Food Sovereignty and Local Agency: Pathways to Urban Sustainability

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ABSTRACT The traditional urban narrative does not conceive of the relationship between food and city in direct terms. In this narrative, urbanity can be industrial, technological, cultural and innovative—and by extension, its spaces can host factories, institutions of all kinds, governments and corporations, and entrepreneurs. But urbanity cannot be agricultural—and by extension, its spaces cannot host fields, seed banks, poultries, dairies and anything associated with food. This brief seeks to complicate this narrative by introducing three elements. The first element of an emerging context is connected to the reality of climate change and the growing efforts towards architecting urban solutions that are sustainable, circular and resilient. The second element of a set of nuances comes from a fresh understanding of how the business models around food are so exclusively tuned towards scale, size and standardisation that they result in an urban food system that is inefficient and unequal and, consequently, unsustainable. The third element of fundamental first principles is directly derived from the concept of quantum urbanism:[#] the creation of new dynamics of community-owned practices of sustainability and resilience that are laying the foundation for new urban models of food sovereignty.

[#]   Quantum Urbanism is a framework derived from the principles of Quantum Physics to understand, analyse and explain the multiple processes of contemporary urbanism that transforms citizens into producers, distributors and consumers of urban products and services in a near simultaneous manner.

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PLENTIFUL FOOD AS CONTEXT; STARVATION AS A CULTURAL FACT

If one were to look beyond the immediacy and urgency of climate change as an ethnographic context and locate it within the realms of a "factful"[1] interrogative inquiry, then there is a need to examine the current human condition as a systematic process of deconstructing a dominant discourse of development in terms of how it has contributed to the norms, notions and systems of daily life. Indeed, the human state is increasingly becoming dependent on the ecological condition of the Earth. Any genuine introspection about the human condition will require an approach that is rigorous and direct, about the way humans live and what are considered as norms of a good life. Since the current human condition is also in equal measure an existential question of the future survival of the planet, the answer to such an interrogation will likely shine the light on people's collective foibles in the name of modernity and progress.

Food, hunger and starvation are a good starting point to interrogate the dominant narrative of human progress and economic development. All three are also important determinants of poverty and are the bedrock of the multidimensional indicators of minimum acceptable threshold of human development. There are two contradictory sets of facts. Last year alone, 32 million people lost their lives due to starvation and hunger.[2] Over one billion people—or one in every six—are hungry.[3] One might be tempted to make the conclusion that there is not enough food in the world.[4] Yet, India wastes over US$14 billion worth of food every year due to lack of storage facilities; Sri Lanka wastes about 40 percent of all the fruits and vegetables that it grows, for the same reason as India, even though the per capita consumption of fruits and vegetables in the island nation is less than 100 grams.[5] Indeed, in any part of the world, conventional agriculture requires storage facilities and one can either treat it as a matter of public investment, private enterprise or a combination of both.

To be sure, food wastage is not the monopoly of developing countries in Asia and Africa. The United States (US), for instance, wastes close to 50 percent of all the food it grows and processes, even as there are 35 million households that are food-insecure. Britain, for its part, wastes 20 million tonnes of food every year while over four million of its people go hungry every day. The countries of the European Union (EU) are home to more than 43 million people who have no secure access to food. Japan, which is known for its thoughtful way of living, wastes more than US$100 billion dollars' worth of food every year;[6] much of what is wasted are imported like caviar, whale meat, sushi and fruits and vegetables.

The issue of hunger and starvation in both the developing and developed worlds is less a question of production, storage, supply and availability of food at markets and stores, and more of equity, access and affordability. Tristam Stuart, author of *Waste: Uncovering the Global Food Scandal*,[7] argues that the global economic structures underpinning the food industry are by default designed to favour scale, size, standardisation, and a business model geared for achieving the lowest possible price points. Such a business model creates incentives and the necessary monetary and

non-monetary value systems to produce and supply more, while assigning negligible or no value to ecology and environment and the connected issues of food sovereignty, equity, access and justice for people.

