Policy Brief

Overview

Since the 2000s, African cities have witnessed a series of interventions to improve water and sanitation. This brief outlines key lessons learned from the intervention experience, drawing on the UNU research project Multi-level Urban Governance for Total Sanitation (2011–2013) under the Education for Sustainable Development in Africa (ESDA) Project. It highlights the importance of multi-actor approaches for promoting: (1) an institutional framework to coordinate civil society organizations, community-based organizations, and the state agencies across levels; (2) policy recognition of water and sanitation as socially embedded infrastructure with gendered dimensions; and (3) the relevance of scientific research and university education to ongoing policy interventions.

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Institute for Sustainability and Peace

Multi-Actor Approaches to Total Sanitation in Africa

A SANITATION CRISIS IS ACCOMPANYING THE GROWING phenomenon of urbanization across less developed regions.[1] According to the United Nations Human Settlements Programme (UN-HABITAT), as of 2008, 2.6 billion people, or two-thirds of the world's population, live without access to improved sanitation.[2] Another study has estimated that, of these people, around 23 per cent live in urban environments, usually in informal settlements or slums, which are continually expanding especially in Asia and sub-Saharan Africa.[3] The informal settlements are often excluded from public services, exacerbating the sanitation crisis. This is evidenced in unhealthy living conditions, disease and increased vulnerabilities.

Sub-Saharan Africa has the world's largest slum population: 199.5 million, or about 62 per cent of its urban population.[4] UN-HABITAT also noted that sanitation coverage in African cities is below 50 per cent; the majority use unimproved informal facilities, and an estimated 25 per cent still practise open defecation. This situation led the United Nations to brand African slums and their sanitation crisis a "global scandal" of poverty and neglect in the 2012 Millennium Development Goals (MDGs) Report.[5] Indeed, among the eight targets set by the MDGs, the targets of reducing the proportion of the urban population living in slums (Target 7d) and of enhancing the quality and quantity of sanitation services (Target 7c) are notably off track.

In order to tackle the crisis, since the 2000s a series of interventions have been carried out in African cities and their slums by both government and non-government actors in the form of water and sanitation ("WATSAN") projects. After a decade of experience, the actors involved have identified a wide range of problems requiring future improvement.

In 2011–2013, the United Nations University Institute for Sustainability and Peace (UNU-ISP), in partnership with the University of Nairobi and Kenyatta University in Nairobi, Kenya, implemented a research project on Multi-level Urban Governance for Total Sanitation[6] within the Sustainable Urban Development component of the Education for Sustainable Development in Africa (ESDA) Project.[7] The research was intended to set up a platform for the state and non-state actors in the WATSAN sector to share their experiences and discuss possible solutions to the problems of the ongoing sanitation practice in informal settlements.

The UNU workshop

This brief presents the critical insights and learning generated in discussions at the research project workshop "Urban Governance for Total Sanitation: Looking to Transformative Approaches", which took place in Nairobi, Kenya, 14–15 February 2013.[8] The workshop brought together 20 experts representing a wide range of development actors, including the Chief Executive Officer of the National Council for Science and Technology of Kenya, a representative of UN-HABITAT, Nairobi City Council planners, representatives of civil society organizations and non-governmental organizations (NGOs), community-based development professionals, and university researchers from Kenya, the United Kingdom and Japan. They gave presentations on sustainability, urban governance and social movements in informal settlements in Asia and Africa. The workshop was interactive, generating lively discussions and exchanges, and became a useful avenue for the multi-actor participants to engage in a roundtable dialogue.

At this workshop, the major problem was recognized that little knowledge has been generated about how to establish coordination between community-based initiatives that involve various non-state actors in the informal sphere and the formal mechanisms of urban governance at various levels. The conventional approach has too narrowly focused on the "provision" of infrastructure and the concept of urban governance as a regulatory framework that enables such provision and maintenance. The discussions identified that institutional coordination between various actors would guarantee the "sustainability" of services already being provided. To this end, new approaches need to be envisaged to establish a platform for multiple actors to come together, undertake public deliberations and shape institutions of governance that can support ongoing grassroots and informal sanitation initiatives.

More specifically, the workshop highlighted the following three key elements:

1. The need for an institutional framework that ensures linkage, operational cooperation and the coordination of interventions between different levels of governance and various civil society, community-based and grassroots initiatives.
2. The need for a rethink and a policy recognition of the social embeddedness of water and sanitation – viewing the service provision not merely as physical infrastructure but also as a social infrastructure asset for the community, with gendered dimensions, and subject to reflexive community deliberations and actions.
3. The need for scientific research and university educational programmes to be relevant to ongoing development practice and intervention, particularly in terms of ongoing experiments to address multi-actor cooperation and the social experience of water and sanitation.

