Penn: Current Research in Sustainable Urban Development

From Global to Local

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The world is beset by interconnected economic, social, and environmental challenges of a magnitude difficult to grasp, much less address. Population growth and urbanization are at the heart of these challenges, with 2.5 billion additional people expected to be living in urban places by 2050. Two recent international agreements— *Agenda 2030,* with its 17 Sustainable Development Goals (SDGs), and the *New Urban Agenda,* a roadmap for achieving the urban-focused SDGs as well as sustainable urbanization in general—offer important opportunities to begin to deal with these global conditions in the coming decades. Further, UN-Habitat's biannual stakeholder meeting, the World Urban Forum (WUF), titled *Cities 2030: Cities for All,* in February 2018 in Kuala Lumpur, Malaysia, provides an arena for sharing knowledge and monitoring civil society and local government contributions to these efforts.

Three centers at the University of Pennsylvania (Penn)—the Kleinman Center for Energy Policy (The Kleinman Center), Penn Institute for Urban Research (Penn IUR), and Perry World House (PWH)—partnered to bring Penn's academic knowledge to bear on achieving key SDGs, implementing the *New Urban Agenda*, and informing the WUF conversation. To this end, they assembled "Penn: Current Research on Sustainable Urban Development," eleven research papers on key topics from among the centers' faculty and associated researchers/fellows. Thus, in this work, Penn's centers show how their own expertise on issues such as foreign policy, energy, and urban studies, grounded in cross-disciplinary research, can contribute to implementation of the SDGs and the *New Urban Agenda.*[1]

GLOBAL AGREEMENTS: INTERCONNECTED AND INCLUSIVE

Adopted by world leaders in September 2015 at the UN Sustainable Development Summit*, Agenda 2030* aims to guide global development by giving equal weight to social, economic, and environmental issues. The inclusion of a goal centered on urban issues—SDG 11: "Make cities and human settlements safe, inclusive, resilient and sustainable"—confirms the importance of urban places in this effort. And, as the UN member states expressly created the SDGs as interconnected and interdependent, the presence of SDG 11 demonstrates global recognition of the importance of cities in achieving the other 16 goals, from eradicating poverty (SDG 1) to providing clean water and sanitation (SDG 6), taking action on climate change (SDG 13), reducing inequity (SDG 10), strengthening partnerships for implementation (SDG 17), and everything in between. So too, the interconnections among the goals show the significance of advancement of these other fields and issues for improving urban life.

In October 2016, when the delegates to Habitat III, the UN-wide convening held every twenty years, adopted the *New Urban Agenda,* they committed to its alignment with *Agenda 2030,* especially SDG 11. In addition, they laid out standards and principles for urban areas, committing the signatories to three interlinked principles that clearly express the inclusive and integrative nature of the agenda: sustainable urban development for social inclusion and ending poverty; sustainable and inclusive urban prosperity and opportunities for all; and environmentally sustainable and resilient urban development.

Nearly half of the *New Urban Agenda*—paragraphs 81 to 160—focuses on its implementation, recommending the pursuit of five strategies that, taken together, would yield sustainable urban development. They are:

> 1. forming national urban policies,
>
> 2. promoting urban legislation and regulations,
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> 3. advancing urban planning and design,
>
> 4. supporting local economy and municipal finance, and

5. engaging in local implementation.

Despite the drafters' extended attention to implementation, they did not prescribe the specifics of how to realize the agenda's principles and strategies. They left this multifaceted problem to local governments and stakeholders in the belief that successful implementation calls for different solutions for different actors in different places. Thus, the SDGs and the *New Urban Agenda* may be global, but their implementation will take place through national and subnational governments in partnership with civil society.