> By far the biggest invaders of the natural landscape are not tarmac and concrete, but fields…Cities, roads and industries are mere spots and veins on the body of the earth compared to the changes brought about by cultivation…Demand for food in one part of the world indirectly stimulates the creation of fields thousands of miles away…The connection between food profligacy in rich countries and food poverty elsewhere in the world is neither simple nor direct, but it is nevertheless real…more than 30 percent of Europe's greenhouse gas emissions come from food production. If food waste was halved, emissions could be slashed by 5 percent or more. In a hypothetical scenario, if we planted trees on the land currently used to grow unnecessary surplus and waste food, we could theoretically offset a maximum of 50-100 percent of world's greenhouse gas emissions[8].

FOOD AS A SYMBOL OF AN UNSUSTAINABLE DEVELOPMENT MODEL

It is tempting to isolate this connection between overproduction, food wastage and hunger as a problem only of a specific industry—the food industry—that emerges directly from its business model, pricing structures, the larger agricultural economy, and the global policy and regulatory framework. Yet, that will ignore the similar marginalisation of millions of people in various aspects of their lives: clothing, shelter, water, energy, technology and transportation. These

are referred to as the multiple dimensions of poverty. And even as the deprivation and marginalisation of people is multidimensional and cross-sectoral, so is prosperity and growth. It makes both ends of spectrum, rather the spectrum itself, part of an overarching structure that is both a way of defining and earmarking development as it is a collection of method and tools for achieving it. Economist and Nobel Prize laureate Amartya Sen has argued[9] that this structure of marginalisation infuses every aspect of the contemporary global economy, culture, politics and society with its characteristics. The structure is best understood as an overarching thought process – a development paradigm — that has defined our approach towards our planet, people and progress.

Food is rarely regarded as a viewpoint. People understand the *world of food*, but not so much its *worldview*. Yet, everything that is considered as food has a context that is one part history, one part anthropology, science, medicine, politics, culture and economics. It is also filled with human subjectivities. It is necessary to unpack the context of food to understand the path to actually consuming it. Food fuels human desire to congregate. Food is deeply visceral, determining individual moods, family ties and social norms. In its fundamental form, food is neither foreign nor indigenous, neither exotic nor plain, neither urban nor rural. Like a hyper-microscopic element of the quantum realm, food exists in multiple states with the seeming ability to collapse space and time to appear at the same place at the same time till it is given shape and defined by human intellect and logic. Understanding *food* is critical for tackling the emerging quantum nature of urban life. It will

impact how people produce, distribute and consume food, in turn defining notions of what is *urban* and what is *rural,* as well as what future urban spaces should do for communities.

When someone invites you to break bread with them it is about everything but the bread. Yet when that same someone is hungry and asks you for bread it is only about the bread and not about anything else. Indeed, people's relationship with food is complex. Food is often like an existential lens for all kinds of norms and rules that drive the politics and economics of inclusion and exclusion. If, for example, cow as the sacrosanct animal and beef as integral food is one end of the inclusion-exclusion spectrum—the *hyperlocal* —then the McDonaldisation of food as an international standard and the fetishisation of culinary skills through cookery shows and high-end restaurants is the other end—the *hyperglobal*. Our relationship with food is deeply emotional. Across cultures, food can be laced with divine symbolism or agnostic materialism.

Yet, the average city and town dweller does not really know where their food comes from or how it is grown or bred. Classical urbanism—with its roots to systems thinking and its linear constructs of scale, size, standardisation and an industrial shop floor model of production-distribution-consumption—has seen food only from the prism of demand and supply. Food is reduced to calories, nutrition and taste—just as mobility is individual or mass public transport; work is jobs in offices and macro economy; energy is big electricity plants, massive distribution infrastructure and billing; water is a civic amenity; and ecology is green spaces.

This is true for every modern city, from Mumbai to Miami, from Seoul to Stockholm. Massive demand has to be met with massive supply, which comes from centralised production hubs from factories, industrial units, SEZs and industrial cities. These centralised production hubs give people their cars, steel, toys. What then of agriculture? It is like a sore thumb. For one, classical urbanism—by anchoring itself to the notion of a city—deliberately pushes the semi-urban and rural areas to the margins. Moreover, there are notions of "urban" as modern, scientific and rational; while "rural" is feudal, slow and not attuned to progress. Why then should this distinction push agriculture and food to the non-urban?

