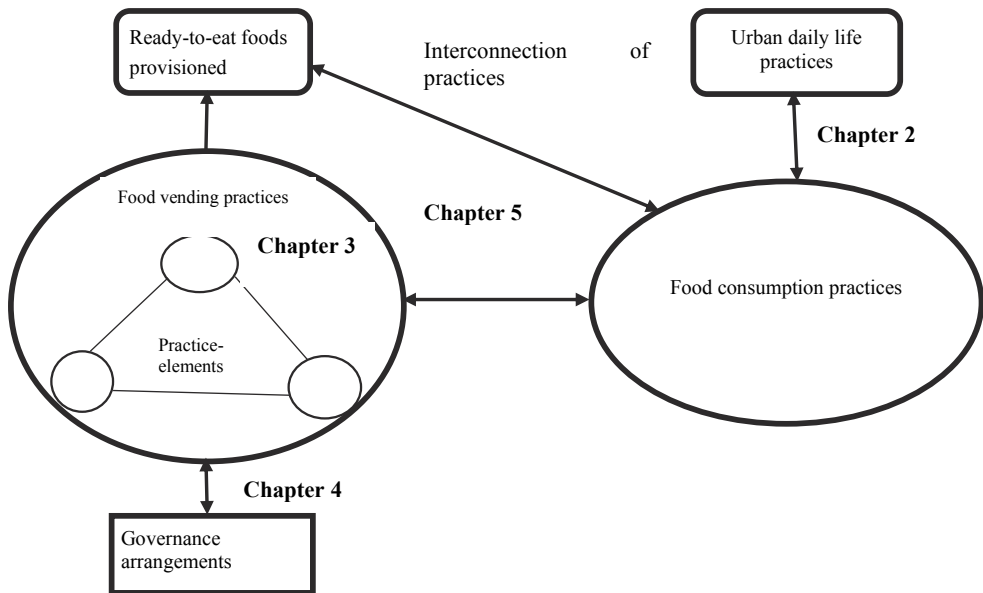
Practice theory provides an alternative approach that shifts the unit of analysis from the individual or households to recognizable practices (Reckwitz, 2002; Wertheim-Heck and Raneri, 2019). According to Schatzki (2002), social practices are routinized behaviors kept together in a more-or-less coherent way by the elements of a practice as well as by interlinkages between different practices. SPT takes a sociological perspective and thereby offers a broad approach to understanding and analyzing the range of practices making up food vending. It takes as its starting point a practice regarded as a routinized event that is taking place every day. Practices evolve, emerge, continue, and persist in an everyday context, beyond the full control of the 'carriers' (or 'practitioners') of the practice. Moreover, SPT takes practices as its unit of analysis and is thereby different from many other perspectives that take households or individuals and their decision-making as their unit of analysis. Food vending consists of a series of actions, (sub) practices, and elements that integrate and interconnect to form the complete practice. SPT allows for presenting food provisioning and consumption in terms of the "interconnectedness of practices," involving the dynamic interactions between practices and their practitioners in their everyday lives (Nicolini, 2012). Different parts of SPT thinking were employed in this thesis: elements of practice (Shove et al., 2012) and practice-arrangements (Schatzki, 2002). This helped to capture the broad range of interconnections in food vending practices. Adopting this perspective enables us to provide insights into the social dynamics embedded in the everyday practice of eating out.

The combination of practice-elements that form provisioning practices analyzed in this study are: competencies/skills (i.e., cooking skills, knowledge of nutrition, menu settings, etc.), the most important materials (i.e., raw food materials, cooking utensils, etc.) and the social meanings involved (i.e., the social meaning of certain food practices, etc.) (Shove et al., 2012; Liu et al., 2016; Dobernig et al., 2016; Wertheim-Heck et al., 2019). Furthermore, the study takes a deeper lens by zooming in on the integration of the different elements of food vending practices and zooming out to understand how food vending and consumption interconnect and interact with the food environment in terms of bundling with other food-related practices, including practices in the daily lives of vendors and consumers, and wider social dynamics (Schatzki, 2002; Nicolini, 2012).

This thesis analyzes how social practices, such as daily life practices, interact with the food vending environment as they constitute a bundle of practices, competing for time and space in the everyday lives of urban dwellers. The bundle of routinized practices that form the everyday life experiences and actions of urban dwellers is conceptualized as urban daily lives (Schatzki, 2002). Urban daily lives are viewed as a bundle of practices that interplay, intersect, and co-evolve with out-of-home food provisioning and consumption practices. For example, people working in cities always have food vendors around them offering food for sale. Commuters step out into the nearby street to find vendors to get their food. The interlinkages between the bundle of practices, food provisioning, and food consumption practices underpin the conceptual approach of this thesis.

The thesis also applies the food system framework to contribute to improved access to healthy and diverse diets. The situated food system in urban areas, which comprises different socio-economic classes, should be understood as coupled with a high rate of urbanization, population growth, and infrastructural development. The focus is on some components of the food system as it relates to food vending (markets, modern retail) and its connections with food availability (proximity) and relates to the choice of what foods to acquire and eat, considering the drivers of food consumption. In trying to make affordable nutritious foods available to people of different socio-economic groups, the food system accommodates a broad range of analyses and different perspectives. The food system framework also incorporates environmental outcomes and social concerns in delivering its results (Gale and Hu, 2012). Thus, this thesis focuses on understanding food vending and its interplay with social concerns within the food system framework. The thesis seeks to understand the social dynamic drivers of the food system that should be considered to achieve healthier and more diverse diets for the urban poor.

Dietary diversity is considered to be embedded in the organization of everyday food vending practices (See Figure 1). Food group diversity is considered here to be the outcome variable, and the study intends to explore this by analyzing informal ready-to-eat food vending practices. Consumers patronize informal ready-to-eat food vending outlets in the context of complex dynamics. Governance arrangements are analyzed with respect to how they provide support structures and frameworks for promoting the diversity of food groups provisioned by informal ready-to-eat food vending. Urban life practices are the daily experiences encountered by urbanites, which may propel them to change their food consumption pattern to out-of-home. There may also be other circumstances that influence out-of-home eating habits. Ready-to-eat food diversity means a variety of food provisioned, while ready-to-eat food governance is seen as the formal or informal rules revolving around informal ready-to-eat food vending. This study starts from the premise that instead of jeopardizing the diets of the urban poor, out-of-home food provisioning may also be harnessed to improve the nutritional intake of low-income urbanites through the provision of a larger variety of food groups.



**Figure 1.1** Thesis conceptual frame-work schematic diagram showing the linkages between out-of-home provisioning practices and consumption dynamics, (source: author concept).

The thesis starts by analyzing food vending practices and their interrelations with the food environment. Then, daily life practices are analyzed with respect to their connections with food consumption practices, while finally, governance arrangements steering food vending practices are also analyzed. See Figure 1 for an overview of the thesis structure aligned with the different chapters. The thesis intends to identify potential modalities for improvement in food vending practices, promoting the provisioning of more healthy and diverse ready-to-eat foods.

## 1.7 RESEARCH QUESTIONS

The thesis aims to explore informal ready-to-eat food vending practices involving the urban poor. It intersects and interlocks with their nutrient intake, food consumption patterns, dietary balance, and daily life activities of low-socio-economic group. Hence, this thesis asks a critical research question:

*In what ways can transforming informal food vending practices contribute to improved diversity of ready-to-eat foods provisioned among the urban poor in Nigeria?*

This general research question is further sub-divided into four sub-questions:

- (i) How do the daily life contexts and practices of urban poor consumers interact and co-exist with out-of-home food vending and consumption? (Chapter 2)

- (ii) What constitutes the existing informal ready-to-eat food vending practices and their diversity of ready-to-eat food groups provisioned? (Chapter 3)
- (iii) In what ways do governance arrangements steer and shape the wider out-of-home food provisioning practices of healthy, good quality, and diverse ready-to-foods? (Chapter 4)
- (iv) In what ways can changing practices and governance arrangements of informal ready-to-eat food vending contribute to improving and supporting the health and diversity of ready-to-eat food provisioned? (Chapter 5)

The research questions were empirically analyzed, and the results are presented in four chapters. In Chapter 2, I start by mapping the urban food vending environment using GIS to take the coordinates of each food vending outlet in the selected communities in Ibadan. This is to provide an overview of the spread of food vending outlets in the local food environment. Then, I further analyze how the socio-economic status of out-of-home consumers shapes their food consumption patterns by interrelating various socio-economic indicators with consumers' out-of-home food consumption practices. I also study how changing everyday life engagements interlink and coexist with out-of-home food consumption. Then, I analyze what makes out-of-home food provisioning attractive to consumers.

In Chapter 3, I first analyze out-of-home food provisioning by elucidating on the existing informal ready-to-eat food vending practices in terms of operations, (sub) practices, functions, performances, challenges, and experiences and their influence on the diversity of the ready-to-eat foods provisioned. I study different activities included in food vending practices and the influence(s) they have on the final outcome. This chapter also analyzes daily food/meal stockings, menu settings, procurement of raw food materials, food preparation and presentation, and the frequency of food provisioning. Furthermore, where in the city and how food vendors source their raw food materials as well as its relationship with other food-related provisioning practices (e.g., food retails, open markets, etc.) within the food vending environment are explored. Taking a practice approach, the analysis further collects the set of food groups provisioned per day for a period of seven days to understand the average number of food groups provisioned per food vending outlet and consider how this relates to the dynamics of practice at different categories of vendors.

In Chapter 4, I analyze the governance arrangements steering and shaping food vending practices within the food environment. I further study how stakeholders in the food vending sector interact to steer food vending practices. Both formal and informal governance arrangements are analyzed, and elements of governance shaping food vending practices are identified. Moreover, the operationality of governance arrangements surrounding food vending is studied.



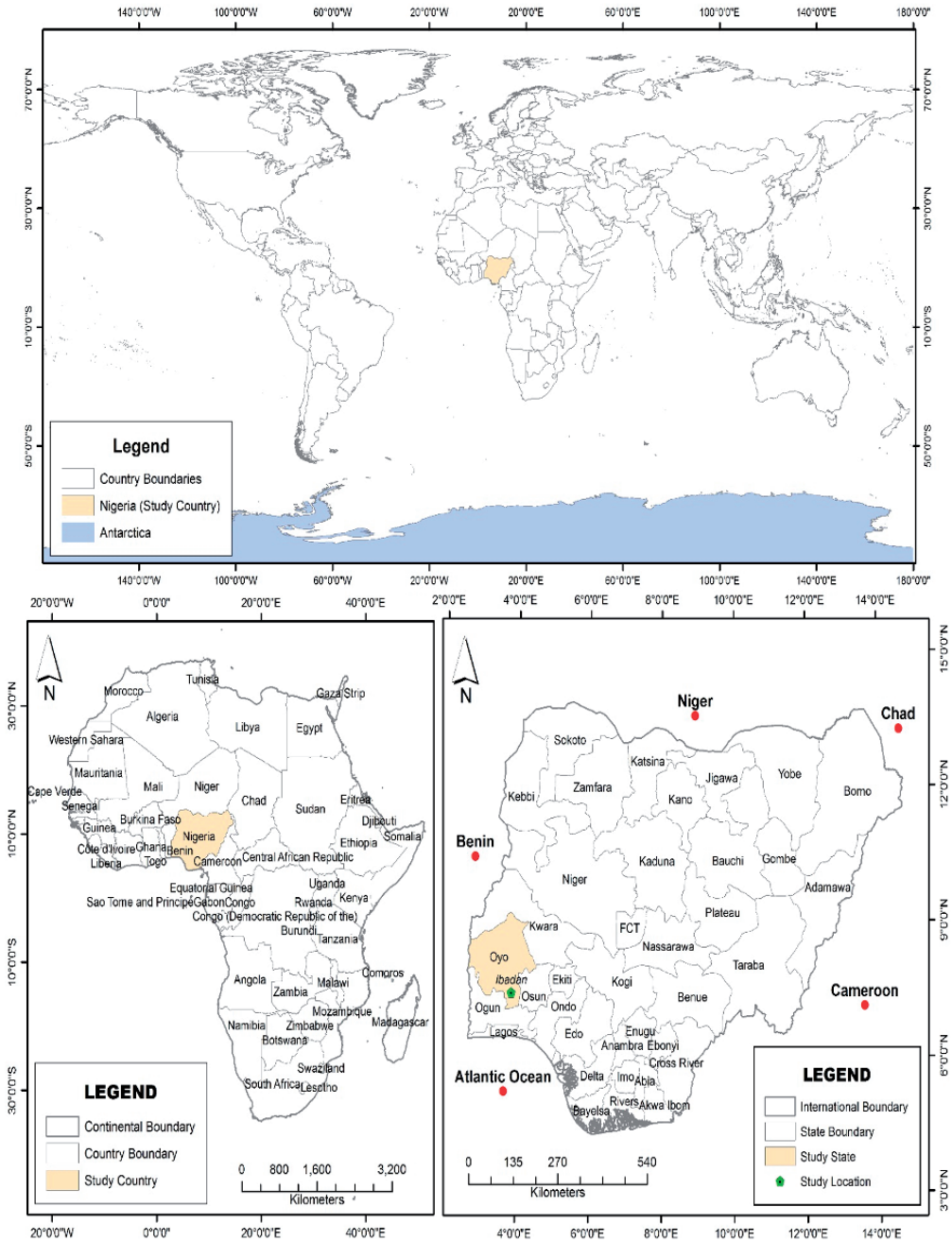


Figure 1.2 Map showing the study location from the world view.

Finally, having explored the practices, (sub) practices, challenges, opportunities, social dynamics, and governance arrangements of food vending in Chapters two, three, and four, Chapter five assesses strategies, suggestions, and mechanisms suitable for improving the health and diversity of ready-to-eat foods provisioned through informal ready-to-eat food vending practices among the urban poor.

## 1.8 RESEARCH METHODS

### 1.8.1 Study location

This thesis explores dynamics in ready-to-eat vending practices among low-income urban residents in Ibadan, a dynamic city in Nigeria with important social and economic functions. The target population for this thesis includes the informal food vendors, out-of-home food consumers, and government agents whose offices are linked to informal food vending practices in low-income communities in Ibadan. The study focuses on food vending in communities where people live below the poverty line of less than \$1.90 per day in the city (UNDP, 2004). We selected the urban poor for this study because they constitute the majority of the city's inhabitants and are the most vulnerable in terms of their lack of access to a healthy and balanced diet. Although some middle-income groups also consume ready-to-eat foods, most out-of-home consumers belong to the low-income bracket. This is because ready-to-eat food is cheap, allowing even those with limited funds to afford it. Ibadan is a city experiencing rapid population growth through a process of peri-urbanization and has a population of about four million (Adelekan, 2016). The city is highly multicultural, bringing together people from different cultures in Nigeria and around the world. Administratively, Ibadan consists of eleven Local Government Areas (LGAs), seven located in the northern part of the city, three in the southern part, and one at the boundary between the northern and southern parts.

### 1.8.2 Ready-to-eat food vending: a case study of Nigeria

Nigeria is a rapidly developing country with characteristics in terms of socio-economic status and demographic dynamics comparable to many other countries in the Global South. It is one of the larger countries in the Global South, with many cities rapidly increasing in size. Nigeria is one of the most populated countries in the Global South, with the country currently experiencing significant rural-urban migration, and the majority of the population now resides in urban areas. Nigeria, India, and China are projected to lead in urban growth by adding 850 million urban residents by 2050, with 37% of these in Nigeria (Aliyu and Amadu, 2017; FAO-UN, 2018). The population of Lagos, its largest city, has risen to twenty-one million, with an 8% annual growth rate (Anetor, 2015). For instance, about 606 people enter Lagos per minute on a daily basis (Agbola and Agunbiade, 2009), of which 80% of the people live in the city metropolis (Lawanson, 2012; Oduwole, 2014), and

the rest live in the city center. Ibadan now has a population of about four million, with an average growth rate of 4.8% annually, reflecting the combined natural increase and net migration (Adelekan, 2016).

In Nigeria, about 60% of the people consume street foods on a daily basis (Leshi and Leshi, 2017). Adolescents obtain 40% to 70% of their food from street food vendors. About 13% to 50% of daily energy intake comes from street foods for adults and 13% to 40% for children (Global Panel report, 2018). In addition, street foods contribute significantly to protein intake, often accounting for 50% of the recommended daily allowance (RDA) (Global Panel report, 2018). Most poor Nigerian households living in urban metropolises depend on street restaurants, street vendors, grocery stores, brick-and-mortar sit-down restaurants, canteens, and street food outlets (Buka and mama put), fruit juice vendors, and uncertified shops for their food sources (Warshawsky, 2016). According to All Africa (2009) and Ogundari et al. (2015), there has been an unmistakable rise in the number of ready-to-eat food vending outlets at every street corner, near workplaces, and along the roads in urban and semi-urban areas due to increased out-of-home food consumption. Lagos alone has an estimated 37,000 to 57,000 informal ready-to-eat food vending operating outlets within its metropolis. They mostly sell hand-made Nigerian meals, while some street hawkers sell industrialized products like fruit juice (Ogah et al., 2015). Grocery stores located inside buildings mainly sell processed food and beverages (Nzeka, 2013). The situation is similar in other cities in Nigeria, including Ibadan. However, informal ready-to-eat urban food vending practices are not clearly understood because they have received little attention from researchers, policymakers, and development practitioners. In addition, there is no well-developed empirical evidence to aid the inclusion of ready-to-eat food vending in the food supply system and development planning in urban Nigeria to accommodate the needs of low-income eat-out consumers. It is also not clear whether nutritious food transformation in the food chain reaches informal ready-to-eat food vending or how the transformation of ready-to-eat food provisioned can occur.

Food vending plays a crucial role in urban Nigeria in terms of food and nutrition security, particularly among the poor. Hence, transforming the food vending system in urban Nigeria creates an opportunity to improve access to a healthy, balanced diet, and sustainable foods for the poor. Thus, this thesis aims to analyze the practices, (sub)practices, operations, functioning, performances, and experiences in informal ready-to-eat food vending provisioning among low-income urbanites. The study will also investigate the informal and formal governance arrangements revolving around informal ready-to-eat food provisioning concerning the variety of food groups provisioned. Hence, the findings from this study will provide insights and empirical evidence to enable policymakers to develop a policy approach that can support poor access to diverse and nutritious foods. The study posits Ibadan in Nigeria as a promising case to investigate the ready-to-eat

food vending system as it can serve as a representation of other Global South countries. The results of the thesis can be replicated or applied to different countries in the context of the Global South with similar demographic dynamics and orientations as Nigeria.

## **1.9 MEASURING DIETARY DIVERSITY: A PRACTICE-BASED APPROACH**

To analyze dietary diversity in food vending, this thesis takes an approach that departs somewhat from the usual nutritionist approach, which is based on measuring a dietary score through a 24-hour recall or measuring a dietary score for a 7-day recall. This thesis takes a social practice approach to understand the daily routine provision of dietary diversity among the poor in urban settings. This approach takes a different approach to calculate food diversity scores by measuring the number of food groups provisioned. The daily food items provisioned were recorded per day for a period of seven days to get an overview of the average dietary diversity provisioned by food vending. Thus, Dietary Diversity Scores ranging from 0 to 12 were recorded. The diversity of food groups provisioned was further processed into four discrete categories: Lowest diversity = 5 or below; Mid Low diversity = 6; Mid High diversity = 7; and Highest diversity = 8 and above (Pritchard et al., 2019; Rammohan et al., 2019). The resulting index measures the diversity of food groups provisioned per food vendor. This choice is adequate because the aim of the thesis is not to measure the exact nutrient availability but to study the practices that enable the provision of more diverse food groups.

## **1.10 RESEARCH METHODS EMPLOYED**

This study employs a cross-sectional design by collecting qualitative and quantitative primary data. The data collection methods for the chapters in this study are presented in Table 1. The respondents for this study include food vendors, food vending association leaders, out-of-home consumers, and government agents in Ibadan. In-depth interviews were used to interact with the respondents and gain a more detailed understanding of their experiences and practices. Participant observation was used to map the situational dynamics of consumers and food vendors that could not be captured by interviews. A semi-structured questionnaire was used to collect information about the socio-economic background of consumers, their food vending practices, and consumption patterns. A food logbook was used to collect information on the daily food stockings and menu settings. Geographic Information System (GIS) mapping was conducted to acquire an overview of the spread of food vending activities in the food environment. The purpose of this method was to analyze the food vending environment in the selected communi-

**Table 1.1** Methodological process.

<b>Methods</b>	<b>Inter-views</b>	<b>Parti- pant observa- tion</b>	<b>Survey</b>	<b>Mapping</b>	<b>Food logbooks</b>	<b>Stake- holder workshop</b>	<b>Focus group discussion</b>
Chapter 2	X	X	X				
Chapter 3	X	X	X	X	X		
Chapter 4	X	X					
Chapter 5			X			X	X

ties and to aid the sampling of food vending outlets for the qualitative interviews and the survey. ArcGIS 10.5 software was used to develop maps with a scale of 1:16,093,440 for the Northern part of Ibadan and 1:8,046,720 for the Southern part of Ibadan. A stakeholder workshop provided the opportunity to bring key informants together to discuss a way forward by addressing the identified challenges and opportunities in informal ready-to-eat food vending. A practice-based visioning and back-casting method were used to collect normative views about future improvement and solutions for the health and diversity of ready-to-eat food provisioned. A focus group discussion was employed to collect information on future visions on improving the health and diversity of food provision. These methods were used at different stages of the thesis by zooming in and zooming out (Nicolini, 2012) to understand and analyze all themes included in this thesis.

In Chapter 2, I employed semi-structured interviews, participant observation (active), and a survey to collect information from out-of-home consumers on their daily life practices and their intersection with everyday food consumption. Approximately forty consumers were interviewed, while 451 out-of-home consumers were included in the survey to collect information on their socio-economic background and food consumption patterns. In Chapter 3, I employed semi-structured interviews, participant observation (passive), and food logbooks to understand the practices and operations of food vending, as well as collect information on food vendors' menu settings. I also conducted a survey to gather socio-economic information from food vendors. I purposively selected 100 ready-to-eat food vendors who provide food to poor consumers in the low-income regions of Ibadan based on their years of experience. Therefore, food vendors with five years of experience and more were selected. An exploratory analysis was applied, and the respondents were interviewed at their food vending outlet locations. In Chapter 4, I employed semi-guided interviews and participant observation to collect information from key informants such as food vendors, food vending association leaders, and government agents. For Chapter 5, I organized a focus group discussion and stakeholder workshops, applying a visioning and back-casting approach involving key food vending actors. The goal was to understand how the provision of healthy and diverse ready-to-eat food in the context of food vending can be improved.

## 1.11 OUTLINE OF THE THESIS

The remainder of this thesis is presented as follows:

In Chapter 2, I analyze the interrelationships between the daily lives of urban residents and their out-of-home food vending and consumption practices, specifically focusing on the urban poor. In Chapter 3, I shift the focus to informal ready-to-eat food vending. I conduct a social practice analysis to examine the existing practices, operations, functioning, and performances of informal ready-to-eat food vending. In Chapter 4, I delve into the governance of informal food vending in urban Nigeria, exploring both formal and informal governance structures and their influence on everyday vending practices. In Chapter 5, I explore suggestions and mechanisms proposed by practitioners for the improvement of ready-to-eat food vending, particularly in terms of promoting the health and diversity of ready-to-eat foods. Finally, in Chapter 6, I present a general discussion and conclusion summarizing the key findings and implications of the study.





# CHAPTER 2

## URBAN DAILY LIVES AND OUT-OF-HOME FOOD CONSUMPTION AMONG THE URBAN POOR IN NIGERIA: A PRACTICE-BASED APPROACH

This chapter has been published as Adeosun, K. P., Greene, M., and Oosterveer, P. (2022). Urban daily lives and out-of-home food consumption among the urban poor in Nigeria: A practice-based approach. *Sustainable Production and Consumption*, 32, 479-491.



## ABSTRACT

2

Understanding the interaction between urban daily lives and patterns of food consumption in the Global South is important for informing health and sustainability transitions. In recent years, the lives of poor urban dwellers have undergone significant transformations which, have been associated with shifts in patterns of daily food consumption from household-based towards primarily out-of-home. However, as of yet, little research has explored how changing everyday contexts of consumers' lives interrelate with their food vending-consumption practices. This study seeks to understand the interrelations between everyday urban lives and out-of-home food consumption practices among the urban poor in Ibadan, Nigeria. A situated social practice approach is employed to understand how everyday contexts shape practices of out-of-home food vending consumption. Multiple methods were employed, including GIS mapping of food vending outlets, quantitative consumer surveys, in-depth consumer interviews, and participant observation. The study provides an overview of food vending-consumption practices in terms of the socio-demographic situation of consumers and the embeddedness of food vending in the practice arrangements making up their daily lives. The findings reveal three key daily life practices that interlock with their ready-to-eat foods consumption practices: daily mobility practices, working arrangements, and domestic engagements. These three categories of daily urban practices that have undergone rapid transformation in line with socio-economic change and urbanisation and emerged as particularly important in shaping out-of-home food consumption. The paper concludes by considering the importance of understanding the embeddedness of food vending practices in the daily lives of the urban poor for sustainable food systems transitions in the Global South.

## 2.1 INTRODUCTION

This paper focuses on everyday consumption of ready-to-eat foods involving poor urban consumers who live below the poverty line of less than \$1.90 per day in the city (UNDP, 2004). Consuming food is a daily routine for human beings, and it is a common practice for urban dwellers to take their daily meal from street food vendors (Esohe, 2012). People in cities in the Global South consume a significant part of their daily food from informal food vendors who provide ready-to-eat foods and beverages on the streets, in small shops, on street corners, marketplaces, motor parks, school premises, and along the road (Muyanja et al., 2011; Hill et al., 2016). This positions informal ready-to-eat food vending (IRFV) practices as critical in sustaining the lives of urban dwellers. The IRFV sector is dynamic, and over recent decades, more and more people, particularly among the urban poor in sub-Saharan Africa, engage in IRFV practices to secure their everyday food consumption needs (Githiri et al., 2016). For instance, in Nigeria, about 60% of consumers engage with IRFV on a daily basis for their food consumption (Leshi and Leshi, 2017). However, the safety, health-related, and hygiene practices of IRFV are a concern to the government and policymakers (Muyanja et al., 2011; Ahamed et al., 2015). Many urban poor face the challenge of accessing quality and balanced diets as they lack adequate income and housing, while inadequate infrastructure complicates their mobility.

IRFV plays an important role in the diets of the urban poor in sub-Saharan Africa, including in Nigeria (Steyn et al., 2014; Njaya, 2014; Githiri et al., 2016; Hill et al., 2016; Swai, 2019; Tawodzera, 2019; Wegerif, 2020). However, as of yet, IRFV consumption practices have not been adequately explored from situated perspectives of the daily lives of poor urban consumers. Rather, most research on IRFV has focused on the perspective of the food vendors (Tawodzera, 2019; Resnick et al., 2019) or explored consumption with a focus on nutrition or on mapping aggregated demand-side characteristics (Ogundari et al., 2015; Leshi and Leshi, 2017). For example, a quantitative analysis has identified IRFV consumption as being inversely related to education level, income level, and age, as well as to opportunity costs in terms of time availability of householders (Ogundari et al., 2015). Such work has revealed that IRFV consumption is predominantly practiced by poorer, less educated, and younger consumers. Furthermore, nutrition-focused studies have indicated that consumers relying on out-of-home food vending are vulnerable to unhealthy, monotonous diets with low levels of food diversity as food vendors mostly sell fried, high-calorie, and high-energy foods (Morgan, 2015). In general, these studies find that food away from home, including street foods, is higher in fat, less healthy, and of lower nutritional quality than food prepared at home (Mwangi et al., 2002; Namugumya et al., 2011). They call for a reduction in the consumption of out-of-home food in favor of home-based food. Such quantitative and nutrition-focused insights point to the socially differentiated nature of IRFV consumption among the lives of the urban poor. However, while this is important in

painting an aggregate picture of the demand characteristics of IRFV consumption, little research has yet explored how these dynamics play out in terms of the lived, qualitative experiences of poor urban consumers. As a result, little is known about how the everyday contexts of consumers' lives interrelate with their food vending-consumption practices. Furthermore, extant aggregate accounts fail to differentiate among food vending experiences in terms of the diversity and health of foods provisioned (see Adeosun et al., 2022) nor do they consider the social and economic role of food vending in urban communities (see Swai, 2019). For example, Adeosun et al. (2022) found that the diversity of foods provisioned varies greatly between vendors of traditional and processed food, with the former offering more healthy and nutritionally rich foods. A more nuanced understanding of IRFV consumption practices as they are performed in daily urban lives is needed to consider the contexts and situations in which consumers participate in more or less healthy out-of-home food consumption practices.

As yet, little research has explored when, how, and why consumers opt for different street food options in relation to the wider everyday contexts of their lives. To understand these interconnections, this research adopts a social practice-informed approach that recognizes the embeddedness of food consumption within the broader arrangement of practices comprising daily life (Southerton, 2020). Most research that examines the temporal dynamics of consumption and the intersection of everyday contexts and particular consumption practices has been conducted in Global North settings. Little work has been done that adopts a practice-arrangement analysis in Global South settings, particularly in relation to out-of-home food consumption practices (e.g., Zukin, 1998; Mohr et al., 2007; Wertheim-Heck and Raneri, 2019; Southerton, 2020). Moreover, few of these studies have revealed the exposure of consumers to out-of-home food consumption due to their daily life practices, with less attention paid to how daily life interlocks with out-of-home food consumption, which our paper aims to achieve.

According to Burgoine and Monsivais' (2013) study in the UK, work and commuting environments contribute to foodscape exposure to takeaway food outlets. As yet, little to no work has investigated out-of-home food consumption as it is embedded within the lives of the urban poor in Global South contexts. This is important when considering how broader processes of socio-economic transition associated with work, infrastructure, and migration within urbanizing environments in the Global South are influencing the daily life engagements and food consumption practices of urban consumers.

Previous studies have taken economic and nutritional perspectives to analyze out-of-home food consumption from the perspective of households or individuals as the unit of analysis, without analyzing how food consumption is connected with other practices (Ogundari et al., 2015; Leshi and Leshi, 2017; Raaijmakers et al., 2018). Most apply rational

choice approaches that see out-of-home food consumption as primarily the result of conscious and deliberate choice-making by individual buyers. In this study, we apply a Social Practice Theory approach to understand and analyze how daily lives interrelate with everyday out-of-home food consumption as routinized practices. The study unravels its empirical evidence from these daily routines as people engage in their day-to-day activities. In doing so, we analyze arrays of interconnections between food-related lifestyles and out-of-home food consumption as bundles of practices as they are connected, performed, and structured in relation to other practices in daily life, as well as wider food systems of provision.

In seeking to address these gaps, the following research question aids the study: In what ways can out-of-home food consumption practices be understood as being shaped by the daily lives of urban poor consumers in the context of urban food provisioning? Applying a situated social practice analysis, the focus is on mapping out-of-home food consumption in terms of their meanings, performances, and embeddedness within daily lives and practice arrangements. In what follows, we first elucidate on the practice theoretical conceptual framework underpinning the analysis, followed by a description of the methodological approach and research context. The remainder of the paper then presents and discusses findings concerning out-of-home food consumption and its embeddedness in daily practice arrangements and the implications of this for food systems transitions in the Global South.

## 2.2 OUT-OF-HOME FOOD CONSUMPTION PRACTICES

Previous studies have analyzed how street foods influence consumption patterns of urban consumers (Hill et al., 2016; Gupta et al., 2018); as well as consumer attitudes and behavior toward risk and hygiene in ready-to-eat food vending (Gupta et al., 2018). Earlier research has also looked into food preferences, purchasing habits, and nutritional characteristics of food that is routinely purchased and consumed by street food consumers (Simopoulos and Bhat, 2000; Hill et al., 2016). Moreover, different food demand attributes such as the convenience of fast food have also been studied (van Horst et al., 2011). According to this literature, different food demand attributes influence consumers' attraction to street foods (Edwards, 2013). However, as yet, little is known about how consumers' daily lives influence their choice of street foods. The consumption interests of people on street foods are changing, increasing, and taking on a more dynamic dimension in their preference and attributes. Moreover, Table 2.1 shows previous related studies on out-of-home food consumption from different perspectives and their findings.

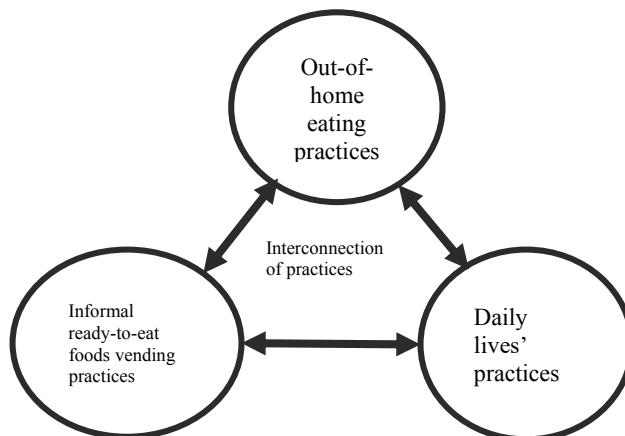
**Table 2.1** Findings of previous literature relating to out-of-home food consumption.

<b>Authors</b>	<b>Period</b>	<b>Title</b>	<b>Discipline/ methodology</b>	<b>Main findings</b>
Ogundari et al.	2015	Household demand for food away from home (FAFH) in Nigeria: the role of education	Economics/ quantitative	Household income and households with younger age cohorts increase the probability of consuming Food away from home.
Thornton et al.	2013	Employment status, residential and workplace food environments: Associations with women's eating behaviours	Nutrition/ quantitative	Employment status did not modify the associations between residential food environments and eating behaviours. Having access to healthy foods near the workplace was associated with healthier food consumption.
Burgoine and Monsivais	2013	Characterising food environment exposure at home, at work, and along commuting journeys using data on adults in the UK	Nutrition/ quantitative	Work and commuting environments contributed to food-scape exposure to takeaway food outlets.
Bezerra et al.	2013	Consumption of foods away from home in Brazil	Economics/ quantitative	Consumption of food away from home in Brazil was reported by 40% of respondents. This percentage decreased with age and increased with income in all regions of Brazil and was higher among men and in urban areas.
Miura et al.	2012	Socioeconomic differences in takeaway food consumption among adults	Economics/ quantitative	Takeaway foods made a greater contribution to energy, total fat, saturated fat and fibre intakes among lower educated groups. Lower likelihood of fruit and vegetable intakes were observed among "less healthy" take away consumers
Karamba et al.	2011	Migration and food consumption patterns in Ghana	Economics/ quantitative	Migration appears to increase overall food expenditures resulting in a shift towards the consumption of potentially less nutritious categories of food, such as sugar and beverages and eating out.
van der Horst, et al	2011	Fast food and take-away food consumption are associated with different lifestyle characteristics	Economics/ quantitative	Take-away food consumption was found to be associated with gender (males), age (40–59 years), income, education (middle) and mental effort.
Mutlu and Gracia	2004	Food Consumption Away from Home in Spain	Economics/ quantitative	Income and the value of housewife time have a positive and significant effect on food consumption away from home.

## 2.3 APPLYING SOCIAL PRACTICE INSIGHTS TO OUT-OF-HOME FOOD CONSUMPTION

Departing from perspectives that view food as an outcome of consumer choice, social practice theories have gained prominence as a means of studying food in a way that connects daily life to wider contexts, including food environments and interconnecting systems of provision (Wertheim-Heck and Raneri, 2019). Such work has revealed the importance of situated, practice analysis for uncovering the complex social processes shaping how and why people consume the way they do in various social, cultural and food environment contexts. Previous literature revealed that daily life actions, i.e. work, and mobility exposed consumers to food vending outlets (Burgoine and Monsivais, 2013). However, it is unclear in the literature how these daily life actions interlock and shape out-of-home food consumption practices. For instance, city is encompassed by complex daily life activities due to distance from the residential area to the workplace and also inadequate housing facilities due to overpopulation and rural-urban migration. Work and workplace are mostly informally structured with no regular opening and closing times in the low-income areas. Urban poor may likely be experiencing these complex daily lives as they are of low income with inadequate financial stands to overcome these challenges. Advancing on previous literature in the Global North, this study analyses the interlocking of daily life practices with out-of-home food consumption among the urban poor which is not well understood in either Global north or south contexts. Consuming food is a daily routine for human beings and closely connected with food provisioning while being rooted in socio-cultural and governance contexts. In contrast with the nutrition and economic studies of out-of-home food consumption conducted to date, a social practice framework allows for uncovering how wider contexts of social lives work to spur demand for out-of-home food and the emergence, expansion, and continued reproduction of IRFV-consumption practices.

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**Figure 2.1** Diagram showing the interconnections of arrays of practices.

workplace are mostly informally structured with no regular opening and closing times in the low-income areas. Urban poor may likely be experiencing these complex daily lives as they are of low income with inadequate financial stands to overcome these challenges. Advancing on previous literature in the Global North, this study analyses the interlocking of daily life practices with out-of-home food consumption among the urban poor, which is not well understood in either Global north or south contexts. Consuming food is a daily routine for human beings and closely connected with food provisioning while being rooted in socio-cultural and governance contexts. In contrast with the nutrition and economic studies of out-of-home food consumption conducted to date, a social practice framework allows for uncovering how wider contexts of social lives work to spur demand for out-of-home food and the emergence, expansion, and continued reproduction of IRFV-consumption practices.

In seeking to understand the interconnections between everyday life and out-of-home food consumption, the analysis in this paper draws on several concepts from practice theories, including Spaargaren and Van Vliet's conceptualization of consumption practices at the intersection of lifestyles and systems of provision (Spaargaren and Van Vliet, 2000) and an understanding of lifestyles (Giddens, 1991) as constituted by and made up of practice-arrangement bundles (Schatzki, 2016). We first draw on Spaargaren and Van Vliet's model to connect individual daily lives with wider systems of provision in understanding how practices emerge and sustain over time (Spaargaren and Van Vliet, 2000). Further, in addition to this, we adopt a conceptualization of daily life practices as "more or less integrated sets of practices" (Giddens, 1991: 81) which comprise an individual's routine everyday activities and are held together in practice-arrangement bundles (Schatzki, 2016). Understanding how links between practices form and are held together to maintain certain forms of consumption has been a central focus of practice theoretic-

cal analysis in food studies. For example, research in Global North contexts has studied the interlinks between food, mobility, and working practices, revealing, for example, how different working arrangements (such as working from home or daily commuting) influence how food is purchased and consumed (Southerton, 2020; Hoolohan et al., 2021). We build on this work to apply our conceptual tools to advance insights into how food vending-consumption practices intersect with the daily lives of urban poor consumers in a Global South context (See Figure 2.1). The figure seeks to represent how daily life practice arrangement bundles connect with wider food systems of provision and food vending practices to shape out-of-home food consumption practices.

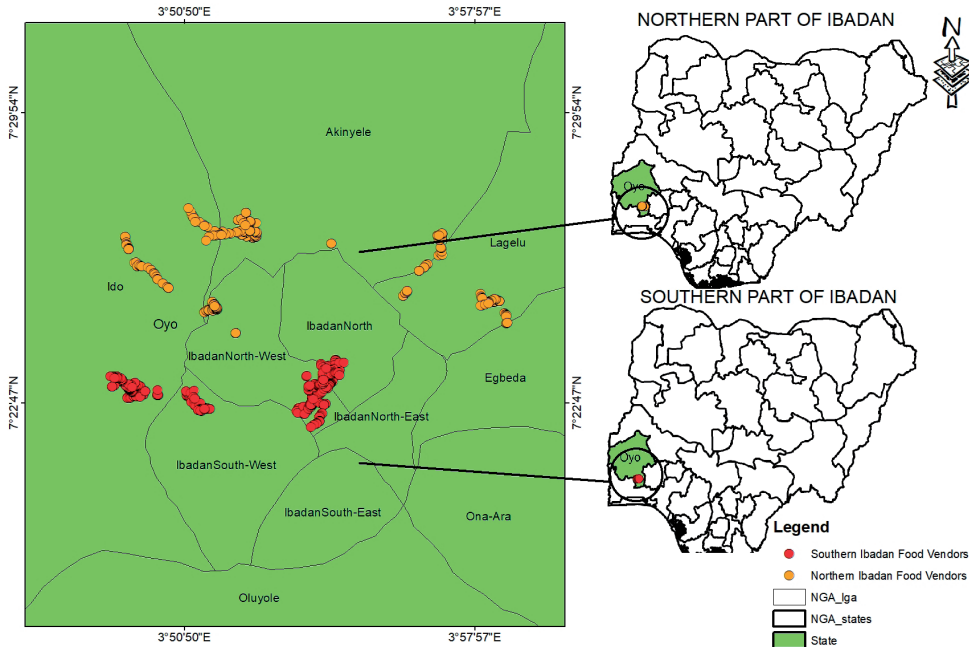
This study examines how out-of-home food consumption among the urban poor is embedded within and shaped by daily life practices and practice-arrangement bundles. Specifically, it explores how intersecting social practices in daily life, comprising urban everyday actions and systems of provision, shape the performance and patterns of street food consumption in the everyday lives of urban dwellers. Attention is paid to different kinds, forms, and patterns of IRFV consumption, including processed and healthier traditional food vending, and its relation to wider contexts of poor urban consumers' lives. The wider urbanizing environment is shaping how daily practice arrangement bundles interplay, intersect, and co-evolve with out-of-home food vending-consumption practices (Figure 2.1). The paper analyzes these from a situated everyday life perspective.