PENN: CURRENT RESEARCH IN SUSTAINABLE URBAN DEVELOPMENT, FROM GLOBAL TO LOCAL

The papers in "Penn: Current Research in Sustainable Urban Development" aim to inform the conversation about how to implement the *New Urban Agenda* and the SDGs. The papers are based on Penn's deep academic expertise and are written from an interdisciplinary perspective that embraces the interconnections among the SDGs and recognizes the need for multiple disciplines to advance urban goals. Collectively, the papers reinforce the idea, foundational to the *New Urban Agenda* and to the inclusion of SDG 11 among the 17 interlinked SDGs, that cities are an important fulcrum of sustainable development. The authors argue that cities are the frame of reference that allows public and private decision-makers to look holistically and locally at complicated issues of geography, governance, energy, development, design, and all the many other threads that make up the tangled knot of sustainable development. They show the interlinkages of elements of sustainable development, maintaining that actions in support of sustainable development need to overcome fractured and fundamentalist thinking and new inclusive forms of global and local governance that foster coalitions across traditional divisions, and align government actions across all levels. Support of this approach requires gathering quantitative and qualitative data on which to develop evidence-based policies and programs. Together, the papers argue that an evidenced-based, interdiciplinary approach can help overcome traditional policy silos and transcend persistent misconceptions that often hamper thinking about sustainable development.

INTEGRATING LOCAL KNOWLEDGE

Individual papers provide lessons about how to integrate local knowledge into implementation. In a study of public space in Hyderabad, India, anthropologist Lisa Mitchell delves into its culture, history, and politics to demonstrate that politically useful public space is an essential part of urban design in that city. She shows how citizens' use of public space—defined in the abstract by the SDGs and the *New Urban Agenda*—for dissent and resistance is deeply embedded in local customs. She concludes that when implementing the public space components of the SDGs or the *New Urban Agenda* in a place like Hyderabad, defining public spaces as culturally neutral "open space" misses its important deeper meaning.

Several authors, including landscape architect Frederick Steiner and sociologist Daniel Aldana Cohen, present case studies of the use of local histories, cultures, and politics to inform the implementation of certain globally-inspired concepts. Steiner, for example, illustrates the development of the Austin, Texas city plan with a locally developed data-gathering and public input process. Cohen explores how the implementation of a seemingly value-neutral policy of lowering water pressure in city pipes during a drought in São Paulo had very different effects on poorer residents than on wealthier ones despite the equal treatment of all. Like Mitchell, Steiner and Cohen demonstrate, through the case studies they present, the process of integrating local knowledge into global commitments.

CROSS DISCIPLINARY BOUNDARIES

The papers in "Penn: Current Research in Sustainable Urban Development" demonstrate how to cross

disciplinary boundaries, both through co-authorship and issue-framing. For example, landscape architect Richard Weller and his co-authors, writing on biodiversity, explicitly bring together two issues that are traditionally presented as two poles on a continuum: urban development and environmental conservation. They point out that the SDGs, in language related to Goals 11 and 15, require approaching urban development and conservation together. Further, they demonstrate how to meet this challenge by 1) analyzing the world's biodiversity hotspots to reveal conflicts among land uses and 2) analyzing cities within the hotspots to reveal conflicts between their growth forecasts and habitat and endangered species. In this way, they are explicitly "placing urbanization and biodiversity in the same frame of reference" in order to transcend siloed thinking.

Similarly, sociologist Daniel Aldana Cohen describes the rift between social justice and environmental action as an unnecessary one, arguing that the goals of many right-to-the-city advocates overlap with the those of advocates for environmental projects; both call for urban density, a mix of housing and employment centers, and public transportation. Right-to-the-city advocates may not be using the language of environmentalism but, he argues, their goals are substantively the same.

Historic preservationist Randall Mason, in his paper on the inherited environment, directly challenges another misconception: the idea that urban development and historic preservation are inherently opposed. This understanding is too narrow, he argues, and it wrongly implies that the choice we have is between change (usually described as growth) and stasis. Instead, he posits "urban conservation" as a "hybrid practice weaving the goals of historic preservation and the means of urban planning to sustain both urban functions and cultural significance of urban forms." He urges leaders to take what is often treated as marginal (such as inherited culture and environment) and make it central. He discusses ways that urban conservationists are trying to realize this approach by valuing cultural functions and not just material form, by recognizing and valuing change not just stasis, and by borrowing from economists' theorizing about cultural values.