The Kenyan example

At the workshop, the Kenyan participants' presentations epitomized the importance of multi-actor approaches. According to the City Council of Nairobi (CCN), more than half of Nairobi's 3.14 million residents live in informal settlements; only a quarter of them have access to household toilet facilities, 68 per cent rely on shared

facilities, and the other 8 per cent have no access at all. The use of open spaces and "flying toilets" (a facetious name for the use of plastic bags for defecation) is common, and only 50 per cent of waste generated is collected. However, in spite of CCN's mandate in the provision of public sanitary facilities (Local Government Act, Cap. 265), it cannot

KEWASNET addresses the importance of cooperation with multi-level governmental institutions and the need for advocacy, especially for disadvantaged groups. For example, the Kenya Water for Health Organization, a member of the network, works to enhance access to potable water and sanitation for women and children in

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serve informal settlements because they are not on the official map.

Therefore, CCN is increasingly seeking to cooperate with NGOs and community-based organizations (CBOs), which have been operating informal water and sanitation services in slums. This cooperation between local authorities and civil society organizations is not unique to Nairobi. An NGO based in the city of Kisumu, Sustainable Aid in Africa (SANA) International, has been leading initiatives to improve Kisumu's sanitation situation through participatory approaches and sustainable technologies. It has demanded the involvement of UN-HABITAT and the City Council to promote a micro-credit revolving fund and actually carry out the initiatives, which are currently sustained through a solidarity group system of lending and social marketing.

NGOs such as SANA International are part of the water and sanitation NGO network called Kenya Water and Sanitation Network (KEWASNET).

particular. The Umande Trust, based in the Kibera slum, is leading implementation of an adaptive technology for a *bio-centre*, which consists of compartmentalized toilets and bathing facilities, as well as a water tank. This infrastructure has been considered to be innovative for its conversion of human waste into biogas for cooking and lighting. Moreover, the centre's management has allowed CBOs to generate their own income, as public toilets and bathing facilities customarily charge 2–3 Kenyan shillings. Other NGOs and donors are now adopting this technology in their projects and governments actively support it.[9]

These experiences of collaboration have shown that governance for total sanitation does not merely point towards a governmental regulatory framework but also involves an institutional coordination framework for multiple actors. For such multi-actor governance to become further strengthened, three main recommendations can be presented.

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About this brief

This policy brief is based on a research project "Multi-level Urban Governance for Total Sanitation" of the United Nations University Institute for Sustainability and Peace (UNU-ISP) in partnership with the University of Nairobi and Kenyatta University in Kenya. The research was conducted between 2011 and 2013 within the Sustainable Urban Development component of the Education for Sustainable Development in Africa (ESDA) Project. The research project aimed to set up a platform to discuss new approaches to linking various forms of governance with water and sanitation policies and ongoing community-based initiatives and grassroots movements, which envisage long-term transformative change for sustainable urban development. The project culminated in a workshop that brought together a wide range of development actors from Kenya, the UK and Japan who engaged in a roundtable dialogue and a sharing of experiences and insights.

Institutionalizing formal–informal coordination

A major constraint in multi-actor approaches to sanitation is the lack of a standard, systematic and enduring institutional framework for vertical and horizontal coordination. For example, Kenya's laws provide the regulatory framework for the cooperation and engagement of state agencies and civil society organizations,[10] making it mandatory for all development actors and citizens to participate in development matters to ensure collaborative sanitation provision. However, no official institutional framework exists to actually implement these laws. As a consequence, development actors have to operate in an ad hoc manner. UN-HABITAT in Nairobi argues that the absence of an implementation framework for cooperation results in a lack of accountability in water and sanitation services.

The CCN admits that it is extremely difficult to formulate an official institutional framework even if it has formally ensured engagement with the multilateral and bilateral partners that fund NGOs and CBOs. This is because of the unstructured mode of operation and the arbitrary organizational structure of the various civil society organizations, which tend to be "project oriented" and more focused on funding-based programme delivery than on long-term social transformation.

However, it can also be argued that NGOs and CBOs encompass diverse interests because they are more embedded in the local context and are representative of socially relevant development practices. Given the inherent pluralism and particularism, the state authorities must learn to negotiate with various organizations to set the terms of engagement. Through constant negotiations, state and non-state actors could jointly decide on who has a right to determine the agenda or who should be involved at what point in the decision-making process. The thorny issue of the ownership of collaborative projects/programmes should also be openly discussed and defined through public deliberations.

