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*Environment and Urbanization* 2012 24: 13  
DOI: 10.1177/0956247812438366

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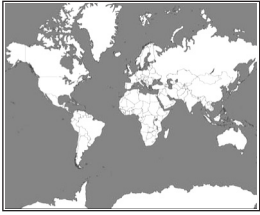
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# Knowledge is power – informal communities assert their right to the city through SDI and community-led enumerations

SHEELA PATEL, CARRIE BAPTIST AND CELINE D'CRUZ

Sheela Patel is founder and present Director of the Society for the Promotion of Area Resource Centres (SPARC) India, which is based in Mumbai and works in partnership with NSDF and Mahila Milan, two community-based organizations working on issues of land, housing and amenities for the poor in cities in India. She is also Chair of Shack/Slum Dwellers International (SDI).

Address: SPARC, 2nd Floor, Khetwadi Municipal School Building, Khetwadi Lane No 1, Girgaum, Mumbai 400004, India; e-mail: sparcsns@gmail.com

Carrie Baptist has worked as a social worker in Vancouver's Downtown Eastside and with SPARC on research and documentation. She is currently completing an MSc in Urbanization and Development at the London School of Economics.

Address: e-mail: baptist.c@gmail.com

Celine d'Cruz was a founder and Associate Director of the Society for the Promotion of Area Resource Centres (SPARC) India until 2007. At present, Celine is Coordinator at Shack/Slum Dwellers International (SDI).

Address: e-mail: celinedcruz@mac.com

**ABSTRACT** This paper provides an introduction to the practice of community-led enumerations as conducted by Shack/Slum Dwellers International (SDI). It sets out the historical context for enumerations, which came out of a need in India in 1975 to find a more long-term solution to evictions, and charts its subsequent evolution and spread throughout other countries. Enumerations can help to build a community, define a collective identity, facilitate development priority setting and provide a basis for engagement between communities and government on planning and development. This process allows communities of the urban poor to assert their rights to the city, to secure tenure, livelihoods and adequate infrastructure. The paper discusses some of the specific methodological issues, including the challenges of legitimizing community data, and the use of technology by slum<sup>(1)</sup> or shack dweller federations when appropriate.

**KEYWORDS** city development / federation building / planning for development of slums / slum surveys / negotiations

## I. INTRODUCTION

With poverty becoming an increasingly urban phenomenon, many cities are significantly challenged in their understanding and management of human settlements and their responses to their poorer residents. In this context, it is difficult to overstate the importance of the role of organized communities of the poor in defining, negotiating and addressing the issues of urban poverty. When these communities can engage directly with policy makers and government, experience shows it is possible to address some of the more complex issues associated with urbanization. Through this engagement, Shack/Slum Dwellers International (SDI), a network of urban communities in 33 countries, has found that concerns around land tenure, housing, livelihoods, service provision and citizenship can be identified, politically negotiated and resolved in a pro-poor way.

While governments in low- and middle-income countries keep records of those who live in formal housing and of most of the land in their cities, they have no records for up to 60 per cent or more of their poor urban populations, nor do their master plans formally acknowledge their presence on the land that they occupy. Lack of knowledge of the urban poor – their numbers, their history and how they contribute to the city's

informal economy – means that they are hardly acknowledged during planning for infrastructure and services. The process of enumeration, by which urban poor communities count themselves, document the lands they occupy and identify alternative lands for housing when needed, is at the core of the SDI approach. It is the basis on which communities mobilize to engage with their cities and find mutually beneficial solutions.

## II. BACKGROUND

Enumeration is a simple but powerful tool designed and executed by the residents of informal settlements, who own and use the information that they gather themselves. Through enumerations they survey and map themselves, and build the skills and knowledge to represent themselves and their needs to government. At the same time, they develop a critical collective identity that helps form the political basis for their engagement with government. For these reasons, the motto within SDI is “When in doubt, count!”

