

The urbanization of food insecurity and malnutrition

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SUMMARY: Malnutrition, including overweight and obesity, is on the rise globally and increasingly concentrated in urban areas. Yet this urban dimension is neglected in research and policy related to food security, even as this field has broadened its scope from food production to encompass consumption as well. Incorporating the urban dimension of food and nutrition insecurity requires attention to many aspects of urban poverty and inequality that affect diets, including income, housing and basic services.

This *Environment and Urbanization* Brief explores how urban poverty, defined across multiple dimensions, limits access to safe, nutritious and convenient food. It also examines the social aspects of urban food access, notably the gendered nature of food-related responsibilities. Clearly, food contributes to building social capital and maintaining community relationships, whether between women and other household members, between food traders and their customers, or among urban residents with a shared interest in the economic and cultural value of making and sharing food.

After a prolonged decline, estimates show that global hunger has increased. In 2017, over 820 million people – one out of every nine – faced chronic food deprivation. Without increased efforts, UN agencies project that “*the world will fall short of achieving the SDG target of eradicating hunger by 2030*”.⁽¹⁾ The burden of child stunting and wasting remains unacceptably high: nearly 151 million children under the age of five have stunted growth, and 50 million are threatened by wasting. At the same time, 38 million under-five children are overweight and more than 672 million adults – more than one in eight – are obese. Increasingly, this malnutrition is concentrated in urban areas: despite the vaunted urban advantage, one in three stunted children lives in an urban area, and the global rise in overweight and obesity mostly affects urban adults.⁽²⁾

Over the last two decades there has been a welcome shift in policy debates from a predominant concern with food production to increased attention to food consumption and a focus on access, affordability and utilization. The latter are especially relevant to the majority of the world’s population now living in urban areas, who rely primarily on food purchases. Yet, with some notable exceptions, the urban dimension remains largely absent from food security research and policy. Food and nutrition security is achieved, according to the Food and Agriculture Organization (FAO), when “*all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life*”.⁽³⁾ As Battersby and Watson note,⁽⁴⁾ this is a wider agenda than ending hunger, and one that requires a wider set of policy responses. In urban settings, policies need to be grounded in a holistic approach that explicitly positions and addresses food and nutrition insecurity within the broader context of urban poverty and intra-urban inequalities. This means taking into account the multiple dimensions of urban poverty, from incomes and the nature of income-generating activities to the provision of adequate housing and infrastructure, to the impacts of urban planning on access to affordable and nutritious food.

The papers in this special issue of *Environment and Urbanization* explore different dimensions and drivers of urban food insecurity but share a focus on low-income and marginalized groups. The key questions explored are summarized in this editorial. These include the links between urban poverty and food insecurity (Section I); the contribution of food safety concerns to the restriction of traditional and informal food markets, and the impacts for low-income consumers and traders (Section II); the importance of using a gender lens to understand the challenges to achieving food security (Section III); and the often underestimated role of food in social relations and in supporting community networks (Section IV).

I. URBAN POVERTY AND FOOD INSECURITY

It is often observed that urban food insecurity is primarily the result of income poverty. This is because urban residents purchase the vast majority of their food, which is in many cases their

1. FAO, IFAD, UNICEF, WFP and WHO (2018), *Food Security & Nutrition around the World*, Food and Agriculture Organization, Rome.

2. IFPRI (2017), *2017 Global Food Policy Report*, International Food Policy Research Institute, Washington, DC, available at <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/131085/file/131296.pdf>.

3. FAO (1996), *Declaration on World Food Security*, Food and Agriculture Organization, Rome, available at <http://www.fao.org/3/w3613e/w3613e00.htm>.