## 2.4 MATERIAL AND METHODS

### 2.4.1 Research context

This research explores the embeddedness of IRFV-consumption practices in the daily lives of low-income urban residents in Ibadan, Nigeria. We selected the urban poor because they constitute the majority of the city inhabitants and are most vulnerable in terms of accessing a healthy and balanced diet. Even though some middle-income groups also consume ready-to-eat foods, the majority of the out-of-home consumers belong to the low-income earners because ready-to-eat food is cheap, so with little money they can buy food. Most of these people live below the urban poverty line of \$1.90 per day (UNDP 2004), also below the Nigeria national minimum wage of Naira 30,000 (\$77) per month and far below the average income of Naira 339,000 (\$880) per month. This research builds on previous studies using nutrition and economic perspectives on food consumption (Raaijmakers et al., 2018), in order to more explicitly advance insights into the socio-economic interrelations of food consumption. Ibadan houses different research institutes, and one of them is the International Institute of Tropical Agriculture (IITA). The city has about 4 million inhabitants (Adelekan, 2016) and is highly multicultural, bringing together people from different parts of Nigeria and from around the world. Administratively, Ibadan





**Figure 2.2** Map of the study location.

consists of eleven Local Government Areas (LGAs), seven located in the Northern part of the city, three in the Southern part, and one at the boundary between the Northern and Southern parts.

Ibadan is a dynamic city with important social and economic functions. It is the capital of Oyo State and located in the Southwest of Nigeria. It is one of the four big cities in Nigeria in terms of city development and population. The city has a complex food system in which ready-to-eat food vending is very prominent.

The research was carried out in the low-income areas of Ibadan to investigate the IRFV-consumption practices of the urban poor. The study adopted a contextualized sampling format whereby consumers were recruited from a range of IRFV outlets. Information about low-income urban areas was collected from the state ministry and used to select the Local Government Areas (LGAs) to be included in the study. The researcher selected two LGAs from the north, one LGA from the south, and one LGA from the center, making a total of four LGAs. Two communities were selected from each of the four selected LGAs to make a total of eight communities identified for the study. The selected LGAs and communities were: (1) Ibadan northwest LGA, selected communities Ologuneru and Eleyele; (2) Lagelu LGA, selected communities Akobo and Iyana Church; (3) Ido LGA, selected communities Apata and Apete; and (4) Ibadan southwest LGA, selected communities Odo-ona and Osasimi.

**Table 2.2** Mapping results of the selected communities.

<b>Food vending outlets</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Traditional	319	46.51
Processed	269	39.21
Unprocessed	98	14.28
<b>Total</b>	<b>686</b>	<b>100</b>

### 2.4.2 Mapping and categorizing food vending

In order to identify and recruit consumers at different IRFV outlets, the principal researcher (first author) and four field officers who are MSc students at the University of Ibadan, Nigeria, mapped the food vending outlets in the selected eight low-income communities using Geographical Information System (GIS) software from the period of July-September 2020. GIS mapping was completed by the team involving the first author and four field assistants. The purpose of this aspect of the methodology was to represent and analyze the food vending environment in the selected communities and to aid the sampling of food vending outlets for participating in the qualitative interviews and survey. ArcGIS 10.5 software was used to develop maps with a scale of 1:16,093,440 for the Northern part of Ibadan and 1:8,046,720 for the Southern part of Ibadan. A total of 686 food vending outlets were mapped and presented on a map (Figure 2.2). These food vendors were categorized into: (1) Traditional Food Vendors (serving primarily local foods such as cooked rice, yam, soup, pounded yam, eba, and amala); (2) Processed Food Vendors (fried foods, snacks, and beverages); and (3) Unprocessed Food Vendors (fruits and vegetables) (see Adeosun et al., 2022 for a detailed account of these food vending categories). In this study, traditional food is referred to as locally made meals, which are often of healthier and more diverse food quality, while processed food is mostly snacks such as meat or fish pie, crisps/chips, biscuits, and highly processed and fried food of lower health and nutritional value (Adeosun et al., 2022). Most out-of-home food provisions in Ibadan fall within these categories. As outlined in Table 2.2, 319 traditional, 269 processed, and 98 unprocessed food vending outlets were mapped in the selected communities in Ibadan.

### 2.4.3 Data description, collection and analysis

In this study, we deployed a mixed-method which included GIS mapping of food vending outlets, a survey questionnaire to collect quantitative information on the socio-economic attributes of the consumers and some of their food consumption behaviors, and finally qualitative in-depth interviews to gather insights into their food-related everyday life practices.

Primary data were collected through surveys by administering questionnaires to the consumers, semi-structured in-depth interviews were done following a list of interview guide (see attached Supplementary Information for questionnaire and interview guide)

**Table 2.3** Showing number of initiatives collected for the paper.

<b>Food vending outlet</b>	<b>Selected food vending outlets for survey</b>	<b>Surveyed consumers</b>	<b>Consumers selected for interview per food vending category</b>
Traditional food vendors	20	211	30
Processed food vendors	15	143	20
Unprocessed food vendors	10	97	10
<b>Total</b>	<b>45</b>	<b>451</b>	<b>60</b>

and participant observation. The methodology involved a number of steps that involved first mapping and categorizing out-of-home food vending (as described above) and then selecting a smaller number of outlets from which to survey and interview consumers and engage in participant observation to generate understanding of IRFV practices and their embeddedness in different consumer life contexts.

Within the eight communities, we selected 60 vending outlets from all mapped food vending outlets which cut across the food vending categories. This included 30 traditional meal, 20 processed food, and 10 unprocessed food outlets to make a total of 60 food vending outlets (Table 2.3). The food vending outlet selection was based on the consent of the food vendors to allow us to stay in their outlet and conduct the survey. Among these outlets, an on-site survey was undertaken by the principal investigator (first author) and four field research assistants of the University of Ibadan to survey 451 out-of-home food consumers (see Table 2.3 for a breakdown of the number of consumers surveyed according to the IRFV outlet categories selected). The researchers stayed put in the selected food vending outlets during morning, afternoon, and evening and during different days of the week and conducted the survey with consumers as they visited the vendor for purchases. The purpose of the survey was to generate an overview of the socio-demographic characteristics of the consumers and assist in the recruitment of a diverse sample of consumers to partake in more in-depth qualitative interviewing. The survey captured information such as income, age, marital status, occupation, and the type and frequency of meals eaten out by the consumer.

To further explore the consumers' experiences, IRFV-consumption practices, and daily lives, a sub-sample of 45 consumers was selected for further qualitative interviewing, which was undertaken with the consumers at a later date at a location of their choice (such as their home or a public place). From the category of traditional food vending, 20 consumers were selected, 15 from the category of processed food vending, and 10 from the category of unprocessed food vending (See Table 2.3). In addition to seeking a broad representation across the food vending categories, the interview sampling strategy sought to obtain diversity in terms of wider characteristics of consumers concerning, for example, their age, occupation, and family situation. Written and verbal consent was obtained from

all participants. A practice-informed interview schedule structured the discussions on citizens' practices concerning their out-of-home IRFV-consumption and its embeddedness in their daily lives. Each interview lasted approximately 30 to 45 minutes.

Insights from the survey and the interviews were complemented with participant observation of the consumers buying and eating food at the food vending outlet. The survey and the (passive) participant observation took place concurrently in the food vending outlet. The researchers were present there for several days of the week.

Data were recorded and subsequently transcribed and analyzed using qualitative analysis software (Atlas.ti). An inductive analysis method was applied to identify themes and sub-themes in the interconnections between daily lives and food consumption practices. Data were collected in the period from March to May 2023. Participant interview data were compared against socioeconomic indicators and contexts to understand how their daily lives interrelate with their out-of-home food consumption practices. Further analysis was done within each indicator to identify further differences. The following socioeconomic indicators were used: gender, age bracket, occupation, income, marital status, and living situation. Although this study was conducted during the COVID-19 pandemic, in Nigeria, all lockdown measures had been officially lifted, and the food vendors were operating during this period. In addition, all precautionary COVID-19 measures were taken with the interviewees such as keeping 1.5 m social distancing and wearing a facemask by the respondents and the interviewers.

#### 2.4.4 Quantitative research

Quantitative survey data were collected at food vending outlets which were purposively selected from the results of our GIS mapping. The consumers for the study were randomly selected. To examine the causal relationships between out-of-home food consumption and socio-economic factors, we employ Ordered Probit regression analysis. The response variable is an ordered variable: whether food is consumed out of home (1) occasionally; (2) sometimes; and (3) regularly. The ordered probit model was analyzed with STATA packages.

The model for the regression is as follows:

$$\begin{aligned}
 & \text{Freq of out - of - home food consumption} \\
 & = b_0 + b_1 * \text{gender} + b_2 * \text{age} + b_3 * \text{trading} + b_4 * \text{artisan} + b_5 \\
 & * \text{marital status} + b_6 * \text{living situation} + \text{log}b_7 * \text{income} + b_8 \\
 & * \text{breakfast lunch dinner} + b_9 * \text{breakfast lunch} + b_{10} * \text{lunch} + b_{11} \\
 & * \text{distance workplace to foodoutlet} + b_{12} * \text{distance home to workplace} + \epsilon
 \end{aligned}$$

To test for the collinearity of the explanatory variables, we conduct the correlation coefficient matrix. The result confirm that the explanatory variables have no significant multi-collinearity.

## 2.5 RESULTS

In presenting our findings, we first provide an overview of the socioeconomic attributes of the consumers. We also analyzed the quantitative empirical causal relationships between the frequency of out-of-home food consumption and socio-economic factors. Building on this, we then draw on the qualitative interview data and participant observations to present an analysis of the embeddedness of food vending-consumption in the daily lives of the urban poor.

### 2.5.1 Brief description of socioeconomic attributes of out-of-home food consumers

Socioeconomic attributes of the out-of-home consumers are presented in Table 2.4. Reflecting the findings from previous research, the survey indicated that most out-of-home food consumers are low-income young adults, ranging from 21 to 44 years. About 48.7% of all consumers earn an income between Naira 10,000 and 40,000 per month, indicating they are very low-income earners receiving far below the Nigerian national average of Naira 339,000 per month. The survey recorded a slightly higher number of males (54.5%) compared to females (45.5%) taking their food from food vendors. This aligns with findings from Hill et al. (2016) who recorded more males (55.6%) than females (44.2%) food vending consumers. In terms of occupation, the majority of out-of-home food consumers are traders ('trading' - 41.9%) or skilled craft workers ('artisan' - 38.4%). Concerning their family situation, 52.3% of out-of-home food consumers are married, and 45.9% are single. See Table 2.4 for a detailed overview of these socio-economic characteristics. Regarding the eating habits of out-of-home consumers, eating out is a common practice, with 33.6% of the respondents reporting that they eat most of their meals out regularly, and 47.7% record eating out sometimes. However, more specific questioning revealed that the majority (56.8%) ate at least one meal out daily, 25.3% eat two meals out daily, and a smaller group (14.6%) eat all three meals out daily. This resonates with findings from Hill et al. (2016) that most consumers (43%) bought street foods two to three times per week, while a significant number (38.3%) bought street foods almost every day, with 19% buying street foods about once a week or once or twice a month. Moreover, lunch is consumed out-of-home by 41.9% of all consumers, breakfast by 16.6%, while 20.4% eat both their breakfast and lunch out-of-home.

### 2.5.2 Frequency of out-of-home food consumption

Table 2.5 presents the regression results for the frequency of out-of-home food consumption and predictor variables. The results reveal that socioeconomic factors are important determinants of the frequency of out-of-home food consumption. Although some factors are not statistically significant, they have an expected directional relationship with the frequency of out-of-home food consumption. Occupations such as trader and artisan

**Table 2.4** Socio-economic characteristics of out-of-home consumers.

<b>Attributes</b>	<b>definition</b>	<b>freq</b>	<b>%</b>	<b>Mean (standard deviation)</b>
<b>Age</b>				33.044 (0.551)
	>20	62	13.7	
	21-32	187	41.5	
	33-44	128	28.4	
	45 and above	74	16.4	
<b>Gender</b>				
	Female	208	45.5	
	Male	243	54.5	
<b>Occupation</b>				
	No job	9	2	
	Trading	189	41.9	
	Artisan	173	38.4	
	Student	43	9.5	
	Civil servant	35	7.8	
	Farmer	2	0.4	
<b>Income</b>				38671.84 (1284.84)
	>#10000	68	15	
	#10001-40000	220	48.7	
	#40001-60000	94	21	
	60001-and above	69	15.3	
<b>Marital status</b>				
	Single	207	45.9	
	Married	236	52.3	
	Widow	6	1.4	
	Divorce	2	0.4	
<b>Living situation</b>				
	Living with family member	365	80.9	
	Living alone	86	19.1	
<b>Frequency of out-of-home food consumption</b>				
	Regularly	150	33.3	
	Sometimes	215	47.7	
	occasionally	86	19	
<b>Part of meal eaten out</b>				
	Breakfast	75	16.6	
	Lunch	189	41.9	
	Dinner	13	2.9	
	Breakfast/lunch	92	20.4	
	Breakfast/dinner	8	1.8	
	Lunch/dinner	10	2.2	
	Breakfast/lunch/dinner	64	14.2	
<b>Most patronised food vending category</b>				
	Traditional	286	63.4	
	Processed	97	21.5	
	Unprocessed	68	15.1	

Table 2.4 Continued.

Attributes	definition	freq	%	Mean (standard deviation)
<b>Location of food vending outlet</b>				
	Along the road	202	44.8	
	Market square	69	15.3	
	Along the street	158	35	
	Motor park	21	4.7	
	Work place	1	0.2	
<b>No. of meals eaten out daily</b>				
	Once	256	56.8	
	Twice	114	25.3	
	Three times	66	14.6	
	Four times	15	3.3	
<b>Distance from workplace to food outlet</b>				0.101 (0.008)
	>= 0.100	338	74.8	
	0.1001 – 0.700	107	23.7	
	0.7001 – 1.3	5	1.1	
	1.3001 and above	2	0.4	
<b>Distance from home to workplace</b>				5.234 (0.322)
	=>0.500	39	8.6	
	0.5001 – 25.375	409	90.5	
	25.37501 – 50.250	2	0.4	
	50.2501 and above	2	0.4	
		451	100	

are positively and statistically significantly related to the frequency of out-of-home food consumption. The distance from the workplace to the food outlet is another factor determining why consumers engage in street foods on a regular basis. Regarding the kind of meals eaten out, our empirical findings reveal that some consumers access all their daily meals from street vendors on a regular basis, while some only access their breakfast and lunch regularly. This confirms the importance of street foods for the food security of poor consumers.

### 2.5.3 Interconnections between consumers' socio-economic and out-of-home food consumption practices

The qualitative interview revealed different socio-economic groups and their interrelationships with out-of-home food consumption. Our findings reveal that both young and older adults engage in the services of food vending. However, observations and quantitative results revealed that young adults are the most frequent in food vending outlets. This aligns with previous research which has reported a positive relationship between being a young adult and out-of-home food consumption (Ogundari et al., 2015). Regarding occupation, the majority of the respondents are in informal jobs such as traders and artisans,

**Table 2.5** Ordered probit result: frequency of out-of-home food consumption.

<b>Variable</b>	<b>Occasionally (1)</b>	<b>Sometimes (2)</b>	<b>Regularly (3)</b>
Gender (1 if Male, or 0 if female)	-0.008 (0.031)	-0.003 (0.012)	0.011 (0.044)
Age (years)	-0.001 (0.001)	-0.000 (0.001)	0.001 (0.002)
<b>Occupation</b>			
Trading (1 if trading, or 0 otherwise)	-0.081** (0.038)	-0.037* (0.021)	0.117** (0.058)
Artisan (1 if artisan, or 0 otherwise)	-0.091** (0.036)	-0.044** (0.022)	0.136** (0.056)
Marital status (1 if married, or 0 otherwise)	0.019 (0.037)	0.008 (0.015)	-0.027 (0.052)
Living situation (1 if live alone, or 0 otherwise)	0.052 (0.047)	0.015 (0.010)	-0.067 (0.056)
Income (Naira/month)	-0.025 (0.020)	-0.010 (0.008)	0.035 (0.028)
<b>Part of meal eating out</b>			
Breakfast/lunch/dinner (1 if yes or 0 otherwise)	-0.118** (0.035)	-0.102* (0.052)	0.220*** (0.085)
Breakfast/lunch (1 if yes or 0 otherwise)	-0.131** (0.032)	-0.109** (0.044)	0.241*** (0.072)
Breakfast (1 if yes or 0 otherwise)	-0.042 (0.044)	-0.023 (0.030)	0.065 (0.074)
Lunch (1 if yes or 0 otherwise)	0.005 (0.041)	0.002 (0.016)	-0.007 (0.057)
Distance from workplace to food outlet (Kilometre)	0.230** (0.093)	0.094** (0.043)	-0.324** (0.129)
Distance from home to workplace (Kilometer)	0.003 (0.002)	0.001 (0.001)	-0.004 (0.003)

Note: The table report marginal effect. Standard errors are reported in parentheses; significant levels: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ , \*Dinner is a comparison variable.

and these influence their frequency of out-of-home food consumption. Most consumers in this category reported that they eat most of their meals from food vendors. The finding further aligns with the quantitative results as trading and artisan have a positive relationship and are correlated with the frequency of out-of-home food consumption. This indicates that consumers who are in informal jobs engage in food vending-consumption on a regular basis (see Table 2.5). This implies that consumers face work-related time constraints in their daily engagements due to the kinds of jobs they have.

*“.....I am a driver, I leave home as early as 4.30 a.m, so I don't have time to eat food at home because I must come early to queue in the motor park so that I can see morning customers to carry, so I come to eat my breakfast and lunch here often, (driver, age 48, male, live with family, distance commuted 3km)”.*



These jobs have significant temporal demands on daily life, with very early starts and late finishes. Furthermore, many low-income workers reported juggling multiple jobs to secure their income, and interviews revealed that they reported feeling constrained in having sufficient time to prepare their food at home:

*".....The reason I eat out-of-home is that ...I don't have time because of my work, most times I work in my workshop and I go to do outside work. My work is too demanding (welder, age 30, male, live alone, distance commuted 1.5km)".*

Consumers with formal jobs patronize food vending but not as much as those with informal jobs. Those with formal, more secure work sometimes engage in the service of food vendors for their breakfast and a few take their lunch from processed food vending outlets but most have their dinner at home. This may be attributed to the fixed end of the working day for people with formal jobs while those with informal jobs often only stop working late in the evening. The following trader's comment highlights the constraints faced by informal workers and how this shapes their reliance on out-of-home food vending:

*".....You see the nature of my work demands my time. People come here to play games. Some games close by 8:15 pm, another one closes by 9:30 pm, 12 pm, so there is no time to prepare my own food (trader, age 32, male, live alone, distance commuted 1km)".*

The following participant's account also resonates with others in the sample:

*".....I can't go through the stress of cooking at home after going through the stress at my place of work. I don't even have the time to be doing that, (carpenter, age 24, male, live alone, distance commuted 3.5km)."*

Regarding the marital status of out-of-home consumers, our empirical results in Table 2.5 show that consumers who are single eat out on a regular basis. This was aligned with the stories relayed by the consumers during the interview, as both single and married consumers gave us their separate accounts of the frequency of out-of-home food consumption. Married consumers reported that although they patronize food vendors, it is not on a regular basis compared to unmarried consumers. This is also evident in our quantitative results in Table 2.5, which show that married consumers engage the services of food vendors "sometimes".

Regarding the location of food vending outlets that consumers patronize, observations revealed that many out-of-home consumers who are commuters engage with food ven-

dors who sell along busy roads. These consumers are commonly mobile informal workers or people who are walking along the road. They mostly engage with processed food vendors on the go to get food that can be eaten along the road or inside their vehicle. In addition to the locations of food vending outlets, our observations revealed that most food outlets are located near low-income workplaces; for example, within motor parks where mechanics, welders, and other tradesmen work, and in marketplaces where traders spend their time. This aligns with the findings of Rosales-Chavez et al. (2021) that street food vending outlets were most often found near homes, transportation centers, and worksites. So, consumers just have to take a short walk to the food vending outlet to get their food. In formal workplaces, food vending is situated a bit further away, and consumers have to walk some distance to get food from a vendor. These food vendors are located at strategic points in those areas. Observations revealed that vendors located in these working areas are the busiest, with consumers present from very early in the morning to late in the evening. Both the qualitative and quantitative results revealed that distance from the workplace to food vending outlets has a negative relationship and is statistically significant with the frequency of out-of-home food consumption. This implies that out-of-home consumers engage the services of food vendors as the food vending outlets are situated close to the workplace.

#### 2.5.4 Interlocking of daily life's practices with "kinds and forms" of ready-to-eat foods

People's daily engagements are important and influence the kinds of food they eat and thereby also the kinds of foods provisioned by food vendors. We found that consumers involved in different practices in their daily lives demand different kinds of food and food in different forms. Most consumers with work practices that require physical strength demand high-energy foods and full meals. Traditional food vending supplies the energy and other nutrients they demand.

The nature of jobs also influences the kinds and forms of foods consumed. Some out-of-home food consumers reported that they patronize traditional food vending outlets because they feel these meals serve their daily needs better. They prefer traditional foods because they are seen as providing the sustenance needed to withstand their daily engagements.

*"...There are some foods that supply energy. One needs to consider the nature of the job when deciding what to eat. Because of the nature of my job, I do go for food like swallow (solid), bread, yam, etc. I cannot go to a canteen now and purchase rice; it won't be up to two hours before I digest everything. And that is why I take swallow in the afternoon (mechanic, age 41, male, live with family, distance commuted 2.5km)."*

According to this participant, food such as rice is not substantial enough to sustain his physically demanding work, whereas swallow is. These requirements for their work practices influence their food practices and what category of vendors they seek to obtain their food from. Some of these consumers take snacks and drinks from processed food vendors in the afternoon, while some other processed foods, such as fried buns, beans, and cake, are sought in the morning. However, most consumers view processed foods as just snacks for refreshment and not as real foods.

*"... Most times, when I have eaten solid food, I could still eat snacks just as refreshments at the same time," (hairstresser, age 43, female, live with family, distance commuted 2km).*

In the morning, some consumers avoid some food items because of the kind of work they do. They believe that such food when eaten in the morning will make them feel heavy and even sleepy at work. These are swallow (solid) foods such as amala, eba, fufu, and pounded yam. Most office workers and students avoid such foods in the morning as it may prevent them from working effectively. Instead, they go for foods like rice and beans.

Consumers who commute every day to work prefer snacks because these are convenient when eaten inside a moving vehicle or when taken home. They indicated that they prefer snacks to keep their stomach at ease until they have access to their main traditional meal. Another category of respondents has daily mobility engagements because they work at multiple locations during the day. They travel from one location to another and reported that they eat at any location when they are hungry. This group of consumers mostly engages with mobile food vendors or with food vendors who are close to where they work at that particular time. This category of out-of-home consumers doesn't have specific food vendors they buy from, unlike other out-of-home consumers.

*"...I don't stay in one place, I move around to work, so I eat anywhere I find food when I am hungry," (driver, age 36, male, live with family, distance commuted 8.5km).*

*"...I am into house interior decoration. I do most of my work at the client's place, that is why I can say the nature of my work is mobile, this in a way makes me eat outside the home," (house decorator, age 29, female, live with family, distance commuted 7km).*

Fruits and vegetables are consumed by few consumers in relatively small quantities because they are considered very expensive food that only a few can afford. Even the few who do buy fruits and vegetables don't see them as real food as they believe they should be eaten before or after the main meal. Most consumers who buy fruits take them home to eat except some who eat them at the vending point or in their workplace. Some con-

sumers prefer fruits that are already peeled for quick consumption, so they don't waste time peeling them.

*"...I preferred they peel the oranges, pawpaw, pineapple and watermelon already to save me the stress of having to do that at home," (civil servant, age 40, female, live with family, distance commuted 4km).*

However, some consumers are concerned that they cannot guarantee the hygiene of the process if the fruit is already peeled.

Concerning the period of the day food is consumed in the food outlet, some consumers reported that they don't have time to prepare food, so they eat most of their meals from the food vendors.

Some said that they eat all their daily food from food vendors while some only eat breakfast and lunch out as they take their dinner at home. From the results of quantitative analysis, eating out all daily meals, breakfast and lunch were found to be significant and have a positive relationship with the frequency of out-of-home food consumption (see Table 2.5).

### **2.5.5 Interconnections between convenience and taste in informal ready-to-eat food vending practices**

The in-depth qualitative inquiry revealed that out-of-home food consumption forms part of the daily food practices of low-income workers. This is due to their perceived need to achieve convenience in the context of their harried working lives, which limits their ability to cook at home hassle-free. As discussed above, the majority of interviewees highlighted the role of IRFV as enabling them to avoid the stress of cooking after a hectic working day. The majority of the consumers agreed that it is particularly convenient to eat out in the morning before going to work because this facilitates minimizing stress during the morning rush to work. Cooking food in the morning demands energy and time, which interferes with their mobility requirements and may lead to delays. Most of the consumers consider street foods delicious and they prefer to engage with food vendors whose food tastes well. Most consumers recognize the taste of the food sold by their preferred food vendors and therefore they want to return to them. Participant observation at the food vending outlets highlighted the function and role of vending outlets also as social hubs and places of interaction where many customers chatted with vendors and customers as friends, often hanging around the stands to engage in conversation. This attests to the important social role of the vending outlets in neighborhoods, something which has been reported in previous work (Isaacs, 2014; Caramaschi, 2016; Stutter, 2017; Panicker and Priya, 2020).

*“.....I come here to eat food, more so, some of my friends come here too, at times we hang out here to discuss politics and football. Even at times, we discuss our personal lives jokingly, for instance, our relationships with our girlfriends, laugh!!!!!!!, (motor-bike repairer, age 25, male, live alone, distance commuted 2km).”*

Some consumers even consider themselves being locked into the practice of out-of-home food consumption because they don't have another option due to their daily work and domestic practice arrangements. Some respondents indicated that eating outside is not always their preference and they only engage in it when they are out of time or in the afternoon, but most times they eat breakfast and dinner at home. For example, the following participant stressed that she felt out-of-home food would never meet the nutritional value and satisfaction levels of food cooked at home:

*“.....Although eating out is convenient and always available for consumption, it can never satisfy like food cooked at home, (trader, age 46, female, live with family, distance commuted 5km).”*

Many interviewees expressed coping with this by choosing to stick to one particular vendor as their regular provider of meals, which they feel they can trust based on past experience to provide healthier, safer food compared to vendors they have less experience with.

*“.....Why I love to patronize the person I have been buying food from regularly is because if I have any complaint, I can easily trace the person and comfortably lodge my complaint. I only buy food from this woman here” (barber, age 31, male, live alone, distance commuted 4.5km).*

### 2.5.6 Packaging and informal ready-to-eat food vending

It used to be common for consumers to go to a food outlet to sit and eat their food there. However, over time, more opportunities became available for consumers to take their food to their workplace or their home and consume it there so that the practices of eating at the vendors and taking food away coexist today. Different materials are used to package food for customers who do not want to eat their food in the food vending outlet. For instance, cellophane bags and foil are used to package food, and some consumers reported bringing their plates to avoid having to pay extra for the packaging material. This suggests that consumers are taking up some of the storage practices of vendors. For example, Simopoulos and Bhat (2000) found that street food vendors used old jars and bottles, cane baskets, newspapers, and polythene pouches to serve food for take-away. The interview discussions revealed that feelings of time availability and the degree of busyness were important factors for determining whether or not a consumer sits at a food vending outlet to eat their food. Again, work practices and contexts are key here.

Some consumers are very busy, and they prefer to quickly buy their food and eat it on the go or take it back to their workplace. Many expressed that they eat and work at the same time, and in this sense, out-of-home convenience food enables them to cope with the harried contexts of their daily lives. For processed foods, the most common practice is for consumers to buy and take it along or start to eat along the way as there is often no provision to sit and eat in the processed food vending outlets.

### 2.5.7 Daily life's practices: synergies between food vending and out-of-home consumption practices

Practice theory perspective in the study allows us to analyze how urban poor consumers lock into out-of-home food consumption practices lies in specific temporal arrangements and interconnections between practices in daily life. It is in the arrangement of practices in daily life in specific temporally organized configurations between work, mobility, and domestic engagements that food consumption occurs. As the preceding discussion illustrates, IRFV and consumption practices are embedded in the broader range of practices that together constitute consumers' daily lives. Of particular interest in modernizing urbanizing contexts are practices related to mobility, work, and domestic life. Building on the sections above, this section delves deeper into the relationship between these practices and IRFV practices.

#### 2.5.7.1 Mobility practices

As the in-depth inquiry revealed, consumers engage in different daily activities, chiefly driven by their working arrangements that let them become dependent on or locked into the daily consumption of street foods. It was further indicated above that although some consumers eat from home before going to work, the majority of them take their breakfast, lunch, and sometimes even dinner from food vendors regularly. This as well concurs with our regression analysis where eating all daily meals, breakfast, and lunch are positive and significantly influence eating out-of-home on a regular basis. Delving deeper into this, we found that most consumers do not live close to the place where they work, which means they have to travel some distance every day (Dubowitz et al., 2015; Ghosh-Dastidar et al., 2017). This is challenging in an urban area with a large population and a complex transportation system such as Ibadan.

*".....My house to my workplace is very far, if I come to work like this [at 5 or 6 am], I don't reach home again until 8 p.m. in the night, and by that time, I am very tired. The distance from home to the workplace is far, that is where I could afford [to live], that coupled with traffic means I can't eat home often (filling station attendant, age 34, female, live with family, distance commuted 8.5km)."*

The city's high population density, shaped by patterns of rural-to-urban migration and an increasing population of low-income workers (Adelekan, 2016), is leading to traffic con-

gestion, particularly in the mornings and evenings. People travel either by foot, bike, or car and have to spend a large amount of time on the road. Most consumers leave their homes as early as 5:30 am or 6:30 am, depending on the nature of their jobs and the expected traffic on the road. For some, particularly transport workers, their jobs demand that they be at work as early as 6 am and sometimes even earlier. Therefore, when they are in their workplace, they engage with the services of food vendors, mostly for their breakfast and lunch. Often, people have to stay for a long time either at the motor park or along the road to wait for transport to their workplace or to their home. During these periods of waiting, they may engage with the services of food vendors, as they are not sure when they will arrive at their destination. As these mobility, work, and out-of-home food vending and consumption practices hang together, their dynamics cannot be understood independently from each other. There are mobile workers who, by the virtue of the nature of their jobs, move around to different work locations almost every week, and most times the work locations are far from their homes. This category of workers depends majorly on the services of food vendors following the account of one participant:

*“.....my job does not allow me to stay in one work location for too long. I work on different sites almost every week, and these locations at times are not close to my house. I need to travel some distance before getting there” (bricklayer, age 44, male, live with family, distance commuted 3 km).*

#### 2.5.7.2 Consumer’s workplace and domestic practices

As the preceding discussion indicates, most out-of-home food consumers engage in different kinds of jobs that keep them away from home until the evening or night. Moreover, temporal and spatial demands and conditions of their work produce daily domestic arrangements in which they are afforded little time and space to engage in at-home food preparation and consumption.

*“.....I am a trader. I come to the shop early to meet the demands of early morning customers who want to buy children’s school materials from me, so I don’t have time to prepare my morning food because of this” (trader, age 47, female, live with family, distance commuted 3 km).*

At times, they prefer buying food out of home because when they come home from work, they are too tired to start preparing food as it will take some time before a meal is ready.

*“.....I eat at least twice regularly outside the home due to the nature of my business. Whenever I’m at work, my breakfast and lunch are to be eaten out-of-home” (trader, age 51, male, live with family, distance commuted 3.5 km).*

This category of consumers takes snacks as their “lunch,” even though they claim this is not a real meal to them. The study found two types of workplace environments that interrelate differently with food vending: the formal and the informal workplace. On the other hand, the kinds of food vending outlets in the formal workplace environment are more standard because they are more organized, a bit expensive, and neater compared to what is obtainable in the informal food vending outlets’ environment.

There are also some activities that take the time of out-of-home consumers, apart from food provisioning. Some consumers indicate that in the morning they have to do the necessary household chores, prepare children for school, clean the house, and therefore lack the time to also include food provisioning and preparation as these constitute part of their domestic work on a daily basis. Otherwise, they feel that they cannot effectively juggle competing domestic and work practices and arrive on time for work. So, to be able to leave home on time, they engage the services of food vendors to meet their food needs.

*“.....As for household chores, which include sweeping, washing plates, preparing children for school and homework – these are done early in the morning and I must still go to work, so I find it difficult combining early morning food preparation with them” (trader, age 41, female, lives with family, distance commuted 2.5 km).*

In addition to temporal constraints associated with working conditions, some of the participants reported living in conditions without full access to kitchen facilities, which is common among low-income young adults living in the city and migrants. The category of people live in just one room apartment and at times they may be up to 2 to 4 occupants living in one room, hence no space for activities like food preparation. Some respondents reported that getting their own personal accommodation is a difficult task as they don’t have enough money to do that, they are just managing with friends. Reflecting wider patterns of rural to urban migration in Nigeria and other Global South contexts (Pendleton et al., 2014; Adelekan, 2016; Nickanor et al., 2016), recent migrants coming to Ibadan from rural locations were particularly constrained in terms of access to accommodation, tending to rely on friends for housing allowing them to work and earn their income. This negatively constrained their ability to cook at home and instead forced them to rely on out-of-home food. More so, our quantitative results revealed that consumers who live with their family members still patronize food vending outlets frequently. This boils down to the issue of people living in a family or friend’s house temporarily, and they don’t have full access to the cooking facilities:

*“.....I hardly cook food at home because I am presently staying with someone, I don’t have an apartment of my own” (apprentice, age 27, male, lives alone, distance commuted 4 km).*



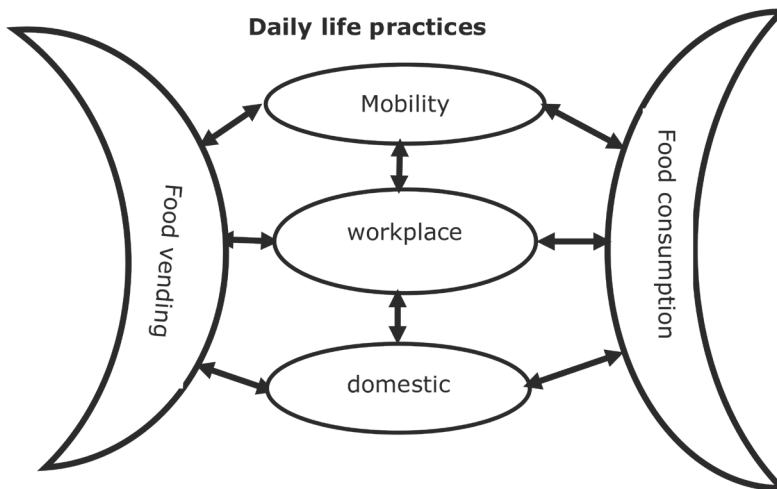
## 2.6 DISCUSSION

This paper argues that while insights from nutrition perspectives and economic aggregation studies of out-of-home food consumption in Global South contexts exist, sociological work in this area remains relatively under-represented. Specifically, the interrelations between out-of-home food consumption and food vending practices in the context of the daily lives of urban dwellers are still under-explored. Seeking to begin to address this gap, this paper has sought to advance insights into the social dynamics of out-of-home food consumption in relation to urban poor daily lives. In doing so, we employed a practice theoretical lens and extended work on practice arrangement bundles from Global North contexts to analyze out-of-home food consumption practices and their embeddedness in daily lives and systems of provision in Global South settings.

Specifically, the analysis in this paper has explored how consumption practices of the poor are embedded within and entangled with other daily practices, practice arrangement bundles, and wider out-of-home food consumption-vending systems of provision. Drawing on the conceptual framework of Spaargaren and Van Vliet on the interconnections between lifestyles and systems of provision, our study reveals interconnections between food system provision and out-of-home consumption practices as embedded in the daily life practices such as mobility, work, and domestic engagement (see Figure 2.3). In the context of urban Ibadan, mobility, work, and domestic practices are bundled in the everyday lives of individuals which interlock with their out-of-home food vending-consumption practices (Figure 2.3).

### 2.6.1 Consumer's socio-economic and out-of-home food consumption

Our study further adds to existing framings by both Giddens (1991) and Spaargaren and Van Vliet (2000) by portraying the importance of socioeconomic positionality of consumers in shaping daily out-of-home food practice dynamics. Focusing on a particular excluded group of consumers, low-income and insecure workers, our findings indicate that their socioeconomic characteristics significantly shape how the intersections of daily life practices and systems of provision play out. The socioeconomic contexts of low-income consumers' lives play an important role in how food is provisioned in urban areas and how food vending services cater to their daily food needs. Our study revealed the particularly important and structuring role of consumers' work and occupational contexts in patterns and performances of food vending-consumption practices. For instance, people with informal jobs take most of their daily meals from food vendors on a regular basis because the nature of their job gives them no time to prepare their food at home. This is in contrast to consumers with a formal, more secure, and higher paying job who have the possibility to better plan their daily schedules and manage to prepare at least one or two meals a day for themselves at home. Resonating with findings by others (e.g.



**Figure 2.3** Interconnections of practices embedded in urban food practices.

Hill et al., 2016), the study further found that the most reliant food vending-consumers often need to juggle multiple low-income jobs to make a living. This study suggests that the work context of lower-income workers results in configurations of daily lives that lock consumers into out-of-home food consumption. Our quantitative findings reveal key socio-economic factors that play an important role in the daily food consumption of the urban poor. The occupation of the urban poor is crucial for what they eat, when they eat, and where they eat. Even though some socio-economic factors are not statistically significant, their directional relationships with out-of-home food consumption practices are positive. This implies that these socio-economic factors still play a role as was revealed in our qualitative analysis. Consequently, our mapping reveals that these food outlets are very important to food security in low-income food environments. Observations during the mapping method revealed that various food outlets are located on strategic points close to consumers' workplaces. Therefore, low-income consumers find it convenient to engage the services of these food vendors because the specific temporal configuration and arrangement of practices making up their daily lives create conditions in which it is difficult for them to engage in food preparation and consumption at home. Consumers' discussions about their daily lives revealed a dynamic interaction of the demands of their working practices, domestic and caring responsibilities, living location, and daily mobility practices combined to influence their daily out-of-home food consumption. In light of this, consumers stressed they are aware that food vendors are accessible near strategic points sited close to their workplaces, so they do not need to worry about their access to food. Even before the food is ready in the morning, some consumers are already on standby waiting to buy food. In the meantime, they engage in social interactions discussing politics, football, etc. This illustrates that food consumption practices are changing from home-based to out-of-home particularly among this low-socioeconomic group of

consumers. This means that policies and interventions should also be focused on this change and search for opportunities to improve the provision of diverse and healthier food.

The study further suggests that these dynamics concerning the structuring role of work intersect with other social differences, such as household situations and composition. Urban areas are becoming overpopulated as a result of rural-urban migration, so housing facilities are limited in rapidly expanding cities such as Ibadan. The majority of these migrants are poor and lack proper housing arrangements because they don't have the resources to secure accommodation. Most of the time, the houses that poor people can afford are located far from where they work and may not have kitchen and cooking facilities as they often live in rooms with many others. These wider political economic, urbanization, and spatial restructuring contexts have a huge impact on the emerging lock-in of many urban poor consumers to out-of-home food vending-consumption practices as it leads to a larger likelihood of depending on IRFV.