BIG IMPLICATIONS FOR SUSTAINABILITY

Every single urban-rural distinction stems from this conceptualisation. Food, therefore, is subsumed in the same rural-urban distinction. The French, for instance, have their country dish Ratatouille; and Indians have their counterpart in, say, *Sarson ka Saag*. Both dishes are popularly portrayed using images of pristine countryside and green farms. At the other end of the spectrum are the "urban" foods: for example, mass produced burgers, pizzas or vadapavs.

Whether one cooks at home in a city or goes to a restaurant, no one really knows where the ingredients are coming from. There is a simplistic and reductive imagination of the food being grown by farmers in some rural area and the meat products being supplied by butchers. Yet the knowledge of food is sorely inadequate and does not really answer several

questions about the origins of food. Food is largely unknown; it is imagined as coming to the city, packaged, ready to be shelved in stores, eventually bought, and finally consumed.

The same principles of scale, size, standardisation, retail networks and logistical muscle applied to a seemingly urban enterprise and activity produces a completely different result for the origin test. A car or a laptop for instance, does end up on shelves but every single part of the product is tagged and barcoded to such an extent that the worker who crafted the silicon chip or moulded the car bumper can be identified. It is ironic that systems thinking underpinning classical urbanism organises "urban" activities so minutely but selectively engages with "rural" activities only to the extent that it contributes to formation of urbanity and the ideal city. By making the origins of food indeterminate and vague, classical urbanism keeps perpetuating the notion that *farming* and *agriculture* are one and the same. Such a paradigm fundamentally breaks the organic human relationship with food, one that is not about consumption but also location, localities, cultures and origins. In short, classical urbanism makes food not only indeterminate, but also non-local.

Yet, food is an integral part of the social relationships that constitute and define the dynamics of a space. For instance, partaking in meals with family or community during a festival is as much about food as it is about relationships. Food is also an integral part of the processes that turn a space into a place. For instance, the high streets of global cities filled with Michelin-starred restaurants are as much about food as it is about making a social

statement. In other words, food defines space and place and it does so by being determinate through an established socio-cultural context and a reasonably sure point of origin. Non-local is *not* global. Neither is it regional, cultural or political. Non-local is purely economic, and that too narrowly transactional. Non-local is rootless to the extent of only having a basic monetary identity. This constant process of mass non-localisation makes city dwellers assume that growing, sourcing, producing and distributing food is something others are responsible for—those "others" invariably being the rural mass of food growers lumped together as "agriculturists".

Non-localisation is also an intrusive process that destroys all notions of personal space and public space and the realms of social, cultural and political. The insidiousness of this form of intrusiveness is to such an extent that the average city dweller fails to recognise it when they see it. It ranges from solidified hydrogenated vegetable oil being sold as "ice cream" to chemically ripened fruits and vegetables made to appear fresh. In simple terms, non-localisation distances a human being from their food by obscuring its origins and by breaking the age-old human connection with ecology, environment and farming.

The sustainability and resilience burden of non-localisation are immense. It leads to a system where the origins of food are no longer relevant. For instance, the hydrogenated vegetable oil that one enjoys as frozen dessert comes from palm plantations of Indonesia and Malaysia that are built after clearing tropical rainforests and displacing tribes that have

lived there for thousands of years. Just to reiterate the case, the shipping itself of the oil to other parts of the world leaves a massive carbon footprint. The other socioeconomic, cultural and political costs of this form of food sourcing cannot really be measured. Classical urbanism fosters non-localisation as a fundamental mechanism to provide food at scale. This ensures that a city dweller does not have any agency or ownership of food. Yes, you can buy food, but can you really own it in the way you own a car? Can a city dweller determine the way food is produced, distributed and consumed?