The institutional framework could take the form of a *joint committee* that helps set up city-wide policy guidelines to avoid the fragmentation, overlap and duplication of WATSAN projects. It was emphasized in the workshop that "the sanitation infrastructures of informal settlements . . . need to be seen as part of large, city-wide technical systems rather than ad hoc rudimentary connections illegally tacked onto the rest of the infrastructural city".[11] To this end, the joint committee must involve non-slum dwellers too in a deliberation mechanism through which all citizens can visualize how their community constitutes part of this overall system.

After all, the state authorities stand to benefit the most from such committees since, in the face of tight fiscal budgets and increasing service delivery demands, they need civil society partners to bring in resources and locally embedded capacities. In turn, NGOs and CBOs working with the state from the planning stage may be able to improve the transparency and accountability of service delivery.

Social embeddedness and gendered dimensions

At its core, the emphasized need for an institutional framework implies the nature of water and sanitation in informal settlements: the provision of water and sanitation services involves not merely physical infrastructure but also a social infrastructure asset for

the community. This requires serious consideration of how water and sanitation services are embedded and experienced socially.

More specifically, sanitation infrastructures usually become a community-based small business and, therefore, the joint committee of the state and non-state actors should

tional coordination and consolidate existing inequalities. However, an informal settlement is never a homogeneous community but consists of several communities, each with different histories, backgrounds and characteristics of its members. Thus, any community-based project should anticipate varying outcomes from

Attention to social embeddedness and the gendered dimensions of water and sanitation can also illuminate the differing priorities emphasized by different communities. The mapping of priorities could pave the way to a greater sensitivity to trans-local cooperation beyond the aesthetics of community-based projects.

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evaluate and analyse how the infrastructure is managed, usually by CBOs. The local evaluation and analysis could also address donor preferences and inflexibilities, making adequate demands for international and national interventions.

The consideration of social embeddedness works to shift the focus in sanitation from purely technical and physical matters to politics and power relations. Understanding these relationships can effectively assist policymakers in deciding appropriate interventions, negotiating and dealing with resistance, and promoting citizen engagement. This is exemplified by the case of Wandiege community in Kisumu, whose people transformed the community water supply project by setting up their own cooperative enterprise to "bring water to *our* doorsteps".[12]

Of course, given the disparities in conditions among the poor, too much emphasis on social embeddedness may work to fragment systematized institu-

deliberative engagement between the project participants and the users of infrastructures. This means that an institutional framework that is sensitive to the social embeddedness of infrastructure needs to be locally flexible from the beginning, constantly enabling the multiple actors to conduct serious follow-ups after each infrastructure project is implemented and experienced over time.

A locally flexible institutional framework must also be sensitive to the inherent inequalities upon which the water and sanitation services are to be placed. A critical factor is the gendered dimensions of water and sanitation, because the specific needs of women, as well as of children and the elderly, are often neglected. Naturally, women must be involved in decisions with regard to design, location and usage, for example, separation for privacy, lighting for security, installing mirrors and payment schemes, etc., to facilitate access to more secure, gender-sensitive sanitation facilities.

The policy relevance of research and education

Scientific research should aim to address the above-mentioned issues of multi-actor institutional coordination that is sensitive to the social embeddedness of WATSAN infrastructures. A critical step forward is to invest in ongoing work to develop case studies of officially unrecorded informal initiatives. For example, "MajiData" – a pro-poor database covering all the urban low-income areas of Kenya – is useful for researchers to obtain information on existing water and sanitation service providers and identify viable partners amid a variety of ad hoc initiatives.[13]

For the purpose of understanding social experiences, fieldwork-based ethnographic studies become useful because they allow researchers to highlight the contextual nuances and processes of social interactions in a particular time and place. Potential research questions include: "How do community members experience

participation in the infrastructure?" or "How do we identify relevant institutional frameworks to help members to share their experiences and inform policies?"

As the National Council for Science and Technology emphasizes, indeed from the very communities needing improved services.

Young people in communities could actively participate in conducting case studies on water and sanitation, and aspire to become local experts by undertaking action research. These inclusive and participatory sanitation projects.