GOVERNANCE AND POWER

Finally, several papers in "Penn: Current Research in Sustainable Urban Development" deal with the structure of governance and the distribution of power among governance units in efforts to implement the SDGs. International law expert and Perry World House Director William Burke-White and Penn IUR analyst Laura Barron acknowledge the tension between putting resources toward limiting vulnerability to impacts of climate change (adaptation) and reducing the magnitude of climate change (mitigation), but argue that local and city government engagement on this issue can potentially overcome this tension. Governance at the city level can both work toward adaptation (which it is particularly motivated to do, being closest to the first-hand effects of climate change) and mitigation (by participating in transnational networks, and by using locally generated political will to create upward pressure for action by national and global authorities). Noting that there is misalignment between the goals of climate action and the power to achieve those goals, their paper is founded on the idea—common to many of the papers—that global sustainability is a challenge for which governance at all levels needs to be improved and coordinated.

Regional scientist and Kleinman Director Mark Alan Hughes and Deputy Director Cornelia Colijn explore the the limits of subnational capacity to implement the goals stated in both the *New Urban Agenda* and the SDGs. They parse the misalignment between global goals and local goals, and the misalignment between local proxies for national goals and local capacities to achieve those goals. The misalignment of goals across scales of governance (from global to national to provincial to local) represent a pernicious example of the challenges of collective action. Larger units of governance capture a fuller range of costs and benefits, creating stronger incentives to act than those facing smaller units of governance. The misalignment of goals and capacity to implement those goals limit the efficacy even among local governments who do align with global goals. The authors present examples of limited capacities (constitutional, statutory, political) in subnational governments that raise cautions about over-reliance on local actors to achieve critical national and global goals.

City planner and Penn IUR Co-Director Eugenie Birch explores the changing nature of global governance based on the inclusion of parties beyond national governments in the development and execution of global agreements. She describes how, as an institution founded on interstate diplomacy, the UN assumes and supports the national sovereignty of its member states—and yet it is trying to solve problems that span national boundaries and that require the participation of multiple actors for their solutions. She shows how, over the past five decades, UN member states have increasingly recognized that civil society is driving the definition of issues they need and want to address and their solutions require new multi-stakeholder partnerships, including partners from civil society. In so doing, she unpacks how member states are agreeing (often reluctantly) to new means of engagement in the policymaking and implementation process (while continuing to protect national sovereignty).

International urbanization experts Ian Klaus and Russell Singer examine the stakeholder engagement processes of four recent negotiated frameworks in detail: the *Sendai Framework for Disaster Risk Reduction*, the *Addis Ababa Action Agenda*, and the *2030 Agenda for Sustainable Development* in 2015, and the *New Urban Agenda* in 2016. For each of these agreements, Klaus and Singer consider how local, urban actors helped shape the outcome document and how they are affected by it. They ask: To what degree were urban actors considered as potential implementers and as sources of expertise? What processes and political issues within the UN either allowed for or inhibited this consideration? In answering these questions for each of the four recent frameworks, they conclude that the importance of cities has not resulted in a consensus on how to treat local governance in intergovernmental negotiations; nonetheless, they note that UN outcome documents are extremely useful tools in creating the political support and upward political pressure that allow local actors to move forward with implementation, "largely out of view of the UN and independent of it."

Many papers call for finding points of agreement among seemingly unrelated interest groups and suggest opportunities for exploration of new partnerships to drive SDG implementation. Weller suggests that water resource protection is one potential point of synergy that can simultaneously address the basic human need for clean water and the preservation of biodiversity. Cohen argues that environmental policies cannot (for practical reasons, as well for social justice reasons) lead to social displacement; instead, "...politicians and other civil society leaders will have to find ways to combine the priorities of environmental and housing-oriented movements." In the context of UN deliberations, Birch shows how civil society has gained a powerful voice as points of convergence and agreement between stakeholders have evolved over decades from single-issue advocacy networks into broad multi-stakeholder networks; while nation states are protective of their sovereignty, stakeholders are making real inroads to influence international policy on sustainable urbanization. Burke-White and Barron describe how cities are forming transnational networks, both to generate political pressure on national and international actors and to create and share knowledge among each other. Hughes and Colijn demonstrate that where cities have sufficient power to govern they can indeed implement energy policies effectively, as in the domain of building energy efficiency (a key target of SDG 7) using building codes, permitting, inspections, and taxes.