### 2.6.2 Daily life's practices and ready-to-eat foods

This study found that out-of-home food consumption practices are influenced by the daily practices of consumers. Practices in everyday life interlock with the degree of frequency and dependency consumers have on IRFV practices for their daily nutritional needs as well as the kinds of food they choose to eat. This implies that the contexts of urban dwellers' daily engagements and daily life practices change in line with broader dynamics in urbanization and associated work and family dynamics. Food vending outlets have expanded to meet their changing daily needs. In light of these dynamics, the urban food system research and policy should also focus on the food vending sector and recognize its strategic position to see how it can be repositioned to better service the poor in terms of food security and nutritional health. This aligns with the findings of Mattioni et al. (2020) that individuals have complex practices around food that contribute to shape out-of-home food consumption practices. Having access to different kinds and forms of foods in the urban environment enables consumers to survive and cope with their everyday actions in the context of harried and demanding jobs. Previous research has indicated that food vendors actively engage with these routinized everyday actions and try to supply food that fits their demand (Adeosun et al., 2022). Food vendors have knowledge about the intersections between the consumers' daily engagements and the kinds of food they prefer, therefore, they take this into consideration in the selection of their menu-settings. Their understanding of consumer daily life's practices not only influences the food items provisioned but also the time when and the forms in which the food is provisioned (see Adeosun et al., 2022). These daily life's practices and their intersections with systems of provision should be incorporated into the urban food system framework and taken into consideration when addressing food security. People in cities engage in

multiple practices in their everyday life, and the dynamics in time and space shape their daily performances, including the out-of-home food consumption practices of the urban poor. Traditional food vending is most popular among out-of-home consumers to secure their main meal because it allows them to participate in the demanding practices constituting their daily lives. Thus traditional food vending seems to fit better into the food system and food security framework of urban Nigeria compared with other food vending categories. This resonates with the findings of Mattioni et al. (2020) that traditional food outlets such as the *Feria* have played an important role in keeping alive certain aspects of a balanced diet in Costa Rica. On the other hand, fruits and vegetables are patronized less because only a few can afford them while they are also not really seen as a meal but mostly a way to aid digestion.

Most consumers perceive street foods as very convenient because they are always available. They can be bought without stress and do not require physically partaking in their provisioning. Packaging also attracts consumers to IRFV because they can take the food with them. The consumers know the food vendors who always provide tasty foods, and they go there to regularly buy their food. These demand elements are embedded in street foods and continue to strengthen the social relationships between food vendors and consumers. Since convenience and taste are important elements in consumer demand, food vendors can build on these to increase their sales. These demand elements on food vending practices co-evolve with the practices of food vendors, which can be harnessed to develop healthier and more diverse food products for customers.

This study showed that people have urban daily life's practices that shape their out-of-home food consumption practices, particularly through mobility, work, and domestic practices. The findings reveal that these daily practices influence urban dwellers' out-of-home food consumption practices. These findings build on Castelo et al. (2021)'s call that single practices like eating need to be understood as being embedded in daily routines and connected to other practices that constitute arrangements of practices. Daily life's practices are linking different practices together that interplay with food demand and provisioning in urban areas. This means that the balance in the diets of out-of-home consumers depends on the kind and number of food items the food vendor is able to provision.

## 2.7 CONCLUSION

This study highlights the embeddedness of informal ready-to-eat food vending-consumption practices in systems of provision and in daily life practice arrangements of low-income urban dwellers in Ibadan, Nigeria. The informal nature of their jobs was a prominent

factor that propels the expansion of out-of-home food consumption practices as well as the food vending outlets supporting them. Food outlets are often situated close to the workplace for easy accessibility. Work, mobility, and domestic practices are critical daily life actions that interfere with the urban food supply system. These interconnecting daily life practices influence how, when, what, and where people consume their daily foods. The food vending sector fills an important gap in accommodating food needs among this group. Previous research has explored how changing temporal and practice arrangements in daily life have shaped consumption practices of various kinds in different Global North settings. However, such insights regarding wider transformations in daily practices and food consumption in the Global South have not been studied adequately through a social practice framework. These findings relating to the importance of understanding the wider daily life dynamics of the urban poor in shaping their food consumption practices may be similar to other contexts, particularly in sub-Saharan Africa with their similar socio-economic orientations and demographic characteristics. However, further work is needed to understand the intersections between transforming everyday lives and consumption in Global South settings. This work can help to offer more critical insights into the ways in which urban lives and the globalizing political-economic dynamics underpinning them are locking urban poor consumers into certain consumption practice trajectories. Our study showed that to serve the urban poor better in terms of providing daily meals that contain the necessary nutrients for a balanced diet, the food vending sector needs to be better aligned with the daily lives of these urban poor to serve them meals with balanced diets. It may be difficult in developing countries to directly influence the everyday lives of the poor, but the food vending sector may be steered more easily through interventions to improve the food provisioned. This may require further training and education on the importance of providing diverse and healthy meals.

This study showed that food consumption is not a singular practice but is interconnected with arrays of different practices that have an influence on how food consumption is shaped in the wider urban food environment. Building on a body of work that explores bundles and complexes of interconnected practices as the site of social life, a social practice perspective provides a useful framework to understand these interconnections in relation to out-of-home food consumption. Providing insights into how food consumption interacts with broader urban daily lives can help to inform and identify opportunities for (policy) interventions aimed at improving informal ready-to-eat food vending-consumption practices towards more healthy and sustainable food consumption among the urban poor. The intersections between daily life practices and out-of-home food consumption should be taken into consideration in the food system framework as well as in food policy implementation and application. This study is limited as it only covered a small number of food vending outlets in selected low-income urban areas of Ibadan. Also, some consumers had limited time available to be interviewed after having their meal, as

they wanted to return to their workplace immediately. Further research is needed that explores how interconnecting practices in daily life influence the food consumption practices of low-income groups as well as other socio-economic groups in Nigeria and other contexts in the Global South.





# CHAPTER 3

## **INFORMAL READY-TO-EAT FOOD VENDING: A SOCIAL PRACTICE PERSPECTIVE ON URBAN FOOD PROVISIONING IN NIGERIA**

This chapter has been published as Adeosun, K. P., Greene, M., & Oosterveer, P. (2022). Informal ready-to-eat food vending: a social practice perspective on urban food provisioning in Nigeria. *Food Security*, 14(3), 763-780.



## ABSTRACT

The way people access food in Nigeria is of central relevance for food security, health, and sustainability. One key trend is the shift from household-based to primarily out-of-home food consumption as an increasing majority of the urban poor derive their daily nutrient intake from street foods. However, few studies have yet explored the role of the ready-to-eat food vending sector in urban food systems and the diets of the urban poor. This paper investigates the interrelations between these practices and the diversity of food groups provisioned among the urban poor in developing city contexts. A social practice approach is employed to explore differentiation among informal ready-to-eat food vending practices in the city of Ibadan, Nigeria, in terms of their daily activities, competencies, and resources. Applied methods include GIS mapping, food log diaries, in-depth interviews, and participant observation to map and classify informal ready-to-eat food vending practices according to the nature of food provisioned and explore the everyday performances of different informal ready-to-eat food vending practice initiatives and their relation to dietary diversity. The results reveal three key categories among these practices: traditional, processed, and unprocessed - with varying levels of diversity in the food groups on offer. Traditional food vendors offer more diversified food compared to processed food vendors and unprocessed food vendors. The results reveal that material infrastructure, cooking bargaining and purchasing skills, and nutritional knowledge are key to the diversity of food groups provisioned. The paper concludes by considering the wider relevance of these findings for urban food science and policy.

### 3.1 INTRODUCTION

In urban settings in sub-Saharan Africa, in everyday life, food is increasingly consumed out-of-home (Njaya, 2014; Mbah and Olabisi, 2015; Githiri et al., 2016; Hill et al., 2016; Swai, 2019; Tawodzera, 2019; Kolady et al., 2020; Wegerif, 2020). Recent studies (Esohe, 2012; Ogundari et al., 2015; Mbah and Olabisi, 2015; Resnick et al., 2019) have shown that nowadays informal ready-to-eat food vending practices (IRFV) constitute the most commonly used food provisioning system in Nigeria, especially among the urban poor, who, due to hostile living and working conditions, are often unable to prepare their food at home. IRFV provides ready-to-eat foods and beverages sold on the streets and in small shops, motor parks, workplaces, and even around schools (Muyanja et al., 2011; Hill et al., 2016). IRFV provides low-cost and convenient access to food, although often with a low diversity in terms of food groups, while allowing the vendor to make a profit (Story, 2008; Mwangi et al., 2002). Informal ready-to-eat food vendors are not registered with either private organizations or the government (FAO-UN, 2016). Vendors don't have any clear form of coordination, and neither do they pay taxes or levies to the government. In Nigeria, about 51.7% of the urban out-of-home food consumers receive their entire daily food consumption from street food vendors (Mbah and Olabisi, 2015). Thus, for a large number of urban poor, the nutritional value and health of their diets depend on the food provisioned by informal food vendors (FAO, 2015).

Accessing a diverse diet, necessary for a healthy life, is a serious challenge among the urban poor. This has raised concerns among policymakers and development practitioners, especially where food insecurity is prominent (Ahamed et al., 2015). IRFV practices have been identified as critical because of their increasing significance within urban food systems and the generally low diversity of the foods provisioned (Mwangi et al., 2002; Steyn et al., 2014). Research has shown that IRFV does not supply enough diverse foods and thereby contributes to poor diets among the urban poor (Mwangi et al., 2002; Pereira et al., 2005; Larson et al., 2009; Global Panel report, 2017; Tull, 2018). Informal food vendors bridge the gap of inadequate home food provisioning, thereby meeting the food needs of out-of-home consumers. Thus, the nutritional health of out-of-home consumers depends on what food vendors are able to provision.

Due to their expansion and increasing significance, understanding IRFV practices is critical for informing urban food systems development. So far, most studies have taken an economic or nutritional perspective. From an economic perspective, IRFV forms an important source of employment and income generation as well as a contribution to the livelihood of the poor (Chicho-Matenge and Nakisani, 2013; Charma et al., 2015; Petersen and Charman, 2018; Tawodzera, 2019; Resnick et al., 2019). From a nutritional perspec-

tive, IRFV is studied to measure nutritional value and dietary intake among consumers (von Holy, 2006; Namugumya and Muyanja, 2011; Leshi and Leshi, 2017). Further work on informal markets in Nigeria has addressed food safety (Dipeolu et al., 2007; Omemu and Aderoju, 2008; Chukuezi, 2010) in connection with informal food retailing practices (Resnick et al., 2019). However, there has been a paucity of research exploring IRFV from a sociological perspective. As a result, little is known about the contexts in which everyday performances of IRFV are arranged and maintained and how this relates to its nutritional value. This study intends to address this gap. In doing so, it employs a situated social practice theory approach (Shove et al., 2012) to advance understanding of the performance and context of IRFV practices and how they interrelate with the diversity of food groups provisioned within the broader frame of changing food environments. Our focus is on the role of the vendor as a critical actor in these practices.

A mixed methodology is employed to explore IRFV practices, including GIS mapping, food logging, and qualitative inquiry. The case of the Nigerian city of Ibadan is taken because there is evidence that the low diversity of food groups provisioned by IRFV has contributed to weak dietary intake of poor people (Mbah and Olabisi, 2015). Nigeria is the most populated country in Africa, and Ibadan has demographic and spatial arrangements comparable to most other cities on the African continent. Ibadan has the highest land mass among the cities in Nigeria where different sociocultural orientations are represented. Moreover, Ibadan is a prime example of a city with a complex infrastructure and high social dynamics providing the context in which IRFV takes place.

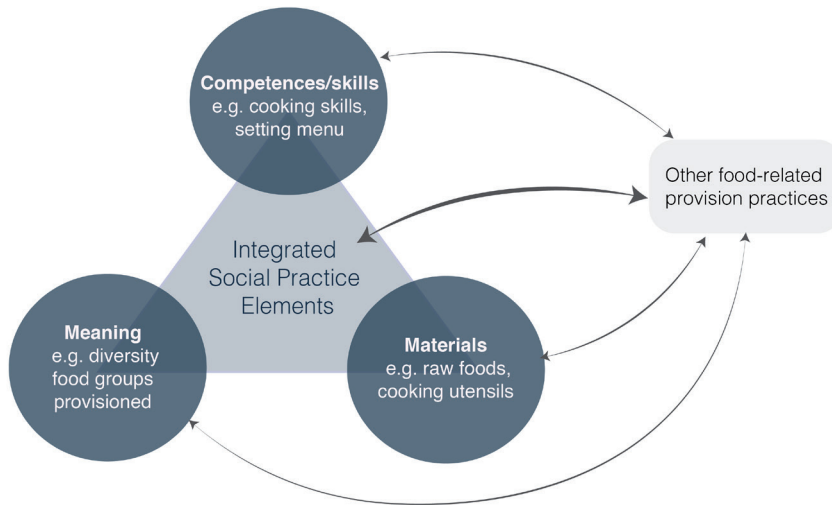
The paper continues after this introduction, with section two, where we introduce the social practice approach as our conceptual framework underpinning the investigation of IRFV. Section three then presents the multi-modal practice-centered methodology. Sections four and five present and discuss the results of this investigation, and we conclude by reflecting on their relevance for future research and policy.

### **3.2 APPLYING SOCIAL PRACTICE THEORY TO STUDY INFORMAL FOOD PROVISIONING**

This study investigates the operations and roles of IRFV in Ibadan. The overarching aim is to advance the debate on the capacity of ready-to-eat food vending-centered food systems to enable access to diverse diets by out-of-home consumers. As outlined, the paper takes a sociological practice-based approach to studying IRFV, drawing on Social Practice Theory (SPT) as a conceptual framework underpinning the investigation. SPT takes recognizable practices as the unit of analysis rather than individuals or social structures (Reckwitz, 2002; Wertheim-Heck and Raneri, 2019). By concentrating on the performative char-

acter of social life, SPT seeks to explore how agency and structural constituents of social life merge and interact in socially recognizable practices, understood as routinized ways of performing social activities that persist and evolve over time. The SPT approach offers a distinct approach to conceptualizing social change, agency, and action that departs from dominant reductionist or behaviorist accounts of action in social sciences. Instead of focusing on individual attitudes, beliefs, values, or behaviors, practices are seen as the fundamental unit of the social world through which social change should be analyzed. The SPT approach allows us to understand and analyze food provisioning practices as it makes up different practice-elements forming a “whole” practice, and the integration of these practice-elements can be studied as competencies/skills, materials, and meanings according to Shove et al. (2012; 2015). Furthermore, practice theory provides an attractive opportunity to study a practice beyond itself in connection with other practices as a bundle of practices. Even though a particular practice can stand on its own, however, sometimes, a practice can connect with other practices for them to generate a consistent and complete meaning. Everyday actions are connected together in an array of practices; this means most times particular practices can be linked together to form a chain of practices that can be studied as bundled practices (Schatzki, 2014; 2016; Blue et al., 2016; Reckwitz, 2017).

SPT invites us to explore social life and change by examining how distinct practices are performed, maintained, and changed over time, as well as how practices connect in a larger bundle of different practices. In recent years, the SPT approach has been employed to analyze food production (food supply) and food consumption practices (Shove et al., 2017; Spaargaren et al., 2012; Welch and Warde, 2015; 2017; Welch and Yates, 2018; Wertheim-Heck and Raneri, 2019). The social practice perspective allows us to understand the embeddedness of elements of practice—competencies/skills, materials, and meanings—within food provisioning practices. Moreover, taking a social practice approach provides a more comprehensive understanding of routine practices (as regards out-of-home food provisioning practices) and the integration of different practice elements that form food provisioning. The study contributes to the body of literature as it holistically dissects food provisioning beyond the view of the combination of practice elements and goes further to examine the wider functions and performances of food provisions within the broader system of food provision. The study joins the body of literature that has employed social practice theory to analyze food provisioning. For instance, Cattivelli and Rusciano (2020) employed social practice to understand the configuration of social innovation in food provisioning. Gobbo et al. (2021) employed social practice to understand whether and how platforms make alternative “good food” more practicable. Likewise, social practice has been employed to understand the role of food safety in everyday food provisioning (Kendall et al., 2016). However, as of yet, little to no research has applied a social practice approach to understand IRFV practices.



**Figure 3.1** Interactions of practice-elements and arrangements bundles in informal ready-to-eat food vending practices.

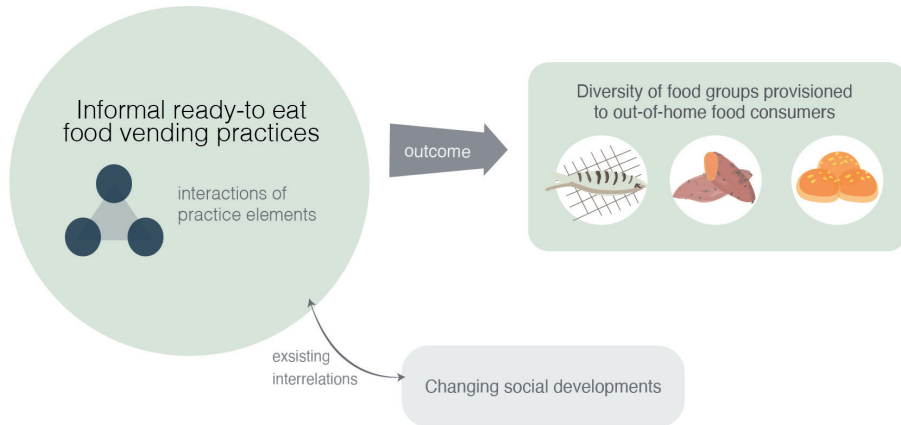
At a very basic level, applying an SPT framework implies conceptualizing IRFV as a distinct social practice that is the outcome of daily performances and undergoes transformations over time. In studying IRFV as a social practice, it is important to recognize that practices can be analyzed at various scales, from the analysis of elements of individual practices to explorations of interconnections and interlinkages between bundles of practices. For this purpose, social practices can be explored by switching between two analytical lenses: a zoomed-in and a zoomed-out perspective (Nicolini, 2012). Using a zoomed-in perspective, practices can be investigated by examining the integration of different practice elements that make up a practice. Shove et al. (2017) define the elements of a practice in terms of the constituent elements of meanings, materials, and competences. Moving away from an analysis of specific practices, a zoomed-out perspective provides the opportunity to investigate a practice beyond its primary scope in its connection with other practices as part of broader bundles of practices. Alternating between a zoomed-in and a zoomed-out perspective enables the researcher to analyze the evolution of specific food provisioning practices, as well as their position within and interactions with practice bundles constituting the dynamic interconnected social system (Nicolini, 2012; Wertheim-Heck, 2015).

In this paper, ready-to-eat food vending is conceptualized as a social practice that integrates different practice elements into an identifiable routinized activity (Shove et al., 2012; 2015). Building on Shove's elemental model of practice elements, this study analyzes ready-to-eat food vending practices as being composed of material objects and environments, as well as socio-cultural meanings and particular skills/competencies and capabilities (Shove et al., 2012; Walker, 2014). In performing IRFV, food vendors integrate and

combine these various elements to produce variant food outcomes; that is, food products with different degrees of healthiness and diversity. This study seeks to analyze the dynamic interactions between the practice elements of different vending practices to better understand the food diversity outcomes. Specifically, different food vending practices are explored in terms of the competences/skills/capabilities (i.e., cooking skills, nutritional knowledge, menu settings, stocking/re-stocking, pattern and frequency of food provisioning, marketing skills, etc.) employed to maintain the food vending practice, materials (i.e., procurement of food items, cooking utensils, storage and preparation space, etc.) needed for their performance, and the meanings attached to different activities and their influence (i.e., diversity of ready-to-eat food groups provisioned, etc.) (Figure 3.1) (Shove et al., 2012; Liu et al., 2016; Dobernig et al., 2016; Wertheim-Heck et al., 2019). Together, these dynamic elements constitute a food vending practice and may produce varying capabilities to deliver diverse and healthy food products.

While this paper focuses on mapping the constituent practice elements of different food vending practices, it also recognizes the embeddedness of the IRFV practices through their interconnections and interactions with other practices in the context of ready-to-eat food in urban Nigeria. The practice of ready-to-eat food vending takes place not in isolation but interconnects, interlinks, co-evolves, and interacts with other (related) food provisioning and everyday life practices. In urban Nigeria, related food provisioning practices include wider agricultural and food supply practices involved in providing raw food ingredients through farming and wholesale markets. Other related practices interacting with IRFV include the wider social transformations that have provided the context for the emergence of IRFV. These include rural-urban migration, changing urban lifestyles associated with working practices and transformations in daily urban commuting mobilities, and administrative and legal arrangements influencing food practices. These social developments interconnect and co-evolve with food vending practices and influence their functioning and performances in a dynamic way (Bhattacharyya, 2001; Swai, 2019; Zhong et al., 2019; Dai et al., 2019).

For instance, rural-urban migration has been associated with significant transitions in food provisioning and consumption practices. Changing demand patterns associated with increases in populations of urban poor consumers have encouraged the expansion of food vending practices as more and more people demand their services (Swai, 2019). These developments have also been influenced by concurrent transformations in the economic organization of urban life; long commuting and working hours, as well as poor household and living conditions among the urban poor, are key elements in the continued expansion of informal ready-to-eat food vending as urban life conditions force many people to eat out (Hill et al., 2016). Out-of-home food vending continues to prosper because many people use this as a coping strategy within their urban lifestyles (Bhat-



**Figure 3.2** Dynamics interactions of food provisions practices within the food environment.

tacharyya, 2001; Ogundari et al., 2015). Changes in consumer demand associated with wider contextual developments interplay with food vending practices as food vendors try to adjust their practices to satisfy particular customer demands.

Figure 3.2 presents the practice-based approach to studying IRFV in which different activities and practices of food vendors (for example, practices relating to food procurement, preparation, marketing, and food presentation) are explored for their influence on the diversity of the food groups provisioned. The number of food groups present in a diet, or in our case, in the food items offered by a food vendor, is an indicator of the nutritional spread of a diet (Mwangi et al., 2002) and is measured by establishing the number of food groups present in a diet, or in our case, in the food items offered by a food vendor. In general, 12 food groups are distinguished: (1) cereals; (2) tubers and roots; (3) legumes; (4) nuts and seeds; (5) vegetables; (6) fruits; (7) meat; (8) eggs; (9) fish; (10) milk; (11) oils and fats; and (12) beverages (Sibhatu and Qaim, 2018; Rammohan et al., 2019). We focus in our research on the functions, performances, and operations involved in IRFV practices and their relationship with the diversity of food groups provisioned, while recognizing the relationship between IRFV practices and wider changing social developments.

### 3.3 MATERIALS AND METHODS

#### 3.3.1 Description of the study area

This research explores dynamics in ready-to-eat vending practices among low-income urban residents in Ibadan, a dynamic city with important social and economic functions. We selected the urban poor because they constitute the majority of the city inhabitants and are most vulnerable in terms of accessing a healthy and balanced diet. Even though

**Table 3.1** Showing the selected LGAs and communities in the study area.

<b>LGAs</b>	Ibadan north west (central)	Lagelu (north 1)	Ido (north 2)	South west
<b>Communities</b>	Ologuneru Eleyele	Akobo Iyana church	Apete Apata	Odo ona Osasimi

some middle-income groups also consume ready-to-eat foods, the majority of the out-of-home consumers belong to the low-income earners, and the reason is that ready-to-eat food is cheap, so with little money, they can buy food. This research builds on previous studies using nutrition and economic perspectives on food consumption in this urban area (Raaijmakers et al., 2018), in order to more explicitly advance insights into the social dynamics of food provisioning. Ibadan, a city experiencing rapid growth through a process of peri-urbanization, has a population of about 4 million (Adelekan, 2016). The city is highly multicultural, bringing together people from different cultures in Nigeria and around the world. Administratively, Ibadan consists of eleven Local Government Areas (LGAs), seven located in the Northern part of the city, three in the Southern part, and one at the boundary between the Northern and Southern parts.

### 3.3.2 Research participants, sampling, and data collection strategies

The informal food vendors included in this study are individuals directly in control of food vending outlets and in operation for at least the past five years. They operate in low-income communities in Ibadan, communities where most people live below the urban poverty line of \$1.90 per day (UNDP, 2004). The sample for this study was selected based on information from the state ministry allowing us to categorize the Local Government Areas (LGAs) in Ibadan. Based on this information, we selected the lowest-income LGAs for further investigation. A preliminary survey was conducted during which community leaders were consulted. They were provided with an information sheet detailing the purpose and expected outcomes of the research, and how their involvement would facilitate its success. To have a good representation of the study area, we selected two LGAs from the Northern part of Ibadan where seven LGAs are located, one LGA from the Southern part of Ibadan where three LGAs are located, and one LGA from Central Ibadan, located at the boundary between the Northern and Southern parts of the city. Thus, in total, four LGAs were selected as the sample area for the study, and within each of them, two poor urban communities were selected as sites for the study (See Table 3.1).

Geographic information System (GIS) was applied to map the location of IRFV-outlets in these communities and establish their spatial distribution in the study area (See Figure 3.3). A research team of four trained assistants moved around to identify and take the coordinates of all IRFV-outlets in the selected communities. Out of about 686 food vending outlets mapped in the selected communities, the study selected 100 food vendors for the qualitative research and food logging activities.



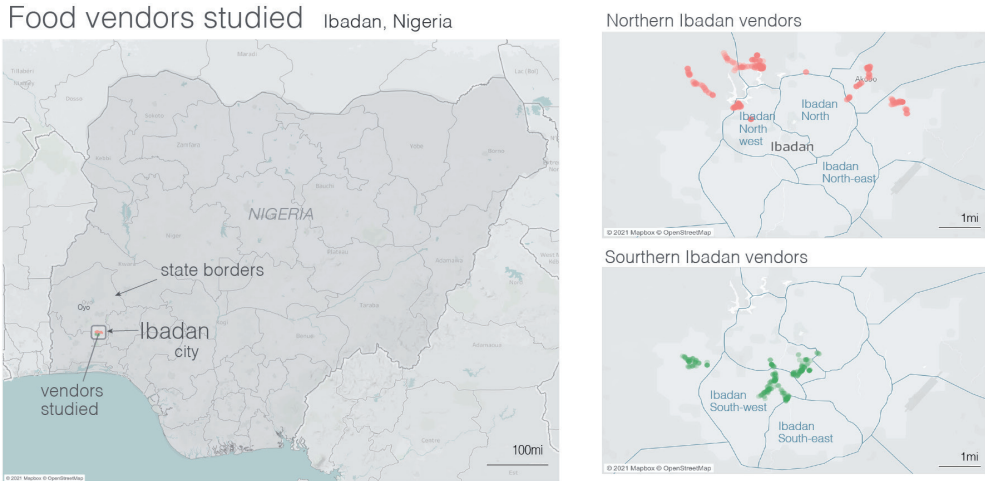


Figure 3.3 GIS mapping of food vending outlet’s locations in Ibadan.

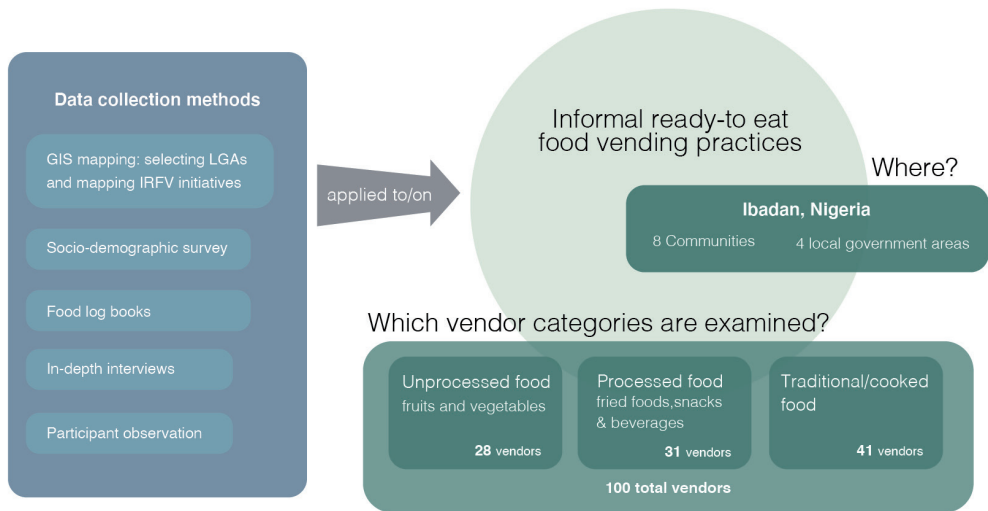


Figure 3.4 Sampling procedure.

Following the GIS mapping, we deployed a stratified sampling strategy to select our respondents, based on the categorization of IRFV using the kinds/forms of foods provisioned (Steyn et al., 2014). The three identified categories are: (1) traditional cooked meals (local foods such as cooked rice, yam, soup, pounded yam, eba, and amala); (2) processed foods (fried foods, snacks, and beverages); and (3) unprocessed foods (fruits and vegetables) (Steyn et al., 2014). In this study, traditional food is referred to as locally made meal, while processed food is mostly snacks and highly processed and fried food. Linkages with food vendors were established mainly through community leaders who are well known in the communities and hold strategic positions. During this process, we generated a list

of all informal ready-to-eat food vending outlets that formed our sample population. The selection criteria included vending category type (we sought a more or less balanced representation across the three categories) (See Figure 3.4) and the readiness of the informal food vendor to participate in the study. 100 respondents across the selected communities from the inventory generated comprised our sample and were invited to participate. The selection was done based on the proportion of food vending categorizations in the selected communities. We found traditional food vending to have the highest number, followed by processed and unprocessed food vending, and on this basis, we selected our respondents. Verbal and written consent was obtained from all respondents prior to their involvement in the study, and respondents were informed that they could discontinue participation at any stage if they wished to.

The research team, composed of four well-trained research officers and the principal researcher, collected data in the period from August to October 2020. Although this study was conducted during the COVID-19 pandemic, at the time of the investigation, all lockdown measures had been lifted, and food vendors were officially allowed to operate. In addition, all COVID-19 precautionary measures were undertaken, such as keeping a 1.5-meter social distance and wearing face masks by the respondents and the interviewers.

Primary data collection included semi-structured interviews, food logs, and passive participant observation (See Figure 3.4). All methods were implemented concurrently and provided complementary insights into the everyday practices of IRFV practitioners. Interviews with respondents were structured to generate insights into informal ready-to-eat food vending while also observing their activities and operations during the interview. Respondents were questioned on their operations, activities, and functions to understand how these related to the diversity of food groups provisioned. Each interview lasted approximately 30 to 45 minutes and was performed at respondents' vending location. Interviews were audio recorded for transcription purposes. Data on situational dynamics that were difficult to collect through interviews were generated through food logs and observations. Data from participant observations were recorded in field notes during and immediately after the interview. The interviews and participant observation data were transcribed and coded using the qualitative data analysis software program Atlas.ti. The analysis followed iterative movements between coding inductively for particular themes and patterns and then reviewing and further categorizing this data according to the social practice theory conceptual framework.

### **3.3.3 Measuring diversity of ready-to-eat food groups provisioned**

In this study, we focused on the food diversity of street food providers rather than the consumers because they determine the composition of the menus available to out-of-home consumers. This means that the choice of a variety of foods on their menu list is

their sole decision, and consumers can only choose from what is available. Street food is very important in the daily diets of Ibadan citizens because this is where the majority of out-of-home consumers arrange their major nutrient intake. As most of the out-of-home consumers have a particular food vendor they eat from, it is important to analyze food groups' diversity at the level of the individual vendor.

Consequently, the details of the diversity of the food groups provisioned and menu settings/stockings were obtained using a food-type logbook within seven (7) days of practice. The measurement of food diversity was based on the 12 different food groups mentioned above, and these were analyzed based on the groupings of ready-to-eat food vending. The Dietary Diversity Score (DDS) measurement was adapted to measure the diversity of food groups provided by food vendors based on "count". The diversity of food groups provisioning was descriptively analyzed based on four discrete categories: lowest diversity = 5 or below; Mid Low diversity = 6; Mid High diversity = 7; and Highest diversity = 8 and above (Pritchard et al., 2019; Rammohan et al., 2019). The indices measure the overview of the diversity of food groups provisioning by the food vendors. Although DDS has been commonly used to measure the diversity of diets using a consumption perspective, this study adapted this tool to measure the diversity of ready-to-eat food groups from a provisioning perspective.

### 3.4 RESULTS

The results of the investigation are presented in two steps. First, an overview is provided of the IRFV initiatives in terms of their categorization based on the degree of diversity of the food groups provisioned. Second, we move to more explicitly unpacking and exploring these categories of IRFV practices according to their constituent practice elements. Drawing on the interview data and participant observations, an analysis is presented of the contexts and performances of IRFV practices and their relation to dietary diversity outcomes.

#### 3.4.1 Profile of informal food vendors

Table 3.2 summarizes the key socio-demographic characteristics of the vendors included. Our sample shows some points of homogeneity, such as age and gender. The majority of people involved in the practice of IRFV are between 34-45 years old. This corresponds with previous findings suggesting the majority of IFV practitioners are young adults (Dipeolu et al., 2007). Furthermore, the vast majority of food vendors are women, ranging from 83.9% to 96.4%. Also, a majority of the food vendors (85.4% of TFVs, 74.2% of PFVs, and 78.6% of UPFVs) listed ready-to-eat food vending as their primary occupation and source of income. Furthermore, most food vendors sell their food from a fixed stationary location, mostly along the streets, with some conducting their business through (semi-) mobile operations, confirming the findings of Simopoulos and Bhat (2000).

**Table 3.2** Socio-economic characteristics of informal food vendors.

Food vendor's characteristic	freq	%	freq	%	freq	%
	Traditional vendors		Processed food vendors		Unprocessed food vendors	
<b>Age</b>						
21 - 33	3	7.3	3	9.7	3	10.7
34 - 45	18	43.9	14	45.2	12	42.9
46 - 58	10	24.4	10	32.3	8	28.6
59 and above	10	24.4	4	12.9	5	17.5
<b>Workers</b>						
<= 1	15	36.6	19	61.3	19	67.9
2 - 4	22	53.7	6	19.4	8	28.6
5 - 8	2	4.9	3	9.7	1	3.6
9 and above	2	4.9	3	9.7	-	-
<b>Food vending experiences</b>						
= 5	3	7.3	7	22.6	6	21.4
6 - 17	18	43.5	17	54.8	13	46.4
18 - 28	14	34.6	5	16.1	5	17.9
29 and above	6	14.6	2	6.5	4	14.3
<b>Sex</b>						
Female	39	95.1	26	83.9	27	96.4
Male	2	4.9	5	16.1	1	3.6
<b>Marital status</b>						
Single	-	-	2	6.5	2	7.1
Married	36	87.8	25	80.6	23	82.1
Widow	5	12.2	4	12.9	3	10.7
<b>Occupation</b>						
Primary	35	85.4	23	74.2	22	78.6
secondary	6	14.6	8	25.8	6	21.4
<b>Education</b>						
No formal education	1	2.4	3	9.7	6	21.4
Primary	6	14.6	7	22.6	9	32.1
Secondary	26	63.5	9	29.0	10	35.7
Tertiary	8	19.5	12	38.7	3	10.7
<b>Type of food vendor</b>						
Mobile	-	-	2	6.5	-	-
Stationary	36	87.8	26	83.9	20	71.4
Semi-mobile	5	12.2	3	9.7	8	28.6
<b>Period of provisioning</b>						
Morning	5	12.2	2	6.5	-	-
Whole day	24	58.5	15	48.4	25	89.3
Morning and afternoon	9	22.0	8	25.8	-	-
Afternoon and evening	3	7.3	4	12.9	3	10.7
Morning and evening	-	-	2	6.5	-	-
<b>Location</b>						
Along the road	11	26.8	15	48.4	19	67.9
Market square	4	9.8	1	3.2	1	3.6
Along the street	25	61.0	13	41.9	8	28.6
Motor park	1	2.4	1	3.2	-	-
Work place	-	-	1	3.2	-	-
<b>Total</b>	<b>41</b>	<b>100</b>	<b>31</b>	<b>100</b>	<b>28</b>	<b>100</b>

### 3.4.2 Diversity and health of food groups provisioned

In order to map the dietary diversity outcomes across the three key categories of IRFV practices, that is traditional, processed, and unprocessed food vendors, as an indicator of the health of their food on offer, we established the number of different food groups provisioned by the vendors. The food-type-log-books maintained over a period of seven days of practice generated data on the diversity of the food groups.

### 3.4.3 Diversity classification of food groups provisioned by food vending practices

The Dietary Diversity Score (DDS) is commonly used to measure the diversity of diets from a consumer perspective, but in this study, we adapted this tool to measure the diversity of ready-to-eat food groups from a provider perspective. Considering the high dependence of out-of-home consumers on informal food vendors for supplying their dietary needs, the number of food groups forms a useful indicator of their average dietary intake. The DDS was calculated by counting the number of food groups provided by the food vendors.

Table 3.3 presents the DDS for the different categories of food vendors. Our findings indicate that the different categories of IRFV provide diverse food groups in varying numbers and mixtures. The table shows that 31.71% of the (41) traditional IRFV provisioned seven food groups compared with only 9.68% of the (31) processed IRFV. The largest group of the processed IRFVs (29.04%) provisioned five food groups, whereas the largest share of the (28) unprocessed IRFVs (46.43%) provisioned only one food group. Overall, 77.42% of the processed and all unprocessed IRFVs were classified with low DDS (below 5 food groups). In contrast, only 7.32% of the traditional IRFVs scored low, while 78.05% scored high DDS (7 or more food groups). These findings indicate that, in general, traditional IRFVs provisioned the largest number of food groups by far and thus provide meals with the largest food diversity.

### 3.4.4 Health classification of food groups provisioned by food vending practices

Besides their diversity, the food groups were also classified into healthy, neutral and unhealthy. Following the classification of the High Level of Expert Panel on food and nutrition (HLPE, 2017), vendors were scored based on the nature and types of food items provisioned from each food group. From the twelve food groups in total, seven are considered healthy, three neutral and two unhealthy (See Table 3.4)

Table 3.5 presents the food vendors in the different categories providing the different healthy, neutral and unhealthy food groups. Traditional IRFV provision predominantly

**Table 3.3** Diversity of food groups provisioned by ready-to-eat food vendors.

Traditional meal vendor			Processed food vendor			Unprocessed food vendor		
Food groups provisioned (count)	freq	% of traditional meal vendor	Food groups provisioned (count)	freq	% of processed food vendor	Food groups provisioned (count)	freq	% of unprocessed food vendor
5	3	7.32	1	1	3.23	1	13	46.43
6	6	14.63	2	2	6.45	2	10	35.71
7	13	31.71	3	6	19.35	3	5	17.86
8	7	17.07	4	6	19.35			
9	4	9.76	5	9	29.04			
10	5	12.20	6	2	6.45			
11	3	7.32	7	3	9.68			
			8	2	6.45			
<b>Total</b>	<b>41</b>	<b>100</b>		<b>31</b>	<b>100</b>		<b>28</b>	<b>100</b>

Explanation: This analysis is based on the 12 food groups identified in the literature (Sibhatu and Qaim, 2018; Rammohan *et al.*, 2019): cereals, roots and tubers, beans and legumes, nuts and seeds, fruits, meat, fish, oil and fats, milk, beverages, eggs, vegetables.

**Table 3.4** Showing classifications of food groups provisioned based on healthy, neutral and unhealthy foods.

Healthy food groups	Neutral food groups	Unhealthy food groups
beans and legumes	cereals	meat
fish	tubers and roots	oil and fats
eggs	beverages	
fruits		
vegetables		
milk		
nuts and seeds		

beans and legumes, fish and eggs as health food groups, cereals and tubers and roots as neutral foods, and meat and oil and fats as unhealthy foods. Processed IRFVs provisioned predominantly fish and eggs as healthy foods, cereals as neutral food and oil and fats as unhealthy food groups. Unprocessed IRFVs provisioned predominantly fruits and vegetables, and also nuts, as healthy foods, and no neutral or unhealthy foods. Among the traditional IRFVs the highest number of food vendors provisioning healthy food groups can be found.

