



CONSUMPTION CONUNDRUM

Can Cities Survive without a Change in Lifestyles?

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The world has witnessed the rise of new economic powers in the past decade, such as the BRICS countries (Brazil, Russia, India, China and South Africa), and Mexico and Turkey, among others. These new economic powers, or NEPs, have begun to define the global economic game, having a profound impact on most markets, from capital and commodities to luxury goods. They have ensured their economic success by leveraging their resources to navigate the waters of an economic system in the midst of a deep transformation toward freer and larger trade, motivating common values and more global institutions. And they have done so hand in hand with a continuing or even accelerating process of urbanization, which to a large extent has emulated the growth path of Western cities.

While the world economic landscape seems to have changed given the new relevance of the NEPs' urban centers, the rules defining the economic game remain the same. The parameters being used to guide and assess prosperity and progress are still gross domestic product (GDP) and consumption levels. This is reflected, for example, by Chinese President Hu Jintao's commitment to quadruple GDP per capita by 2020 over its 2000 level, or in his pursuit to shift the Chinese economy into one centered further on consumption.

Yet cities in the NEPs are catching up within an economic system that is today showing signs of environmental, social and cultural crisis. These cities are mostly being developed to foster GDP growth and often seek the prestige of becoming global cities. There are three problems with this course of urban development.

Western cities may be setting the benchmark, but they themselves are facing sustainability challenges that are difficult to solve. The new global cities risk experiencing a lock-in effect caused by current decisions made on infrastructure, technology and product

◀ *Recycling at Viridor
Materials Recovery Facility,
Crayford, England, June 8,
2010. David Hoffman*

design. Given the large scale and high-speed urbanization process, it becomes easier to repeat ills already experienced in other cities. Finally, along the way in this path of urban development, many local traditions and values are being left behind.

Paradoxically, it is precisely these practices that are aligned with a more sustainable urban life, and indeed they are being adopted as new models for addressing sustainability challenges in the West.

Rethinking the notion of prosperity is crucial to ensuring a sustainable urbanizing process and economic development. Given their economic weight, growing cities in the NEPs can lead and drive change by advancing new sustainable models that simultaneously adopt local values, resources and traditions. To drive a more sustainable and prosperous urban life, it is essential to look at the lifestyles of urban dwellers and understand the impact of their consumption patterns.

Global Cities

Urbanization has a huge transformative effect. As Brian Roberts and Trevor Kanaley rightly synthesize in the study “Urbanization and Sustainability in Asia” (Asian Development Bank, 2006), urbanization redefines lifestyles, employment, welfare, social structures and institutions as well as power relationships in households, organizations and government. Nowadays, the world is witnessing an urban shift of multiple facets. The world’s urban population is now greater than its rural population. While this is already telling, one must look to other trends for a comprehensive picture of the global urban landscape. The direction and shape of this transformation bears great relevance to envisioning sustainable approaches to urban life. Let us look at the main trends and projections.

First, the growing power of urbanization has created a network of global cities that in many fields replaces the traditional system of nation states. Illustrating this, the report “Urban World: Mapping the Economic Power of Cities” (McKinsey Global Institute, 2011) recommends that foreign services align their trade-related diplomatic efforts with the twenty-first century’s urban reality.

Second, cities are increasingly the basis of economic growth. According to the McKinsey report, 38 percent of the world’s population is hosted in large cities, and these cities generate 72 percent of global GDP. Projections run by the McKinsey Global Institute Cityscope database show that the 2,000 cities being monitored will contribute 75 percent of global growth by 2025.

Third, as urbanization increases dramatically in Africa, Asia, Eastern Europe and Latin America, and as cities continue to drive economic growth, the center of gravity of the global economy has shifted to these regions, especially to those in the East. This shift became especially evident during 2007-2010. The contribution to global GDP by cities in the NEPs rose, while that by large cities in the developed countries fell.