The potential for this kind of data to strengthen the collective voice and position of communities first became apparent during the fight against eviction in Janata Colony, Mumbai, in 1975, when community leaders realized the significance of collecting information about themselves and their settlements when negotiating with the authorities. Because of the forces aligned against them and the suspension of law during the 1975 Emergency, Janata Colony residents only managed to delay their eviction. However, their strength and organization helped them deal with the challenges of relocation to Cheetah Camp and meant that they got much better terms for resettlement.<sup>(2)</sup>

Based on this experience, the leadership, which went on to form the National Slum Dwellers Federation of India (NSDF) in 1974, decided that they needed a robust strategy both to protect themselves from future episodes of eviction and also to explore the potential for their voice to be heard in city matters. The rise in evictions and the poor success of past strategies of mass demonstrations, picketing and advocacy prompted them to look at new ways of engaging government and landowners. They decided to proactively collect information about various settlements, initially in Mumbai and Bangalore, so that they could negotiate with facts and figures and concrete solutions when they entered into discussions with government. Knowing, for instance, that in the Mumbai slum of Dharavi there are 800 people to one toilet seat has a different impact from a more general demand for rights. They called the initial questionnaire that they developed a “settlement profile”. The idea was to ascertain the number of structures in a settlement, the status of tenure, the land occupied, amenities available and existing community, social or political organizations working in these areas.

A few years later, in 1984–1985, the Mumbai NGO SPARC began to explore working with pavement dwellers. The city of Mumbai wanted to evict these households but did not actually know how many people lived on the pavements. SPARC saw the collection of information about the residents as a natural and obvious response to the Supreme Court judgement of 1985, with its threat of eviction. There were assumptions that the pavement dwellers were transient, on the pavement for a few days or weeks, and below the notice of the state in terms of their housing and

1. The term “slum” usually has derogatory connotations and can suggest that a settlement needs replacement or can legitimate the eviction of its residents. However, it is a difficult term to avoid for at least three reasons. First, some networks of neighbourhood organizations choose to identify themselves with a positive use of the term, partly to neutralize these negative connotations; one of the most successful is the National Slum Dwellers Federation in India. Second, the only global estimates for housing deficiencies, collected by the United Nations, are for what they term “slums”. And third, in some nations, there are advantages for residents of informal settlements if their settlement is recognized officially as a “slum”; indeed, the residents may lobby to get their settlement classified as a “notified slum”. Where the term is used in this journal, it refers to settlements characterized by at least some of the following features: a lack of formal recognition on the part of local government of the settlement and its residents; the absence of secure tenure for residents; inadequacies in provision for infrastructure and services; overcrowded and sub-standard dwellings; and location on land less than suitable for occupation. For a discussion of more precise ways to classify the range of housing sub-markets through which those with limited incomes buy, rent or build accommodation, see *Environment and Urbanization* Vol 1, No 2 available at <http://eau.sagepub.com/content/1/2.toc>.

2. See Arputham, Jockin (2012), “How community-based enumerations started and developed in India”, in this issue of the Journal.

3. SPARC (1985), *We the Invisible. A Census of Pavement Dwellers*, SPARC, Mumbai, 41 pages.

livelihood needs. The information they collected challenged this myth. The enumeration resulted in a document entitled "*We the Invisible*",<sup>(3)</sup> which remains a milestone in the development of enumerations.

The pavement dweller enumeration attracted SPARC to the attention of the National Slum Dweller's Federation (NSDF), and the two groups, along with the emerging federation of women's savings groups, Mahila Milan, subsequently began to work together as the Indian Alliance. This coalition conducted many enumerations and created a national network of federations, so that each local settlement could form its identity, connect with other federations in the city and together link to other cities in their country and around the world.