Institutionalizing cooperation among different development actors is a slow process and entails great effort. This brief has underlined the importance of considering the provision of

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such ethnographic studies contribute to the identification of boundary conditions that determine the way in which appropriate technologies for sanitation are introduced and adjusted in each informal settlement. Other key research topics include studies of environmental conditions relevant in the implementation of the infrastructures, such as seasonal flooding, a high groundwater table or being a tidal community; and economic mechanisms such as innovative financing procedures. Gender analysis tools and data or information disaggregated by age should be available to inform the design of facilities.

Methodologically speaking, action research is a standard procedure. In order to realize this, research should be connected to good educational programmes at local universities where students are trained to work with local populations on the ground, as the ESDA Project envisages. Ultimately, solutions to the sanitation crisis are likely to be most effectively sought by local experts who are physically close to the communities affected or who are future experts could undertake useful analyses and make methodologies available to various platforms of public and scientific deliberation, continually engaging in and improving the operation of the institutional coordination frameworks.

Conclusion

The crisis of urban sanitation in developing countries is one of the most complex challenges of our time. The inability of state and international agencies to respond effectively to the crisis could potentially lead to further marginalization, exclusion and unrest among the urban poor, mostly slum dwellers. Meanwhile, in the absence of the state, civil society organizations, including NGOs and CBOs, have been implementing informal sanitation infrastructure to meet demand in an ad hoc manner. The UNU-ISP's research project workshop "Urban Governance for Total Sanitation" has highlighted that the real challenges lie in establishing an institutional framework in which state and non-state actors can and should jointly sustain coherent, sanitation as socially embedded and experienced infrastructure so that the actors involved – including citizens who do not live in informal settlements – have a basic understanding of the needs, priorities and gender-specific requirements for public deliberations that can be conducted longitudinally. Within the institutional framework, locally flexible policies should be outlined to sustain service delivery, avoid duplication of tasks and use resources effectively.

The brief emphasizes that scientific research that is relevant for practice also helps policy-makers to find ways to guide WATSAN projects according to each local situation and needs. The research must involve local universities and students who can conduct action research effectively and provide case studies of the ongoing social experience of infrastructures. In particular, young people from the slums need to be supported in this research process, because they could be key to promoting the participation and engagement of local actors.

Ultimately, sustainable urban development is highly contingent upon the interplay of unpredictable structural and institutional constraints and opportunities. Multi-actor approaches are a pragmatic way to make locally variable institutional frameworks socially relevant. After all, the sustainability of infrastructures and urban development cannot be achieved if it is not desired and pursued by all the actors involved.

Notes

1. Urban areas are expected to absorb all the population growth anticipated over the next four decades, growing from 3.6 billion in 2011 to 6.3 billion in 2050. Furthermore, most of this population growth in urban areas will be concentrated in the cities and towns of the less developed regions: by 2050 the urban population in Asia will have increased by 1.4 billion, in Africa by 0.9 billion, and in Latin America and the Caribbean by 0.2 billion. United Nations Department of Economic and Social Affairs/Population Division, *World Urbanization Prospects: The 2011 Revision.* New York: United Nations, 2012. Available at: http://esa.un.org/unup/pdf/WUP2011_Highlights.pdf.
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4. United Nations Human Settlements Programme, *State of the World's Cities 2010/2011: Bridging the Urban Divide.* London: Earthscan, 2010.
5. United Nations, *The Millennium Development Goals Report 2012.* New York: United Nations, 2012. Available at: http://mdgs.un.org/unsd/mdg/Resources/Static/Products/Progress2012/English2012.pdf.
6. See http://isp.unu.edu/research/sanitary-africa/index.html.
7. See http://isp.unu.edu/research/esda/index.html.
8. See http://isp.unu.edu/news/2013/total_sanitation_in_nairobi.html. The case studies mentioned in this brief are derived from presentations at this workshop of which the details are available at this website.
9. See the Umande Trust's website: http://www.umande.org. See also Otsuki, K., "What Sanitation Means in Nairobi Slums". *Solutions Journal* 4(5), 2013. Available at: http://www.thesolutionsjournal.com/node/24010.
10. The laws include: the Public–Private Partnership Policy 2011, Bill 2012, the County Government Act 2012, and the Urban Areas and Cities Act 2011.
11. McFarlane, C., Desai, R., Graham, S., "Informal Urban Sanitation: Everyday Life, Comparison and Poverty". *Annals of the Association of American Geographers*, forthcoming.
12. Owuor, S., Foeken, D., "The Wandiege Community Water Supply Project (Kisumu, Kenya): From Self-Help Group to Water Company", University of Leiden African Studies Centre *Infosheet* 14, 2012.
13. See http://www.majidata.go.ke/.

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