Fourth, economic growth will largely be driven by middleweight cities ranging from one to 10 million residents. Only twenty of the 440 emerging cities monitored by the McKinsey database have populations above 10 million; these are considered megacities. While the McKinsey Global Institute explains that economic growth will be primarily in the hands of mid-size cities, this group comprises a set of cities featuring diverse population sizes. Therefore, urban development strategies will have diverse landscapes to work upon.

Finally, these fast-growing cities will host a critical mass of new consumers. As cities develop and become the centers of economic growth, waves of new consumers arise. There has been a substantial increase in the rate of growth of consuming classes (people earning a disposable income above \$10 at purchasing power parity per day); between 1970 and 1990, the increase was 1.7 percent per year, 3.5 percent between 1990 and 2012 and it is expected to grow at 3.7 percent per year till 2025, according to the McKinsey Global Institute.

Supply-Side Bias

The world has evolved from an approach of pollution control in the 1970s and 1980s to one of pollution prevention in the 1990s. The past decade saw an increased involvement of the private sector through corporate commitment to lessen energy and water consumption. Today, public authorities and private firms are approaching sustainability considerations and management as a source of opportunity rather than only for risk minimization. Current leaders in corporate social responsibility are moving toward net positive programs that aim to move beyond the concept of ‘less bad.’ A noteworthy example of this is Kingfisher Plc, a European home improvement retailer, which is working towards a reforestation rate greater than the deforestation caused by the business.

These public and private efforts are needed and should be further developed, but they should work in conjunction with a focus on the demand side. Up to now, the type of initiatives advanced by cities as well as corporations and most non-governmental organizations (NGOs) reflect a bias toward tackling sustainability from the supply side.

Despite the fact that the concept of sustainable consumption has been around for some time, the initiatives meant to promote it have largely aimed to make goods and services more environmentally and socially friendly rather than attempting to tackle dysfunctional consumption patterns. An example of this is the Puma Eco-box, a box/bag that reduces cardboard use by 65 percent, among other benefits. This is a case of higher efficiency in the supply chain and an appropriate advance in the design phase, yet such a change does not necessarily affect the consumption scale and pattern. Joel Makower, author and chairman of GreenBiz Group, describes such efforts as “smarter consumption” rather than sustainable consumption.

Many initiatives are still focused on how to make the products we consume less bad, but fall short in fostering sustainability through an integral and systemically conceived strategy. To do so would require incorporating a sophisticated metric analysis of the urban dweller's aspirations and consuming behavior. Not doing so results in inefficiencies, due to the investment required to green a supply chain that serves a demand not necessarily or completely aligned with the goals of sustainability.

A World of Trash

Consumers have a huge impact on sustainability, as personal choices constitute the key basis of markets, as well as social and political forces. Addressing consumption levels and patterns becomes crucial for ensuring economically, socially and environmentally sustainable urbanization.

As the population grows, urbanization advances and the middle class rises, consumption increases and the demand for natural resources keeps accruing. The higher levels of consumption call for a greater absorption of fossil fuels, metals, minerals, trees, land for crops and cattle, and so on. In the report "The New Frontier in Sustainability" (Business for Social Responsibility, 2010), Linda Hwang underlines that population growth, increasing per capita consumption and technological capacity have led to ever greater levels of production and consumption, threatening the quality of the ecosystem services supporting our existence.

A 2008 study from Goldman, Sachs and Company titled "The Expanding Middle: The Exploding World Middle Class and Falling Global Inequality" reminds us that preceding periods of massive middle class expansion (for example, in the late nineteenth century in Europe and the United States) reflected large progress, though it came coupled with political, social and environmental change.

It is important to highlight two things from this report. First, when comparing the resource constraints then with those being felt today (related to water, food and fuel, for example), this study concludes that the situation is arguably more tightly controlled nowadays. Second, the report doesn't specify what type of progress happened in the past, but it could be said it refers to economic progress and standard of life measured by life expectancy for example, which is actually different from measuring the quality of life. The latter would incorporate the social dimension at least. Moreover, the resulting environmental degradation returns in the form of risks to economic activity and threats to human wellbeing.