### 3.4.5 Exploring dynamic elements of food provisioning practices

Drawing primarily on qualitative interviews and participant observations, this section examines the context, performance, and situated dynamics of different IRFV practices in Ibadan.

Table 3.5 showing the percentage of food vendors provisioning healthy, neutral and unhealthy foods.

Category of food vendors	Healthy foods						Neutral foods						Unhealthy foods					
	Beans and legumes	Fish	Eggs	Fruits	Vegetables	Milk	Nut and seeds	Cereals	Tubers and roots	beverages	Meat	Oil and fats	Freq	%	Freq	%	Freq	%
TFV (n=41)	34	34	28	21	24	Nil	1	36	32	6	41	41	100	41	100	41	100	
PFV (n=31)	9	17	19	6	3	6	9	26	7	5	7	26	83.8	7	22.6	26	83.9	
UPFV(n=28)				28	100	100	12											

### 3.4.5.1 Relevance and informality of ready-to-eat food vending practices

Overall, the study confirms previous findings on the centrality and relevance of street food (Tawodzera, 2019; Swai, 2019) in the daily diet of Ibadan citizens, particularly among the urban poor. Food vendors indicate that they have a consistent and regular consumer base and suggest that, for many of their clients, this is where they derive the majority of their daily nutrient intake. Most of the out-of-home consumers have a particular food vendor from whom they regularly buy their food, confirming the importance of analyzing food group diversity at the level of food vendors.

Informality in ready-to-eat food vending cuts across the different elements of food vending activities, from arrangements with customers to choices concerning the kind of food they provide, to wider legislative contexts and relationships with public authorities. No formal regulations guide the interactions and interrelations between food vendors and their customers, nor the food provisioned. Informal food vendors do not register with the authorities and do not pay taxes, so they do not have to follow a set of formal legislative or administrative rules guiding their operations.

The majority of the food vendors regard their food vending operation as their main job and chief source of income. This influences their commitment and involvement in food vending, as well as the level of competence and skill they feel they embody.

*“This is the job I have been doing from the beginning of my life, and because of my long experience, I know the kinds of foods my customers want, thus I cook mainly what interests my customers (TFV 1, age 48).”*

For traditional food vendors in particular, increased experience leads them to provision more common food items, although not necessarily more diverse, as the food items provisioned may still be from a particular food group. For instance, a traditional IRFV may cook different products based on cassava, which does not mean more dietary diversity. However, these are common foods that people prefer to eat in that food environment. In this respect, experience gained from continuous practice, as well as interacting with consumers requesting additional food products, were reported as key factors influencing the expansion of the types of food provisioned.

The vending activities are embedded in the wider family lives of the food vendors; most of the respondents received support from members of their family (Simopoulos and Bhat, 2000). On the other hand, families also benefit, as was shown among traditional food vendors, where the majority of their children received their daily meal from what was provisioned at the vending operation. This may likely influence the diversity of food groups provisioned; some vendors also aim to supply the required nutrient intake of their



children directly or indirectly through the food they provide, and for some, this increases the likelihood that they are concerned with improving the diversity of the food groups provisioned. However, most traditional IRFVs provisioned the kinds of foods their customers prefer, so their families also have to eat these.

#### 3.4.5.2 Application and transmissions of skills and competences

Key differences between the categories of IRFVs exist in terms of the types of skills and competences needed to sustain their operations. Traditional food vending requires more skills and competences when compared with processed and unprocessed food vending. Traditional food vending includes more food groups in their menus, allowing customers more choice. This difference in skills and competences has implications for the differences between IRFV types in terms of pathways of recruitment, training, and learning.

Most traditional IRFV reported being recruited into the practice through informal learning processes within the family. Many had a mother, aunt, or sister already engaged in the practice and, through observing, social learning, and participating whenever the practice was being performed, they became increasingly acquainted with the practice. Most traditional IRFV respondents view the transmission of food vending skills and competences as guided by generational connections, in the sense that the practice is being transferred from one generation to another within the (nuclear or extended) family.

*"...I was informed by the practice from my mother as I usually participated in the activities. I usually observed my mother doing the activities (TFV 5, age 40)."*

Still, some traditional food vendors acquired the necessary skills through apprenticeship by being a support worker. When they have learned the necessary skills and competencies, they start their own independent IRFV themselves. In the case of processed IRFV, socialization and recruitment through family ties were less common, and instead, many entered the practice based on what they had learned about food preparation in school. In comparison with traditional IRFV, unprocessed IRFV requires fewer competences and transfer of skills, thus enabling easier and faster recruitment. Unprocessed IRFV essentially required a brief consultation with existing practitioners, particularly on procurement and pricing skills. They enter the practices without much specific training.

All three categories of food vending require skills such as purchasing and bargaining, customer treatment/relationship, nutritional knowledge, marketing, and being proactive. Cooking skills are common for traditional IRFV, while measuring and baking skills are more common for processed IRFV, and the ability to detect spoilage for unprocessed IRFV. Our findings show that nutritional knowledge, purchasing and bargaining skills, and cooking skills influence the variety of food groups provisioned. Overall, the more diversified the

food vending practice, and the more complex the skills and competences underpinning it, the higher the earnings the vendor receives.

#### 3.4.5.3 Food provisioning period/time

Timing in out-of-home food provisioning practices refers to the time of the day at which different food items and meals are provisioned. Some food items are provisioned in the morning because they are culturally considered breakfast, whereas some other food items are considered evening food. Traditional IRFV practices include providing rice, beans, spaghetti, and stew in the morning and mashed foods, such as pounded yam and processed cassava, in the afternoon and evening because they are seen as heavy foods with high energy content. Processed and unprocessed foods are in demand throughout the day and not linked to particular meal times as they provide fewer food items. Most food vendors provision foods from Monday to Saturday and take Sunday off because they go to church. After the church service on Sunday, only a few food vendors are present, mostly selling processed and unprocessed foods, such as fried foods, noodles, and fruits. Overall, we found that traditional food vendors, providing the most diverse foods, follow culturally and institutionally conditioned food timing more strictly. Furthermore, the timing also influences the diversity of the food items provisioned. For instance, in the case of traditional IRFVs, fewer food items are usually available in the morning compared to the afternoon and evening when people have more choice.

#### 3.4.5.4 Material Resources: Procurement of raw materials

Sourcing material inputs is an important component of food vending practices that inter-relates with the kinds of food groups provisioned. Different categories of food vendors source their inputs from different markets depending on the food groups on offer. For instance, traditional IRFVs purchase their inputs at open markets where raw local food materials are sold. In contrast, processed IRFVs are more likely to buy their food materials from grocery shops. Unprocessed IRFVs mostly buy directly from farmers at the farm gate because this is cheaper. Generally, raw food materials are sourced on a weekly basis or when stocks are nearly finished. However, a common practice among traditional and processed IRFVs is to purchase perishable food products such as vegetables every day because they spoil very quickly. Sometimes, particularly traditional IRFVs, make logistical arrangements with their suppliers to deliver produce which reduces the stress of having to go to the market every time to buy food inputs and also provides more time for vendors to concentrate on food preparation and selling activities.

*"...I have suppliers for all my raw materials. All I have to do is call the different suppliers of the raw materials on the phone once I am running out of stock and it is brought directly to me (PFV 8, age 35)."*

On the other hand, other respondents preferred to adopt a more flexible approach to choosing a supplier, depending on the conditions of the market:

*"... I do not really have a particular supplier I patronize in the market because when the price of things increases they are quick to tell you, but when there is a reduction in the price, they will not tell you and still sell it at a higher price" (TFV 7, age 42).*

Adopting a flexible approach is a common practice among both traditional and processed IRFVs because food preparation competes for time with food procurement, leading some vendors to opt for deliveries.

The availability of different raw food materials within the systems of provision influences the practices of food vendors, including the combination of types of food provisioned. At times of high demand, food vendors might buy inputs from grocery shops and small markets close to them, particularly when they need to buy in small quantities. However, if inputs are unavailable, this may result in reduced diversity of foods available at a particular vendor until the food group can be sourced again.

#### *3.4.5.5 Informal ready-to-eat food vending interrelates with other food-related provisioning practices*

Our findings indicate that a dynamic interconnection exists between IRFV practices and other food-related provisioning practices. Food vendors source parts of their food ingredients from other food outlets, and the vendors from whom the IRFVs buy ingredients, in turn, buy ready-to-eat foods from them. Together, they operate a kind of vendor-vendor relationship.

*"...Having them around, particularly the food grocery shops, helps me to quickly get what I want instead of working or traveling a far distance to the market (PFV 15, age 37)."*

There are some supermarkets and restaurants around the IRFV locations, but consumers do not visit them because they are quite expensive. Nevertheless, IRFVs imitate them or are inspired to innovate in order to stand out:

*"...when I started at this location, I decided to be innovative and do things differently because of the environment, i.e., the hotel and beer parlour around me. I started adding vegetables like cabbage, runner beans, carrot, cucumber, onions, etc. I even started frying chicken to sell. I garnish my noodles with vegetables and crayfish (PFV 16, age 45)."*

As this processed food vendor's account suggests, competition in the wider food environment can act as a driver for increasing the diversity of the food groups provisioned. The respondents agreed that good relationships exist between IRFVs and raw food materials vendors. At times, they give them inputs on credit and will be paid back later. However, most of the time, unprocessed IRFVs buy their fruits in bulk directly from open markets or at the farm gate. Having other food outlets around provides quick access to food raw materials and also enables provisioning a larger variety of food groups.

#### 3.4.5.6 *Stocking, re-stocking and storage practices of ready-to-food vending*

The practice of stocking involves keeping raw food materials in the shop or in a safe place to allow for preparing small quantities. Most food vendors indicated that they stock their raw food materials to prevent having to go to the market on a daily basis. They take the quantity they need to prepare for the day until their stock is almost finished. However, some food items cannot be stocked for more than a day or two at the most before spoiling. Unprocessed IRFVs cannot stock their fruits for too long because otherwise, they will ripen and spoil. However, they preserve their fruits under shields and in cool places to prevent spoilage. Both the traditional and processed IRFVs report that, apart from particular food items that need to be sourced every few days, on average, they stock their food ingredients for about 5 days to one week before needing restocking. The food materials are stocked in the shops in a cool environment.

*"...I restock when the available ones have almost finished. I go to the market every 5 days. I do not allow the available food materials to finish before I buy another. When I gauge with my eyes and realize the remaining will only last a day or two, I must buy another one (TFV 21, age 52)."*

Stocking influences the provisioned diversity in food groups as it encourages food vendors to buy a greater variety of food items that can be stocked for days without spoiling. Thus, a greater capacity to stock and store food raw materials appears to increase the variety of ready-to-eat food groups provisioned.

The storage practices of IRFVs also include the preservation of already prepared ready-to-eat food items and meals. In general, meals need preserving to allow selling the next day, and this depends upon the availability and access to equipment such as cooling boxes, fridges, and freezers. These storage practices varied among vendors depending on the types and diversity of the food groups provisioned. For traditional IRFVs, food items like semovita, pounded yam, and beans cannot be sold the following day, whereas food items like rice and fufu can be stored and sold the following day. For processed IRFVs, snacks and fried foods generally cannot be stored and preserved and must be consumed on the

day of preparation; otherwise, the customer will detect the decline in quality and taste. The majority of traditional IRFVs do not store their foods at all but ensure they produce the food products they can sell in a day to avoid the need for storing until the following day. However, some traditional IRFVs did engage in storage practices by using freezers to store surpluses of prepared foods.

The majority of the food vendors reported that if there are leftover foods, they either give them away or serve them to their family. Unprocessed IRFVs are not concerned about leftovers since unsold fruits can be easily stored in boxes in a cool environment. However, if the fruit stays too long, the unsold items may perish or over-ripen and can no longer be sold. Thus, storing practices can promote the diversity of food group provisioned in the sense that when food vendors are assured that if their foods do not finish and can be stored overnight, they can provision more food groups.

#### 3.4.5.7 Food preparation

Food preparation, an important component of food vending practices, differed between the food vending categories and according to the type and diversity of the foods being provisioned. We found differences in the preparatory procedures and processes, including the utensils used and the raw food materials needed. Both traditional and processed IRFVs begin with preparing food in the morning, as early as six o'clock, whereas unprocessed IRFVs do not need any preparation other than putting the fruits on the tray. In the case of traditional IRFVs, certain preparation stages are done the previous day to ensure that the food is ready as early as possible to supply breakfast customers:

*"I do some of my food preparation the previous night, such as frying meat, grinding pepper, etc. To make things easier, I always boil my pepper at night (TFV 13, age 38)."*

Food preparation continues in the food vending outlets throughout the day as vendors sell food. Food items are prepared in a continuous manner in response to demand, cooked bit-by-bit, and as a particular food item is about to finish, another batch is put on the fire. Likewise, food items are left on a mild fire to keep them warm and ready for sale.

*"...I cook the foods a little at a time, I start the preparation of another batch of food item when I perceive it is about to finish (TFV 26, age 50)."*

According to the respondents, preparing some food items such as pounded yam and fufu is labor-intensive, so they are often excluded from the menu or the preparation is outsourced. Compared with processed and unprocessed vendors who report spending less time in preparing a smaller range of food groups, it is more rigorous and time-consuming for traditional IRFVs to prepare their food because of the number and complexity of steps involved in preparing more complete dishes from a larger number of food groups.

### 3.4.5.8 Menu settings

Menu setting is the presentation of the food provisioned by the vendors. Each category of food vending has different menu setting patterns because of the different food items they have on offer. In their outlets, different food items are prepared and displayed at different parts of the day. Unprocessed IRFVs display their fruits on trays for customers to buy. For both traditional and processed IRFVs, the presentation of food for sale differs throughout the day.

*"...In the morning, as early as possible, I prepare breakfast food (rice, beans, yam, and stew) and in the afternoon till evening, I sell mashed foods such as Amala, Eba, Semovita (TFV 14, age 43)."*

*"...I always fry puff puff before anything else, then followed by egg roll, then buns in the afternoon and lastly fish roll in the evening (PFV 3, age 39)."*

The composition of the menus is similar on a daily basis for most categories of food vending. They stick to their routine menu and make changes only under special circumstances. This implies that, in particular, processed IRFVs find it difficult to expand their regular menu-setting, which may constrain improvements in the diversity of food groups provisioned.

### 3.4.5.9 Changes embedded in informal food vending practices

Nevertheless, over time, IRFV practices have changed in terms of their mode of operation, sale, provisioning period, menu-setting, price of raw food materials, and the variety of food groups provisioned. For example, according to this TFV respondent:

*"...I started with mobile food vending, selling only rice and beans, and after some years, I got a shop and I started selling other ready-to-eat food items such as fufu, amala, eba, semovita (TFV 10, age 35)."*

Having a stationary food outlet influences the number of food groups provisioned as it allows vendors to operate from a foundation of stability and routine, in fixed spaces where they can stock, store, and prepare food materials, resources, and utensils. The price of raw food materials does not really influence the food diversity provisioned; rather, the quantity dished out to consumers is adjusted regularly based on the changes in the price of raw food materials. Some vendors have transformed from processed to traditional food vending due to the continuous demand from their customers for particular kinds of foods, giving them the opportunity to provide more food groups. Also, changes in the timing of food provisioned were observed:

*“...I used to provide food only in the evening before (jollof rice, moin-moin, and smashed foods), but now I provide throughout the day and have added other food items to my menus (TFV 15, age 49).”*

3

In summary, it is evident from our findings that informal ready-to-eat food vending practices are formed through the integration of an array of practice elements. These different practice elements influence the diversity of food groups provisioned and thereby the dietary outcomes. Although there are some dimensions of practice elements that cut across all three food vending categories, there are others that are peculiar to a particular food vending category. Differences across food vending types were observed in terms of the diversity of food groups provisioned, their healthiness, as well as the daily activities underpinning the operations. The study informs on the skills and competences needed and shows that the raw food materials and the variety of food groups provisioned are guiding the meaning of the practice. Informal ready-to-eat food vending is an important component of the food supply system in urban Nigeria, and each element of these practices is vital for its overall functioning. Likewise, the study shows the variability in the categories of food vending in terms of the capacity and required resources. Traditional IRFV showed the most capabilities and resources required for the provisioning of more diverse food groups. Consequently, we found that the more diversified the food vending practice, and the more complex the skills and competences underpinning it, the higher the vendor's income. Some vendors have transformed from processed to traditional IRFV vending due to the continuous demand for particular kinds of foods from their customers, giving them the opportunity to provide more different and diverse food groups.

### 3.5 DISCUSSION AND CONCLUSION

This paper aimed to gain deeper insights into urban informal ready-to-eat food vending practices in the context of nutritional health and food diversity. Building on and moving beyond existing work (in nutrition and other fields), this sociological analysis focused explicitly on understanding the everyday performances, skills, and competences of different food vending practices.

We analyzed how the different components of out-of-home food vending practices connect with the diversity of food groups provisioned. Three key categories were identified as central in the IRFV sector of Ibadan: traditional, processed, and unprocessed food vending practices. Across these three categories, our analysis revealed broad differences between their practices in terms of the nutritional context and diversity of food groups provisioned. These differences in diversity and nutrition were further found to be related to the practice components in terms of skills and competences, materials and resources

needed to sustain operations. Such competences and resources include skills required for food procuring and preparation, material resources in terms of ingredients, cooking utensils, space, and storage units needed, as well as the temporal rhythm of the practice in terms of hours spent on food preparations and timing of different meals. Overall, the analysis revealed that traditional food vending practices have the highest diversity and nutritional content, with a greater capacity to support healthy and diverse diets among out-of-home poor consumers. Compared to processed IRFV, the daily performance of traditional IRFV practices depends on competences concerning food knowledge and preparation that require more learning, which is acquired through more complex socialization processes as well as access to material resources such as fridges, storage units, fixed outlets, etc. Understanding the ways in which IRFV practices differ in terms of the constituent elements comprising them has important implications and directions for policies focused on improving dietary diversity among the urban poor.

Firstly, the three categories of IRFV provide different numbers of food groups. Traditional IRFV, involving more activities and functions, provides a broader range of food groups, serving more people than the other two categories. Along the practice chain of food vending, different sequential stages influence the diversity of food groups provisioned. Understanding these elements can enable opportunities for policy actors to intervene, monitor, and adjust the core practice. Each food vending category needs a particular type of support to deliver more diverse food groups and healthy dietary outcomes. Unprocessed IRFV practices are rather simple and mainly involve procurement and displaying, while traditional IRFV practices involve a broad range of supplying, preparing, and managerial activities. The changes occurring among the IRFV practices also differed per category. Some traditional food vendors operated first as processed food vendors, but due to the evolving demand from their customers, they changed the kinds of food provisioned into offering more traditional meals. However, unprocessed food vendors remained unchanged except when they increased the variety of fruits provisioned. The structure of traditional IRFVs shows the characteristics to enable the provision of diverse diets, while there is also an opportunity for expansion, restructuring, and repositioning in processed IRFVs to enable the diversity of provision by readjusting and reorganizing its practice elements.

Secondly, our findings also revealed that food vending interrelates with other food-related provision practices by engaging in transactions to procure the necessary food ingredients. By operating in vendor-vendor relationships, they have multiple interactions, which may contribute to more effective and efficient performances, functions, and deliveries in food vending. IRFV practices are connected with input suppliers at short and long distances, creating a dynamic bundle of practices. So, if there is an urgent need for food ingredients in smaller quantities, the ingredient suppliers at a short distance are consid-



ered while otherwise open markets at a larger distance are patronized. The diversity of the food groups provisioned by the IRFV practices is directly influenced by the ease in accessing raw food materials. We showed that an increase in the availability of a broad variety of food ingredients leads to a greater variety of ready-to-eat food groups provisioned. The close relationship between the food vendors and the different food ingredient suppliers allows them to access food ingredients on credit. Supermarkets and expensive restaurants form an inspiration in shaping and transforming food vending practices, as many food vendors tend to imitate their practices to improve their own.

Thirdly, our findings indicate that traditional food vending seems to be more diversified when compared with processed and unprocessed food vending, although some of the food groups provided are consumed in small quantities only. The number of food groups provided is higher because some of them are consumed in small quantities combined in particular dishes. Unprocessed food vending is mostly limited to two food groups because of what customers expect them to provide. With respect to the diversity of food groups provisioned, processed food vending is positioned in between the two other categories. When analyzing the food groups provisioned as regards to their health score, we found that only seven healthy food groups are provisioned among the three categories of food vending, whereby traditional IRFV offered the largest number of healthy food groups.

In conclusion, the study highlights the contributions from a social practice understanding of IRFV and how important the interactions between the practice elements are to achieve health and diversity in the food provisioned. This approach also provides the opportunity to identify the critical element(s) across the three categories of IRFV and to identify opportunities for (policy) interventions and applications to improve IRFV practices and enable diverse diets to be supplied to urban consumers. Improving the success of IRFV can, for instance, be achieved by improving the necessary skills and competences of vendors to procure diverse raw food materials and to transform these into edible meals. Also, effective stocking and storage facilities are needed to support the provisioning of more diversified food groups. Critical skills and competences are cooking skills, bargaining and purchasing skills, and nutritional knowledge. Such practice element(s) need attention for future intervention to achieve health and diversity in informal ready-to-eat food provisioned as a component of an urban food supply system that is accessible to the urban poor. From a practice perspective, recruitment is important, and we found that IRFV is attractive for younger members in the family of vendors and that most learning takes place within the household. This shows how IRFV is an everyday routinized practice that is transmissible at both the family and community levels. We also found that the levels of healthy food provided by IRFV practices could be improved. In general, this study showed that a social practice approach generates detailed empirical results on the practice ele-

ments of IRFV, which can adequately inform policymaking as well as aid smooth policy application and implementation to support more diversity in the food provided through IRFV practices.





# CHAPTER 4

## INFORMAL READY-TO-EAT FOOD VENDING GOVERNANCE IN URBAN NIGERIA: FORMAL AND INFORMAL LENSES GUIDING THE PRACTICE

This chapter is under revision as Adeosun, K. P., Greene, M., and Oosterveer, P. Informal ready-to-eat food vending governance in urban Nigeria: formal and informal lenses guiding the practice, submitted to *PLOS ONE*.

## ABSTRACT

Informal ready-to-eat food vending is an important, cheap, convenient, accessible, and readily available urban food supply sector that has become an increasingly important part of the diets of people in developing cities in Africa and throughout other contexts in the Global South. Over decades, street foods have been informally accepted as part of the urban food supply system, particularly among the urban poor, even though it is faced with challenges of healthiness and hygiene. Despite the importance of street foods to food security and employment needs in urban Nigeria and elsewhere, very little is known about the governance arrangements (whether formal or informal) revolving around their food provisioning practices. The study explores governance arrangements that steer and shape food provisioning practices in Ibadan, Nigeria. Taking a social practice approach, the study analyzes the interconnections between governance and ready-to-eat food vending practices. The study employs a qualitative method through in-depth interviews and participant observation to understand different governance arrangements revolving around food vending practices. The findings reveal that formal and informal governance structures are jointly steering and shaping the practices of informal ready-to-eat food vending. The findings also reveal the crucial role informal middlemen fulfill in the governance chains, particularly concerning informal food supply systems. The findings of this study provide a new dimension to thinking about food governance of urban food supply systems in terms of co-governance between formal and informal actors. They also provide empirical evidence that can aid policy application and implementation on urban food supply systems going forward. The study recommends developing a co-governance framework that recognizes and encompasses the formal-informal nature of the food sector. Such an approach recognizes and involves informal middlemen in the governance of informal ready-to-eat street food vending embedded into a larger framework of food system governance.

## 4.1 INTRODUCTION

The rapid growth of food vending practices in sub-Saharan African cities has been influenced by political-economic transformations, which intersect with changing lifestyles of the people and the complex urban food system (Burgoine and Monsivais, 2013; Adeosun et al., 2022b). Over decades, street foods have been accepted as part of the urban food supply system, particularly among the urban poor, even though the sector is faced with challenges in terms of health and hygiene. Health and hygiene are weak because of provisioning low diet quality and little fruits and vegetables, preparing food in an unclean environment, using rotten raw food materials, and low personal hygiene of the food vendors (Mwangi et al., 2002; Steyn et al., 2014). Moreover, many street foods are confronted with problems of provisioning poor quality, unhealthy, higher-caloric, and low diverse foods (Mwangi et al., 2002; Story, 2008; Chukuezi, 2010; Adeosun et al., 2022a). However, in many countries, street food vending is yet to be included in the urban governance framework or development plan, and thus, as of yet, there is no policy supporting urban food vending practices (Arimah and Adeagbo, 2000).

The changing and increasingly complex intersecting socio-material dynamics of cities and changing urban lifestyles in Africa have positioned informal ready-to-eat food vending (IRFV) as an essential sector in the urban food supply system. Low-income employment, rural-to-urban migration, lack of access to suitable housing for migrants, changes in political-economic contexts and labor dynamics, including more women moving into formal jobs and increasingly flexible informal and precarious jobs among the urban poor, as well as challenging domestic and living conditions among urban poor consumers, have been identified as particularly important drivers in out-of-home food consumption (Karamba et al., 2011; Thornton et al., 2013; Burgoine and Monsivais, 2013; Adeosun et al., 2022b). Street food, which is cheap and readily available, is increasingly important for food security among the urban poor (Battersby and Watson, 2018; Zhong and Scott, 2020). Almost every low-income earner in cities in the Global South depends on street foods (Etzold et al., 2013; Ogundari et al., 2015). IRFV has emerged in the context of these changing social dynamics of people's everyday lives and their food consumption practices (Adeosun et al., 2022b).

Despite the growing importance of informal food vending in urban life and the daily practices of consumers, the sector has remained neglected by policy. This is also true in Nigeria where the government is yet to see the importance of this sector as a channel to address food and nutrition security issues. Previous policies and programs on food nutrition and security in Nigeria have not recognized ready-to-eat food vending as an important part of the urban food supply system that influences the diets of the people (FARMD, 2017; Resnick, 2020). In the past, the government saw food vending as sub-standard practices

that should not be allowed due to some shortcomings in terms of hygiene practices. This raised the level of persecutions by the government to a very high level in the past to restrict or disallow food vending practices, particularly in the city. Moreover, the available policy documents on food and nutrition security in Nigeria do not include the food vending sector among other food supply systems. In fact, the government is sitting on the fence or undecided on whether to recognize food vending or not. Despite the importance of informal food vending to food security and employment needs in urban Nigeria and elsewhere (Esohe, 2012; Ogundari et al., 2015; Mbah and Olabisi, 2015; Kazembe et al., 2019), very little is known about the governance arrangements (whether formal or informal) that revolve around these food provisioning practices. Furthermore, it is unclear how these governance arrangements are structured and performed in practice, as well as how formal and informal elements interrelate and coexist in the informal food sector. In response to these gaps, this paper seeks to improve understanding of IRFV governance arrangements. According to van Bers et al. (2019), governance plays an important role in facilitating and supporting transformative practices and collective actions when they emerge. While there are studies on food governance and work on food practices, there is limited information on the interconnectedness between food-related governance and social practices, particularly street food vending practices. There is a need for a greater understanding of the practices of informal governance in relation to the increasingly important informal food vending sector. This paper situates itself as an initial empirical contribution to this gap in scientific knowledge. In doing so, the paper seeks to add to insights concerning the contexts and practices of governance and how these enable and constrain informal food vending practices. Thus, the study aims to understand different institutional arrangements, formal and informal governing structures guiding and steering out-of-home food vending practices among the poor consumers in the context of urban settings.

While little work exists on informal food governance, a small body of work is emerging. The existing literature on food vending governance in Nigeria highlights the tensions and contradictions in the field, for example, by revealing experiences of harassment among traders by local and state government officials (Onodugo et al., 2016) whose efforts to exert control on the informal markets can lead to enforcement and the displacement of food vendors from government-restricted zones. Existing literature on the governance of informal food vending tends to focus on laws and regulations (Crush et al., 2017; Finn, 2018; Kazembe et al., 2019; Resnick et al., 2019). Zhang and Pan (2013), Zhong et al. (2019), and Resnick et al. (2019) have looked at institutional issues of food retailing and street food markets from government actors' perspectives. Dia et al. (2019) studied the governance of street food vending and the role of cooperation, the streamlining of vendor-authority relations, and vendors' livelihoods. Likewise, Forkuor et al. (2017) studied the challenges and negotiating strategies of street-vended food regulators and the implications for their

relationship with street food vendors. However, as of yet, there has been limited work looking at experiences and practices of governance as it interrelates with the everyday food vending practices involving food vending practitioners and other stakeholders.

In seeking to explore the relationship between governance and street food vending, the study adopts a social practices perspective (outlined in detail in the following sections), a framework that, despite some exceptions (e.g., Adeosun et al., 2022a), has not been applied to the informal ready-to-eat food vending sector. Specifically, the study seeks to understand governance dynamics in relation to social practices of selling street foods in urban Nigeria. The study explores the existing practices of informal and formal regulation and governance of the IRFV sector in Ibadan, as well as how these intersect with and shape the daily practices of food vendors. The paper pays particular attention to the ways in which governing practices and IRFV influence the provision of healthy, good quality, and diverse foods. In doing so, this paper also responds to the call by Dragsted-Mutengwa (2018) and Kazembe et al. (2019) for more nuanced approaches to capture the full spectrum of interactions between state actors and the informal food vending sector. Through a situated social practice theoretical approach to investigating these dynamics, the study advances this field both empirically and conceptually. Specifically, this paper aims to answer the following research question:

*In what ways do governance arrangements steer and shape the wider out-of-home food provisioning practices of healthy, good quality, and diverse ready-to-eat foods?*

The remainder of the paper is structured as follows: section two provides an understanding of the concept and an overview of formality and informality in the food supply system, followed by an overview of informal food vending in Nigeria and of food vending practices in Ibadan city in particular. The following section explains the social practice theoretical framework informing the study of the interconnections between governance and ready-to-eat food vending. It is followed by a description of the study context and the methods used in collecting and analyzing the data. The final sections present and discuss the results of this investigation and, finally, the conclusions and recommendations for policy and future research.

## **4.2 CONCEPTS AND OVERVIEW OF FORMALITY AND INFORMALITY**

Formal markets are those that are regulated through formal governance structures where licensed sellers can publicly advertise their locations and prices, such as hypermarkets, supermarkets, and official restaurants (Wertheim-Heck and Raneri, 2019; Downs et al., 2020). According to Wertheim-Heck and Raneri (2019), the informal food vending



sector entails self-organized unlicensed food retail businesses. However, many scholars argue that the formal and informal should not be completely separated because they intersect and are linked in various ways (Chen, 2012; Meagher, 2013). Nevertheless, the informal food vending sector's governance structure seems to be different as the formal food sector is standardized and officially registered, while informal food vending is not standardized nor registered with the government. Informal practices can be found in two key informal food vending sectors, such as informal food retailing and IRFV. First, informal food retailers are re-sellers who often trade in raw food materials that they purchase either in formal or informal markets and move closer to the final consumer in order to increase convenience (Wertheim-Heck and Raneri, 2019; Trivette, 2019; Downs et al., 2020; Ambikapathi et al., 2021). Second, IRFV comprises the selling of processed, unprocessed (fruits), or traditional ready-to-eat foods and beverages prepared by food vendors in small shops and on the streets, motor parks, workplaces, and even around schools (Muyanja et al., 2011; Hill et al., 2016; Adeosun et al., 2022).

Most studies on food vending governance have analyzed food practices as holistic practices with a link to livelihoods, food security, and/or more or less on their spatial operations in the city (Etzold, 2014; Resnick, 2020; Díaz-Méndez and Lozano-Cabedo, 2020), neglecting the interconnections of governance with inherent elements that form the food vending practices and/or their core practices. For instance, a study by Zhong and Scott (2020) analyzed the process of informalization of food vending practices to ensure food security. Likewise, Dai et al. (2019) evaluated how recent policy reforms have affected vendor relations and vendor livelihoods. An earlier study looked at how food vendors in emerging cities are economically, socially, and spatially integrated within the urban food system (Giroux et al., 2021). Yet, it remains unclear in the literature how governance has interacted with different components of food vending practices, particularly at the level of elements of food practices. Moreover, how different elements of governance interact with different elements of food vending practices remains a gap in the body of literature. This paper aims to fill the gap in the literature.

As urban populations continue to grow in developing countries, likewise, the urban poor may not necessarily benefit from food diversity and the booming formal food system as they don't have the economic power to purchase varieties and nutritious foods (Battersby and Crush, 2014). This is in line with the study conducted in Nairobi, Kenya, where 80% of households were food insecure due to their inability to purchase nutritious food (Kimani-Murage et al., 2014). Thus, food vending serves as important connectors to the nutrition security of the urban poor. The migration of the population from peri-urban and rural areas to urban cities has further increased the food insecurity problem as most agricultural labor forces that used to produce food have moved to the city.

### 4.3 OVERVIEW OF INFORMAL FOOD VENDING PRACTICES IN NIGERIA

IRFV practices, operating outside the formal food provisioning system and mostly conducting business without legal status or protection (Giroux et al., 2021), have existed for decades in Nigerian cities. However, their presence was exacerbated with the structural adjustment policies in the 1980s when the contraction of formal employment forced many to resort to informal food markets (Onodugo et al., 2016; Resnick et al., 2019). These political-economic trends, coupled with increasing urbanization and the large-scale migration of rural people to urban areas, have led to a growing sector of street food vending in Nigeria, as is the case in other African countries experiencing similar socioeconomic and demographic dynamics and trends.

When it comes to eating out-of-home, ready-to-eat vendors are the most important food providers to the urban poor in Nigeria, largely because they offer cheap food that is affordable to them (Ackah et al., 2011). For instance, in Ibadan, about 56.8% of low-income earners source food from street vendors at least once a day (Adeosun et al., 2022a). IRFV is highly relevant to them because of their limited access to formal markets (including supermarkets, official restaurants, and fast food outlets) (Battersby, 2011), and it offers an affordable, convenient, and easily accessible daily food option (Steyn et al., 2014). Proponents of street vending argue that street food vending builds a safety net for vulnerable and marginalized urban citizens. Informal street food vending is adapted to how and where poor people consume their food as part of their daily lives, which is shaped by critical political-economic factors, such as their working conditions, daily mobility needs, and changing family practices (Adeosun et al., 2022b). Food vendors actively engage with these routinized everyday practices and try to supply food that fits the changing demands of the urban poor (Adeosun et al., 2022a). Street food vending requires no prior skills or legislation and involves low investment for a startup of the business (Mamun et al., 2013). Informal food vending enterprises selling street foods are located throughout the urban landscape in Nigeria but are particularly concentrated in low-income neighborhoods and can be found near busy places such as transportation hubs, office blocks, and school districts (Nickanor et al., 2019).

### 4.4 FOOD VENDING PRACTICES IN IBADAN CITY

Ibadan is a dominant and dynamic city in Nigeria experiencing rapid growth through a process of peri-urbanization, with 67% of Ibadan's population concentrated within the municipality and 33% in the suburbs (Ogunyankin, 2019). The administrative and commercial functions of Ibadan transcend state boundaries with important social and economic

functions. The city is highly multicultural, bringing together people from different cultures in Nigeria and beyond. Ibadan houses different research institutes, and one of them is the International Institute of Tropical Agriculture (IITA). Thus, Ibadan is well positioned in terms of its aspiration to be globally competitive and “comparable to other major cities in the world” (Ogunyankin, 2019).

4 In Ibadan, food is overwhelmingly purchased rather than prepared by households. A large increase in the patronage of street food has been recorded in Ibadan and other big cities in Nigeria (Iyanda et al., 2018). This has been attributed to daily life practices that involve a long time at work and when commuting; hence, people prefer to buy convenient, fast, easily accessible, and inexpensive food (Seto and Ramankutty, 2016). Existing literature revealed that daily life actions, i.e., work and mobility, expose consumers to food vending outlets (Burgoine and Monsivais, 2013; Adeosun et al., 2022b). For instance, the city is encompassed by complex daily life activities due to the distance from the residential area to the workplace and also inadequate housing facilities due to overpopulation and rural-urban migration. Work and workplaces are mostly informally structured with no regular opening and closing times in low-income areas (Adeosun et al., 2022b). The urban poor may likely be experiencing these complex daily lives as they have low income and inadequate financial resources to overcome these challenges. This is the situation in Ibadan city, according to the study conducted by Adeosun et al. (2022b). This has led to a high demand for vended foods in the Ibadan metropolis. Moreover, more people migrate to Ibadan on a daily basis without any suitable housing infrastructure facilities. Many of them stay temporarily with families and friends but engage food vending outlets for their daily meals.

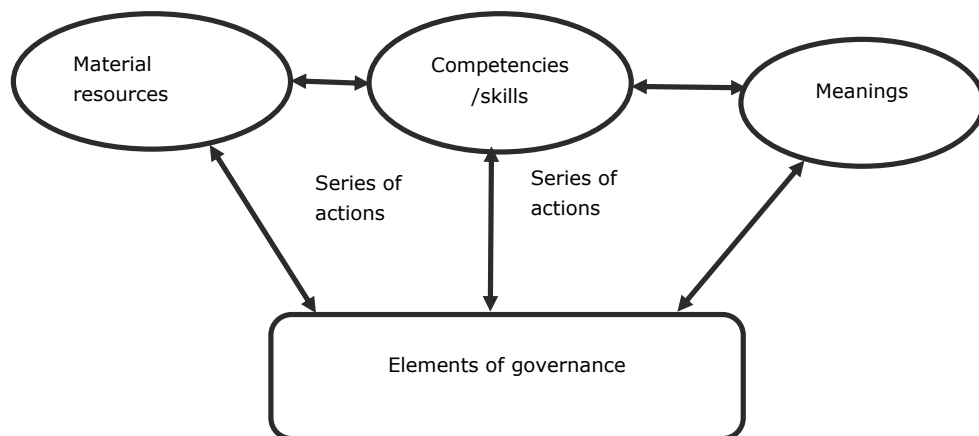
In Ibadan, most peri-urban (low-income earners) dwellers get their food mostly from the informal food system. In addition, they get their food from roadside restaurants and uncertified shops because that is what they can easily afford. The people who eat vended foods fall into a range of socio-economic and demographic categories. The low-income and some significant middle-income groups mostly patronize food vending outlets, while most high-income groups engage in supermarkets (Olutayo and Akanle, 2009). Even though some middle-income groups also consume ready-to-eat foods, the majority of the out-of-home consumers belong to low-income earners, and the reason is that ready-to-eat food is cheap, so with little money, they can buy food (Adeosun et al., 2022b). Meng et al. (2014) added that the supermarket retail format only appeals to consumers with sufficient buying power and may have detrimental effects on food access for lower-income groups. In general, in urban areas, though households may shop across the whole range of informal and formal retailers, poorer households tend to rely more on informal vendors, while wealthier households shop more frequently at supermarkets (Battersby and Watson, 2018a, 2018b; Skinner, 2016). In Ibadan, there are traditional dishes such as akara

(fried bean cakes), In Ibadan, there are traditional dishes such as *akara* (fried bean cakes), *e.ko. gbigbona* (hot maize gruel), *e.ko. jije*. (solid maize loaves), *isu sise ati sisun* (boiled and roasted yam), and *dodo* (fried plantain), as well as local Nigerian food items such as Amala, pounded yam, fufu, eba, etc.

#### 4.5 THEORETICAL FRAMEWORK OF THE STUDY- SOCIAL PRACTICES THEORY

The study analyzes the interconnections of governance arrangements and ready-to-eat food vending through the lens of social practice theory (SPT). Building on Bourdieu (1977) and Giddens (1984), the social practice approach proposes that social structures, such as rules and institutions, do not simply ‘exist’ or influence actors ‘from the outside’, but are produced and reproduced in practice, in the interaction between actors and structures. According to Schatzki (2002), governing agencies (individuals and organizations) are distributed throughout social life, involving different practices and arrangements. In cities, government structures, policies, and regulations interact with everyday practices. Applying a social practice approach allows us to understand how governance arrangements shape everyday routinized actions rather than individual choices. The social practice approach adopted in this paper thus departs from mainstream governance approaches that see the individual and “context” as separate entities and often position individuals’ decision-making as a starting point. Instead, following SPT, the study takes practices themselves as the starting point for investigation and de-centers attention away from the decision-making of individuals as the center of the analysis (Shove, 2010; Spaargaren, 2011).