4. Battersby, J and V Watson (2019), “Introduction”, in *Urban Food Systems Governance and Poverty in African Cities*, Routledge.

main expenditure. The paper by Sigrid Wertheim-Heck, Jessica Evelyn Raneri and Peter Oosterveer shows that this amounts to 40 per cent of the total household expenditure of lower-income groups in Hanoi, Vietnam. Drawing on research conducted by grassroots organizations of the urban poor in Cambodia and Nepal, the paper by Somsook Boonyabancha, Thomas Kerr, Lumanti Joshi and Cecilia Tacoli suggests that for poorer households and the residents of smaller towns the figure can be much higher. In Nepal, the poorest of the poor spend virtually their whole income on food, yet have limited or no access to nutritious food. Food insecurity is certainly exacerbated by low and irregular incomes, most typically for those depending on work in the informal sector. Illness or accidents can be frequent, and when they affect the main earner it often means that there will be no food on the table that day. Increasingly, recurrent floods and heatwaves also affect income generation. As incomes fluctuate from one day to the next, so does food security. To reflect this, both the Nepali and the Cambodian urban poor organizations distinguish among three categories of food poverty, with most residents of low-income settlements moving among them.

Heather Mackay's paper reports on food access and affordability in two smaller urban centres in Uganda. Her findings show that while all income groups access food through the same relatively limited sources, and their diets are broadly similar, their levels of food security vary. The more food and financially secure households are able to buy in bulk and store staples when they are cheaper, often travelling to distant markets where prices are lower. In these lower-density urban centres, access to land for farming in both urban and rural areas is an important element of food security, as are food transfers from rural relatives.

Critical as dependable income is, non-income dimensions of urban poverty are also important in shaping food insecurity. Drawing on a large-scale survey of 1,698 households in Bengaluru, India, the paper by Shriya Anand, Keerthana Jagadeesh, Charlotte Adelina and Jyothi Koduganti shows that, although the overall levels of food insecurity in the city appear to be less severe than in other Indian cities, households that face a number of disadvantages, including lack of access to piped water and inadequate housing, are more likely to be food insecure. They are also more likely to be migrants and to have no access to ration cards, the main welfare support system for the Indian poor.

II. FOOD SAFETY, INFORMALITY AND URBAN PLANNING

Food safety is an increasingly central concern for consumers, local authorities and policymakers. While consumers tend to consider bacterial contamination to be manageable through washing and cooking, agrochemical contamination is a source of growing anxiety, especially in Southeast Asia, and a focus of changing strategies on the part of decision-makers. The paper by Wertheim-Heck et al. describes how food safety is a key driver of plans to transform Hanoi into a "modern" city where the existing 67 permanent traditional markets will be replaced by 1,000 supermarkets by 2025. For Hanoi's low-income residents this transformation is likely to have dire consequences, however. As Wertheim-Heck and her colleagues show, traditional markets are the main source of the fresh fruit and vegetables that are the mainstay of Vietnamese cuisine, whereas supermarkets and convenience stores primarily provide customers with processed and ultra-processed foods. Neither alternative is ideal for a diet that is both safe and healthy. As in Cambodia and Nepal, organic produce in Vietnam is unaffordable for the urban poor.

The paper by Sohail Ahmed, Julio D Dávila, Adriana Allen, Mordechai (Muki) Haklay, Cecilia Tacoli and Eric M Fèvre questions the assumption that informal markets have lower food safety standards. It reviews studies from East Africa, Northeast India and Vietnam showing that, while food sold in formal urban markets may be perceived as safer, it may in fact have lower compliance with standards than informally marketed foods. Like Wertheim-Heck et al., Ahmed and coauthors point out that informal markets are the main source of cheap, fresh produce for low-income urban residents.

This paper also examines the links between rapid urban growth and the emergence of zoonotic diseases – diseases that are transmitted via food products such as meat, dairy and animal products, water and waste. These account for the majority of infectious food-borne diseases, which Ahmed et al. note are still more prevalent than non-communicable diseases in cities of the global South. Their review of the literature shows that the drivers most often cited include rapid urban growth and increased density, heightened movement of people, animals and animal-sourced products, rural-urban migration, and changes in land use. The authors also point out, however, the importance of taking into account the shape of cities and the spatial segregation often underlying socio-economic and environmental inequalities. Low-income settlements with inadequate or nonexistent basic infrastructure provide breeding grounds for zoonotic diseases, while marginalization more generally compromises responses to outbreaks of zoonotic diseases such as Ebola. These factors generate, according to Ahmed and colleagues, an "accumulation of disease risk and vulnerabilities".