QUANTUM URBANISM: FOOD AS URBAN SOVEREIGNTY

The question is this: Can the average urban citizen be *food sovereign*? There are two aspects to food sovereignty within the framework of quantum urbanism[10] and in the specific context of urban food. The first is the relative autonomy to choose. Autonomy means that every person should have access to the same or similar food choices, to practical, material and knowledge resources on growing food and an equal or equivalent ability to take decisions individually and collectively to determine what is relevant and best for their local environment, sociocultural context and long-term sustainability and resilience of their community. The second is that this form of choice is not just a simple function of affordability or accessibility. It also has to incorporate stakeholdership and ownership, the two building blocks of equity and justice. Affordability and accessibility, combined with equity and justice, by default makes it sustainable.

It is here that sustainable urban farming can play a crucial role not only in terms of having a softer carbon and chemical footprint, but also in giving local groups and communities a voice in what is being grown, how it is being grown and the manner in which its gets distributed and consumed. In short, real urban sovereignty can only be achieved when people have control over their immediate surroundings and environment. Such control allows for an inherent system of checks and balances that fosters more holistic business models that are not exclusively coupled to bottomlines, revenues and size. Control is also more or less directly proportional to size. Size is different from scale. The best way to understand the difference between size and scale is to think of a blue whale and an ant. A blue whale is sheer size, while an ant is scale because it lives in a colony, knows the other ants, cooperates and collaborates and together as a colony builds such tall anthills that if converted to human terms would be several skyscrapers put together.

Since control and agency is directly proportional to size, and not scale, sovereignty in the true sense can only be local. In practical terms, it means that both communities and individuals have to take centrestage. It also means that both will have to come together in various forms and shapes – from collectives, forums and networks to producer companies, platforms and social businesses – to start owning the process of growing, producing and distributing food for themselves and others like them. When food is grown in a local manner with the direct involvement of urban groups and communities, the concept of stakeholdership and ownership—in the

manner of people owning social equity in an ecosystem—is truly fulfilled. Such an ecosystem approach also has direct implications on some of the logistical requirements of conventional agriculture, particularly on the need for storage facilities. One of the primary reasons for basic storage and its associated value-added services like cold chains, processing facilities for preserving perishable food products and irradiation and dehydration technologies emerges from the need to transport food, dairy and meat products over long distances and give it a longer shelf life. Both are pillars of the retail food model that depend on massive distribution across geographies.

Sustainable urban farming focused on involving local, hyperlocal and microlocal communities and groups changes the dynamics of such a system of transnational demand and supply. With the market being confined and tied to a particular local ecosystem, and value being defined not just in terms of price points but also in how sustainably the food is grown and how fresh it is, the need for capital intensive storage infrastructure is drastically reduced. This also makes the local ownership of the food ecosystem genuine. It is only when you own food in the truest possible sense that you become *food sovereign*. Quantum urbanism not only allows for that possibility, but distinctly favours it as one of the more "probable" probabilities. Within the emerging quantum urbanism of urban spaces, people are both individualists and collectivists at the same time, probability is a reality on a daily basis, measurement does define reality, relationships are always co-local, and urban is always a set of emergent possibilities.

All of this leads to two fundamental questions. Are we expected to grow our own food or at least significant portions of it? And, if so, how is it even possible? The answer to both questions is a yes. People must quite literally get back to their roots by owning the source of food, to achieve genuine food sovereignty. The inherent limitations of classical urbanism will not allow humans to explore and fructify such a possibility. Quantum urbanism does: it allows people to break the shackles imposed by the false distinctions between rural and urban, between people and communities, economy and culture, politics and governance, urban life and living. Growing one's own food is not as outlandish as it seems, and two examples should suffice. One is institutional and the other is communitarian. Both are creative responses to the emerging quantum nature of urban lives.