Besides the pressure in resource demand, the increase in consumption has a direct correlation with increase in waste generation. As disposable income increases in tandem with the growth of cities and the rise of middle classes, consumption of goods and services expands, stimulating greater generation of waste. In June 2012, a "rubbish

map” published by the *Economist* showed that 1.3 billion tons of annual municipal solid waste is produced globally by cities, an average of 1.2 kilograms per city dweller per day; by 2025, estimates project a rise to 2.2 billion tons, or 1.4 kilograms per person. About half of the current waste is generated by the member countries of the Organization for Economic Cooperation and Development, and the United States continues to lead the ranking in solid waste output per capita. Brazil, China, India and Mexico are among the top ten solid waste-generating countries, in great part due to the size of their urban populations, but also because as income per capita rose, their city dwellers adopted lifestyles based on higher consumption levels.

China has surpassed the United States in the national aggregate level of solid waste generation. As an illustrative comparison, the *Economist* chart projected that China’s urban population will generate 1.4 billion tons of waste in 2025, representing an increase from the 520 million tons today, while United States waste generation will go from 620 million tons today to 700 million tons in 2025.

The waste problem does not end there; one must also consider the types of waste being produced. Urbanization and affluence promote an increase in inorganic material disposed, such as plastics and metals. What is more, as urbanization advances and the amount of waste increases, the space for landfills becomes scarcer. This constriction, coupled with the pressures of the housing demand, challenges the social dimension of sustainability and heightens the environmental impact of urbanization, especially since waste needs to be transported, at times internationally.

The Millennium Ecosystem Assessment of the United Nations Environment Programme links the destruction of ecosystem services with economic growth, demographic changes and individual choices. These three factors present the qualitative link between consumption and socio-environmental impact, whereby wellbeing is often and largely associated with material possession. As Manish Bapna, managing director of the World Resources Institute put it in a 2011 blog post titled “Seven Billion: The Real Population Scare is Not What You Think,” the resource-intensive lifestyles characterizing the high and middle classes represent much more damage to the planet’s capacity to absorb human impact than the booming birth rate in low-income countries. Decoupling wellbeing and prosperity from material possession and natural resource use must be a guiding principle to advance sustainable urban and economic development.

What is the impact of consumption on urban sustainability at the level of the individual? In a 2008 report called “Sustainable Consumption: Facts and Trends from a Business Perspective,” the World Business Council for Sustainable Development found that although consumers are increasingly aware of the implications of their choices, many have not supplemented efforts in the public and private sector with shifts in their own lifestyle and purchasing decisions. This report cites a survey

of consumers run by McKinsey in Brazil, Canada, France, Germany, the United Kingdom, and the United States in 2008.

The surveys revealed that environmental and social issues represented a concern for 53 percent of the interviewees, and yet they were not willing to act accordingly at the shops. Another finding was that 13 percent would not mind paying more to support efforts in tackling social and environmental issues, but were not currently doing so. In other words, despite the greater awareness and concern by consumers, they seem to expect that the change should and will come from the actions of businesses and governments. Driven by their own need for profit and GDP growth, firms and public authorities respond by affecting the supply side to satisfy demands for consumption as usual. This reduces the possible impact of sustainability actions. Addressing the demand side should be an integral component of sustainability efforts.

On Your Bike

Tackling urban sustainability requires big investments, and addressing the demand side calls for new policy approaches. Fortunately, both provide opportunities for ensuring the wellbeing of urban dwellers while fostering a healthier economic development.

First, there are positive changes occurring in consumer values. In her 2011 book *Putting the Luxe Back in Luxury: How New Consumer Values are Redefining the Way We Market Luxury*, Pamela Danziger explains that affluent consumers' values are moving away from indulgence, reflecting a search to transcend the ambition for getting more 'stuff.' This trend is strengthened by the appearance of Generation Y (born late 1970s-2000s) as a demand segment, an important factor supporting the consumption preferences shift. This younger generation is expressing concern for unethical production and the environmental impact of business activities.