Policy responses to the ubiquitous growth of informal street food vending in cities of the global South have veered between outright repression and neglect. Success with eradication of this important part of the market has been elusive, however, and despite the increasing hardship for both

traders and consumers associated with repressive measures, informal street vending is likely to remain a feature of urban landscapes of rapidly growing cities. The paper by Lawrence N Kazembe, Ndeyapo Nickanor and Jonathan Crush describes the attempts of municipal authorities in Windhoek, Namibia to formalize street food trading, which is the main source of food for the large proportion of the city's population living in informal settlements. Traders were required to move to approved market spaces created by the municipality. Traders who do not comply are subject to harassment, fines and confiscation of goods. However, these more centralized spaces are not suitably located for many poor consumers who cannot afford transport costs and can only buy food daily and in small quantities. Responding to consumer demand, traders started clustering in strategic locations. In time the need for this was recognized by the city authorities in what the authors describe as an "alternative governance model" of "informalized containment" – a pragmatic response to vendor agency and consumer demand, guided by the larger concern with mitigating food insecurity among the urban poor.

III. DO WOMEN HAVE A "SPECIAL INTEREST" IN FOOD?

Roles and responsibilities around food are heavily gendered. The respondents of the survey conducted by Wertheim-Heck et al. were women of childbearing age, who are seen as primarily responsible for household food purchases and preparation. Boonyabantha et al. note that the group discussions set up by the grassroots organizations in Cambodia and Nepal were initially attended by both men and women in the communities, but that very quickly men disappeared. Similarly, the cooperative bakery set up in an informal settlement in Chile's "mining capital", Antofagasta, documented by José-Francisco Vergara-Perucich and Martín Arias-Loyola, was almost entirely run by women. These authors point out that women are disproportionately the ones to manage food insecurity and scarcity more generally. Indeed, women are usually more knowledgeable on how to stretch meagre budgets to feed several people, but often at a high cost of their time and energy. This reflects normative roles that see women as primary carers; these can, however, stretch to include an element of self-sacrifice that increases the burden on women. Especially in traditional cultures such as in southern Nepal, women often – sometimes very often – go hungry in order to feed their families.

Gender-based differences in relation to food are not limited to the household. In their review of informal markets and food safety, Ahmed et al. observe that although women are exposed to pathogens both in the home and as traders, they are more knowledgeable about hazards and often adopt effective strategies to mitigate microbial risks and follow good basic hygiene practices.

IV. THE SOCIAL VALUE OF FOOD

Food is central to urban life: it shapes cities and connects them to the wider world; it is a very large part of urban economies, and a key determinant of urban health. But perhaps more importantly, it connects people through a web of social relations. The paper by David Smith describes how, in Port-au-Prince, Haiti, low-income consumers' access to and provision of food is based not only on the physical infrastructure of markets but also on the relations between traders and consumers. This echoes Boonyabantha et al., who note the importance of local traders in providing short-term credit to the urban poor. An understanding of these networks of social support brings an important additional argument in favour of small-scale food traders, whether located in traditional markets or set up more informally on the streets, as opposed to supermarkets as places of limited social interaction.

The paper by Colleen Hammelman on urban agriculture projects in Toronto, Canada similarly highlights how providing a space to grow food for marginalized communities not only supplements food budgets and enhances health outcomes, but has the additional benefit of connecting people. Also pointing to the benefits for social capital, the paper by Vergara-Perucich and Arias-Loyola describes an experimental bakery project bringing together the residents of an informal settlement in Antofagasta, Chile with academics, officials from state agencies and NGOs. The purpose of the cooperative bakery set up in the settlement was not only to produce bread and to bring people together, but primarily to create a means for exercising their right to the city.

All authors note that such social infrastructure is highly vulnerable – in the case of Port-au-Prince, to crises that impact physical proximity and spatial stability; in Toronto, to revitalization projects that can easily ignore the needs of traditionally marginalized residents; and in Antofagasta, to changes in political priorities and loss of support by the state. More generally, policy that ignores the needs of low-income groups can have detrimental impacts on their access to food, on their health and on their wellbeing. In their diversity, all the papers in this issue of *Environment and Urbanization* make one fundamental point: urban food and nutrition security is central to the right to the city and is about much more than food.

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