Singapore has largely depended on Malaysia and other Southeast Asian countries for its fruits and vegetable needs. In 2010, for the first time, the city state was covered by a massive haze cloud for almost three weeks that drifted from Malaysia as a result of the burning of tropical forests for creating new palm plantations. Every year since then, Singapore has faced the same seasonal problem of haze cloud. This prompted the Singaporean authorities to actively approach the question of sustainability. One of the byproducts of this active thinking was the city state's effort to convert vacant public land like parking lots, commercial rooftops and land meant for future constructions into urban farms. Notably, these farms were allowed to be owned and run only by communities and social business enterprises. The city state now has an

active programme for urban farming: with training courses, starter kits, seeds, organic farming techniques and pioneer and mentor farmers. Close to 60 percent of the greens available in the city state's fair price shops owned by the National Trades Union Congress (NTUC) come from these community-owned local farms. What the Singapore government has done is to ensure through policy, regulatory and tax incentives for the food-focused retail chains, especially those in which the Singapore government or its institutions have a certain stake, to connect directly with social urban farming business enterprises and the emerging community of urban farmers to fund the logistics of procurement and storage and legal protection needed to use urban spaces like parking lots, rooftops, public spaces and even public gardens in a creative manner. This has allowed the urban farming businesses and communities to focus on growing food in a sustainable, frugal and organic manner. The Singapore government has also tied these efforts directly with its own commitments to reduce its carbon footprint as part of its contribution to achieving the Sustainable Development Goals (SDGs) by 2030.

The second example is of a group of amateur gardening enthusiasts in Florida in the US who noticed that the backyards of suburban houses were rarely being used. These enthusiasts banded together and created a model where they would lease the vacant backyards from owners for either a nominal sum or for a certain share of the vegetables, fruits and flowers they would grow. In the process, they brought back many of the indigenous vegetable and fruit varieties and created an ownership model where every single household had a stake. These

households collectively decided what would be grown for a particular season. The same group has since been seeking to replicate the example in nearby areas of Florida. Unlike Singapore where the community of urban farmers and social businesses got institutional and regulatory support for ensuring distribution of their fresh produce at scale, the Florida community of urban farmers solved the distribution issue by linking up with a network of "mom & pop" shops that were otherwise dying because of their inability to compete with the giant retailers such as Tesco and Walmart. Today many of these 'mom & pop' shops are seeing a revival, with the local communities increasingly buying their fresh produce from them.

Both examples are counterintuitive. They also militate against conventional definitions of "urban" and "rural" and the manner in which their distinctions play out at the ground level. There are three kinds of generalised reactions that emerge from such new realities. The first is the argument that these enterprising and counterintuitive solutions are a "developed country phenomenon" and not really relevant to emerging economies like India given their different processes of urbanisation. Such an assessment, however, hides the serious and continuing institutional, business and community efforts[11] in cities like Delhi and Bangalore to promote organic urban farming[12] and rooftop cultivation,[13] as well as in smaller cities like Ahmedabad, Hyderabad and Bhubaneswar. The second argument is that Indian cities and its citizens have a more direct relationship with their food through local neighbourhood grocery and vegetable vendors, dairy farms and meat shops. It is true only to the extent of a traditional relationship

with the vendor, rather than the grower, farmer or the actual meat producer. Yet, it overlooks certain trends in Indian urban spaces: of citizens wanting to know more about the source origin and the process of how their food landed on their tables[14] and the increasing use of retail networks for buying food and food products.[15]

The third critique emerges from the differences between the high-density, mixed-use development and distress migration common to Indian and Asian urban spaces and those low-density and structured urban spaces of Europe and North America. The argument boils down to two questions: Where is the space? Should precious forests and gardens be used? What these two questions fail to take into account is that the government, particularly in Asian and African contexts, is usually the biggest landlord and often has unused vacant spaces that could be put to good use, as it was in the case of Western Railways in Mumbai.[16] The Indian government, for instance, owns land the size of nine Delhis.[17] There is, of course, a genuine issue with the standards of cultivation and the quality of vegetables grown. That issue, however, is a secondary problem that can be addressed by training, awareness campaigns, involvement of civil society organisations and the setting up of regulations and standards. Utilising vacant urban spaces and unused land for creating an urban farming ecosystem has the immense potential to involving rural migrants who generally have strong sets of skills and knowledge about farming practices and turning them into genuine stakeholders of a city.