EVIDENCE-BASED APPROACHES AND THE ROLE OF ACADEMIA

Several papers underscore the importance of building and sharing data in order to implement the New Urban Agenda and SDG 11, something that the New Urban Agenda itself stresses:

> We will support the role and enhanced capacity of national, subnational and local governments in data collection, mapping, analysis and dissemination and in promoting evidence-based governance, building on a shared knowledge base using both globally comparable as well as locally generated data, including through censuses, household surveys, population registers, community- based monitoring processes and other relevant sources, disaggregated by income, sex, age, race, ethnicity, migration status, disability, geographic location and other characteristics relevant in national, subnational and

local contexts. (Paragraph 159)

Given the importance of data and research in implementation, academia has a crucial role to play in informing both policy and politics. Penn, a leading global urban university with expert voices in urban research and a global leader in connecting research to real-world concerns, has much to offer as is demonstrated by several papers in the series.

Former Assistant Secretary of State for Population, Refugees, and Migration in the U.S. State Department Ann Richard and Perry World House analyst Katelyn Leader show, in their paper on the integration of refugees in urban areas in the United States, what this approach means in practice. They forcefully make the case for "globally comparable as well as locally generated data" disaggregated by various characteristics (such as "income, sex, age, race, ethnicity, migration status, disability, geographic location and other characteristics") in order to monitor implementation of internationally agreed-upon goals and inform decision-making and governance. They demonstrate the hurdles to be overcome—in particular the failure to collect disaggregated and longitudinal data, and the dearth of monitoring and evaluation for programs that support refugee integration—in order to realize such an approach. They particularly emphasize that disaggregated data, "can reveal dissimilar outcomes between sub-groups" where "a glance at aggregate data can show overall progress toward a given goal, while masking stark differences in progress across groups."

In the same line of thinking, sociologist Onoso Imoagene, writing on diversity visa immigrants to the United States, argues that collecting *ante-* and *post-*immigration data on individuals would enable improvements in immigration policy, an important issue in understanding not only the U.S. dynamics but also those of global immigration. Her paper demonstrates the importance of not forgetting the individual urban resident in any effort to gather standardized data on cities. Similarly, Mitchell calls for working across disciplines to understand data in context. As noted above, Mitchell argues that public space needs to be understood within specific contexts and histories; she asks that urban planners and policymakers consult with sociologists and historians to better understand context and local politics.

CONTRIBUTIONS OF PENN: CURRENT RESEARCH IN SUSTAINABLE URBAN DEVELOPMENT

This series lays a foundation for thinking about the nuances of implementing global agreements, with special consideration of local issues. This work offers an initial platform for further development with the accretion of knowledge about effective policy and programs aligned with the urban-focused SDGs and the *New Urban Agenda* in the future. In particular, it explores the importance of local knowledge in this work with examples ranging from thinking about public space in Hyderabad, India to water service provision in Sao Paolo, Brazil. Further, it discusses the necessity of crossing disciplinary boundaries in the formulation and execution of implementation policies with cases on biodiversity, environmental action, and historic preservation. Next, it provides examples of the emerging governance models that will accommodate these efforts, with essays on changing power arrangements and policy alignments that have occurred over time and are being refined today. Finally, it argues for the collection of new units of national data and disaggregated data in service of understanding the local dynamics and offer evidence for policy formulation. The three Penn centers—The Kleinman Center, Penn IUR, and PWH—expect to continue this work in the future, ensuring that policy debate is informed by academic knowledge that bridges disciplinary boundaries.