Second, the cities that are to host the new classes of consumers are still in the beginning stages of urbanization, which affords opportunities to adjust the course of urban development. This is critical in terms of environmental impact as well as cost efficiency and savings.

Third, enhancing cleaner production and more sustainable consumption patterns opens up areas for innovation in business models, thus strengthening the acumen and identity of cities. These new areas of dynamic economic activity may also align to a more sustainable urban development, even while generating high-productivity employment.

Fourth, the tools are at the tips of our fingers. There are various habits and traditions in the high-speed urbanizing cities which are more socially and environmentally friendly and are being seen by Western cities as new models to tackle sustainability challenges. A good example is the case of the beauty products company Lush and their non-packaged goods such as shampoo, or the growing number of farmer's markets in

New York City. These are targeting the high-middle income segment with processes and business models that are still alive and culturally embedded in other places.

According to the Future Leaders team of the World Business Council for Sustainable Development, a great part of India still buys small, unpackaged goods from low-cost, family-run shops. While some of these shops could certainly improve their resource intake, the habit of consumers aligns with a more sustainable way of consuming daily goods (that is, refilling, buying in local shops, in bulk and/or unpackaged). Currently, raising income per capita risks driving habits toward more resource-intensive lifestyles including the purchase of plastic soft drink bottles instead of returnable glass bottles, and the use of automobiles rather than public transport or bicycles. But policies, regulation and business practices (such as branding and marketing) could work to promote lifestyles that balance higher standards of wellbeing with more sustainable habits. The case of Beijing is illustrative: once a cycling paradise, it is now epitomized by polluted air and traffic jams, only to start promoting bike riding once again.

These opportunities provide ground for action in fast-growing cities toward a more sustainable urban economic development and to tap into the benefits of adopting early changes. The need for such an approach is an urgent one.

Local and national authorities, as well as not-for-profit organizations and private companies, could pursue action in three broad ways: 1) better assessing lifestyles and demand of citizens/customers, 2) supporting smarter consumption through less resource-intensive production, and 3) promoting more sustainable urban lifestyles.

These lines of action need to be pursued together to forge a well-intentioned circle and ensure mutual reinforcement. The aim is to stimulate a creative process in policy making for a new urban lifestyle based on principles such as the importance of systems thinking.

What Citizens Desire

As cities grow, they do so in tandem with changes in population, neighborhoods and lifestyles. Developing, updating and monitoring the necessary methods and parameters to assess these changes are critical for ensuring appropriate policy changes. In fast-growing cities, regulation might be missing or falling behind real needs of residents. The Citizens Housing and Planning Council of New York (CHPC) has put forward an initiative that attempts to overcome this problem in the housing sector. The relevance of the case is compounded by the fact that housing demand will be one of the most pressing issues in quickly urbanizing areas, where buildings account for the largest shares of greenhouse gas emissions.

While lifestyles continue to change, housing standards in New York City have remained largely untouched. Existing regulations promote the construction of larger units rather than smaller ones, and penalize residential density. CHPC's research

reveals that only 18 percent of the city's housing units host traditional nuclear families (parents and two kids), while 33 percent are occupied by individuals living alone, 23 percent share the home (6 percent of these do so with unrelated flatmates), 15 percent serve couples with no children and 10 percent belong to single parents.

Acknowledging these changes in the city's housing patterns, in 2007 CHPC created the Making Room initiative. It aims mainly to expand housing options by improving demographic research, heightening the role of design and promoting pragmatic policy in order to serve unmet or underserved demand. Applying such an approach to New York's reality showed that there was a need for small, efficient studios designed for single-person households, legal shared housing options for unrelated adults, and accessory units to make a single family home more flexible for extended families or additional renters. What is more, a comprehensive analysis of the city population, housing stock and regulation proved that to provide these much-needed options, improving existing housing stock (rather than new construction) would deliver greater benefits.