The paper analyzes how governance interacts with specific components of social practices, i.e., governance interacts with elements of practice and a series of actions within food vending in the food environment (see Figure 4.1). For instance, rules and regulations are instructions and principles outlining how food vending practices should be done. Thus, rules direct and constrain people to perform certain actions (Schatzki, 2002). Therefore, governance can interact with different components and various series of actions in food vending practices. For example, governance oversees activities from the type of raw food materials purchased to the kinds of utensils used and the cleanliness of the cooking materials and food vending outlets, etc. Moreover, this study elaborates on how elements of governance interact and interrelate with elements of food vending for the desired outcome(s) (see Figure 4.1). Governance highlights how agency and power relations among different actors are key to any transformative change in food vending systems. The outcome of a practice is driven by the effectiveness of rules that govern it. Hence, a well-refined outcome can be achieved if there are effective and robust interactions between the practices, (sub) practices, and the governance arrangements.



**Figure 4.1** Interactions between elements of governance and practices.

The shift from government to governance is by now well-documented, with both market actors and civil society organizations taking on new responsibilities for the governance of societies and organizations, next to government actors (Spaargaren et al., 2016). Governance arrangements include actors and tools and involve various support structures to provide effective policy strategies, coordination, and leadership (Oosterveer, 2015) to steer everyday action. Thus, (formal or informal) governance drives other elements of the food supply system (Bene et al., 2019). Governing practices are conceptualized in this study as rules, regulations, supervision, monitoring, control, and coordination that are interconnected and coexist with everyday food vending practices. According to Schatzki (2002), rules and regulations are instructions, pathways, and principles that shape how food vending practices are taken up and performed and thereby guide, direct, enable, and constrain people engaged in these practices. In this study, practice elements such as rules, regulations, control, supervision, monitoring, and coordination are grouped together and form a bundle of governance practices. This bundle of governance practices interconnects with the elements of practice and various series of actions in ready-to-eat food vending. In doing so, street food governance arrangements inform efforts to shape, improve, or sustain (the reproduction of) ready-to-eat food vending practices in terms of quality, income generation (profit-making), and health. Actors involved in these practices reproduce them by drawing upon specific sets of rules and resources constitutive of these practices (Spaargaren, 2011).

Consequently, in this study, the study explores how rules, regulations, supervision, monitoring, and coordination are embedded in governing arrangements and work to co-shape informal street food vending practices in terms of their daily operations, functions, and performances (Schatzki, 2014). Specifically, the paper seeks to explore how different critical elements in everyday food vending practices, such as food outlet cleaning, raw food

material procurement, food preparation, and menu setting, are governed and shaped by sets of governance practices on a daily basis.

In Ibadan, food provisioning governance arrangements are heterogeneous with respect to actors, organizations, and ways of functioning (FAO-UN, 2016). Among these, the IRFV practices and their governance are not well understood, although they constitute a commonly used part of the urban food system. This study analyzes how these governance arrangements connect and drive food vending practices.

## 4.6 METHODS

### 4.6.1 Study location

This study was carried out among low-income urban residents in Ibadan, a dynamic city with important social and economic functions. It builds on previous studies on the social dynamics of food provisioning in terms of experiences, performances, and functioning of food vending in Ibadan (Adeosun et al., 2022a; 2022b). Ibadan is located between geographical latitudes 7°2'E and 7°40'E and longitudes 3°35'N and 4°10'N. It is 128 km north-east of Lagos and 345 km southwest of Abuja, the federal capital of Nigeria (Iyanda et al., 2018). Ibadan, a city experiencing rapid growth through a process of peri-urbanization, has a population of about 4 million (Adelekan, 2016). Administratively, Ibadan consists of eleven Local Government Areas (LGAs), seven located in the Northern part of the city, three in the Southern part, and one at the boundary between the Northern and Southern parts. The study selected poor urban communities because ready-to-eat food vending is the most prominent food provisioning outlet used in these neighborhoods. Most people in these communities live below the global urban poverty line of \$1.90 per day (UNDP, 2004). They also predominantly live below the Nigerian national minimum wage of Naira 30,000 (\$77) per month and far below the Nigerian average income of Naira 339,000 (\$880) per month (Odejimi and Ugiagbe, 2019; Cieslik et al., 2022; Trading Economics, 2022).

### 4.6.2 Sampling and data collection

A preliminary survey was conducted during which community leaders were consulted. They were provided with an information sheet detailing the purpose and expected outcomes of the research, and how their involvement would facilitate its success. To have a good representation of the study area, the study selected two LGAs from the Northern part of Ibadan where seven LGAs are located, one LGA from the Southern part of Ibadan where three LGAs are located, and one LGA from Central Ibadan, located at the boundary between the Northern and Southern parts of the city. Thus, in total, four LGAs were selected as the sample area for the study, and within each of them, two poor urban communities were selected as sites for the study. Before the selection of the vending out-

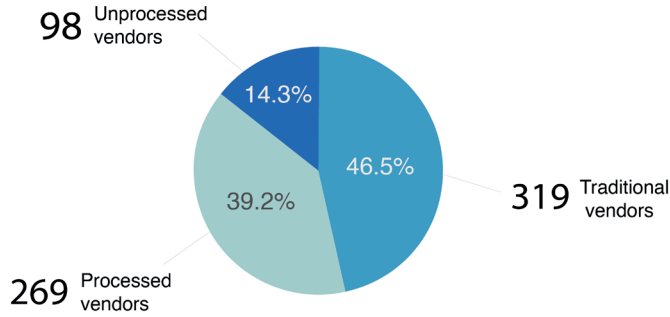


Figure 4.2 Mapped food vending outlets.

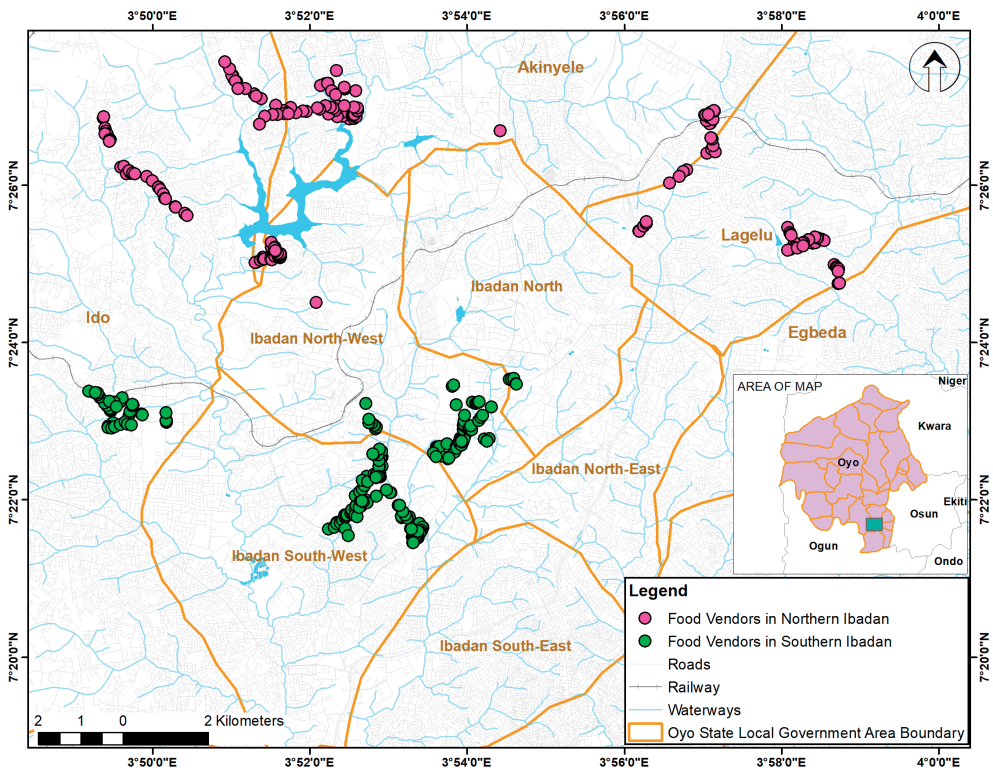


Figure 4.3 Map of the food vending environment.

lets for the interview, the study mapped food vending outlets in the selected communities with the aid of Geographical Information System (GIS) software during the period of July-September 2020. About 686 food vending outlets were mapped, including 319 traditional food vending outlets, 268 processed food vending outlets, and 98 unprocessed food vending outlets (see Adeosun et al., 2022a). The coordinates of all the food vending outlets in the selected communities were taken to measure the spread of the food outlets in the food vending environment (see Figure 4.2). GIS mapping was completed by the



team involving the first author and four field assistants. The purpose of this aspect of the methodology was to visualize the food vending environment in the selected communities and to aid the sampling of food vending outlets for participation in the qualitative interviews. The results from the mapping activities were presented in Figures 4.2 and 4.3. The respondents for the study were selected from the mapped food vending outlets.

Primary data were collected through semi-structured in-depth interviews and participant observation (passive). The observations were done at the food vending outlet, providing situational dynamics information that the interview may be missing. Interviews with respondents were structured to generate insights into IRFV governance. Different categories of respondents were interviewed in this study, ranging from food vendors, food vending association leaders, and state and local government (LG) actors. While the focus was on food vending actors, the study also sought to include the perspectives of association leaders and government agents. For the government agents, more emphasis was on LG because they have a direct link with the food vendors in terms of governance arrangements, operations, and organization.

Across the vendors, association leaders, and government agents' interviews, the study explored interviewees' perspectives and experiences regarding rules and regulations governing the food vending sector and how this plays out in daily practices and operations. Written and verbal consent was obtained from all participants. A practice-informed interview schedule structured the discussions on governance practices and their interrelations with ready-to-eat food vending practices. Each interview lasted approximately 30 to 45 minutes. Interviews with vendors and association leaders were performed at their food vending outlets, while the state and LG actors' interviews were conducted at their secretariat's offices. Data were collected from August to December 2021. Although this study was conducted during the COVID-19 pandemic, during the period of interviewing, all lockdown measures had been officially lifted in Nigeria, and the food vendors were operating as normal. In addition, all precautionary COVID-19 measures were taken with the interviewees, such as maintaining 1.5m social distancing and wearing a facemask by the respondents and the interviewers.

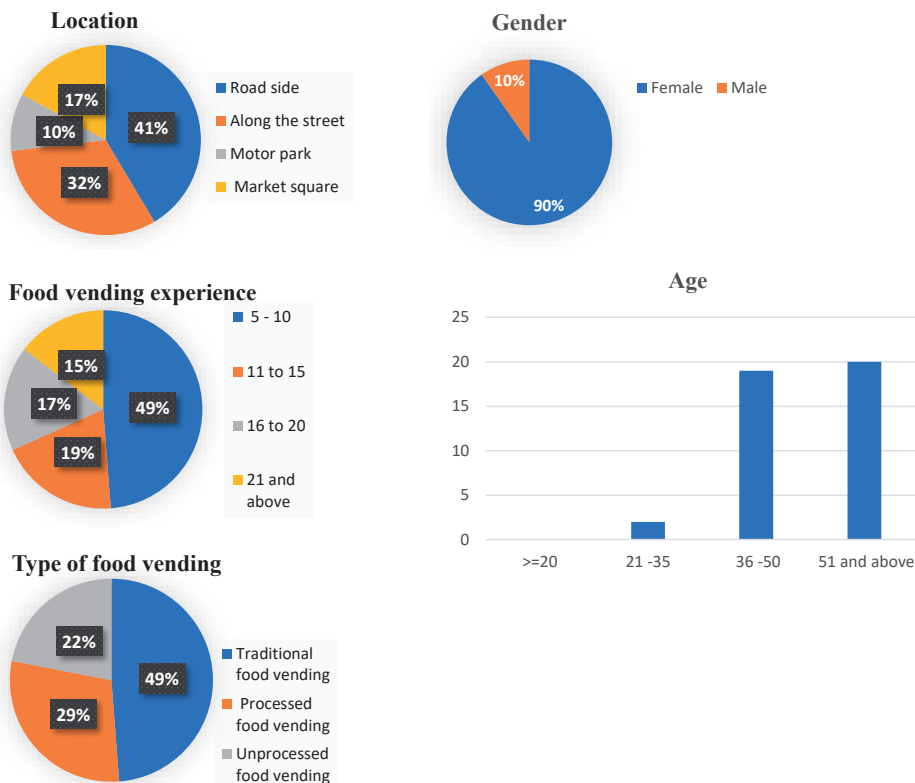
The methodology was based on the key socioeconomic indicators of the food vending stakeholders, such as age, food vending experience, the location of food vending outlet, gender, and type of food vending category (see Figure 4.4). These enable us to capture the dynamics in the information provided as well as to cover a wide range of food vending initiatives. Moreover, the indicators provide us the opportunity to harness a wide range of experiences and perspectives about governance issues at different socio-economic levels of food vending that affect food vending practices in the study area. The informal food vendors included in this study are individuals directly in control of food vending



**Table 4.1** Overview of practitioners and stakeholders interviewed in this study.

Respondents interviewed	Number
Food vendors	36
Food vending association leaders	5
Local government agents	3
State agent	1
<b>Total</b>	<b>45</b>

4



**Figure 4.4** Showing different socio-economic indicators used in selecting respondents.

outlets and in operation for at least five years to ensure sufficient information dynamics and up-to-date experiences.

Altogether, forty-five (45) respondents were purposively selected for this study (see Table 4.1), and this was based on the readiness to be interviewed and the willingness to provide responses to the questions. Given that the study takes a qualitative approach, the number of respondents selected is considered sufficient to provide a broad overview of perspectives and experiences in food vending practices. Forty-one (41) food vendors were purposively selected across the different categories of food vending and socio-economic indi-

cators, and five of them are among the food vending association leaders. Likewise, three (3) LG agents and one (1) state actor were selected for an expert interview (see Table 4.1 for an overview of respondents selected for the study). These are actors that have links with food vending activities in the urban area. The sample included 19 traditional meal vendors, 12 processed food vendors, and 5 unprocessed food vendors (See Adeosun et al., 2022a for an overview of the different categories of vendors). The interviews were recorded, transcribed, and content analysis with inductive coding was used to code the transcribed interview data using qualitative analysis software (Atlas ti). The open codes that were identified were then analyzed, compared, and grouped into categories. An iteration between inductive and deductive analysis was used for particular themes and patterns and then reviewed to further categorize this data according to the SPT framework.

#### 4.6.3 Socio-economic indicators of food vendors

Regarding socioeconomic characteristics, the majority (90%) of the food vendors are female. This agrees with the findings of previous studies that found high levels of women's involvement in street food vending (Zhong et al., 2019; Adeosun et al., 2022a). Likewise, most food vending activities happen along the roadside (41%), along community streets (32%), market squares (17%), and motor parks (10%). Regarding food vending experience, for 49% of the respondents, this ranges from 5 to 10 years, while 19% have been in food vending for 16 to 20 years (see Figure 4.4).

## 4.7 RESULTS

The results from this study explain how formal and informal governance intersect and co-steer the practices of food vending in Ibadan, Nigeria. Formal regulations are government-stipulated rules that revolve around informal food vending practices. Likewise, informal rules are mostly initiated by food vendors themselves, particularly through their association. Altogether, these rules shape the everyday practices of food vending in the city. The results reveal insights into the practices and experiences of the food vendors, food vending association leaders, and local government (LG) actors. There are two food vending associations in Ibadan: one that includes all the traditional and processed food vendors and another that includes all unprocessed food vendors, but both have similar modus operandi and rules and regulations guiding their associations.

#### 4.7.1 Rules' enactment and implementation practices: formal and informal lenses

The formal coordination, monitoring, control, and supervision of food vending activities reside within the state ministries and local government (LG) institutions. The local governments and state ministries operate rather independently, but the LG is more involved in

the regular coordination and supervision of food vending activities and visits food vendors more frequently.

*“.....Both arms of government officials visit me (i.e., Public Health officials or Environmental Sanitarian). But the local government officers visit me regularly, especially every Thursday of the week (food vendor 3, traditional, experience 10, female).”*

4

Despite food vending being an informal sector, there are different arms of government agencies that are involved in the supervision and coordination of food vending activities. The government agents reported that they are interested in this particular sector because of the kind of services they offer. The sector feeds a large number of people, but the consumers don't have control over the food they get, in terms of how it is being prepared, the cleanliness of the water used, and the hygiene of the food environment. Moreover, any contamination coming from this sector will negatively impact a large number of people. Hence, there are public health officers who are in charge of environmental cleaning and personal hygiene, and task force officers who are in charge of collecting levies. However, due to tensions between government actors and vendors, which have caused several confrontations and altercations between them, and to avoid continuous occurrence, the levies are paid via the food vending associations onward to the government. The associations have their mechanisms of dealing with their members without rancor. Conflicts between government officials and vendors occur because sometimes the agents are somehow forceful or hard on the food vendors, and the food vendors see some of the activities of the government agents as oppression.

Even though the rules are not written down on paper, government officials continue to enforce regulations through verbal means. The government officials confirmed that the rules written for other sectors contain a section guiding food vending activities. However, these documents are not available to the food vendors. This implies that there is yet no standardized regulatory framework particularly for informal food vending activities. This was confirmed by LG officials who indicated that only official restaurants are licensed, standardized, and registered with them. Nevertheless, despite the informal character of the food vending sector, government officials still seek to enforce and regulate it. Monitoring and supervision are enacted through enforcing “rules” that seek to regulate the quality of the food prepared, the cleanliness of the food vending outlet, the health status of the food vendors to be checked in government-accredited hospitals, and proper waste disposal to ensure the safety of the people living in the community where the canteen is located. These rules also emphasize how the environment must look like and how food vending workers should be decently dressed. Vendors indicated that LG officials visit their food vending outlets every Thursday of the week to check if they are abiding by the rules. Regulators daily face challenges that limit their implementation and effectiveness. For

instance, officers reported that they don't have enough staff to do the supervision. This is in line with Forkuor et al. (2017) and Giroux et al. (2021) who found that regulators operate in a context with limited resources, leading to a general feeling of neglect and inability to implement food safety regulations.

#### 4.7.2 Hygiene practices in the food vending outlet

As stipulated by the government rules guiding the sector, food vendors are required to keep their environment clean. Interviews with vendors also confirmed, as indicated by government officials, that they must make sure they sweep and dispose of their waste regularly and do not pile up any waste around their food vending outlet. This is enforced by government officials who visit the vending outlets and inspect whether the vending outlet environment is sufficiently clean and well maintained. This also applies to their practice when selling foods; vendors indicated that officials instruct them on their physical hygiene and cleanliness: their clothes must not be dirty, they must cover every part of their body, and their nails must not be overgrown. Likewise, they must not converse when serving, carrying, cooking, and dishing out foods to the customers to avoid spitting saliva on the foods.

*".....Yes, there are existing rules on the dressing and other physical appearance of the food vending staff, how healthy they must look or appear, and avoiding involving sickly staff members in the daily activities of the business until they are well again," (public health officer, female).*

*".....I was instructed by the government officials anytime they visit on how to maintain my food outlet, and that my food outlet should be clean always," (food vendor 1, traditional, experience 11, female).*

Observations at the food vending outlets revealed that most vendors strongly observe these rules; the food vending outlets were clean, they attend to customers and to the sitting arrangements. This confirms that the food vendors are aware of these rules and execute them. This aligns with the findings of McKay et al. (2016) that food vendors are aware of good basic hygiene practices despite having low levels of literacy and income and limited job security.

#### 4.7.3 Food preparation and menu-settings

The respondents reported that all vending staff involved in food preparation and using equipment for food processing and preparation must practice good hygiene. They must adhere to food safety and not use rotten raw food materials, while unprocessed food vendors should avoid using harmful substances like methanol to ripen or preserve their fruits, and they should not sell spoiled fruits. According to Rane (2011), the quality of raw

materials used in the preparation of street foods is very important to food safety, as contaminants can persist even through preparation and cooking.

*“.....The rules by the government that guide our food vending practices here are basically on the provisioning of healthy foods, personal hygiene of all members of staff, and general cleanliness of the canteen environment,” (food vendor 7, processed, experience 12, female).*

4

At the time of the interviews, there were also new rules due to the evolution of the COVID-19 pandemic. The canteen must not be overcrowded, vending staff must regularly wash their hands with soap under running water, and vendors have to check customers' temperature with an infrared thermometer. The customer sitting arrangements also had to be modified to enable a 1.5m distance between customer groups.

Even though rules and regulations concerning food vending activities are made and enforced by the government, this is done in consultation with the food vendors, particularly with the food vending associations' leaders. The leaders of the food vending associations meet with the government when the need arises to deliberate on different regulations that are applied to them, on the implementation procedures, or on any other important issue. The importance of inclusive food governance was also revealed in the findings of Bui et al. (2019) that retailers and local authorities have an interest in demonstrating their mutual role in supporting local producers. A vendor reported that anytime the government wants to make a new rule, they will gather all the food vendor associations' leaders to discuss this with them. Association leaders have a crucial intermediary role here; whatever the association leaders discuss and conclude with the government is passed down to the rest of the food vendors during association meetings. According to Asiedu and Agyei-Mensah (2008) and Schindler (2013), a street vending association can be characterized as one of negotiation, where street vendors and city regulators are constantly negotiating over space for business, economic advantages, and power.

*“.....The government officials usually invite us for discussion and opinions on matters that border on customers' welfare and food vending best practices, and we come back to give feedback to our members in the association meetings to inform them about the new rules,” (association leader 2, traditional-processed, experience 20, female).*

The vendor respondents predominantly indicated that they have confidence in their association leaders' ability to represent and defend their interests. On the other hand, food vendors reported the challenge they face in terms of high prices of food raw materials, as almost all food vendors complain that the price of food materials is increasing every day and negatively impacting their business.

#### 4.7.4 Interrelations between food vendors and government officials

The findings indicate that there is generally quite a cordial relationship between food vendors and government agencies, with food vendors generally obeying the rules and regulations. However, there are still challenges faced by this relationship, particularly in the area of levy collection and issuing fines. Food vendors always face serious opposition if they don't pay their levy as and when due, and they see the fines as being too heavy compared to the offense committed. Likewise, there is a cordial relationship between the government and the food vending associations' leaders as they help the government monitor the level of compliance with government-imposed rules on food vending practices and collect some levies on behalf of the government. This aligns with Dai et al. (2019), who identified a non-confrontational relationship between some groups of vendors and the Chengguan city authority. Rather than one of conflict and opposition, their relationship is better understood as one of cooperation. Similarly, Resnick et al. (2019) found that informal food vendors in secondary urban centers in Nigeria operate in an enabling environment for their activities with fewer harassments by government agencies compared to a large city like Lagos. Harassment mostly happens to vendors who want to sell in government-restricted areas or along busy roads.

*".....Basically, the association ensures that every member complies with the government rules, especially the ones that border on hygiene, and any grievance among members should be reported to the leaders for settlement. We have a task force that moves round to ensure compliance among members," (association leader 2, traditional-processed, experience 20, female).*

In addition, food vendors collaborate with other private sectors, particularly with microfinance institutions, to get a loan to support their food vending business, which they will pay back at a lower interest rate. Even though interest rates vary over time, they are always lower than the rates of commercial banks. Likewise, the repayment pattern is small-scale business-friendly. There are other companies like a bakery, a pure water factory, and Coca-Cola that are interested in collaboration on business grounds. They connect to food vendors basically because they expect food vendors to buy their products to complement the ready-to-eat foods they provide.

*".....Their interest is basically on the patronage they expect from me to buy their products to complement my foods. The nature of their interest is basically on business matters," (food vendor 15, processed, experience 9, female).*

For instance, some companies also collaborate with food vendors by supplying whole food ingredients and related information on ingredient measurements to ensure health and safety for their customers.

#### 4.7.5 Self-organization in food vending practices

Informal coordination, supervision, control, and monitoring of food vending mostly reside with the food vending associations. The study revealed that there are two different associations, even though their operations are almost similar: there is a traditional-processed food vendors association and an unprocessed food vendors association. The traditional-processed food vendors association has more members, which aligns with the finding by Adeosun et al. (forthcoming) that traditional food vendors are more frequently patronized by consumers than processed and unprocessed food vendors. The traditional-processed food vending association consists of people selling traditional foods like amala, rice, beans, as well as those selling snacks like puff-puff and buns. The unprocessed food vendors association consists of sellers of unprocessed food, such as fruits. However, both associations have almost the same modus operandi. Everyone selling ready-to-eat foods must belong to an association to avoid trouble, including having their practice and food seized by the association. The leaders of the associations have data from all food vendors; therefore, coordinating them is not a challenge. They have their way of detecting those who have not registered as a member. For instance, whenever the members notice an unfamiliar face selling food, they approach that individual to register with the association to avoid being stopped by the association task force. In case he/she refuses, the member will report this to the association leaders, who will take action and request the association task force to stop such a person from selling. Both associations have key executive members, including the president, vice president, treasurer, secretary, and task force officer, who direct their day-to-day affairs. The association leaders are food vendors themselves, and they have been involved in food vending practices already for a long time. They have ascended into their position based on their years of food vending experience. As observed, most members of the executives are elderly. The young food vendors see the elderly ones as matrons, and they follow their guidance. During the associations' weekly meeting, individual food vendors with ideas on how to improve their common practices can share them to help others.

*".....Yes, I am a registered member, I have my certificate, and I always pay my levy to the association. Yes, I do attend meetings every Thursday of the week. The association comprises traditional and processed food vendors and always sees to the affairs of the members," (food vendor 4, traditional, experience 6, female).*

Apart from government rules, associations also have rules that guide food vending practices, although some of the rules align with the government rules. Members selling food close to one another must be at a distance of at least five to six poles (about 40 meters). All members must fully participate in all activities and meetings of the association and are not allowed to arrive late or be absent from the weekly meetings without prior notice.

*“.....Association rules, apart from the ones that border on members’ punctuality and some few social activities in the meetings, are aligned with government rules,” (association leader 3, unprocessed, experience 22, female).*

The associations monitor the types of food provisioned to ensure compliance with the stipulated norms among the food vendors in the same location and to maintain peaceful coexistence between them. The associations also provide a platform of support for members who lack survival or coping strategies when facing challenges in their business. In turn, members of the associations who have in the past successfully overcome business challenges can volunteer to help others. According to Roever (2007), associations can help their members develop their capacity, analyze complex issues, and provide access to information about important community or public issues impacting their livelihood. The experience of the vendors studied in this research resonates with this.

On the other hand, some food vendors report that they are not comfortable with the activities of the associations, particularly regarding compulsory attendance at meetings and the mandatory weekly contribution. There is hardly any information about the purpose the association is using the money for. This confirms Roever (2007), who found that street vending associations generally suffer from low levels of participation, high rates of exiting members, and a lack of trust between leaders and members.

*“.....The challenge I used to face from the association leader is the compulsory attendance at the association meeting,” (food vendor 16, unprocessed, experience 5, female).*

#### **4.7.6 Association’s recruitment practices**

Before starting food vending, a vendor has to pass through entrance processes in the association. The association takes the vendors through paid training and seminars to ensure they become familiar with their operations. During this process, the vendor is introduced to the other members, and a certificate will be issued. The vendor registers with the association by paying a one-time fee of #10,000 (\$24), two cartons of biscuits, and a crate of soft drinks. The items provisioned are similar for each association, but the size or quantity may vary between them. The vendor will also be provided with an association membership card and a printed sheet outlining the association rules. From that moment on, the person has made a commitment to abide by these rules that guide the association and the food vending practices.

#### **4.7.7 Training on best food practices**

Periodical training in the form of seminars or workshops on different aspects of food vending is organized by either government agencies or food vending associations. Environmental officers organize training for food vendors on the best practices in food vend-



ing outlets. This training is offered once or twice a year and covers topics such as maintaining the cleanliness of the food vending environment, personal hygiene, dress code, provisioning of quality food, recipes for preparing stews or soups in healthy and nutritious ways, and how to effectively relate to customers. To ensure safe food for consumers, health education of the vendors is needed (Chukuezi, 2010).

*“Yes, I remembered they also trained us on the types of ingredients to use for the health benefits of the consumers. Quality ingredients used in appropriate quantity will result in healthy food for public consumption” (food vendor 2, processed, experience 7, female).*

Food vendors reported that they usually do the training in local government (LG) offices close to their vending locations. Many vendors felt that the application of knowledge from this training has improved their practice and supported them in developing good customer-food vendor relations. Furthermore, the training serves as an avenue to motivate them to do more and aim for best practices. Vendors usually pay for the training, which provides access to training materials and a certificate that is given after completion of the training. The certificate is valid until another training is organized and enables the monitoring officials (task force) to identify those who have attended the training and those who have not. There is a penalty for vendors who refuse to attend the training, and they are not allowed to practice vending until the next training.

*“I attend the training not just to avoid being sanctioned but to learn lessons that can help me attract customers, for they will only patronize food vendors whose environment is appealing and provide tasty foods” (food vendor 5, traditional, experience 11, female).*

The government usually organizes the training in consultation with food vending association leaders so they can help organize it and mobilize their members. They provide the association leaders with the agenda for the training and the amount to be paid by each food vendor to attend the training. The government usually invites official restaurant owners such as Iya Dumni to train them. These types of restaurants, though expensive and rare in the area, are found in the cosmopolitan area (core center of the city where rich people reside). They are standardized, licensed, and registered with the government. Likewise, the association sometimes informs food vendors and prepares them to be addressed by a food-related non-governmental organization. These activities contribute to “cohabitation” through which informal food vendors coexist with and benefit from formal food vending activities, such as supermarkets and restaurants, which strengthens their resilience (Crush and Young, 2019).

*“A big restaurant like Iya Dumni provides us training for smaller food canteens like mine. It serves as an avenue to encourage and motivate me to do more and aim for the best practices” (food vendor 10, traditional, experience 6, female).*

The COVID-19 pandemic has brought about some changes in their food vending practices, so they likewise receive education on how to cope with them, particularly with respect to the seating arrangements in the vending outlets and the hygiene practices within the food vending facilities.

#### 4.7.8 Levy and defaulting

A small amount is being paid as a levy (average ₦300, equivalent to 0.70 dollars per day) by the food vendors to the government. However, the food vendors, on average, earn in the range from ₦1,000 to ₦2,500 (2.5 to 6 dollars) per day. Previously, this levy was paid directly to the government agencies. However, this has recently changed because food vendors clashed with government agents during the collection of the levy. This process now occurs through the food vending associations. This aligns with the findings of Flock and Breitung (2016) from a study conducted in Guangzhou, China, which showed that a stringent regulatory environment and enforcement of levy payments by government officials was met with vendors’ resistance, escalating into violent clashes. In Ibadan, the associations now pay collectively to the government on behalf of the food vendors. The associations reached an agreement with the government on the modality and amount of the payment. The association leaders levy all the members to make their payments, which are contributed zone by zone, and a ticket is given to the members after paying. The association leaders collect the money and then take it to the local government (LG) for onward transfer to the state government account after the LG has taken their share.

*“Before the food vendors association was saddled with this responsibility of collecting money on behalf of government officials, the government agencies used to come directly to approach us to pay local and state government levies. But I think, due to clashes between food vendors and some of these impatient government officials, it was later decided that the association should take up this responsibility” (association leader 4, traditional-processed, experience 19, female).*

The majority of the food vendors pay the money monthly, while a few said they pay yearly because there is an option to either pay per month or per year. This money is a form of revenue generation from the small-scale businesses to the government, although the amount differs depending on the type of business. Even though they directly or indirectly pay some sort of levy to the government, food vendors still operate informally. They don’t pay taxes and remain unlicensed, unstandardized, and not officially registered with the government. They don’t submit a report on their activities to the government, so they are not accountable to the government.

“I pay levies to both the state and local governments on a monthly basis through our association with the government at each level. I pay #200 to the state government purse and #100 to the local government purse, both on a monthly basis” (food vendor 13, traditional, experience 9, female).

There are penalties in case of defaulting on the payment of the levy or breaking environmental or hygiene regulations. The punishment can come from either the government agencies or the association task force. The association task force monitors the level of compliance among association members and checks who has not yet paid their levy and the reason for non-payment before proper punishment is given. Similarly, there are punishments for violating the existing rules laid down by the government and the association. When vendors default, the association task force or government agencies usually seize their food or seal their shop, preventing them from continuing to sell until they go to the LG office and pay the required fine. For instance, if the food vending outlet is dirty or waste is not properly disposed of and the task force finds out, a fine will be imposed.

*“Like some time ago, they locked my neighbor’s shop because she put a small amount of dirt inside the sachet water nylon pack in front of her shop, and they asked her to pay #1000” (food vendor 9, traditional, experience 13, female).*

Apart from the levy to the government, food vendors contribute to their associations for association or members’ support. In the case that the association needs money for any activity, such as transportation fare to represent the association at meetings with the government, the vendors contribute. Likewise, if any member of the association needs urgent support or faces an emergency, the members’ contributions are used.

*“We pay #200 weekly to the association. This money is used to buy clothes for our social functions. Also, if anyone needs assistance, we give the person from the money contributed” (food vendor 14, unprocessed, experience 8, female).*

However, some food vendors have a different opinion about the levy they pay to the government through the association. They responded that the levy is too high, considering they are low-income earners, and they believe they should not have to pay anything to the government as they have not benefited enough from what they are asked to pay.

*“The only challenge that I am facing from the government officials is the payment of the levy because how much am I realizing from what I am selling, and they will still come to collect money” (food vendor 21, traditional, experience 17, female).*

#### 4.7.9 Self-directed practices in food vending outlets

The stipulated rules and regulations by the government and food vending associations further stimulate individual food vendors to include, extend, and expand on other practices that can add value to their food provisioning activity. They are further extending the required practice activities, and their implementation is solely based on the discretion of individual food vendors. These practices are undertaken to further increase customers' patronage as well as the acceptance of out-of-home food provisioning. They cut across but are not limited to the type of food items they provide, and the respondents reported that they make rules for their staff based on hygiene and punctuality. Some of the respondents do not allow customers to remain in their food vending outlet after eating to avoid customer crowding at the outlet. They also monitor their staff on their cooking practices and hand out menus to the customers to maintain hygiene standards. Whenever customers buy food at a food vending outlet, he/she cannot return the food because it is likely to have been contaminated, so it is unacceptable to return purchased food. This is further linked to the health and food safety practices of food vending.

*"My own self-rules that I am following are when I employ workers, I used to tell them that they must not leave the plates the customer used to eat without washing them immediately. Also, the number of ingredients to be used for soup and other things" (food vendor 18, traditional, experience 14, female).*

Societal norms guiding food vending practices are the rules from the community where a particular food vendor is situated and operates. For instance, some communities have a specific time at which movement is not allowed for security purposes. While some communities prohibit selling late at night, these are most common with food vendors that operate along the community streets.

*"Yes, there are community norms. The norm is that I must not stay here until late at night. They only allow me to stay from 6 am to 8 pm. I usually ensure that I abide by the time stipulated by the community leaders" (food vendor 17, unprocessed, experience 7, male).*

There is also a norm that food vendors should prevent rivalry or any kind of unhealthy competition among themselves. They adhere to the rules guiding the community where they operate their practices. Proper hygiene must be maintained to ensure the safety of the community where they operate.

## 4.8 DISCUSSION AND CONCLUSION

This paper aimed to gain an in-depth understanding of the (formal and informal) governance arrangements revolving around food provisioning practices in Ibadan, Nigeria. Exploring the perspectives and experiences of practitioners and stakeholders in the food vending sector, the study analyzed how the coordination, supervision, control, and monitoring of food vending activities take place in practice. Where there are concerns about out-of-home food provisioning practices in terms of health and safety, the government and food vending associations are working on modalities to improve them and make them more acceptable. Despite this form of collaboration, some food vendors are not comfortable with some of the rules and modalities guiding their practice, particularly on the levy payment and how fines are issued. They consider themselves informal and, unlike more formal food sector businesses, receive little or no formal benefits from the government in terms of support for their business. Despite paying money to the government from their meager income, they feel mostly neglected as a sector. The food vendors reported that they would prefer the governance of their sector to remain fully within their association, which they see as having more appropriate informal mechanisms for dealing with issues, including guiding and governing their practices and assisting with the implementation of rules and the resolution of disputes. Decentering governance to the associations would likely limit the tensions generated between government agents and food vendors and prevent further confrontations.

Despite the informal nature of the sector, formal regulations are established and enforced by the government to guide food vending practices. These regulations, which govern the everyday practices of food vendors, are brought to the attention of food vendors by government officials who monitor their implementation and compliance. All food vendors are expected to obey the rules to avoid penalties. These formal governance dynamics within an informal food sector align with the findings of others. For example, Skinner and Haysom (2016) report that the formal governance of street foods lies with Public Health officers as well as the Food and Drugs agency in LG, who have the power to confiscate any foods that are deemed unsafe and unfit for consumption, and to fine traders accordingly. Even though the status of food vending is still informal in urban Ibadan, the government interferes with individual food vendors' activities and controls them directly and indirectly through the associations. The government maintains the power to stop any food vendor that goes against the rules and regulations and can sanction individual food vendors. The government agents are driven by an understanding that, when implemented, the government rules and regulations can bring about improved health and food safety practices in the informal food vending sector. Indeed, the analysis suggests that the active supervision and monitoring of ready-to-eat food vending have reshaped and influenced food vending practices in terms of norms of cleanliness,

hygiene, promoting clean food outlet environments, and maintaining hygiene in food preparation practices. This highlights that rules and regulations can co-shape the norms and logics guiding everyday actions, promoting effective, sustainable, and continuous practices (Schatzki, 2014).

The study analyzed the different formal governance arrangements that coexist with food vending practices in the city. The analysis revealed that the city authority is aware of the operations of food vending and directly and indirectly oversees their activities, particularly through the government-stipulated rules and regulations that guide food vending practices. The government's interest is focused on the food sector because of the nature of the services they provide and the impact they may have on the larger society, particularly for out-of-home consumers. Any contamination coming from this sector can negatively impact the larger society. Consumers only have access to the final product and cannot change the product before consumption, compared to food retailers who resell raw food materials to households who can prepare the final product themselves. This suggests that if this sector is not properly monitored, it can spread food poisoning in the community with huge costs to the government. On the other hand, another important element of food security was missing in the overall ready-to-eat food vending governance arrangements. The food vending diversity provisioned has received little attention from the government; although the association confirmed they do talk about food diversity, it is not the first on their priority list, and much depends on the discretion of individual food vendors. Food vending stakeholders revealed that they have not taken cognizance of aspects of food diversity in their out-of-home food provisioning practices. However, previous studies by Adeosun et al. (2022) and Adeosun et al. (forthcoming) have suggested that food vending diversity is important for ensuring balanced diets and diverse nutrient intake by out-of-home food consumers. This becomes even more important as more people in urban areas consume their meals out-of-home daily.

The findings in this paper suggest that formal rules constrain and influence food vendors to stick to acceptable practices, even if they want to do otherwise. The government-stipulated rules and regulations streamline food vending practices to more acceptable variants. The majority of food vendors expressed that they are aware of these rules and want to follow them to continue their practice and to avoid being fined by the government or the association task force. Moreover, the required rules, when followed, will attract more customers to their food vending outlet as it is likely to increase their trust in out-of-home food provisioning in terms of food safety.

The study revealed that the governance of food vending in urban Nigeria is a joint action involving government officers and the informal food vending associations. Most government decisions about food vending are taken in consultation with the food vending

associations. This depicts that for formal rules to work effectively for informal food vending activities, informal stakeholders should be incorporated into the decision-making process. According to Kazembe et al. (2019), there are few instances of informal vendors forcing change in formal legislative and regulatory frameworks governing the informal food sector, including how or whether they are implemented. Thus, the effective implementation and sustenance of the rules and regulations concerning informal food vending practices lie within the ambit of both the government and informal food vending associations, with the informal food vending association playing crucial roles. This resonates well with the findings of Zhong et al. (2019), who found that the public-private hybrid model of urban food system governance is highly inclusive as it involves numerous food vendors in the system of urban food provisioning. The results from the study suggest that involving informal actors in the enactment, execution, and implementation of the rules and regulations will propel their quick adoption. This indicates that interconnections between the (formal-informal) co-governance and food vending practices are indispensable to achieving acceptable and effective informal food vending systems. This study provides empirical information on how the formality process of informal food vending can go forward. This is similar to the findings of Dai et al. (2019), who advocate for community-based bottom-up initiatives to formalize informal governance. The findings reveal that governance arrangements revolving around food vending practices in Ibadan are only structured around food safety, as this is a government priority. However, provisioning diverse food is not adequately taken into consideration in these governance arrangements. Further research is needed to understand what aspects of governance arrangements may shape food diversity provisioning practices among the food vendors and improve food nutrition and security of out-of-home food consumers.