Quantum urbanism opens us up to the possibility that food can now exist both as local viewpoint and as a global worldview. To be sure, it will need a helping hand in terms of a new urban policy and regulatory framework that allows for typical urban spaces from parking lots, gardens, vacant government land to rooftops to be used in a creative manner while protecting the rights of ownership and usage. The local urban groups also need financial and non-financial support to seed and establish community-based, owned and managed urban farming businesses. In charting out a pathway towards urban sovereignty by owning our food, we might be able to answer some of the questions of sustainable life and living for our future urban spaces.◉RF

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ENDNOTES

1. Rosling, Hans (2018), *Factfulness: Ten Reasons We're Wrong About the World - and Why Things Are Better Than You Think* Sceptre, London.

2. The World Counts 2019: "How Many People Die from Hunger Each Year". www.theworldcounts.com/counters/global_hunger_statistics/how_many_ people_die_ from_hunger_each_year (Accessed 2019-02-02).

3. World Food Programme 2018: "Zero Hunger". www1.wfp.org/zero-hunger. (Accessed 2019-02-02).

4. The World Counts 2019: "How Many People Die from Hunger Each Year". www.theworldcounts.com/counters/global_hunger_statistics/how_many_ people_die_ from_hunger_each_year (Accessed 2019-02-02).

5. Stuart, Tristam (2009), *Waste: Uncovering the Global Food Scandal*, Penguin Books, London, pp xv-xxii

6. Ibid, pp xv-xxii

7. Stuart, Tristam (2009), *Waste: Uncovering the Global Food Scandal*, Penguin Books, London

8. Stuart, Tristam (2009), *Waste: Uncovering the Global Food Scandal*, Penguin Books, London, pg xv

9. Sen, Amartya; Nussbaum, Martha (1993). *The Quality of Life*. Oxford England New York: Clarendon Press Oxford University Press.

10. Quantum Urbanism derives its principles from Quantum Physics. The first principle is that people are individualists and collectivists at the same time, just as particles are waves and waves are particles. The second is that an individual in his 'moments' is always in a discrete state and not a fractal state, just as quantum states are always discrete. The third principle is that even in the simplest of direct urban transactions involving only two people as individuals, only a set of probable outcomes is all we will ever know and predict. The fourth principle is that what you see is determined by how you see it, which in turn determines what happens at that moment. Just as the principle of quantum physics posits that measurement determines reality. The fifth principle is the every social relationship is non-local, just as quantum co-relations are non-local. The sixth principle is that any co-relation that is not explicitly forbidden is mandatory.

11. Better India 2019: "Live Green: 5 Start Ups that will Help you Set Up an Organic Farm from Scratch" www.thebetterindia.com/180575/how-to-do-urban-farm-organic-city-weekend-diy-india/ (Accessed 2019-05-25)

12. Down to Earth 2015: "Farms in Cities: A Case for Urban Agriculture in India" www.downtoearth.org.in/blog/farms-in-cities-35682 (Accessed 2019-05-25)

13. Medium 2017: "Urban Farming in India: Is it Serious Business?" medium.com/ @VikramSarbajna/urban-farming-in-india-is-it-serious-business-b1acb8a15b38 (Accessed 2019-05-25)

14. Livemint 2019: "The New Food Factories: Inside India's Organics Trade" www.livemint.com/Industry/RoxfUb6XwV2Qbq7qDaLhqL/The-new-food-factories-Inside-Indias-organics-trade.html (Accessed 2019-05-25)

15. Livemint 2018: "Indians Do 10% of Their Shopping in Modern Stores" www.livemint.com/Consumer/sBOQbidAi81pYCocLMIAvN/Indians-do-10-of-their-shopping-in-supermarkets.html (Accessed 2019-05-25)

16. Down to Earth 2015: "Mumbai's Urban Railways Farms" www.downtoearth.org.in/news/mumbais-urban-railway-farms-40309 (Accessed 2019-05-25)

17. Hindustan Times 2017: "How Much Land Does the Government Own? About Nine Times the Size of Delhi" www.hindustantimes.com/india-news/how-much-land-does-indian-govt-own-officials-building-inventory-railways-biggest-landowner/story-NTUmFHp2xFXoB2lZRbv5TP.html (Accessed 2019-05-25)

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