While the same approach might deliver different results when applied to different cities, it is instructive to recall that housing standards and design are influenced by society's values, and that demand for sharing homes is an increasing need in many cities and an opportunity to raise efficiency in the use of resources such as land, energy and water.

Once the demand dynamic has been understood, design should follow as a critical element to ensure people find the needed and desired options to consume goods and services that require less natural and material resources and generate less waste.

Designing Lifestyles

Mainstreaming sustainability at the design phase is overwhelmingly important and builds to a large extent on understanding current lifestyle patterns. As Hwang highlights, the design stage is a point at which critical decisions are made concerning a wide range of human and material resource flows. This is true for public as well as private goods and services.

Moreover, design is largely judged by its success in meeting a need, therefore, the concept of sustainability should be embedded as a need in the design process, rather than an ad hoc feature. By making production and distribution processes more sustainable, consumers will have more options for smart choices. Succeeding in providing these smarter options should reflect the incorporation of systems thinking and a thorough understanding of the target population in the design phase, rather than solely the introduction of new technology. An illustrative example of smarter consumption of public goods and services is the case of the Parisian bicycle-sharing system Vélib'.

Promoting public transport as a first choice is critical in advancing more sustainable cities, as well as ensuring that public goods and services are produced in a cleaner way.

The Vélib' system succeeded in becoming part of the city's identity largely because it was advanced in tandem with complementary efforts directed at the boundary of the transport system (reducing traffic congestion, air and sound pollution, revitalization of public spaces). An example of this is that together with expanding the network of pedestrian priority-shared streets, the city promoted Quartier Verts (green neighborhoods). These simultaneous efforts at the transport and neighborhood level align with the development of a more locally based economy and shopping patterns (buying in small local pastry shops rather than at big supermarkets). Not least important is the fact that the Vélib' bikes are largely recyclable and JC Decaux, the developer of the bikes, has set up a recycling network for worn bike tires, being the first one of its kind in France. This shows how designing for smarter consumption opens up opportunities for new businesses within a more sustainable urban economy. Vélib' should be a model for transport systems and urban development in urbanizing cities to gradually turn to a greener urban growth model.

The transport sector carries greater relevance for the growing cities in the NEPs, where the auto market is showing an exponential growth. Research from the Goldman Sachs Economics, Commodities and Strategy Team in 2010 estimated that world auto sales could grow up to 104 million units per year by 2020—from 70 million in 2010—and that half of the sales by then will represent purchases from consumers in BRICS nations. What is more, the design of the transport system has huge impact on the lifestyles urban dwellers will carry. As many cities in the United States showcase, designing the urban context with cars in mind implies wide and deep impact on the environment and social dynamics through roads, parking spaces, pollution, and energy requirements. Once the model based on car use is implemented, it becomes difficult to reverse the negative effects.

Businesses have made advances in the private goods supply chain's energy and cost efficiency, as well as improving reporting and other sustainability management areas. These efforts contribute to reductions in the environmental and social impact and can help raise the global prestige and reputation of the city. To enhance the benefits from actions pursuing more sustainable business models, policy making in the NEPs should look at identifying the income thresholds at which the different products' adoption paths start, and varying adoption curves reflecting the relation between the local consumer and product or service. The sectors at which the adoption curve kicks off earlier could be prioritized for policy actions on the supply and demand side, ensuring positive feedback on public and private efforts.

Goldman Sachs' Jim O'Neill highlighted in a 2008 Global Economic Paper for the firm that consumer durables hold their penetration sweet spots on the low-to-middle income threshold and beyond, but within the middle class income. As a

result, in the NEPs growing cities there will be an accelerating demand for washing machines, TVs, refrigerators, radios, DVD players, autos and others. Consumers in the BRICS countries for example still allocate a relatively low share of their expenditure to durables; therefore, now may be a good time to set up policies to boost the greening of these sectors, an example of which is Japan's Top Runner program for energy efficiency in appliances.