The study revealed that the effectiveness and implementation of the rules and regulations by food vendors were due to the involvement of the food vending associations. These associations play a middleman role in terms of collecting levies, monitoring, and supervision. This shows that associations are the interface between the government and food vendors to bring about effective and quality outcomes in food vending practices. Governance can be more effective and sustained if the middlemen are from the sector which the governance arrangements are intended to govern. It is sometimes stress-free to implement and execute rules and regulations because associations are involved in the arrangement in terms of implementation and execution. This shows that informal middlemen are crucial when formal governance interrelates with the informal structure. This can further relate to the possibility of taking advantage of informal middlemen to improve the food diversity provisioned if it becomes a priority. Furthermore, the government and food vending associations can use the advantage of co-governance, informal middlemen, and periodic training to influence the food diversity in food vending.

Periodical training has been instrumental in the changes in food vending practices when tailored towards health and safety practices. This has been an important initiative that has shaped food vending practices in Ibadan. According to Habib (2016), proper training about safe food handling may be helpful to overcome the challenges faced by food vendors to maintain the hygiene of the foods sold. Food vending associations are the platform that brings all the food vendors together and serves as an important informal instrument for the controlling and monitoring of food vending practices. It checks their practices in every area, and because of the activities of the food vending associations, individual food vendors are always conscious of the kind of activities they take up in their food vending outlet.

There are self-directed practices of food vending that further strengthen hygiene practices and attract consumers. The findings indicate that individual food vendors have additional self-directed rules that further guide their practices, and it is within their discretion that they implement these rules. These practice elements mainly concern the type of foods provisioned as vendors have agency on whether and how to construct their menu. Building on the self-directed initiative provides an opportunity for intervening in the food diversity provisioned. This implies that food vendors may influence the diversity of foods consumed by out-of-home consumers if taken as a priority. This aligns with the findings of Adeosun et al. (2022) that the decision on the number of food groups provisioned at the food vending outlet is at the discretion of individual food vendors. Likewise, more vegetables and fruits can be provisioned to increase healthy food consumption, i.e., more vegetable soups, and menus can be included in their menu settings. In addition, food vending can influence the healthiness and safety of food provisioning by preventing the returning of ready-to-eat foods sold out as this might have been contaminated and may cause illness. Some food vendors reported that these discretionary rules are a must-follow for them and their staff as they understand the importance of their services to society. These rules are made and implemented for more effective out-of-home food provisioning practices.

In conclusion, the study highlights governance arrangements that revolve around informal food vending activities in urban Ibadan, how they are being taken up, and the synergies between formal and informal stakeholders in the governance arrangements that concern informal food vending. The study revealed that there are synergies between the food vending associations and the government in the governing of informal food vending, with the food vending associations taking a crucial role in the arrangements. Over time, this governance approach has kept the food vending practices on the right track. The study also identified the importance of periodic training and the role of informal middlemen in the governance structure of food vending practices as they aid improvement in terms of functioning, operations, and performance. Consequently, the study revealed



that there is also a form of co-governance that involves the government and food vending associations in making and implementing rules and regulations that guide informal food vending operations. The policy implication of the study is that policymakers, government, and food system practitioners should take (formal-informal) co-governance and informal middlemen into consideration in the policy enactment, execution, and implementation concerning the informal urban food supply system. The interconnections between governance practices and the capabilities that this may influence going forward are yet to be researched, for which the findings of this study provide a starting point and suggest further research into the food vending capabilities that may be influenced by governance arrangements.







# CHAPTER 5

## **PRACTITIONERS' PERSPECTIVES ON IMPROVING READY-TO-EAT FOOD VENDING IN URBAN NIGERIA: A PRACTICE-BASED VISIONING AND BACK-CASTING APPROACH**

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## ABSTRACT

In many parts of the world, food consumption is shifting from mostly home-based to out-of-home due to the transformation of everyday lives as a result of urban development and changing infrastructure. This trend has spurred the expansion of informal ready-to-eat food vending, particularly among the urban poor. However, informal ready-to-eat food vending practices have faced challenges in provisioning menu settings with high-energy and calorie-dense foods. Moreover, there are concerns about the safety, health, and diversity of food purchased through ready-to-eat food vending. This paper explores practice-oriented strategies, suggestions, and mechanisms through key actors' experiences and perspectives to understand how the provisioning of healthy and diverse food in informal ready-to-eat food vending can be improved in urban Nigeria as a future transformative initiative. A social practice-oriented approach, combined with participatory future visioning and back-casting, was employed in a multi-phase process of interlinked focus group discussions and workshops involving key food sector stakeholders. The findings reveal that achieving an increase in diverse foods and integration of fruits and vegetables requires changing food norms and promoting sensitization to the importance of diverse diets through training initiatives involving primary actors. Additionally, key skills/competences in the provisioning of healthy and diverse foods need to be learned and relearned, while adequate food materials, finance, and effective and efficient integration of the different food vending practice elements are required for the realization of these initiatives. Furthermore, understanding the relationships between food vending and other food-related provisioning practices within the food vending environment is essential in transitioning to healthier and more diverse food provisioning in the informal food vending sector. Our findings provide insights for policymakers to provide strategic pathways for practical interventions to improve food vending practices that meet the food security and nutritional needs of the urban poor.

## 5.1 INTRODUCTION

Urbanization, complex urban infrastructural change, and rural-urban migration are transforming food consumption practices in cities in the Global South (Karamba et al., 2011; Adeosun et al., 2022a). One key change in food consumption brought about by these dynamics is the shift from home-based to out-of-home food consumption, particularly among the urban poor (Piaseu and Mitchell, 2004; Tsuchiya et al., 2017). In many developing countries like Nigeria, ready-to-eat food vending has expanded tremendously (Adeosun et al., 2022b). This has raised concerns about poor urban dwellers who disproportionately depend on out-of-home food outlets, for whom food insecurity intersects with multiple other challenges in daily life, such as inadequate housing and long working hours in informal jobs (Adeosun et al., 2022a). These developments suggest that out-of-home food consumption will continue to grow, and this trend has a range of consequences. Recent research reveals that changes in daily practices such as mobility, work, and family life associated with socio-economic transformations in urban settings have contributed to increasing out-of-home food consumption (Thornton et al., 2013; Adeosun et al., 2022a). In response, out-of-home food provisioning is expected to align more along these situational dynamics to ensure the food security of the concerned groups of consumers.

Despite their increasing reliance on out-of-home food, low-income consumers do not have absolute control over the kinds of foods and the composition of meals provisioned by food vendors, so their out-of-home food intake is limited to what these vendors provide. However, the kinds of food provisioned intersect with different dynamic activities happening within the food vending environment. This includes location-specific activities such as the employment context of consumers, the period of the day that food is being provisioned, and the mobility dynamics of food vendors (Adeosun et al., 2022a; 2022b). Moreover, research shows that even though food vendors are aware of nutrition imbalances in the current food provisioned, profit-making takes priority in selecting the food they offer (Githri et al., 2016; McKay et al., 2016; Adeosun et al., 2022b). Furthermore, the tendency for most out-of-home food consumers to stick to a particular food vendor they trust in terms of factors such as hygiene, food safety, and sometimes the perceived satiety and energy the food provides, rather than the food's nutritional benefits (Adeosun et al., 2022a), increases the likelihood of them consuming mostly monotonous diets. Even though some food vendors offer different food groups, some are provided and consumed in small quantities only (Adeosun et al., 2022b). Despite multiple benefits attributable to the intake of fruit and vegetables in daily diets, poor consumers still eat below the usual recommendation by WHO (WHO, 2003). In most poor households in developing countries, Nigeria included, the consumption of fruits and vegetables is far below the minimum recommended level of 400g per capita per day (WHO, 2003; Ruel et al., 2004; Lee, 2016).

Given these trends, it is therefore critical to consider how out-of-home food can be improved to enable consumers to access healthy and adequate diets. This study conceptualizes healthy food in a way that departs from a focus on individual choice alone to direct attention to the contexts of provisioning and consumption that shape whether and how consumers can access a diverse diet that includes a variety of food items, fruits, and vegetables (WHO, 2015). By directing attention to the contexts of food provisioning and consumption, the paper investigates practice-oriented strategies and mechanisms that can aid in improving the health and balance of ready-to-eat food.

5

Most studies on ready-to-eat food provisioning have until now focused on food handling practices, food hygiene, the provision of high-calorie foods, and monotonous menu settings (Mwangi et al., 2002; Story, 2008; Muyanja et al., 2011; Lucan et al., 2014; Kolady et al., 2020; Adeosun et al., 2022b). However, it remains unclear how these interconnections and intersections of practices can aid in the improvement of food vending practices in terms of the health and diversity of the ready-to-eat foods provisioned. In this research, the study conceptualizes health and diversity of ready-to-eat food as two distinct aspects of obtaining an adequate diet through: (1) the integration of fruits and vegetables into menu settings and meals and (2) increasing the diversity of food groups provisioned.

In addressing this aim, the study builds on previous research on informal food vending in the Global South and, in particular, in Nigeria (Chukuezi, 2010; Leshi and Leshi, 2017; Resnick et al., 2019; Dai et al., 2019; Kazembe et al., 2019; Tawodzea, 2019; Swai, 2019; Zhong and Scott, 2020; Wegerif, 2020; Adeosun et al., 2022a; 2022b). In doing so, this study adopts a social practice-oriented approach using participatory back-casting methods (Davies and Doyle, 2015; Oomen et al., 2022; van der Gaast et al., 2022) to unpack practices, strategies, and mechanisms suitable for improving food diversity in ready-to-eat food vending practices among the urban poor. A study by Davies and Doyle (2015) confirmed that only a few studies in the domain of food vending apply back-casting using everyday social practices as their unit of analysis. Welch et al. (2020) studied the connections between social practices and regimes of engagement to understand future practices. Some studies applied visioning and back-casting in studying food futures in the Global North (Quist et al., 2011; Mangnus et al., 2019). For instance, Van der Gaast et al. (2022) employ social practice and future engagements in food entrepreneurship to understand possible transformations towards a sustainable food system. However, while the use of futuring and visioning methods has somewhat increased in food consumption research in the Global North, there is a lack of applying such methods in food studies in the Global South. This paper intends to fill this gap.

The remainder of the paper is structured as follows: section two outlines the conceptual-methodological framing underpinning the study. In section three, we present the

study context and the methods used to collect and analyze the data. Section four reports the findings from the study, which are discussed in section five to arrive at a conclusion on the implications of the insights generated for urban food system research and out-of-home food policy.

## 5.2 CONCEPTUAL-METHODOLOGICAL FRAMEWORK

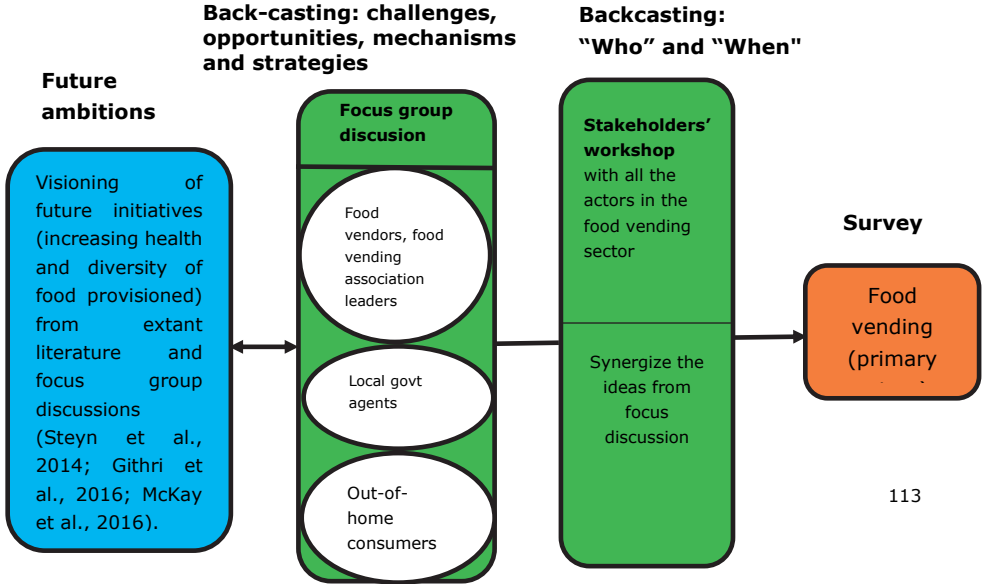
### 5.2.1 Visioning and practice-oriented back-casting methodology

A practice-oriented participatory back-casting method was applied to collect empirical information on visioning ways to improve the health and diversity of ready-to-eat food provisioning during focus group discussions, as well as a stakeholders' workshop. This combined approach was chosen because a social practice approach is inadequate for developing a normative direction to guide future transformational strategies. Thus, combining a practice perspective with a normatively focused back-casting methodology can help to overcome this limitation and explore visions for alternative practice arrangements, as well as pathways to their realization.

According to Davies and Doyle (2015), back-casting implies an overarching, multi-phased methodology. It starts with generating future ambitions or possibilities and is followed by a process of back-casting, which involves developing strategies, mechanisms, and frameworks from the present to the future that can enable the realization of these future ambitions. Building on this, the approach employed in this study stimulates face-to-face interactions between diverse stakeholders who have some knowledge of food vending practices. It starts with generating future ambitions and is followed by a process of back-casting, which involves developing strategies, mechanisms, and frameworks from the present to the future that would enable the realization of these future ambitions. According to Ahlqvist and Rhisiart (2015) and Kantamaturapoj et al. (2022), present actions are crucial for directing how we think about the future in the present. The approach, therefore, allows for the co-creation of strategies for improving food vending practices in the present. The study, therefore, takes everyday social practices as the starting point for discussing present arrangements to enable future changes (Mandich, 2019; Welch et al., 2020; Oomen et al., 2022).

According to Shove et al. (2012), social practices might be transformed in different ways, such as reconfiguring, substituting, or changing how practices interlock (see also Spurling and McMeekin 2015). Reconfiguring practices means rearranging one or more of the practice elements (meanings, competences, materials) comprising them (Shove et al., 2012; 2015). Practices can also be transformed by substituting one practice for another to achieve the expected outcome. For example, consumers might shift from eating their





**Figure 5.1** Participatory practice-oriented visioning and back-casting methodological process (adapted from Davies and Doyle, 2015).

lunch at home to eating it out-of-home. As practices interlock with other practices in practice-arrangement bundles, these connections may also change (Schatzki, 2002). For instance, the rise of out-of-home food consumption is interconnected with other related practices, including food systems, the economy, and the government. Consequently, attention should be paid to how transformations in routinized practices connect with dynamics in the wider socio-technical and socio-material contexts that both shape and are part of the practice. On a more situated level, daily food practices are linked with other practices in daily life, such as work and mobility. Thus, identifying the linkages between these other practices allows for identifying options to rearrange them and achieve the desired changes (Castelo et al., 2021). In this study, possibilities for healthier and more diverse food vending provisioning practices are explored through a lens that focuses on food vending practices and their arrangements with other related practices within the food environment.

The conceptual framework of this study envisions the changing interactions between food vending practices and governing practices and reintegrates the elements of these practices and how the practices themselves interlink to enable an improvement in the provision of healthy and diverse ready-to-eat foods.

The process of envisioning future ambitions and practice arrangements was informed by existing literature and insights from focus group discussions concerning the delivery of

healthy and diverse foods (Steyn et al., 2014; Githri et al., 2016; McKay et al., 2016; Adeosun et al., 2022a). Using insights from the literature combined with insights from the focus group discussions, a picture of what the future food vending landscape should look like (the “what”) was generated. This was followed by back-casting to understand “how” this aimed-for future can be achieved and “who” should be responsible for particular actions and the probable prospects and challenges it may face. The process of visioning and back-casting used in this study followed two stages of visioning and back-casting.

The focus group discussions involved stakeholder-specific discussions. During these discussions, back-casting of key challenges, opportunities, and mechanisms and strategies for the envisioned future initiatives (i.e., improving health and diverse ready-to-eat foods provisioned) were co-generated. The practice-based approach helped embed this discussion in the changes, rearrangements, and transformations of food vending and governance practices.

The results from the focus group discussions and the stakeholder workshop were further deployed to assess their practicability, implementability, and potential for wide adoption by the majority of the primary actors, i.e., the food vendors. A semi-structured questionnaire seeking to gain a wider view on food vendors’ views on the proposed visions and strategies was designed and administered to randomly selected food vendors from the study area. See Figure 1 for an overview of the methodological process.

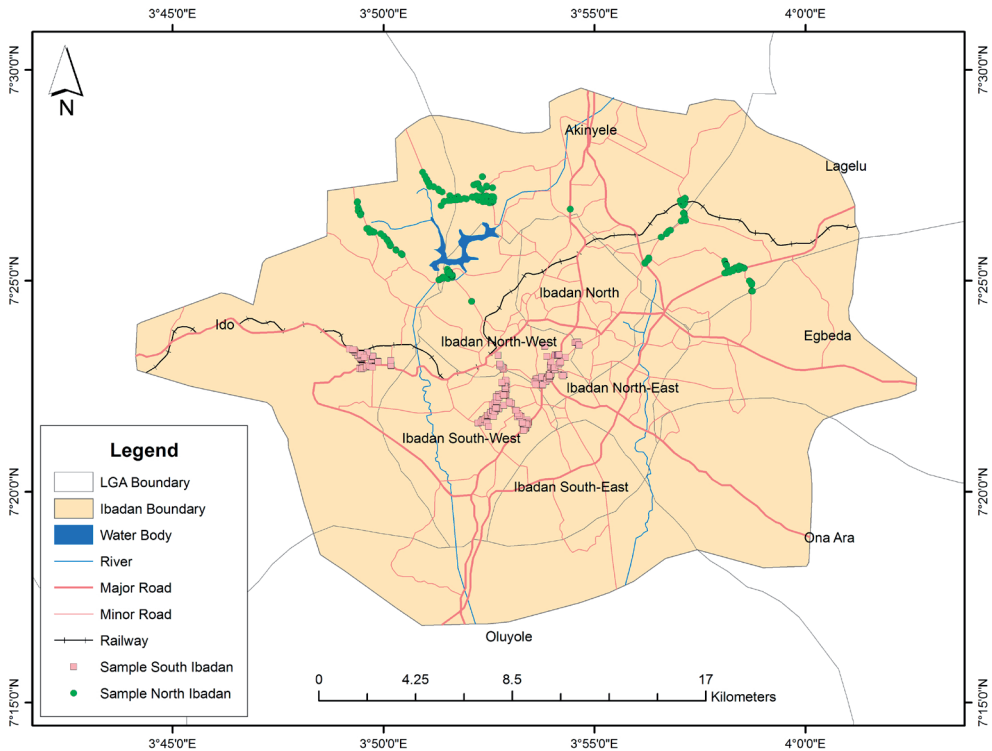
## 5.3 RESEARCH CONTEXT AND METHODS

### 5.3.1 Study location

The study is carried out in Ibadan, Nigeria. Ibadan is one of the largest cities in Nigeria with about four million inhabitants (Adelekan, 2016). As an ancient city, it accommodates different ethnic groups and people from different religious backgrounds. It has about 11 local government areas (LGAs) with five in the city metropolis and six in the peri-urban area where the majority of the low-income people reside. Most people in these communities live below the standard urban poverty line of \$1.90 per day (UNDP, 2004). The study selected these poor urban communities because relative to other social groups in the city, they rely most prominently on ready-to-eat food provisioning.

### 5.3.2 Food vending mapping

The study took a census of food vending outlets in the selected communities using Geographical Information System (GIS) to provide a spatial overview (see Figure 2). This method was applied to represent and analyze the food vending environment in the study area based on three identified food vending categories, that is: (1) traditional cooked meals



**Figure 5.2** Location of mapped food vending outlet's in Ibadan.

(local foods such as cooked rice, yam, soups, pounded yam, cassava mash “eba,” and cassava flour “amala”); (2) processed foods (fried foods, roasted foods, smoked, snacks, and beverages); and (3) unprocessed foods (fruits and vegetables). 686 food vending outlets were mapped by taking the coordinates of all the food vending outlets in the selected communities, including 319 traditional food vending outlets, 268 processed food vending outlets, and 98 unprocessed food vending outlets. From this larger sample, the study selected a diverse sample of food vending outlets for participating in the focus group discussions, stakeholders’ workshop, and survey.

### 5.3.3 Sampling procedures

An exploratory sequential mixed-method design was applied in the sampling and data collection. This approach was applied to generate a broad range of empirical data. The sample for this study was selected on the basis of information from the state ministry, allowing us to categorize the Local Government Areas (LGAs) in Ibadan. Based on this information, the study selected the lowest-income LGAs, as areas where a majority of low-income residents live, for further investigation. To ensure a good representation of the study area, the study purposively (based on their revenue size) selected two LGAs from the Northern part of Ibadan, where seven LGAs are located, one LGA from the

**Table 5.1** Showing different methodology applied and the numbers of food vending stakeholders selected.

<b>Methods applied</b>	<b>Food vendors/food vending association leaders</b>	<b>Consumers</b>	<b>Government agents</b>	<b>Nutritionist</b>
Focus group discussions	7/7	7	3	1
Stakeholders' workshop	5	5	2	1
Survey	300	-	-	-

Southern part of Ibadan, where three LGAs are located, and one LGA from Central Ibadan, located at the boundary between the Northern and Southern parts of the city. Thus, in total, four LGAs were selected as the sample area for the study, and within each LGA, two communities were randomly selected as sites for the study.

The study developed a multi-modal approach that started with focus group discussions involving different food vending stakeholders. This was followed by a stakeholders' workshop that brought them all together and a larger quantitative survey among the food vendors. Based on the particular research method, concurrent sampling techniques were applied. First, the study selected different groups of stakeholders for a series of four stakeholder-specific focus group discussions, i.e., (1) two groups of seven food vendors, including food vending association leaders (elected leaders that supervise and manage the affairs of the food vending association); (2) one group of three local government agents who supervise the activities of food vendors and a nutritionist from the University of Ibadan, and (3) one group of seven out-of-home food consumers. These amount to a total of four focus group discussion meetings conducted. For the stakeholders' workshop, the study included 13 stakeholders: (1) five food vendors, including food vending association leaders, (2) five out-of-home food consumers, (3) two government agents, and a nutritionist. These stakeholders were selected from the participants in the focus group discussions to participate in the stakeholder workshop. The overview of the methodology applied and food vending's stakeholders selected is presented in Table 1.

Quantitative data were obtained from 300 food vendors who were systematically selected from the list of each food vending outlet's category mapped, and a semi-structured questionnaire was administered to collect their opinions. Based on the mapping results, three lists of food vending categories were produced, and considering the size of each list, systematic sampling was applied to select the respondents for the survey. Thus, 165 respondents were systematically selected from the list of traditional food vending, and 135 respondents were systematically selected from the list of processed food vending. Only traditional and processed food vending was considered in this study because they provide low food group diversity (Adeosun et al., 2022b). The consent letter was read to the respondents in their local language to seek their consent, and the study only inter-

viewed the respondents who gave their consent verbally, while those who did not give consent were not interviewed.

The respondents were selected from across the four selected local government areas, based on their readiness to participate in the discussion as well as specific conditions. These conditions differ per category: food vendors should be at least five years in service, association leaders should be active in service and have spent at least one year in that position, government agents should be from an office linked to food vending activities, consumers should regularly use out-of-home food (at least one meal out-of-home every day) outlet and rely on different categories of food vending. These criteria were applied to receive firsthand information from practitioners and stakeholders who have a wide range of experiences in food vending. Fieldwork was organized by the first author between July and September 2022, with the support of four research assistants.

Data from the focus group discussions and stakeholders' workshop were recorded, transcribed, and coded inductively using (Atlas.ti). The open codes that were identified were then analyzed, compared, and grouped into categories. An iteration between inductive and deductive analysis was used for particular themes and patterns, and then this data was reviewed and further categorized in accordance with the social practice approach.

## 5.4 RESULTS

This paper aimed to understand future strategies and mechanisms that can contribute to improved food vending practices in the contexts of health and diversity of food provisioned. Taking a nuanced approach, the study analyzed different interconnections and interactions of practices, (sub) practices, elements of practices, and elements of governance that can support the future improvement of food vending practices. The study presents the findings under the following headings: first, the study analyzes the views of food practitioners (vending and consumption) on the benefits of increased health and diversity of food provisioned. This is followed by the expected future strategies. Different suggestions were made on practice-oriented mechanisms, including learning practice meanings, norms, competences, and materials, as well as reshaping links and synergies among different food markets within the food vending environment and establishing more effective and efficient regulatory frameworks guiding food vending practices. The last section of the results is based on the envisioned challenges and implementation process.

### 5.4.1 A paradigm shift in food vending practices

While there is variation among the different food vending categories (Adeosun et al., 2022b), changes in the ready-to-eat food vending practices are indispensable for ensuring

**Table 5.2** Perceived future opportunities in food vending practices by primary actors (food vendors).

N/S	Opportunity/prospects	Mean	SD	Decision
1.	Nutritional balance of food provisioned is not sufficient enough in terms of number of food groups provisioned by food vendors.	2.947*	0.014	Agree
2.	There is inadequate fruits and vegetables inclusion in the meal provisioned.	2.950*	0.013	Agree
3.	It is important to increase food group provisioned and integration of fruits and vegetable in a complete meal	2.950*	0.013	Agree
4.	Increasing food groups provision and integration of sufficient proportion of fruits and vegetables will avail us the privilege of improving the health of our customers and invariably increasing the income of food vendors.	2.921*	0.018	Agree
5.	Government empowerment programs through financial support scheme to food vendors as well as provision of enabling environment will be a welcome development and it will aid the implementation of the initiatives	2.937*	0.016	Agree

healthy and adequate diets. The study explored potential arrangements and interconnections between different practices, that can support these needed improvements.

#### 5.4.1.1 Future benefits of increasing the health and diversity of ready-to-eat food provisioned

Table 2. presents the vendors perceptions of the benefits of increasing the health and diversity of food provisioned and the possible processes of achieving this in the future.

The measurements are on a scale of 1 to 3, with a weighted average = 2.0, where, 1 = disagree, 2 = neutral and 3 = agree. \* indicates significant with respected to the statement. The results showed that vendors agree that the food currently provided is not sufficiently diverse, and there is inadequate integration of fruits and vegetables in the meals provisioned. This was also a viewpoint shared with the wider stakeholder groups. During the stakeholder focus group discussions, it was reported that an increase in the diversity of the foods provided offers an opportunity for consumers to access healthier diets.

*"...increasing food groups provision and inclusion of a good proportion of fruits and vegetables will avail us the privilege of improving the health of our customers and, invariably, increasing our income as vendors." (FGD, food vendor).*

*"It is quite necessary for the food vendors to increase their menu settings because of the nutritional level we obtain from different varieties of food. Each food supplies different nutrients to the body. Moreover, as the adage goes, 'health is wealth'." (FGD, nutritionist).*

The majority of the food vendors also confirmed that increasing the number of food groups and integrating sufficient fruits and vegetables is a welcome future initiative. The stakeholders agree that fruits and vegetables should be integrated into meals rather than provisioned as a separate dish, as some consumers may not be interested in purchasing them this way. This is important as the WHO (2015) recommends that individuals consume 400g of vegetables per day. Consumers, in particular, reported a need for food vendors to lead by integrating more fruits and vegetables into meals at affordable prices:

*"I would rather prefer fruits and vegetables integrated into my meals when I go to the food vending outlet, and not eat them necessarily as a sole meal." (FGD, consumer).*

However, despite this general agreement, most stakeholders agreed that current food norms and practices, as well as limited availability of diverse and healthy foods, impeded this:

*"Most of the foods we eat outside of our homes are starchy foods with inadequate vegetables. We are just managing them since we have little or no option once we are out of our homes." (FGD, consumer).*

For out-of-home food consumers, increasing the degree of food group diversity provisioned was understood as providing access to a greater variety of food items, thus enabling more diverse nutrient intakes and enjoying good health through consuming an adequate diet. Food vendors were also seen as benefiting from a greater diversity of food groups, as they generally also consume the meals they provision (Adeosun et al., 2022b).

*"Our customers will have easy access to an adequate diet at their doorstep, and we, the food vendors, will make more profit by providing nutritious food for them." (FGD, food vendor).*

The food vendors asserted that having additional varieties of foods to provision without reducing the number of existing food items provisioned will likely increase patronage as well as their business' profit. This implies a win-win situation for both parties (vendors and consumers).

*"The benefit we will enjoy is that we will be able to make better choices of the right combination of different classes of foods." (FGD, consumer).*

## 5.4.2 Expected future changing strategies

### 5.4.2.1 Changing food norms and sensitization

For both initiatives (increasing food group diversity and integration of fruits and vegetables in meals) to be fully accepted, there is a need for proper and intensive understanding of changing food norms and sensitization among both food vendors and consumers. The stakeholders reported that first, the consumers and food vendors should be educated about the need to increase fruits and vegetables in daily diets. The government and food vending associations should have a mutual agreement in bringing food vendors together to educate them on the reasons why they need to change their menu settings and how they can go about it and benefit in terms of profit-making.

This would involve challenging a belief, especially among the urban poor, that stresses the quantity rather than the quality of the food consumed. The government can play a critical role in this sensitization through public awareness campaigns using different media (i.e., TV stations, radio stations, newspapers, and social media). In particular, using well-designed jingles in these campaigns will drive home the importance of consuming fruits and vegetables and more food groups.

*“I think there is a need for the creation of awareness not only among the food vendors but also among the consumers because if the food vendors increase their menu and the consumers are not ready to buy, the seller will be at a loss.” (Stakeholders’ joint assertion).*

The food vendors reported that they may change their provisioning strategy and provide different types of food at different periods of the day. For instance, they can have a timetable for provisioning different classes of foods so their customers know when a particular type of food is available. Likewise, their presentation might change because each type of food has a unique presentation style.

The different stakeholders are of the opinion that the campaign for increasing the provision of fruits, vegetables, and diversity of food groups should be linked to health benefits to enable both vendors and consumers to understand and absorb these initiatives. This is because the ideas cannot be forced upon food vendors or consumers. Rather, they should find ways to educate them on why these initiatives are important. Probably, the government can aid this via the food vending association leaders by organizing training, seminars, and workshops.

*“The government can also help in the area of publicity by creating awareness among the public about the benefits of eating vegetables and fruits in sufficient quantity.” (FGD, government agent).*



**Table 5.3** Food vendors' perspectives on increasing food group provision and integration of fruits and vegetables provisioned.

<b>Initiatives</b>	<b>freq</b>	<b>%</b>
The initiatives is something possible for me to imbibe	260	86.7
I will like to start with the two initiatives at the same time	193	64.3
<b>I will like to start with one of the initiatives first</b>		
Increasing food group provision	52	17.3
Integration of fruits and vegetables	15	5.0
Not interested in the initiatives	40	13.4
<b>The food raw material sellers that are most important for the initiatives</b>		
Open market	202	67.3
Raw food retailers	52	17.3
Grocery shops	6	2.0
<b>These initiatives can start within this period</b>		
I am not interested	40	13.3
Immediately	192	64
Next year	64	21.3
Next two years	3	1
I don't know	1	0.3
<b>Receiving training for these initiatives is important</b>	252	84.0
<b>Organization of training for these initiatives</b>		
Government agency only	50	13.3
Food vending association only	52	17.3
Non-government agency only	19	6.3
Government/food vending association	139	46.3
<b>Monitoring of the implementation of the initiatives</b>		
Government agency	51	17.0
Food vending association	72	24.0
Non-government agency	5	1.6
Government/food vending association	132	44.0
<b>Total</b>	300	100

Non-governmental organizations and food vendors can also take the role of enlightening consumers about the essentials of the initiatives. This should also include efforts to improve engagement through embodied know-how. For example, stakeholders discussed how awareness can also be increased through demonstrations by food vendors in public places by offering tastings of new dishes and speaking with consumers about the nutritional importance of the menu settings provisioned.

#### 5.4.2.2 Training needed for future changing food vending practices

This section presents the food vendors' perspectives on the possibilities, prospects and strategies embedded in the envisioned transformative initiative in food vending regarding the increasing food groups and integration of fruits and vegetables.

The food vendors reported that for these initiatives to be materialized, they need to procure new cooking utensils, improve existing skills, and learn new skills. Changing food vending practices was recognized as a process that requires support and training to enable vendors to acquire the necessary skills and competences. Healthy and diverse food provisioning requires vendors to go beyond what they presently do. For example, as the number of food items increases, they need to develop skills to manage different food types, increase their menu settings, and discover ways to increase their income. Thus, the importance of training on increasing the variety of food groups provisioned and the integration of fruits and vegetables in meals was strongly emphasized. A food vendor will only prepare what he/she is skilled at, but once he/she has knowledge about different methods of preparation, different food items can be added to the menu. Food vendors in the survey also supported this, with about 84% asserting that they like to undergo training to improve health and diversity of ready-to-eat food provisioned. Regarding the organization of the training, about 46.3% of the food vendors suggest that collaboration between government agents and food vending association leaders is the most effective option (Table 3).

*“Some of our fellow food vendors who are not exposed to these different food preparation methods before would have to go and learn it. For instance, a vendor amongst us who hasn’t prepared salad before will have to go learn it for the sake of its necessity and inclusion.” (FDG, food vendor).*

The stakeholders also reported that such training is needed and should be organized by the government in consultation with food vending association leaders. Trained food vending association leaders can then train their members at their various clusters in developing new competences and skills. Trainings should be accessible and motivate the food vendors to adopt the content.

*“I can tell you that the language of people those food vendors listen to and comply with is their association leaders.” (FDG, government agent).*

In the past, the government has organized a series of trainings with food vendors centered on food safety and hygiene practices, which generally had positive impacts on vendors. A training specifically focused on health and diversity of ready-to-eat food provisioned and the skills and competences needed for increasing the variety of food groups and the integration of fruits and vegetables could be usefully integrated here.

*“Although our training has been on sanitation, food hygiene, personal hygiene, and how to prepare their meal in a neat environment, the government can also include the food nutrition balance benefit in the training.” (FDG, government agent).*

Access to material resources in the context of executing the initiatives is important as the food vendors would need to add additional materials, and the government could acquire more resources for training, sensitization, and coordination. Trainings should also integrate information on prices, free training opportunities, loans, and grant opportunities. There is a need to form synergies between nutrition experts, government, and food vending associations in organizing trainings. The food vendors further suggested that trainings would be more accessible if they were organized on a zonal basis.

### 5.4.3 Practice-oriented mechanisms

#### 5.4.3.1 Materials and financing

The focus group and workshop discussions revealed practices and practice arrangements that can contribute to the execution of the proposed healthy and diverse food initiatives. Important practices that would need to change to support healthier food include food preparation and preservation techniques, food procurement processes, storage and stocking, menu-setting, and vendor-consumer relations. These require hiring more staff to work in the food vending outlets, buying new kitchen tools such as pots, more plates, bowls, different sizes of cutlery, equipment such as a freezer for the preservation of foods, and a generator for constant power supply, and many more. They might also need to reposition their staff due to the expansion of activities in the food vending outlets.

*.....I will surely need more hands in food preparation since I will be preparing many food items (FDG, food vendor).*

The visioning and back-casting discussions identified different mechanisms that may need to be adopted in sourcing additional food materials. For example, procuring more food will impact the current way of sourcing food. As they require larger quantities, vendors need to transport raw food materials via reliable means from their providers in the open market using logistics staff. This would require a shift from cash to online payment. It is also likely to impact the temporality of procurement practices: procurement of food currently occurs every day or every three days but may be adjusted to a weekly or bi-weekly basis. As envisioned, vendors would have less time to go to the market due to the increased labor at the vending outlets associated with the preparation of healthier and more diverse meals. This means they may buy larger quantities in fewer shopping trips or employ logistics personnel. To accommodate the changed procurement practices, storage practices would also need to change in the future. Storage space, infrastructure, and materials will need to be improved, bought, or replaced. Since more food items need to be provisioned, current practices of selling all food items in one day are likely to be replaced by practices that allow for food to be preserved for several days. This means an increased demand for storage facilities for stocking and restocking prepared

food items and raw food materials to preserve perishable foods and prevent them from being attacked by animals.

*".....I can get people to help me construct a safe cabinet for stocking food raw materials to save me the stress of going to the market every day", (FDG, food vendor).*

The stakeholders agreed that food vendors would need financial support to be able to effectively engage in the new initiatives. Previous studies revealed that most people in food vending practices have a low-income status (Panicker and Priya, 2020). Therefore, they will need more finance to be able to expand their menu settings. Stakeholders believe this support can come from either the government, food vending associations, or non-governmental organizations. The government can empower vendors through financial support schemes as well as by creating an enabling environment.

*".....the support that we need is that of finances, for instance, most of us use soft loans and thrift to support our food provisioning business", (FDG, food vendor).*

There is a need to support training programs for food vendors, equip farmers, and reduce the levy for food vendors. The food vendors believe that more support for farmers would positively impact the price of food raw materials, as they may sell their raw food materials at a lower price. The government can aid the implementation of these initiatives through economically friendly policy formulation and the creation of wider public awareness. Food vending associations in connection with the government can roll out proposals to banks and other financial bodies to finance training programs for their members and seek soft grants or loan schemes for their members to provide them with the means to effectively take up the initiatives.

#### 5.4.3.2 Regulations

The focus group discussion included back-casting of different governing practices and arrangements that can support the envisioned future. Different governing practices and how they interconnect in shaping the future improvement of ready-to-food vending practices were identified. The stakeholders discussed and brainstormed governing practices that can increase the rate at which the initiatives are implemented in themes related to coordination and monitoring, controlling and supervision, and implementation. The results are presented below.

Coordination of transformations in the food vending sector can be carried out by both the government and association leaders. Food vendors trust and listen to their association leaders more than any other stakeholder. Hence, whenever the government seeks to influence food vendors, they seek to mediate this through the food vending association leaders.

*".....this new initiative can be successful when the coordination is done by the leaders of the food vendors' association with the support of government agents. They are the closest to the food handlers"; (FDG, government agent).*

5

The focus group discussions suggested that the association leaders should play a major role in the coordination and monitoring of the activities supporting future initiatives. Therefore, there must be a good understanding between the government and food vending leaders about the aim and importance of the future initiatives, as that would make coordination easy. The food vending association leaders should champion the coordination with the support of the government agents. The leaders can take advice from the government agents on how to ensure voluntary compliance by the food vendors. Constant inspection at the point of operation of food vendors by government agents and association leaders will make the implementation of the future initiatives more effective. The government can carry out monitoring by improving the policies and guiding the actions and operations of food vendors in the communities. This can be achieved through roundtable meetings between the government agents and the food vending association leaders. About 44% of the food vendors in the survey believe that monitoring the implementation of initiatives will be effective if it is inclusively executed (Table 3)...

To avoid price disparity for similar food items among food vendors, price control and standardization must be considered. The government can also support the initiatives by setting up a quality control agency that involves the leaders of the food vending associations and nutrition experts.

*".....key leaders among the food vendors must be contacted first, sensitized about the new initiatives, after which they can be released to disseminate and step down the idea to their colleagues at the grassroots level"; (FDG, government agent).*

#### **5.4.4 Synergies within food vending environment**

##### *5.4.4.1 Raw food markets*

The food vendors reported that for the initiatives to be successful, they need the support of other actors. Actors such as unprocessed food (fruits and vegetables) sellers, raw food retailers, open wet markets, and small grocery shops are important for ensuring accessible and stable raw food material supplies. About 67.3% of the food vendors perceive that open markets will be important in supplying raw food materials, while about 17.3% indicate that raw food retailers will be important (Table 3). Raw food suppliers could play an essential role in reducing the burden of procurement. In this case, food vendors could more easily call on them to supply the needed ingredients through delivery.

*".....I would not need to stress myself going to the market as people who are selling fruits and vegetables here can help me buy in bulk from the market", (FDG, food vendor).*

#### 5.4.5 Envisioned challenges and implementation process

Starting the new initiatives to provision more food groups and the integration of fruits and vegetables come with their own future challenges and depend on ongoing dynamics. Some of the challenges that could hinder the rapid implementation of this scheme include a lack of sufficient staff at food vending outlets, inadequate start-up capital, and a lack of storage facilities. Other constraining factors discussed include the instability in governmental policies, the persistent rise in the price of food commodities, the erratic power supply, and the vendors' and consumers' resistance to change.

Adding more food groups may also reduce the patronage of existing food items. For instance, if a food vendor is selling four food items before and she decides to add two food items, this addition is likely to reduce the sale of the existing ones. The food vendors also reported that the increase in food group diversity will largely depend on the prices of the food raw materials they get from the market.

*".....another issue is the uncertainties that may come with consumers' acceptance of the initiatives. This can be handled by starting with a small quantity at first and then improving on that later as demand increases", (FDG, food vendor).*

The integration of fruits and vegetables into meals may likely lead to an increase in price per meal, and vendors do not know if the consumers will be ready to pay for this. It was, however, recognized that these initiatives will not only have positive but also negative effects for food vendors. For instance, positive effects may include access to diverse diets and an increase in profit in the long run if the consumers' patronage increases. Negative effects might encompass an initial loss of profit due to consumers lagging to adopt the new food groups.

Food vendors are of the opinion that a process of incremental change is the most feasible option. For instance, they may start with two or three food groups and see how consumers respond. According to the survey (Table 3), about 64% of the food vendors believe that the implementation of initiatives in an incremental fashion can commence immediately, while 21.3% indicate that this process should start next year. Similarly, about 86.7% of the food vendors surveyed agree that the initiatives are possible, and they can imbibe them in the future. Also, about 64.3% of the food vendors indicate that they can undertake both initiatives (increase diversity in food group provision and integrate fruits and vegetables into a meal) at the same time, while 17.3% prefer to start first with increasing food group diversity and 5% to start with the integration of fruits and vegetables (Table 3).

## 5.5 DISCUSSION AND CONCLUSION

The study presents deeper insight into how informal food vending practices can be improved to deliver healthy and diverse foods to the urban poor. The study presents its findings to corroborate with existing literature on identifying practice-oriented processes that can enable/engineer solutions to multiple challenges and shortcomings of ready-to-eat food vending practices in the Global South (Mattioni et al., 2019; Bezares et al., 2023; Adeosun et al., 2022b). Being the most commonly used food provisioning outlet among the urban poor (Mwangi et al., 2002; Steyn et al., 2014), ready-to-eat food vending is an important food supply channel through which to focus attention in efforts to achieve healthy and diverse food systems. This study takes a practice-centered participatory back-casting methodological approach to explore mechanisms, strategies, and empirical information that can aid the improvement of urban food vending practices.

Our methodology and practice-oriented approach enabled us to analyze the “future in the present” and provided an analytical framework to understand the improvement of food vending practices. In doing so, we have responded to the call by Van der Gaast et al. (2022) for more research on the interactions between near and distant futures in different contexts and circumstances. Our approach deviated somewhat from the usual application of visioning and back-casting by implementing both into a process that involved two stages of visioning combined with one stage of back-casting. Previous studies have employed back-casting and visioning approaches to other situational dynamics (González-González et al., 2019; Bibri et al., 2019; Sisto et al., 2020; Villman et al., 2021; Soria-Lara et al., 2021), but none has been applied in the study of informal ready-to-eat food vending. The application of our method of two-staged visioning and back-casting may also be applied to analyze challenges and solutions for other components of the food system in the Global South.

The results from mapping the food vending environment indicate that out-of-home food provisioning has expanded and continues to expand in the food landscape. These observations underline the importance of food vending for the food security of the urban poor. This agrees with the findings of Swai (2019) and Tawodzera (2019) that street food vending is expanding and serving most people’s food needs in the city of Dar Es Salaam and Cape Town, respectively. Most out-of-home consumers depend on street foods for at least one to two of their daily meals, and they patronize food vendors for their daily meals regularly (Ogundari et al., 2015). This implies that any transformation towards improving food vending will directly benefit the urban poor consumers.

First, we analyzed the perspective different stakeholders have on the prospects of food vending, and we found that there is wide agreement that transformations in the food

vending sector are overdue and necessary to adequately meet the nutritional needs of consumers. According to Mwangi et al. (2002), a high proportion of food vendors do not sell food that is sufficiently diverse for a healthy diet. If consumers have access to and consume an adequate diet, this will be reflected in their health. According to Branca et al. (2019), transforming the food system can contribute to reducing non-communicable diseases. This study found that this transformation should entail two initiatives: (i) the increased consumption of fruits and vegetables and (ii) access to more diverse diets that include a broader range of the different food groups. The stakeholders reported that it is important that fruits and vegetables are integrated into meals sold in the food outlets rather than servicing them as separate meals. This is also important as WHO (2015) recommended that 400g of fruits and vegetables should be consumed per day. This way, low-income consumers can have access to a portable meal with fruits and vegetables as well as an adequate diet at affordable prices. However, the stakeholders suggest that more is needed for these initiatives to be successful. Both food vendors and consumers should be made more aware and sensitized on the competencies that are needed for the success of these initiatives. According to Panicker and Priya (2020), street vending can supply healthy and nutritious food to consumers if it is well organized.

Extant literature further indicates that some out-of-home food consumers prefer to eat food that has high satiety value, can fill their stomachs quickly, and enable them to withstand their often physically intense daily jobs, with a consequence that they ignore healthy foods (Adeosun et al., 2022a). However, consumers should be encouraged to seek food that suits their physical demands as well as provides enough nutrients, i.e., an adequate diet. Even though consumers follow their normal food routines, changes in a practice they are connected to can change the actual food they consume. Since food consumption practices are interconnected with food vending practices (Adeosun et al., 2022a), transforming food vending practices can lead to changing food consumption practices.

Second, the starting point in transforming food vending practices should be a focus on changing food norms and practices through training-related activities supported by the government and food vending association leaders. NGOs aiming to increase the consumption of healthy foods should also be carried along in implementing the initiatives. Training of food vendors centered on the know-how of the necessary skills and competencies and material resources usage required to execute the initiatives is indispensable. The stakeholders suggested that such training should be organized by the government with the collaboration of the food vending association leaders. This suggestion is in line with insights from research that highlight mutual understanding between the government and food vending association leaders on organizing training for food vendors (Zhong et al., 2019).



Third, the study analyzed different elements that are integrated to form the social practice of ready-to-eat food vending. Seeking to transform these, existing practice-elements and activities may need to be adjusted, changed, or supplemented. From our findings, adjusting practice-elements and processes that include skills, material resources, and capital are considered essential for the implementation of the initiatives. Buying additional food raw materials, kitchen utensils, other food preparatory materials, and effective storage facilities will be needed to accommodate more food materials to be stored and ensure they are prevented from being spoiled and eaten by rodents. In addition, the initiatives will require more capital as they have to buy additional food and other materials. The study suggested that such capital can come via soft loans from the government as a special package for these initiatives. NGOs can also provide financial support to food vendors. From our findings, confirming Herrero et al. (2020), it can be inferred that transforming food vending components of the food system involves the re-integration of key practice-elements such as procurement of raw food materials, storage facilities, food preparation and presentation, stocking, and restocking.

Fourth, the study analyzed how interconnections between food vending and governing practices can support the implementation of the initiatives. We found that governing practices can drive changes in food vending practices. The government should play this role in conjunction with food vending association leaders. This is because food vendors trust and listen to their leaders more than to government staff. This implies that for formal actions to be effective in informal settings, the stakeholders of the informal settings need to be included from the start of the discussions. According to Vermeulen et al. (2020), bottom-up and top-down approaches to dietary and food system transformations should be complementary. The study also suggested that past intervention strategies in food vending in the area of food safety and hygiene practices can be built upon for the implementation of the initiatives.

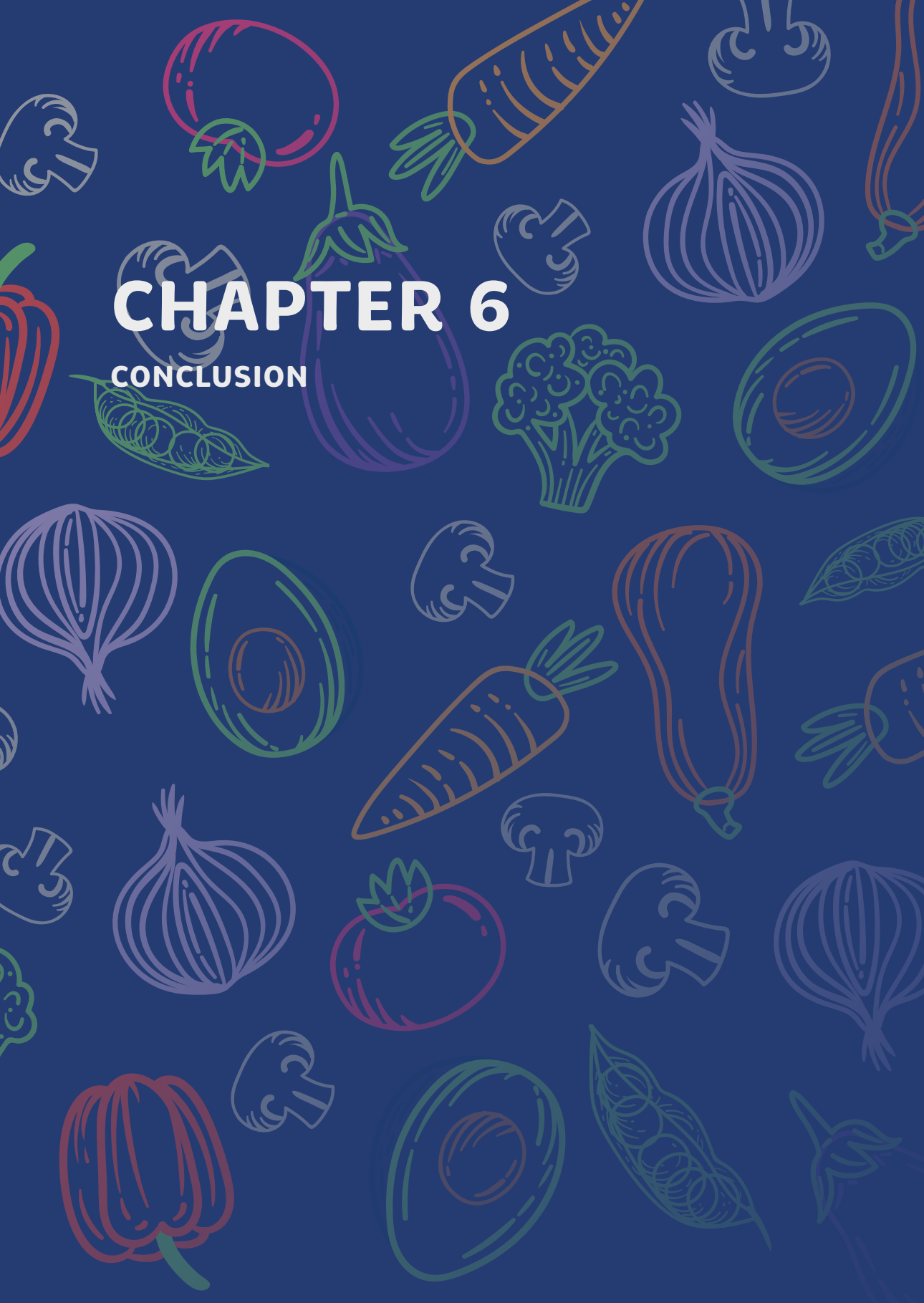
In conclusion, transforming food vending practices to increase the diversity of food groups provisioned and the integration of fruits and vegetables in meals involves the integration of practice-elements, interconnection of practices, and interconnections with governing practices. The study identified several key food vending practice-elements and elements of governance that need transforming. Specifically, adjustments in the procurement of raw food materials, food preparation and presentation, storage, and stocking strategies will enable the realization of the initiatives. Furthermore, key governance elements, including monitoring, supervision, coordination, and steering in collaboration with food vending association leaders, will facilitate the implementation of the initiatives. Our findings also provide some insights for policymakers to support the improvement of food vending practices. The study recommends further research on understanding consumers' receptiveness towards an increase in the diversity of foods provisioned by informal food vending.





# CHAPTER 6

## CONCLUSION



## 6.1 INTRODUCTION

6

Out-of-home food provisioning is the most prominent, accessible, and affordable food supply system for the urban poor, playing a critical role in urban food security in developing countries. Previous research has shown that food vending is the most relevant food provisioning channel across different socio-economic groups living in urban areas, but particularly among the urban poor who face specific challenges in accessing healthy and diverse food. As urbanization, socio-economic dynamics, and infrastructural development transform cities in the Global South, food vending has become an especially critical food supply channel for the urban poor. The increasingly precarious economic situation of the poor and their specific everyday life practices make food vending a cheap, convenient, and accessible food outlet. However, the ways in which out-of-home food provisioning interacts with the everyday life practices and socio-economic contexts of both food vendors and the urban poor remain little understood. This is of important concern as studies have shown that out-of-home food consumption is generally less healthy and less diverse compared to food prepared at home. Previous research investigating food vending practices has been predominantly economic or nutrition-focused, concentrating on food safety, poor diets, hygiene practices, and livelihood strategies with less attention to the everyday social dynamics of the practices that constitute them. Ready-to-eat food vending and consumption are interwoven and intersect in many ways as they coexist in the urban food landscape. Ready-to-eat food vending has evolved over decades as an unofficial part of urban development and the food supply system and has become the most commonly used food provisioning outlet for the urban poor. However, the social dynamics of how food vending is taken up and continues in everyday urban life remain unclear in the scientific literature. In this thesis, I therefore progress a sociological analysis into the everyday practices of ready-to-eat food vending and consumption in Nigeria.

Existing literature has found that ready-to-eat food vending faces challenges of poor food safety, low diverse foods and monotonous provision, and provides foods high in energy and calories. Different perspectives have aimed to analyze these problems mostly from a nutrition and food safety perspective to understand the nutrient properties, composition, and hygiene level of food provisioned by food vendors (Mwangi et al., 2002; Namugumya et al., 2011; Njaya, 2014; Steyn et al., 2014). However, these perspectives have provided limited insights into the everyday social dynamics of food vending practices. Progressing an innovative practice-oriented perspective, this thesis provides a broader lens to generate a better understanding of the social dynamics of food vending. A practice theory approach allows me to provide a situated social understanding of the food vending activities, from resource procurement to the final output (diverse ready-to-eat foods) and consumption. Departing from previous studies that take a partial analysis of food vending, this practice approach allows me to analyze the procedures, activities, series of actions, and meanings

that drive practices in food outlets and that culminate in the food vending's final products (ready-to-eat foods), as well as in the situated daily life dynamics of their consumers. The application of this sociological perspective offers me the opportunity to investigate everyday actions of food vending and how various integrations of meanings, materials, forms of know-how, and series of actions lead to the actual food vending's output. This is important as the links between elements and practices in food vending and out-of-home food consumption shape whether and how these practices can change towards more healthy and nutritional food consumption. Having adequate diets and healthy foods on the menu settings of food vending outlets is an important prerequisite for healthy food consumption.

However, specific contexts of daily life practices of consumers shape whether and how different types of out-of-home food are consumed. It is important to understand these dynamics to enable the necessary changes that can bring about healthier food vending. Such insights are critical given the increasing importance of food vending in the diets of the urban poor, as their diets depend on the food available in vending outlets (Fellows et al., 2012; Esohe, 2012). The insights from this study suggest that food consumption needs to be considered as a social issue rather than an individual choice (Vermeulen et al., 2020). This thesis, therefore, analyzes the food vending's practice elements (meanings, competences, materials), the series of actions underpinning food vending and consumption, and the wider interlinked practices in systems of provision and daily urban lives to understand food vending operations in urban Nigeria.

This thesis sets out to understand the social dynamics of how food vending practices evolve, persist, continue, and change in the context of urban settings in Nigeria, generating insights that are relevant for science and policy in Nigeria and elsewhere. This thesis builds on practice theory and governance arrangements' thinking to empirically study how out-of-home food vending practices are formed, interlinked, and can work together in the context of urban food systems.

### 6.1.1 Main research questions and overview of chapters

This section presents the findings when answering the different sub-research questions underpinning the study's main overarching research question: *"in what ways can transforming informal food vending practices contribute to improved diversity of ready-to-eat foods provisioned among the urban poor in Nigeria?"*

These sub research questions are listed again below.

- (i) How do the daily life context and practices of urban poor consumers interact and co-exist with out-of-home food vending and consumption?

- (ii) What constitutes the existing informal ready-to-eat food vending practices and their diversity of ready-to-eat food groups provisioned?
- (iii) In what ways do governance arrangements steer and shape the wider out-of-home food provisioning practices of healthy, good quality, and diverse ready-to-foods?
- (iv) In what ways can changing practices and governance arrangements of informal ready-to-eat food vending contribute to improving and supporting the health and diversity of ready-to-eat food provisioned?

The thesis commences by asking what is obtainable in an urban area regarding the food supply system and the role of food vending practices in this landscape. It investigates the social dynamics of food vending practices in terms of operations, functioning, performances, and activities. In Chapter Two, the thesis analyzes the positionality of ready-to-eat food vending within the everyday lives of the urban poor and how these everyday life contexts interrelate with their out-of-home food consumption practices. In Chapter Three, the study shifts the focus from the everyday lives of urban food consumers to food vending practices to investigate the existing experiences of ready-to-eat food vending. Everyday food vending practices are explored in terms of the meanings, competences, materials, and procedures that enable their performance across the different types of food vendors (traditional, processed, and unprocessed) and how these practice dynamics interrelate with food-related contexts and systems of provision. Chapter Four focuses on understanding how synergies between formal and informal governance shape and frame informal ready-to-eat food vending. In Chapter Five, multi-stakeholder visioning and back-casting methods are employed to explore how improvements in ready-to-eat food vending can be brought about to ensure that healthier and more diverse foods are provisioned.

### 6.1.2 Answering the research questions: main findings

As outlined, this thesis aims to answer four specific research questions that revolve around food vending and consumption practices in urban Ibadan, Nigeria. This section outlines the key insights generated in response to each of these questions. Additionally, potential policy implications emerging from the study and future research directions are discussed as well.

1. *How do the daily life context and practices of urban poor consumers interact and coexist with out-of-home food vending and consumption?*

Chapter Two explores how the consumption practices of the poor are embedded within and entangled with other daily life practices and the wider out-of-home food consumption-vending systems of provision. Drawing on the conceptual framework of Spaargaren

and Van Vliet on the interconnections between lifestyles and systems of provision (Spaargaren and Van Vliet, 2000), I reveal that out-of-home food vending and consumption coexist within increasingly precarious urban daily lives, and the interconnections between the food system of provision and out-of-home consumption practices are embedded in arrangements of daily life practices, such as those related to mobility, work, and domestic engagements. Together, these (and other) elements constitute the everyday life of urban dwellers. The analysis revealed how street food vending becomes interlocked with the informal job conditions of poor urban dwellers, such as work conditions with low job status, low control at work, irregular working times, and limited food preparation time. These situational dynamics and other contextual factors, for example, those associated with long commuting times and precarious housing conditions, have led to significant changes in food access and consumption patterns among the urban poor, from home-based food preparation to buying from informal ready-to-eat food vending outlets (Esohe, 2012; Fellows et al., 2012; Tsuchiya et al., 2017; Swai 2019; Tawodzera 2019; Wegerif 2020).

Socio-economic transformations and the associated changes in the rhythm of the daily lives of urban poor consumers often create conditions that make home-cooked meals or eating food at home difficult. As a result, households in urban areas nowadays depend on street food for the bulk of their daily meals. Work, mobility, and domestic practices are critical daily life practice domains that intersect with these changing dynamics in the urban food supply system. These daily life practices influence how, when, what, and where people consume their daily foods. Chapter Two revealed that socioeconomic characteristics significantly shape how the intersections of daily life practices and systems of provision play out. Moreover, the socioeconomic context of low-income consumers' lives plays an important role in how food is provisioned in urban areas and how food vending services cater to their daily food needs.

Chapter Two argues that to better serve the urban poor in terms of providing daily meals that contain the necessary nutrients for a balanced diet, the food vending sector needs to be better aligned with the daily lives of the urban poor to serve them meals with adequate diets. The physical attributes of food outlets, such as opening hours, and outlet cleanliness, are considered essential factors that shape out-of-home food consumption patterns (Cannuscio et al., 2014; Chen and Kwan, 2015; Elliston et al., 2017). This chapter shows that food consumption is not a singular practice but is interconnected with arrays of different practices that influence how food consumption is shaped in the wider urban food environment. It indicates that food consumption is bundled and intertwined with other daily life practices that shape a consumption pattern as it occurs in time and space within the food landscape and become a starting point in food consumption decisions. This implies that daily life factors are essential in how the food environment is shaped, emerges, and persists over time. Most times, consumption of healthy and diverse diets



is not really determined by availability, affordability, and accessibility only, as everyday life routine events play a role in people's consumption orientations and decisions. Even though the growth of out-of-home food consumption spurs food vending activities, different daily life practices also initiate, encourage, promote, and push the need for out-of-home food consumption. This chapter also suggests that the interference and interconnection of everyday life practices with food consumption are not limited to the urban Nigeria context but play out in other parts of the world as well, and this calls for further research to explore these interconnections.

2. *What constitutes the existing informal ready-to-eat food vending practices and their diversity of ready-to-eat food groups provisioned?*

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Chapter Three focuses on understanding the existing everyday practices of food vendors within the food vending environment with respect to nutritional health and food diversity. Three types of food vending that operate within the urban food landscape were identified, i.e., traditional, processed, and unprocessed. It is revealed in this chapter that there are broad differences between these food vending categories in terms of nutritional context and diversity of the food groups provisioned. Traditional food vending is the most diversified when compared to processed and unprocessed food vending. Taking a sociological perspective to understanding the social dynamics of the practice elements and the series of actions constituting the food vending practices, different skills, competencies, and material resources were identified among the vendors. Critically, the variations in these practice elements and actions were important in shaping differences among the vendors in terms of the degree of health and diversity of the food groups provisioned.

Zooming in, this chapter identified critical elements that are key in food vending practices and provide opportunities for their transformations. Considering that food vending does not exist in isolation but interrelates with social developments within the food environment, this chapter also zooms out to identify other key social dynamic activities that co-evolve and coexist with food vending. Specifically, it was revealed that food vending interrelates with other food-related provision practices by engaging in practices to procure the necessary food ingredients, and similarly, that migration and economic developments interfere with these practices. Rural-urban migrants interface with the different food environment context and more or less engage with food vending to meet their food needs. While economic growth prompts more women into formal jobs, thereby limiting their domestic engagements.

The insights generated in this chapter have important policy implications. They show that supporting certain practice elements and actions among food vendors can help to ensure that out-of-home food provisioning improves the nutritional intake of low-income

urbanites through the provision of a large variety of healthy food groups. Ready-to-eat food vending has the potential to serve as an instrument of food and nutrition security. Going beyond the attachment food vending has with the urban poor, it is evident that food vending can also play an important role among other socio-economic groups in urban areas in the delivery of healthy and diverse diets. The application of practice theory provides an in-depth understanding of the series of actions inherent in this practice. It is envisaged that the application of the practice approach provides an understanding that changes, modifications, and adjustments of practice elements and a series of actions within a particular practice can influence the nature of the outcome. In that way, the insights generated show that it is possible for an “expected outcome” of food vending to be realized if its practice elements, activities, and series of actions are reframed, readjusted, and reconfigured. This chapter shows that a “practice application” provides a foundation for understanding other components of the food system, i.e., as a food system component with practice-oriented elements.

3. *In what ways do governance arrangements steer and shape the wider out-of-home food provisioning practices of healthy, good quality, and diverse ready-to-eat foods?*

Chapter Four, addressing this question, focuses on understanding how the governance of the informal food vending sector occurs. The chapter views governance as a wheel that drives food provisioning practices and influences their effectiveness. Taking the social practice approach, the focus is on exploring the interconnections between governance practices and food vending practices. A practice methodology was employed to explore these interconnections through precisely mapping the views and experiences of different stakeholders, including food vendors, Food Vending Association leaders, and government agents whose offices are linked to food vending activities. Despite the informal nature of the sector, I found that formal regulations are also established and enforced by the authorities to guide food vending practices.

Although the status of food vending is still informal in urban Ibadan, the government interferes with individual food vendors’ activities and controls them directly and indirectly through the Food Vending Associations. These insights reveal how the active supervision and monitoring of ready-to-eat food vending have reshaped and influenced food vending practices. Hence, formal rules and regulations can co-shape the norms and logics guiding everyday actions and therefore also promote effective, sustainable, and continuous practices. The generated insights reveal that the governance of food vending in urban Nigeria is a joint activity involving government officers and the informal Food Vending Association leaders. Most government decisions about food vending are taken in consultation with the Food Vending Associations. Thus, the effective implementation

and sustenance of the rules and regulations concerning informal food vending practices lie within the ambit of both the formal government and the informal Food Vending Associations, with the latter playing a crucial role.

The empirical analysis indicated that involving informal actors in the enactment, execution, and implementation of rules and regulations propels their quick adoption. I found that interconnections between the (formal-informal) co-governance arrangements and the food vending practices are indispensable for achieving acceptable and effective informal food vending systems. The associations play an intermediary role in terms of collecting levies, monitoring, and supervision. Thus, the informal associations are a crucial vehicle by which formal governance interrelates with the informal food vending sector.

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Chapter Four also revealed that the governance arrangements revolving around food vending practices in Ibadan are structured around food safety, with little or no attention to the provisioning of diverse or healthy foods. Apart from government and association-initiated rules, I found that individual food vendors have additional self-directed rules that guide their practices, and it is within this discretionary space that they implement these rules. This chapter showed that to effectively deliver healthy and diverse diets, governance should play a monitoring and enforcing role to enable the individual vendors and their organizations to comply with stipulated rules. Undoubtedly, governance is the wheel that plays a critical role in how practices and food systems as a whole evolve, and it is therefore important in helping to bring about effective and sustainable performance in food vending. Effective governance can impact food vending systems in urban cities through the provision of leadership for effective coordination to ensure nutritional quality and sustainable food systems.

4. *In what ways can changing practices and governance arrangements of informal ready-to-eat food vending contribute to improving and supporting the health and diversity of ready-to-eat food provisioned?*

This question was explored by building on the results of Chapters Two, Three, and Four to provide suggestions and strategies that can aid transformative initiatives in food vending practices. Practice-centered participatory visioning and back-casting methods were employed to understand the integration of practice-elements, interconnections between different practices, and governance practices that can enable transformations in ready-to-eat food vending practices. Different food vending stakeholders, including food vendors and the Food Vending Association leaders, out-of-home food consumers, government agents, and a nutritionist, provided suggestions and information that would enable the transformation in food vending practices aimed for. Chapter Five revealed that trans-

forming food vending can be beneficial to the health of the out-of-home food consumers and the food vendors themselves, particularly the low-income groups among these categories. In particular, such a transformation would provide opportunities for low-income urban residents to have better access to fruits and vegetables and more diverse diets. It was revealed in this chapter that fruits and vegetables should be integrated into the meal sold in the food outlets rather than servicing them as separate meals. This way, low-income consumers can have access to a portable meal with fruits and vegetables as well as an adequate diet at affordable prices.

The stakeholders identified training as an essential element in this transformation process. This training should be centered on assisting vendors to develop the necessary skills and competencies and access to the material resources required to execute future initiatives. Seeking to transform food vending practices, existing practice-elements (meanings, materials, competences) and activities need to be adjusted or supplemented. Drawing on insights from Chapter Four, the critical role of governing practices in driving changes in food vending practices was stressed. The government should play this role in conjunction with the Food Vending Association leaders. This chapter showed that like other food system components, the food vending system also needs to be improved to enable it to deliver healthy and diverse diets. In improving the outcome of a particular practice, all the key elements and interrelated practices need to be re-configured, re-adjusted, re-molded, and changed to enable the desired outcomes towards healthy and diverse foods to be materialized. This chapter showed that effective improvement can happen in the food vending system if everyday routinized practices are unraveled and the necessary elements are identified. It implies that for an improvement to happen, the starting point is to understand the existing and relevant interconnected practices.

This thesis provides evidence-based information on the broader operations of informal ready-to-eat food vending and what transformative initiatives are possible to improve it. In answering this thesis' broad research question, Chapters Two, Three, and Four provide empirical evidence-based insights on opportunities to improve informal food vending concerning the health and diversity of the ready-to-eat food provisioned. Chapter Five builds on this to consider possible transformative innovations in food vending and the mechanisms and strategies needed to realize them. The thesis identifies and generates further understanding regarding the different elements and the series of actions inherent in food vending practices and provides suggestions for their improvement and transformation. Such insights provide fresh directions for policymakers and inform the government about the importance of the informal food vending system in the lives of urban citizens and the need to include the informal food vending sector as a critical element in leveraging transformations for healthy food transitions, to transform the diets of the urban poor in particular. The findings of this thesis can inform key policy sets and enable

practical interventions that can initiate the transformations needed to support informal ready-to-eat food vending going forward.

## 6.2 REFLECTION ON PRACTICE-ORIENTED PERSPECTIVE TO UNDERSTAND URBAN FOOD VENDING AND CONSUMPTION

The thesis set out to understand informal ready-to-eat food vending in urban settings among low socio-economic groups. My findings demonstrate that food vending is an important food channel mostly patronized by the urban poor and composed of different practices, (sub)practices, and practice-elements that are interlinked and integrated. I therefore argue that food vending is not an isolated practice but interconnects and intersects with other practices such as everyday routine events, raw food markets, and food consumption. These social factors and entities that interlock with and shape everyday food vending practices deserve further discussion. Considering the indispensability of food vending in the urban area, it is important to take this sector into consideration in future urban planning and development, particularly in the Global South.

My thesis has set the pace for the application of a social practice perspective to understand out-of-home food provisioning in Ibadan, which offers further directions for social practice-based analysis of food systems in the food vending sector across the Global South. I contribute to the literature by applying this perspective to the understudied topic of ready-to-eat food vending in the Global South and also by applying a practice-based visioning and back-casting approach to identify future improvement initiatives in food vending. This is innovative because most practice theory analysis of food practices has occurred in the Global North settings (e.g., Zukin, 1998; Mohr et al., 2007; Wertheim-Heck and Raneri, 2019; Southerton, 2020). This allowed me to analyze food vending as an existing everyday practice and as against the normative requirements.

This thesis also introduces innovative methodologies for studying practice dynamics by applying a multi- and mixed-methodological approach that includes qualitative, quantitative, and spatial elements. The research methods applied in practice analysis included developing GIS mapping, using food logbooks, and performing in-depth interviews, participant observations, focus group discussions, stakeholder workshops, surveys, visioning, and back-casting to understand and analyze food vending practices and their transformations. Specifically, a multi-method approach such as this can help to mitigate challenges in representation while trying to access, represent, and study practices (Davies et al., 2012; Gheradi, 2019; Hoolohan and Browne, 2020; Greene and Royston, 2021). This is also the first study that has applied a practice-based perspective in measuring dietary diversity as it departs from a commonly used approach that takes 24-hour or 7-day recall to meas-

ure dietary diversity. I take a practice-based approach to measure dietary diversity provisioned on a seven-day basis in practice (i.e., food groups provisioned were recorded on a daily basis for a period of seven days). To further solidify the insights, the methodology also included quantitative analysis to generalize and to build more confidence about the findings among the end users (NGOs, food system practitioners, government, and policy-makers), to frame a sustainable policy that can recognize the crucial role informal ready-to-eat food vending plays in the context of the urban food supply system. Moreover, qualitative methods allow particularly for understanding processes and situated experiences, while quantitative methods are good for garnering insights into aggregate patterns and trends. As, so far, most studies that employed a social practice theory approach have taken a qualitative approach, this thesis adds to the basket of methods by implementing quantitative approaches in an effort to identify more aggregated trends and patterns (Browne et al., 2014; Wertheim-Heck and Raneri, 2019).

According to Bourdieu (1977) and Giddens (1984), the social practice approach proposes that social structures such as rules and institutions do not simply 'exist' or influence actors 'from the outside', but are produced and reproduced in practice, in the interactions between actors and structures in social systems. In my case, practice theory allowed me to analyze the urban food vending system as comprising an intersecting nexus of multiple practices. I view activities within the food vending system as consisting of interactions between different elements and a series of actions that together produce a definite outcome. Thus, the nature of the outcome of food vending practices is a reflection of the integration of the different elements of a practice as well as of the interactions between a series of actions occurring within the food vending environment. This theory, therefore, enabled me to analyze how practices interrelate within the food vending system. Thus, food vending is interconnected with other practices forming bundles of practices, i.e., interconnections with consumption, daily life actions, and governance arrangements (Bhattacharyya, 2001; Nicolini, 2012; Schatzki, 2014; 2016; Swai, 2019).

This practice perspective enabled the analysis of how food vending emerged, persisted, and changed over time. Social practice theory advanced the understanding of food vending practices as consisting of skills, competencies, material resources, and meanings (Shove et al., 2012; 2015). The thesis showed how food vending outcomes are shaped by forms of know-how, skills, techniques, and capabilities as well as the availability of materials and resources that are required (Shove et al., 2012; Walker, 2014). Furthermore, intersecting practices include daily life practices that are critical in influencing how, when, and what kinds of food are consumed. The wider contexts of food vending consumers' lives are critical factors influencing consumption patterns and thus essential for understanding how consumers take up and become locked into food vending to source their daily meals. The study contributes to the literature in the sense that consumption of healthy and diverse diets is beyond availability, affordability, and accessibility only, as

everyday life routine events play a crucial role in people's consumption orientations and decisions.

The implication of these findings is that food vending needs to be (re)framed around the socio-economic conditions and daily life engagements of the urban poor. Therefore, it is not possible to expect that a campaign for achieving a total home-based food preparation will be successful. Also, in the future, informal food vending will remain an important element in the urban food system framework that needs more attention from researchers and policymakers. In addition, informal and formal governance arrangements interact and collaborate in the coordination and monitoring of food vending activities, which departs from the common perspective in the literature that both formal and informal governance are strictly separated (Roever, 2007; Schindler, 2013; Dragsted-Mutengwa, 2018; Dai et al., 2019; Díaz-Méndez et al., 2020). This implies that a more robust and effective governance approach is possible and can stimulate improvements in informal food sectors if formal and informal arrangements are mutually configured and interconnected.

Therefore, I argue that instead of focusing on individual decision-making (of consumers and vendors) in food vending transformations, efforts towards change should concentrate on the everyday routine practices of food vending. Transforming food vending involves changing or reconfiguring these elements and bundles. For example, targeting skills, supporting additional material resources, and facilitating the application of new techniques can enable changes towards more diverse and healthier out-of-home food provisioning. The dynamic interactions between food vendors and buyers can impede or facilitate changes in food vending, but power is skewed to the side of the food vendors.

Improving food vending delivery of healthier and more diverse ready-to-eat foods requires the concerted efforts and interactions of food vendors, Food Vending Associations, and government institutions. According to Vermeulen et al. (2020), bottom-up and top-down approaches to dietary and food system transformations should be complementary. Therefore, the government plays an important role in conjunction with Food Vending Association leaders in aiding the transformation of food vending. A holistic approach is needed to identify practice-oriented solutions, mechanisms, and suggestions to promote the delivery of healthy and diverse ready-to-eat food vending in the Global South.

### **6.3 POTENTIAL POLICY IMPLICATIONS**

Food vending activities continue to be neglected by authorities and are not yet recognized as an important sector that can support cities in terms of food security and economic

development. Even though food vending has existed for several decades, it is not factored into city planning in Nigeria and most other African countries. The main reason for this is that these activities are informal and therefore not licensed and standardized. The refusal to include food vending practices as part of urban settings and planning and developmental arrangements, however, implies the neglect of low socio-economic groups' food security concerns by the city authorities. Food vending seems to have been designated as a sector in the city that delivers unhygienic and unhealthy foods and should therefore not exist. However, this assumption does not take into consideration previous research findings about street foods. Existing literature found that street foods can contribute to both nutritional needs and the economy of the city (Steyn et al., 2014; Leshi and Leshi, 2017). Even though the government slightly strengthened their supervisory activities, informal food vendors are not officially registered under the government. Recognizing food vending would mean identifying its contribution to accessing adequate diets and mapping the various food consumption practices among the different socio-economic groups living in the city.

This thesis provides evidence for city authorities to rethink their perceptions and approaches to street food vending practices. It has confirmed that street food vending plays an important role, particularly in catering to the food and nutrition needs of urban poor dwellers. It also provides strategic pathways for practical interventions to improve food vending practices that meet the food security and nutritional needs of the urban poor. If food vending is transformed in the future, it surely needs to benefit all socio-economic groups in the city. Presently, in Nigeria, no stringent policy solidifies food vending operations. For improving food vending activities, it is crucial to understand how their deliverables are shaped, and this requires understanding their daily routine practices. The critical element(s) across all different categories of food vending should be analyzed to identify concrete opportunities for (policy) interventions. Hereby, also the wider daily life dynamics of the urban poor in shaping their food consumption practices should be included. This is expected to lead to more inclusive and effective policy interventions, particularly in Sub-Saharan Africa with similar socio-economic and demographic characteristics.

Incorporating food vending practices into the city's master plan is necessary, which means enabling more robust rules and regulations to guide the informal food practices. In formalizing food vending, the particular characteristics of informal food vending should be taken into consideration. For instance, most food vending actors are of low educational status with low start-up capital. So far, they have received little or no support from the government to sustain their practices in terms of infrastructure, capital, and other facilities. To implement improvements in the informal food vending system, co-governance is needed, whereby informal intermediaries can play an important role in the execution.



There is widespread agreement that food system transformation and innovation are needed to meet demands in terms of food and nutrition security (Brouwer et al., 2021). In particular, there is growing awareness of the need for incorporating healthy foods into our diet. Street food vending is yet an underexplored vehicle for propelling this forward. The findings of this thesis indicate that the food vending system can potentially play a significant role in helping to address nutrition inadequacy, particularly among poor urban populations. Hereby, more attention should be paid to informality in the food system as this is critical in identifying a suitable approach to address the problem of food insecurity and malnutrition. As this thesis reveals, informality in food practices is expanding because it is a channel commonly used by socio-economic groups that are becoming increasingly present in cities expanding through rural-urban migration.

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Finally, also identifying opportunities for policy interventions requires insights into how food consumption interacts with the broader daily lives of the urban poor as part of the informal sector. The complexity of urban life and the dynamics of mobility, home, and workplace practices the urban poor are involved in influence what, where, how, and when foods are consumed. Informal jobs, prevalent among urban poor consumers, prevent them from home-based food preparation and consumption practices. Thus, the job characteristics of the urban poor should be studied to identify potentially effective interventions. These intersections between daily life practices and out-of-home food consumption should be taken into consideration in the food system framework as well as in food policy implementation and application.

## 6.4 FUTURE RESEARCH OUTLOOK

Based on this thesis, the following three suggestions for future research are presented here.

First, there is a need to understand how food vending fits into the migration dynamics in urban areas. In-depth empirical understanding of how rural-urban migration shapes, emerges, and persists in urban Global South settings remains unclear. Rural-urban migration is likely to cause food transitions as people may (need to) change their diets when migrating. How migrants adapt to the urban food system, access food, and rearrange their food consumption practices needs to be better understood. Of particular concern here is understanding how these dynamics play out for poor people who are likely to become dependent on food vending systems for access to their daily meals. For instance, rural-urban migration has been associated with significant transitions in food provisioning and consumption. Understanding how everyday urban migration dynamics shape and interconnect with urban food vending and consumption is important in reframing urban food systems and their governance.

Second, there are other outputs that the food vending system can deliver apart from provisioning diverse daily food. For instance, there is a relationship between well-being and food vending and consumption. Further research should take a capability approach to explore the level of influence the food vending system has on the well-being of its key actors, including the food vendors and the consumers. It is also important to understand the impact on sustainability the food vending system in urban areas has in relation to food safety practices and the diversity of foods provisioned. The critical question is to explore how, in the context of the expected growth in this sector, sustainability can be achieved.

Third, and finally, future research should further explore consumers' receptiveness towards an increase in the diversity of foods provisioned by informal food vending. There is a need to empirically understand consumers' willingness to accept the expected transformation taking place in the food vending system. It is important to understand the materials, competencies, and meanings that can shape and steer consumers' receptiveness toward a food vending system transformation. This can be done through experimental studies to analyze whether the transformational initiatives suggested in this thesis would be considered by consumers as a good way forward.