While mainstreaming sustainability and heightening the role of design to improve production is needed to decouple wellbeing from material consumption, it does not affect the scale of consumption. There is a need not just to make products greener, but to redefine consumption through favoring services over material products, de-materializing, and responding to needs rather than increasing sales. Efforts to heighten consumer engagement in better use and end-of-use habits should be integrated, especially to extend the life cycle of goods and avoid waste generation. The notion is to focus on the quality of experiences, rather than simply providing more 'stuff.' In getting there, it is important to understand and shape more sustainable urban lifestyles.

Chasing the Dream

The economic model on which a city bases its development influences in multiple ways individual consumption choices of public and private goods and services. Current trends show that those choices are creating constraints on the environmental and social capacity to bear them. Therefore, policies guiding more sustainable urban lifestyles are necessary and strategic to cities undergoing the initial or middle phases of the urbanization process.

It is encouraging to know that while people tend to consume more when their income rises, concerns for issues like fair trade and environmental degradation appear to become stronger too. Furthermore, there are already initiatives in place to address the unsustainable consumption pattern through redefining prosperity. Among these is Bhutan's concept of Gross National Happiness (GNH), coined in 1972 and based on four pillars: economy, environment, community and personal wellbeing. Other countries can incorporate the GNH concept as the philosophy guiding urban development.

The project China Dream advanced by the Joint U.S.-China Collaboration for Clean Energy (JUCCCE) represents a big and tangible step arising from the private and not-for-profit sector. Based in Shanghai, JUCCCE has set actions to promote sustainable consumption besides its two programs on sustainable urbanization and sustainable industry. As Randall Krantz summarizes in his blog *Bhutan Chronicles*, China Dream addresses the challenges found in the questions: Why should Chinese citizens aspire to an unsustainable American Dream, one built on a model of consumption and growth? Would it not be more appropriate to have aspirations based

on local culture and values? The China Dream project has two specific objectives: to shape social norms by creating and seeding a visual lexicon for the new China Dream, and to guide consumer behavior by introducing local policies. The approach involves reaching out to stakeholders from green practitioners to ad agencies in a multi-channel process involving government, media, brands, academic institutions and more. Due to the success and great outreach, the initiative and methodology have now expanded to the United Kingdom with the launch of the UK Dream at the beginning of 2013.

Initiatives such as China Dream go straight to the heart of prosperity aspirations, holding enormous power for long-term deep impact in aligning prosperity, wellbeing and urban development. Krantz also explains that shaping culture and aspirations is substantially more difficult than greening individual products, yet it promises greater margin for action by those that can influence and shape them. In addition, it allows aligning supply and demand toward a more sustainable economic dynamic. The lack of effective demand for more environmentally friendly products and services is often seen by the private sector as a barrier to hold bolder initiatives toward building sustainable business models. Aligning consumption choices with sustainability efforts put forward by city policy makers is crucial to overcoming the barrier in the private sector.

Rethinking Economic Growth

Urban development is a dynamic process that occurs in constant dialogue with the economic growth model followed and the lifestyle urban dwellers pursue. Any action to conduct a more sustainable urban economic and infrastructure development should envision the decoupling of wellbeing from natural and material resource intake.

Addressing this point is a strategic necessity for those cities undergoing high-speed urbanization. To make their current successes endure for generations to come, sustainability must be mainstreamed in the urban as well as economic development models. To accomplish this, the lifestyles of citizens in general and their consumption patterns in particular should be studied in order to guide proper design and ultimately tackled by modifying lifestyle aspirations.

Business strategies and government measures have a great stake in advancing actions to promote innovative business models based on less resource-intensive production and more sustainable urban lifestyles that support responsible consumption. This is a pressing side of urban economic development that while often ignored is essential to rethinking the economic growth and prosperity of cities.