In conclusion, this thesis shows that informal food vending is growing and mainstreaming into the context of different socio-economic groups in urban areas as a critical contribution to nutrition security. It shows a broader understanding of food vending as consisting of a broad array of processes that are integrated to form the final outcome (ready-to-eat foods). I envisage that food vending remains a useful informal food supply channel that is important with regard to out-of-home access to "nutritious" foods. Research on informal food vending is of growing importance and needs further contextualization to provide a broad understanding applying different perspectives from both the Global South and North so valuable lessons can be learned. As an informal activity, ready-to-eat food vending is nevertheless an essential part of the urban food system, and therefore any transformation process should include this sector. Addressing food system challenges in the Global South towards health and sustainability requires recognition and in-depth understanding of ready-to-eat food vending as a critical part of the urban food system.



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# **APPENDICES**

**APPENDIX A**

**APPENDIX B**

**APPENDIX C**

**APPENDIX D**

**SUMMARY**

**WASS EDUCATION CERTIFICATE**

**PUBLICATION LIST**

**ACKNOWLEDGEMENT**

**ABOUT THE AUTHOR**

# Appendix A

## CHAPTER 2

Dear respondent,

Please find below a summary of your rights as a participant in this survey:

This research is being carried out as part of Kehinde Paul Adeosun's PhD thesis at the Environmental Policy Group, Wageningen University (the Netherlands). Your responses will form the basis for several chapters of Mr Adeosun's thesis and potential articles which will focus on understanding urban lifestyles and out-of-home consumption practices in Ibadan, Nigeria.

Please be assured that your responses will be held in the strictest confidence. Furthermore, if your responses are quoted within his work, should you so wish, they will be sufficiently anonymised in order to protect your identity. Please be aware that you are under no obligation to participate in this survey. Furthermore, you may refuse to answer any questions you wish to avoid.

Note!: the consent of the participant were sought in written form and verbally.

Kind regards

Kehinde Paul Adeosun

### Socioeconomic attributes of consumers

1. Gender: Male  Female
2. What is your age:  years
3. Which kind of job do you do: No job  Trading  Artisan  Student   
Civil servant  farmer
4. What is your marital status: Single  Married  Widow  Widower   
Separated  Divorce
5. Living situation:  Live alone  With family member
6. What is your average income per month:  naira
7. How many times do you eat out in a day:  number
8. Which part of your meal do you eat out-of-home: Breakfast  Lunch   
Dinner  Breakfast/lunch  Breakfast/dinner  Lunch/dinner   
Breakfast/lunch/dinner

9. What is the distance of your workplace to this food outlet:  Km
10. What is the distance of your home to your workplace:  Km
11. What is the distance of your home to this food vending outlet:  Km
12. How often do you come here to eat? Regularly  Sometimes  Occasionally
13. Number of meals eating out daily: Once  Twice  Three times  Four times
14. Which category of food vending do you patronize most: Traditional   
Processed  Unprocessed
15. Location of the food vending outlet: Along the road  Market square   
Along the street  Motor park  Workplace

### Out-of-home consumers interview guide

1. How is your ordinary day organised in terms of key activities, leaving home, travelling to work, travelling back to home; in terms of timing and content/means. What and what is involve? How do your activities in the workplace look like interms of your food consumption pattern? In what ways do these activities affect/intersect with your out-of-home food consumption practices?
  - a. Then follow up with specific questions on eating: where, when, why these choices.
  - b. Then you can follow up with specific question on the kinds of street food and the key criteria for making choices on what food to buy where.
2. Can you tell me your everyday life with respect to activities you engage with out-of-home and how your out-of-home food consumption practices look like
3. Which of the these daily activities (e.g. mobility, workplace, domestic) do you engage with on daily basis and how do they affect your choice of your out-of-home food consumption practices?
4. How does your domestic activities look like interns cooking at home, do you have kitchen and other food preparatory materials? Do you cook your food yourself at home or how do you go about it?
5. How do you see street foods in terms of convenience, taste, safety and availability? How do they influence your choice of streets foods consumption
6. How do the following factors motivate your choice of street foods: (1) variety of foods available (2) convenience (3) health, (4) price, (5) easily consume, (6) culture etc.
7. Do you eat processed foods as a meal or just as snack, in general, how do you view processed (snack, fried foods, beverages, bread) foods?
8. What can you say about different types of street foods you know and how is your perspective about them as foods. E.g traditional foods, processed foods(snack, fried foods, beverages, bread ) and unprocessed foods(fruits/carrots/coconuts)
9. Can you explain the reasons why you prefer to eat out?
10. Do you eat all your daily meals from food vendors. If yes, can you explain why?

# APPENDIX B

## CHAPTER 3

Dear respondent,

Please find below a summary of your rights as a participant in this study:

This research is being carried out as part of Kehinde Paul Adeosun's PhD thesis at the Environmental Policy Group, Wageningen University (the Netherlands). Your responses will form the basis for several chapters of Mr Adeosun's thesis and potential articles which will focus on operations, experiences and activities of informal ready-to-eat food vending practices in Ibadan, Nigeria.

Please be assured that your responses will be held in the strictest confidence. Furthermore, if your responses are quoted within his work, should you so wish, they will be sufficiently anonymised in order to protect your identity. Please be aware that you are under no obligation to participate in this study and may withdraw from the interview at any time. Furthermore, you may refuse to answer any questions you wish to avoid.

Note!: the consent of the participant were sought verbally.

Kind regards,

Kehinde Paul Adeosun

Food vending is the act of selling ready-to-eat foods (food that is consume directly without undergoing further processing or transformation) to the consumers in the public places such as along the road, in the motor park, along the street, in the market and workplace.

### **1. Motivations of informal ready-to-eat food vending practices**

- a. can you please tell me about a typical day or week running your vending business?
- b. how and why did you venture into this food provisioning practices?
- c. what were you doing before as occupation before venturing into this practices?
- d. how did you come to know about the practice of food vending?
- e. is there any training you undertook before venturing into the practice, if yes, can you explain the training process? (formal and informal)

- f. how does your profit earnings look like in this food vending practices?
- g. why are you still involved in the food vending practices?
- h. do you do other work apart from food vending? if yes, what other works/activities and why do you involve in them?

**d. Zooming in perspective: practice-elements of informal ready-to-eat food vending:**

**(i) competences/skills in informal ready-to-eat food vending**

- a. what are the necessary competences/skills e.g cooking skills, nutritional knowledge, marketing skills needed to be able to practice food vending effectively?
- b. how does each of the competences/skills listed above help you in making decision on the different types of food items you provide? – food items are different type of foods you sell e.g rice, yam, beans etc.
- c. what other happenings or situations do influence the decision on the combinations of food types provisioned?
- d. can you explain your food presentation pattern and menu-settings and why you do it in that way?
- e. do you provide different type of foods at different time-periods? If yes
- f. can you explain how you do them?
- g. what is the reason(s) behind it?
- h. at what time of the day do you provide foods and what is the reason behind it?
- i. do your provisioning time influence the type of foods provisioned and if yes, why?
- j. how do you do it?

**(ii) materials in informal ready-to-eat food vending**

- a. how do you source/procure your food raw materials and where?
- b. what food utensils and other food preparatory materials needed for your food operations and how and where do you get them?
- c. how do you go about your storage activities in case your food remains? during the day and the night/weekends?

**(iii) Interactions between competences and material elements of informal ready-to-eat food vending**

- iiia can you explain to me how you do each of the following activity below:
  - 1. food raw material sourcing?
  - 2. food preparation?
  - 3. food collections?
  - 4. menu-settings?
  - 5. food stocking? and

6. food re-stocking?
  - a. how do you apply your competences/skills e.g (1) food marketing skills, (2) cooking skills (3) nutritional knowledge etc. to the listed activities in iiii to make informal ready-to-eat food vending practices?
  - b. Is there changes/transformations that have existed overtime in your food vending practices before and now, if yes, can you describe or explain the changes in details in each of the listed item all above in iiii?
  - c. why and how do these changes occur in each of them in iiii?
  - d. how do each of the listed practices in iiii influence the type of food items provisioned?

**e. Zooming out perspective:**

**4. The interconnections and interactions between practice-elements of informal ready-to-eat food vending and other informal food practices (system of food provision) within the food environment**

- a. what relationships exist between procurement of food items and other food provision practices? e.g open market, groceries shops, supermarkets, farm gate/farmers
- b. what relationships exist between food stocking and re-stocking and other food provisioning practices around you?
- c. what relationships exist between frequency of food provisioning and other food provisioning practices around you?

**(i) The interconnections and interactions between informal ready-to-eat food vending and other informal food practices (system of food provision) within the food environment**

- a. has your food vending practice been impacted by changes you have seen in other food provision practices in the wider food environment in the city, for example open markets, expensive restaurant, supermarkets etc if yes, can you please explain?
- b. how and in what ways have the occurrence of Covid 19 pandemic affects your food provisioning practices?
- c. how does changes in prices of raw food materials and food utensils and other food preparatory materials impact informal ready to eat food vending practices?
- d. how does seasonality impact informal ready to eat food vending practices?
- e. how does scarcity of raw food materials and food utensils and other food preparatory materials impact informal ready to eat food vending practices?
- f. how does the location of the food vending outlet influences the informal ready-to-eat food vending practices?

**f. Opportunities and challenges of informal ready-to-eat food vending practices**

- a. can you describe the challenges you face in this food provisioning practices in terms of sourcing for food raw materials, stocking and re-stocking, food preparation, food marketing, customer patronage, vendor’s association and government agencies etc?
- b. what challenges do you face in selling different food items?
- c. what other benefits or opportunities inherent in this food provision practices apart from profit you get?

**g. Socioeconomic characteristics of the food vendors**

- a. Age .....
- b. Sex: female ..... male .....
- c. Marital status .....
- d. Is this your primary or secondary occupation .....
- e. Educational level .....
- f. Average income per month .....
- g. Type of food vendor: stationary ..... mobile ..... semi-mobile .....
- h. Number of workers in the food outlets .....
- i. What category of food vending .....
- j. How many years have you been into the food vending practices .....
- k. What period(s) of the day do you provide food: morning ....., afternoon ....., evening ....., whole day ....., morning and afternoon ....., afternoon and evening .....
- l. What is the average number of people come to eat your place a day .....
- m. Which location do you sell your food? (i) along the road ..... (ii) market square ..... (iii) along the street ..... (iv) motor park ..... (v) workplace ..... (vi) school premises
- n. do you belong to any food vending association? if yes
- o. what is the responsibilities/objectives of the association?
- p. what is the mode of operation of the association?

**Food type-log-book**

**5. Meaning: diversity of food groups provisioned**

The table below shows the list of different food types provided at different days for 7 days by food vendors. Please kindly tick against each day as it is applicable to you.

- a. do you supply different type of foods base on consumer expectations or needs?
- b. do you supply different type of foods base on what the consumer around you can afford?
- c. What other reasons make you to supply the different type of foods you sell?
- d. do you think you can expand on the variety of foods you? if yes under what condition?
- e. and how can you do this?
- f. Why do you choose these food item to sell?



<b>Food group</b>	<b>Cereals</b>	<b>Tubers and roots</b>	<b>Legumes</b>	<b>Nuts and seed</b>	<b>Fruits</b>	<b>Meat</b>	<b>Fish</b>	<b>Milk</b>	<b>Oils and fat</b>	<b>Beverages</b>	<b>Eggs</b>	<b>Vegetables</b>	<b>Dietary fibre</b>
Day 1													
Appear in single mixture													
Day 2													
Appear in single mixture													
Day 3													
Appear in single mixture													
Day 4													
Appear in single mixture													
Day 5													
Appear in single mixture													
Day 6													
Appear in single mixture													
Day 7													
Appear in single mixture													

Compositions of food item in each food group

Give the detail list of the food item comprises of each food groups provided.

Different tables for Day 1 to 7

**Day 1**

	<b>Food item per each food group</b>												
Cereals													
Tubers and roots													
Legumes													
Nuts and seed													
Fruits													
Meat													
Fish													
Milk													
Oils and fat													
Beverages													
Eggs													
Dietary fibre													
vegetables													

**Day 2**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

**Day 3**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

**Day 4**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

**Day 5**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

**Day 6**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

**Day 7**

	Food item per each food group								
Cereals									
Tubers and roots									
Legumes									
Nuts and seed									
Fruits									
Meat									
Fish									
Milk									
Oils and fat									
Beverages									
Eggs									
Dietary fibre									
vegetables									

# APPENDIX C

## CHAPTER 4

### List of interview guide (food vendors/food vending association leaders)

#### Formal regulations

1. Do the government officials check on you based on different types of foods you provide, if yes, what do they say about the kinds of food you provisioned? Is there any official rules as regards the types of foods provisioned or what really do they base their visit on?
2. Do the officials instruct you or advise you on the type of foods to provision? Have you received any education on food nutrition and healthy provision, if yes, how have you applied them?
3. Can you tell us the government rules that guide food vending practices? Is this rules written on paper and given to you or how do you know about them? Are there any existing and new rules guiding the practice?
4. Do you pay levy or tax directly to the government? If yes, how do you pay it, into the government account by yourself? Do you pay per month or annually? What is the average amount you pay?
5. What is the nature of fines given to you if your default any of the government rules?
6. Do the government official provide training as regards your practice? If yes, in what areas of the food vending practices do they train you?
7. Do the government officials visit regularly? Can you tell us how your relationship has been with the government officials? Is it friendly or with hitches? If hitches, what causes it?
8. Are there template given to you by the government officials as regards the type or number foods to be provisioned?
9. Can you describe the level of participation of food vendor in the policy or regulations that affect them?
10. From your own perspective, In ways can government make regulation or what regulations can they make that can help improve food vending practices?

**Informal norms**

11. Is there any food vending association in your area? If yes, do you belong to the association? What is the role of the association as regards the types or kinds of food provisioned? do you register with the association and do you also pay levy to them? Do you attend their meetings and is the meeting on weekly or monthly basis?
12. Can you tell us some of the rules of the association regarding food provisioned? how does the rules apply to you? Do the association considers food nutrition and security as priority as part of their association goals? Do you receive food nutrition education from the association? if yes, how do you apply them in your practice?
13. How do the association coordinate the activities of their members? Do they have rules on the kind of foods to provisioned and how they go about it for people to obey the rules? Who and who enforce the rules and how do they go about enforcing it?
14. Can you tell us how your association operate? (asking the association leader). How does the association rules align with government rules on food vending practices? is there any collaborations between government and food vending association? If yes, how does the collaboration play out?
15. Is there any society norms apart from government or association rules guiding food vending practices in your area? if yes can you explain what it is and how this is being implemented?
16. What is the influence of community norms on the provision of diverse foods by food vendors?
17. Apart from government and food vending association, are there any private organizations showing interest in the food vending practice? If yes, can you tell us the aspect of food vending that show interest them? What is the nature of their interest?
18. Are there private organization working with food vendors, what do they bring to the table for food vending in terms on guiding, advising, and exposure to new practices

**Urban governance challenges faced by food vending practices**

19. Can you tell us the challenges you face from government officials and how does their rules impede or promote your practices?
20. Can you tell us the challenges you face from association leaders and how does their rules impede or promote your practices?

**List of interview guide for government officials in charge of food vending activities**

1. As government agent who supervises food vending activities officially, what is your modus operandi? 1a what are elements of governance you apply in your operation and how do you apply them?
2. Do you organize training to food vendors? If yes how do you go about it? 2a. Can you explain the modality of the training in terms of content?
3. Do you have a stipulate rules that guide food vending activities if yes, how do you apply them? Are these rules written down and given to the food vendors? What are these rules?
4. What are the penalty for the defaulters and how do you implement this?
5. What is your relationship with food vendors and food vending association leaders look like? Can you tell us in details about this relationship?
6. Can you tell us the different aspects of food vending activities you oversee and how do you do it?
7. Do you have rules and regulations specifically on the type of food to be provisioned, if yes, can elaborate more on this. Is there a template as regards this? 7a. In terms of supervision, what areas do you cover?
8. Do the food vendor pay fees or levy to government? If yes can you explain the payment channel?
9. In your own perspective as government agent, what do think you can do more to increase or improve the practice street foods provisioning to a standard?
10. Can you tell us the challenges you are face supervising food vending activities and how does it impede your activities?
11. Do you have any collaborating arrangements with food vending association leaders, if yes, can you explain those collaborations?

# APPENDIX D

## CHAPTER 5

### List of interview guide food vendor

#### **Diversity of ready-to-eat food provision:**

#### **increase more food items and sufficient quantity from more food groups**

1. What is your opinion about increasing food items in terms of quantity and numbers from more food groups?
2. Do you think this is possible and what would you benefit from it as a food vendor?
3. How do you think an increase in the variety of food items provisioned can impact your your food preparation practices or your business?
4. Do you expect challenges if you intend to increase variety in your menu-settings?
  - a. If yes, can you outline what your view as expected challenges (in the areas of skills, materials, and money) (explain your views on expected challenges)
5. How can this effort impact consumers as well?
  - a. what could be done in your social or work environment to help support you to make these changes happen?
6. Do you need to change some of your existing activities for you to do this?
  - a. If yes, which aspects of your current activities do you think need to be changed (procurements, food presentation, training, food preparations, storage, stocking, and restocking, etc.)?
7. Can you explain more specifically what changes will be needed to be made in the above activities?
8. Are there other activities, including new activities, you must undertake in order to increase your food items?
9. If yes, can you explain more specifically what challenges you might envision in bringing in these new activities to your business?
10. Do you need the support of other food-related actors around you (such as retailers and open markets) for increasing variety of food items?
  - a. If yes, what roles would these actors play?
11. Who do you think should be responsible for particular activities?
12. How do you think consumers will view these new development? (The increasing of variety of food items)
  - a. in what ways do you think consumers can encourage you to increase the variety of food items?

13. Do you think consumers have a role to play in your increasing of variety of food items and if yes, can you explain the role the consumers can play?
14. Do you think of organizing educational training in the future for food vendors would facilitate the increasing food items?
  - a. If yes how do you want to go about it?
15. What roles do you think the food vending association can play to achieve increasing food items?
16. When do you think you can start to increase your menu-settings (probe the answer further)

### **Health food provision: inclusion of fruits and vegetable food vendors**

1. What is your opinion about the inclusion of fruits and vegetables as a sole meal in your menu-settings? or prepare meals that just include more vegetables in them
2. Do you see the need to include this and why?
3. Have you thought about this before or have you tried to include it and didn't continue?
  - a. If yes what could be the reasons?
4. Do you think this is possible and what would you benefit from it as a food vendor?
5. How do you think the inclusion of fruits and vegetables will impact your food provisioning practices?
  - a. Do you expect challenges if you intend to include fruits and vegetables in your menu-settings?
6. If yes, can you narrate the expected challenges (skills, materials, money, social challenges, resistance from consumers and other actors to change and so on)?
7. How can you make this inclusion happens?
8. Do you need to change some of your existing activities for you to do this?
  - a. If yes, which aspects of your current activities do you think need to be changed (procurements, food presentation, training, food preparations, storage, stocking, and restocking, etc.)?
9. Who do you think should responsible for each of the activity listed above
  - a. Can you explain more specifically what changes will be needed to be made in the above activities?
  - b. If yes, can you explain more specifically what challenges you might envision in bringing in these new activities to your business?
10. Are there other activities, including new activities you must undertake in order to include fruits and vegetables as additional meals or prepare meals that just include more vegetables in them?
11. Do you need the support of other food-related actors around you? (such as retailers and open market) for effective implementation? If yes, what roles would these actors play?



12. How do you think consumers will view this new approach? And what do you expect from them?
13. When do you think you can start including fruits and vegetables as a separate menu (probe the answer further)
14. What are the challenges you think can limit the implementation of this inclusion?

### **List of interview guide consumers**

#### **Diversity of ready-to-eat food provision: increase more food items and sufficient quantity from more food groups**

1. As consumers what do you think about food vendors increasing their menu-settings
  - a. Probe: Prompt for what they see as the benefits and what they see as challenges/negative aspects
2. Would you be happy and wanting to buy if you see more options for foods than what you are seeing now?
3. What would be the benefit for you as a consumer?
4. As consumers what do what they view as the downside of vendors changing their menu
5. Do you think it is a good idea for food vendors to increase their food items and why?
6. How can you support or encourage food vendors to increase their menu-settings?

#### **Health food provision: inclusion of fruits and vegetable food vendors**

1. As consumers what do you think about the inclusion of fruits and vegetables in food vending as a sole meal or integrating more fruit and veg into an existing menu?
2. What would be the benefit for you as a consumer?
3. Would you prefer if more vegetable is included in the meal or have vegetables as a sole meal
4. What does this initiative look like for you?
5. Have you seen or patronized a food vendor that has done this before?
6. Do you think this new developments is a good idea for and why?
7. How can you support or encourage food vendors to include this in their menu-settings?

## List of interview guide government agents

### Diversity of ready-to-eat food provision: increase more food items and sufficient quantity from more food groups

1. Do they think it is essential for food vendors to increase their menu-settings?
2. What roles can government play to achieve this with food vendors? (do you think government should enforce it and then if so, how they can and how
3. In what ways can the government play this role(s) (prompt for coordination, monitoring, controlling, and supervision), can you explain?
4. Do you think co-jointly and food vending leaders standing between government and other food vendors can help to implement increasing food items and if yes, How can it be done?
5. Do you think government can enforce this and if yes can you explain how?
6. Do you think food vendors should be trained about this and if yes, how can we go about it?
7. Do you think of organizing training about food vendor increasing food items in the future and if yes how do you want to go about it?
8. What are the challenges you think can limit the implementation from the government side?

### Health food provision: inclusion of fruits and vegetable food vendors

1. What are the concerns/opinions of the government about fruits and vegetables consumption?
2. What does the government think about the inclusion of fruits and vegetables in the menu-settings of food vendors?
3. Do they think it is important to include fruits and vegetables in the menu-settings of food vendors? And/or increase its proportion in the meal
4. What roles can government play in achieving this?
5. How can the government play this role(s) (coordination, monitoring, controlling, and supervision)?
6. Do you think government can enforce this and if yes can you explain how?
7. Do you think co-jointly and food vending leaders standing between government and other food vendors can help to implement inclusion fruits and vegetables in the menu-settings of food vendors? And/or increase its proportion in the meal and if yes, How can it be done? (as personal opinion)
  - a. if yes, How can it happen?
8. Do you think food vendors should be trained about this and
  - a. if yes, how can the government go about it?
9. Do you think of organizing training about this in the future and if yes how do you want to go about it?
10. What are the challenges you think can limit the implementation from the government side?

**Survey list for food vendors**

s/n	Prospects and opportunity	Agree	Neutral	Disagree
1.	Nutritional balance of food provisioned is not sufficient enough in terms of number of food groups provisioned by food vendors.			
2.	There is inadequate fruits and vegetables inclusion in the meal provisioned.			
3.	It is important to increase food group provisioned and integration of fruits and vegetable in a complete meal			
3.	Increasing food groups provision and integration of sufficient proportion of fruits and vegetables will avail us the privilege of improving the health of our customers and invariably increasing the income of food vendors.			
4.	Do you think number (3) is doable for food vendors to implement.			
5.	Government empowerment programs through financial support scheme to food vendors as well as provision of enabling environment will be a welcome development and it will aid the implementation of these initiatives (no. 3).			

6. Do you think these initiatives is something possible for you to imbibe? Yes [ ] No [ ]
  - a. If yes would you like to start with the two initiatives at the same time? Yes [ ] No [ ]
  - b. If No which one of the initiatives would like to start first?(a) Increasing food group provisioned [ ] or (b) Integration of fruits and vegetables [ ]
7. Which of the other food raw material sellers do you think will be most important for these initiatives? (a) open wet market [ ] (b) raw food retailers [ ] (c) [grocery shops [ ]
8. How many food groups do you provision at the moment?  
.....
9. How many food groups do you intend to add to it when these initiatives start?  
.....
- 10a. When do you think you can start these initiatives? (a) I am not interested (b) Immediately [ ] (c) Next year [ ] (d) next two years [ ] (e) Next three years [ ]
- 10b Give reason(s) to the answer you selected in 10a above  
.....
11. Do you think these two initiatives can be implemented concurrently? Yes [ ] No [ ]
- 11a. If No, then why?  
.....
12. Would you like to receive training on the new initiatives Yes [ ] No [ ]

13a.who do you think should organize the training? (a)Government agency alone [ ]  
 (b) Food vending association alone [ ] (c) Non-government agency alone [ ] (d)  
 Government agency and food vending association together [ ]

13b.What is the reason(s) for selecting your answer in 13a  
 .....

14. Who do you prefer to do the follow up or monitoring of the implementation of  
 these initiatives? a)Government agency alone [ ] (b) Food vending association  
 alone [ ] (c) Non-government agency alone [ ] (d) Government agency and food  
 vending association [ ]

14a.what is the reason for your answer in number 14?  
 .....

15. If this initiatives would you like to hire more workers in your food vending outlets?  
 Yes [ ] No [ ]

15a.If yes, how many workers do you think you can hire?  
 .....

**Socioeconomic characteristics of food vendors**

- 16. Age.....
- 17. Sex: female [ ] male [ ]
- 18. Marital status: Married [ ] single [ ] widow [ ] divorce [ ] widower [ ] separated [ ]
- 19. What is your primary occupation .....
- 20. What is your secondary occupation .....
- 21. Have you taken loan or thrift before purposely because of your business?  
 Yes [ ] No [ ]
- 22. Educational level: Primary [ ] secondary [ ] tertiary [ ]
- 23. Number of year spent in school .....
- 24. Average income per month .....
- 25. Type of food vendor: stationary [ ] mobile [ ] semi-mobile [ ]
- 26. Number of workers in the food outlets .....
- 27. What category of food vending: traditional food vending [ ]  
 processed food vending [ ]
- 28. How many years have you been into the food vending practices .....
- 29. What period(s) of the day do you provide food: morning [ ] afternoon [ ] evening  
 [ ] whole day [ ] morning and afternoon [ ] afternoon and evening [ ]
- 30. Which location do you sell your food? (i) along the road [ ] (ii) market square [ ] (iii)  
 along the street [ ] (iv) motor park [ ] (v) workplace [ ] (vi) school premises [ ]
- 31. Do you your family eat from the food you provision? Yes [ ] No [ ]
- 31a.If yes, which of the daily meal do they eat from your outlet? Breakfast [ ] Lunch [ ]  
 Dinner [ ] Breakfast/lunch [ ] break/dinner [ ] lunch/dinner [ ]
- 32. Which of these other food raw material sellers is close to your food vending outlet ?  
 (a) open wet market [ ] (b) raw food retailers[ ] (c) [grocery shops[ ]

# Summary

Access to food is of central relevance for food security, health, and sustainability of people around the world. In recent years, many developing urban centers in Africa and throughout the Global South have witnessed a shift in how the urban poor access their food from household-based to increasingly out-of-home food consumption. They derive the majority of their daily nutrient-intake from street foods. The lives of these poor urban dwellers have undergone significant transformations as a result of urban development and changing infrastructure. These developments have spurred the expansion of informal ready-to-eat food vending. Many urban poor patronize food vending outlets because their food is cheap, convenient, and readily available. In several decades, street foods have become an important, informal, part of the urban food supply system. However, there are many concerns about the safety and diversity of food purchased from these ready-to-eat food vending outlets. Particularly the urban poor are faced with challenges of healthiness and hygiene of their daily food meals. This thesis therefore explores the social dynamics characterizing informal ready-to-eat food vending and consuming with a focus on health and diversity to look for ways to address the current challenges.

Informal ready-to-eat food vending is highly important for the urbanites, yet, it is faced with the challenges of provisioning low-quality and monotonous diets, and foods with high amounts of calories and sugar. So far, most studies have investigated ready-to-eat food vending from an economic or nutritionist perspective. Economists looked at it as an income generating activity and way to improve livelihoods. Nutritionists studied food safety and measured the nutrient composition and other properties of the food items provisioned. However, both perspectives paid less attention to the activities and social dynamics or the changing everyday contexts of consumers' lives that were involved in creating this output, although they are relevant to explain the nutritional quality of the food provided. So far, few studies have explored the role of the ready-to-eat food vending sector in urban food systems and the diets of the urban poor. Therefore, this thesis tries to fill this knowledge gap by analyzing the everyday routinized activities to understand how (sub) practices and series of actions cumulate into food vending practices and how they are arranged and maintained. It investigates the relationships between food vending-consumption practices and the diversity of food groups provisioned among the urban poor in developing city contexts. A social practice approach is employed to explore ready-to-eat food vending practices in the city of Ibadan, Nigeria. In four empirical chapters key dynamics of ready-to-eat food vending practices are explored through empirical research among food vendors, their consumers, their associations and the local government. Multiple research methods were applied to generate information about these practices.

Chapter Two analysed the interrelations between urban daily lives and the ready-to-eat food vending-consumption patterns of the urbanites. A social practice theoretical framework was employed to understand these dynamic relationships and different research methods were used, including in-depth interviews, surveys, and participant observation. This Chapter provided an overview of the food vending-consumption practices in Ibadan in terms of the socio-demographic situation of consumers and the embeddedness of food vending in the practice arrangements making up their daily lives. I revealed that daily life practices are a critical factor in determining how, when, what, and where people consume their daily foods. Three daily life practices were identified that interlock with the food consumption practices of the urban poor and are particularly important in shaping their out-of-home food consumption: daily mobility practices, working arrangements, and domestic engagements. These three daily urban practices have undergone rapid transformation in recent years in line with the ongoing socio-economic developments and urban dynamics. The Chapter concluded by considering the importance of better understanding the embeddedness of food vending practices in the daily lives of the urban poor for sustainable food system transitions in the Global South.

Chapter Three investigated the everyday practices of food vendors within the food vending environment with particular attention to nutritional health and food diversity. Research methods that were applied included GIS mapping, food log diaries, in-depth interviews, and participant observation. With the help of these methods, I mapped and classified informal-ready-to-eat food vending practices according to the nature of food provisioned. I also explored the everyday performances of different informal-ready-to-eat food vending practice initiatives and their relation to dietary diversity. The study revealed that three key categories existed among the ready-to-eat food vending practices: traditional, processed, and unprocessed; each with varying levels of diversity in the food groups on offer. Traditional food vendors offer more diversified food compared to processed food vendors and unprocessed food vendors. However, traditional food vending is skewed to the provision of foods of high amounts of energy and calories. The thesis revealed that material infrastructure, cooking, purchasing skills, and nutritional knowledge are key to the level of diversity of food groups provisioned. This Chapter also found that instead of jeopardizing diet quality, out-of-home food provisioning can also be used to improve the nutritional intake of low-income urbanites through the provision of a larger variety of food groups. Ready-to-eat food vending has the potential to serve as an instrument(s) of food and nutrition security. Furthermore, this Chapter also showed that the outcome of a practice is the reflection of the different modes of integration of the sub-practices and the practice-elements. Thus, the application of social practice theory provides a core understanding of a particular practice and orients towards the series of actions that are inherent in it. This provides a foundation for understanding also the other components of the urban food system with practice orientations, i.e., out-of-home food

consumption and urban food system governance. The Chapter concluded by considering what the wider relevance of these findings is for urban food science and policy.

Chapter Four studied the governance arrangements (whether formal or informal) relevant for ready-to-eat food vending practices. For this goal, governance arrangements that steer and shape food provisioning practices were analyzed with the help of qualitative research methods, such as in-depth interviews and participant observation. The findings revealed that formal and informal governance structures are jointly steering and shaping the informal ready-to-eat food vending practices. Informal middlemen fulfill a crucial role in the governance chains, particularly concerning informal food supply systems. These findings contribute to thinking about food governance of urban food supply systems in terms of co-governance between formal and informal actors. This Chapter suggests that the active supervision and monitoring of ready-to-eat food vending actors have reshaped and influenced food vending practices. Hence, rules and regulations can co-shape the norms and logics that guide everyday actions and thereby promote effective, sustainable, and continuous practices. These interconnections between the (formal-informal) co-governance practices and the food vending practices are indispensable to achieving an acceptable and effective informal food vending systems.

Chapter Five analyzed the strategies, mechanisms, and empirical evidence on how the provisioning of healthy and diverse foods in informal ready-to-eat food vending in urban Nigeria can be improved. A social practice-oriented approach combined with participatory future visioning and back-casting was employed in a multi-phase process that included interlinked focus group discussions and workshops involving key food sector stakeholders. The Chapter revealed that increasing the diversity of the food groups provisioned and integrating fruits and vegetables in meals could be an effective starting point to improve dietary health. For improvement initiatives in the informal food vending sector to be successful, there is a need for transforming skills, materials resources, and capital as well as addressing the relationships between food vending and other food-related provisioning practices within the food vending environment. This requires the unraveling of food vending practices and the identification of those practice elements that need to change or be adjusted. The Chapter revealed that practices interjecting governing arrangements can drive changes in food vending practices and thereby provided strategic pathways for practical interventions to improve food vending practices that meet the food security and nutritional needs of the urban poor.

In the concluding Chapter Six, I considered the importance of informality in food consumption and provisioning, particularly in the Global South. The goal of this thesis was to explore how food vending can better serve the food and nutrient needs of the people. My findings demonstrate that food vending is an important food channel mostly patronized

by the urban poor and composed of different practices, (sub) practices, and practice-elements. I therefore argue that food vending is not an isolated practice but interconnects and intersects with other practices such as everyday routine events, raw food markets, and food consumption. This means that food vending needs to be (re) framed around the socio-economic conditions and daily life engagements of the urban poor. My expectation is that campaigning for a complete return to home-based food preparation will not be successful. Also in the future, informal food vending will therefore remain an important element in the urban food system.

I conclude by suggesting that more attention should be paid to informality in the food system to address the problem of food insecurity and malnutrition. Informality should not always be considered negative. I found that the informality in ready-to-eat food vending practices is expanding and becoming an indispensable channel to access daily food for different socio-economic groups in expanding urban centers in the Global South. Thus, researchers, government, policymakers, and NGOs should pay more attention to in re-framing this sector in order to improve the health, sustainability and safety of the food accessed by the poor.



# WASS Education certificate

**Kehinde Paul Adeosun**  
**Wageningen School of Social Sciences (WASS)**  
**Completed Training and Supervision Plan**



Name of the learning activity	Department/Institute	Year	ECTS*
<b>A) Project related competences</b>			
<b>A1 Managing a research project</b>			
WASS Introduction Course	Wageningen School of Social Science	2019	1
Writing PhD proposal	Environmental Policy Group, Wageningen University	2020	6
PhD content meetings of ENP	Environmental Policy Group, Wageningen University	2020	0.5
<i>'Practitioners' perspectives on improving ready-to-eat food vending in urban Nigeria: a practice-based visioning and back-casting approach'</i>	NL-CGIAR conference 'Partnering for Global Food Security: Advancing knowledge and innovation for food system transformation', online	2022	1
<i>'Ready-to-eat food vending-consumption's interrelations in urban Nigeria: a qualitative analysis'</i>	2nd Annual International Conference, theme: Multiple Dimensions of Human Security: Prognosis, Challenges and Panacea in a Globalized World, organised by University of Nigeria, Nsukka, Nigeria	2022	1
Essentials of Scientific Writing and Presentation	Wageningen Graduate Schools	2019	1.2
Paper review	Food security journal	2021	1
Paper review	Heliyon journal	2021	1
<b>A2 Integrating research in the corresponding discipline</b>			
Food Systems: towards Food Security in an Urbanising Society	Wageningen Centre for Innovation and Development	2019	6
Sociology and political science of environmental transformations	Environmental Policy Group, Wageningen University	2020	1.5
Advanced Qualitative Research Design and Data collection, GEO 556806	Wageningen University	2020	6
<b>General research related competences</b>			
<b>B1 Placing research in a broader scientific context</b>			
NVIVO-based qualitative data coding and management training for social scientist	Wageningen School of Social Science	2019	1
PhD course: Academic Publication and Presentation in the Social Sciences	Wageningen School of Social Science	2020	4
Transformative and participatory qualitative research approaches and methods	Wageningen School of Social Science	2023	4

<b>Name of the learning activity</b>	<b>Department/Institute</b>	<b>Year</b>	<b>ECTS*</b>
<b>B2 Placing research in a societal context</b>			
Co-organizing University of Nigeria, international conference	University of Nigeria, Nsukka, Nigeria	2021	1
<b>Career related competences/personal development</b>			
<b>C1 Employing transferable skills in different domains/careers</b>			
Project and Time management	Wageningen School of Social Science	2022	1.5
MSc thesis supervision	Environmental Policy Group, Wageningen University	2022	2
<b>Total</b>			<b>39.7</b>

\*One credit according to ECTS is on average equivalent to 28 hours of study load

# Publication list

## PUBLICATIONS IN THIS THESIS

**Adeosun, K.P.**, M. Greene, and P. Oosterveer, (under revision). Informal ready-to-eat food vending governance in urban Nigeria: formal and informal lenses guiding the practice, submitted to *PLOS ONE*.

**Adeosun, K.P.**, Greene M and Oosterveer P (2023) Practitioners' perspectives on improving ready-to-eat food vending in urban Nigeria: a practice-based visioning and back-casting approach. *Frontiers in Sustainable Food Systems*, 7:1160156. <https://doi.org/10.3389/fsufs.2023.1160156>.

**Adeosun K.P.**, M. Greene, and P. Oosterveer. (2022). Urban daily lives and out-of-home food consumption among the urban poor in Nigeria: A practice-based approach, *Sustainable Production and Consumption*, Volume 32, 479-491, <https://doi.org/10.1016/j.spc.2022.04.024>.

**Adeosun, K.P.**, Greene, M., & Oosterveer, P. (2022). Informal ready-to-eat food vending: a social practice perspective on urban food provisioning in Nigeria. *Food Security*, 1-18. <https://doi.org/10.1007/s12571-022-01257-0>.

## OTHER PEER-REVIEWED PUBLICATIONS

**Adeosun, K.P.**, Salman, K.K., Chukwuone, N.A., Ume, C.O., Chukwuone, C.A., & Ezema, C.N. (2022). Factors Influencing Fruits And Vegetables Consumption among Pregnant Women: Evidence from Enugu State, Nigeria. *Economia Agro-Alimentare / Food Economy*, 24(1), 1–20. <https://doi.org/10.3280/ecag2022oa12293>.

**Adeosun, Kehinde Paul** and Omonona, Bolarin Titus (2021). Estimation of Socioeconomic Status and Rainwater Consumption in Ibadan Metropolis, Nigeria, *Journal of Agricultural Extension*, Vol. 25 (3), 13-25, <http://eoi.citefactor.org/10.11226/v25i3>

Nnaemeka Andegbe Chukwuone, **Kehinde Paul Adeosun** and Chiamaka Adaobi Chukwuone. (2020). Socioeconomic factors affecting households' use of indigenous forest management practices in managing non-wood forest products: evidence from forest communities in Nigeria derived savannah, *Heliyon*, 6, 05281, 1-11, <https://doi.org/10.1016/j.heliyon.2020.e05281>.

- Chukwuma Otum Ume, Ogochukwu Onah, **Kehinde Paul Adeosun**, Onyekwe Chris Nnamdi, Nice Nneoma Ihedioha, and Chukwuemeka Onyia. (2020). Unpacking the Levels of Household and Individual Climate Change Adaptation: Empirical Evidence from Leeds, United Kingdom, *Wea. Climate Soc.* 12 (3): 501–513. <https://doi.org/10.1175/WCAS-D-19-0109.1>
- K.P. Adeosun**, C.O. Ume and R.U. Ezugwu (2019). Analysis of socio-economic factors of fish pond production in Enugu State, Nigeria, *Journal of Tropical Agriculture* 57 (1): 27-34.
- Ukwuaba, Ikenna Charles, Agbo, Festus Ugwuoke and **Kehinde Paul Adeosun**. (2018). Socio-economic and Institutional Determinants of Watermelon Marketing in Enugu State Nigeria, *Journal of Agricultural Extension*, Vol. 22 (3), 161-173. <http://eoi.citefactor.org/10.4314/jae.v22i3.16>

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# About the author

Paul Adeosun is from the western region of Nigeria. He started his PhD in 2019 at Wageningen University and Research Centre (WUR), the Netherlands at Environmental Policy Group under the interdisciplinary project: Food system for healthier diets focusing on ready-to-eat food vending in urban Nigeria. He has published three papers from his PhD in highly revered peer-review journals. He received his MSc degree in Management Studies from WUR, and on returning to his home country, he took up a lecturing job at one of the universities. He has a bachelor's degree in Agricultural Economics. He is interested in research related to food consumption and provisioning, food system, and food security taking an interdisciplinary approach with qualitative and quantitative methodological lenses. He is also interested in Social Practice Theory to understand these scenarios focusing on Global South.











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