Between 1992 and 1996, while the federations in India grew and expanded, they also started to hold international exchanges. First, a group from South Africa, and later groups from Kenya, Namibia and Zimbabwe, learned the community-building practices of NSDF and SPARC and began to undertake enumerations of their own and to form federations. The specific process varied in each country: in some instances, women's daily savings groups were formed and they undertook the enumerations; in other instances, the enumerations led to the formation of daily savings groups. In almost all cases, the organizations that formed as a result of this process began a journey to develop the voice of the urban poor and to seek engagement with their cities to address deficits in their settlements.

Shack/Slum Dwellers International (SDI) was formally set up by eight national federations in 1996, and between 1996 and 2005 many other federations representing both cities and countries joined SDI and started using enumerations as a tool to begin working in their cities. The growth of SDI has taken place in waves, as older federations matured and passed on their knowledge and strategies to newer country federations, which became SDI affiliates.

### III. THE METHODOLOGY

#### a. Three kinds of enumeration

As the federations refined their methodology, they began to focus on different kinds of information. They started with settlement profiles, but then also collected information on individual households within settlements and, sometimes, catalogued vacant land that might be available for use. Mapping became a critical component of the process.

**Settlement profiles** are usually the first information collected. They focus on the residents as a community, on the land they occupy, their migration and eviction history, the number of structures, the services they access and do not access, people's occupations and how they relate to their location. These settlement profiles are sometimes accompanied by a mapping exercise, moving from rough community maps to cadastral maps and, more recently, to the use of GPS to mark structures and the settlement boundaries. Mapping the settlement gives residents a sense of the area they occupy and its value, and also helps them plan future redevelopment options. All this information allows a settlement to look at itself as a collective rather than a set of individual households. Living together in a densely packed space does not automatically confer a sense of shared community. The process of surveying one's settlement, tabulating

the data and discussing the results can help create this collective identity. The process makes it possible also to identify new leaders and to mobilize residents.

By going on to consolidate settlement data at the city level, the federation leadership gains an overview of informal settlements in the city. For instance, by knowing approximate collective income levels they can see their financial strength at the city level. By seeing the collective expenditure on services such as toilets, water and electricity, they are able to understand the long-term drain on household savings. At the city level, this data can also represent a significant proportion of the population, giving the federation political legitimacy through their strength in numbers. With this data, as well as the strength and size of the communities it represents, the federation has the basis for negotiation, a better way of communicating a point than demonstrating for rights on the street outside city offices. The collective articulation of the poor in a city is strengthened through this process and leads to the formation of a city level federation that is the political voice that can open doors for dialogue with the city, state and national government. Consolidation of data also makes it possible to categorize the types of land occupied by the poor in a given city, for example settlements on airport land as distinct from settlements on railway land; or those who occupy municipal land versus those on private land. This can allow communities to operate at multiple levels, federating locally based on the ownership of the land they occupy, and negotiating with the respective landowning authority with the back-up support of the larger city level federation.

**The household survey** is a completely different process, located within the community. Usually, it takes place when a particular settlement is ready to take on slum upgrading or resettlement, or is forced to respond to imminent displacement. In the course of this process, information about every household and all its residents is collected and recorded. Every single structure is numbered and marked on a map. This is crucial, as each number relates to an allocation in the slum upgrading or resettlement project. Care is taken to ensure consistency of information in all the records produced; for example, that the number marked on the door of every structure matches the structure number on the community register from the settlement profile. This is usually accompanied by a family identification card with the same number, along with a photograph of the family. This level of consistency and accuracy gives state agencies confidence in the data collected.

During data collection, a lot of the more difficult and unresolved issues of eligibility and allocation surface between tenants and owners, between siblings, between parents and children, and long-term residents and newcomers. There can be complex situations: a man may have more than one wife, or a divorced girl may have come back to live with her parents. The community has to make decisions about eligibility. In the absence of an empowered community, local politicians and vested interests influence the criteria for inclusion. The federation understands that it is essential for each community to take an active role in these important decisions, acknowledging challenges within, and to choose a strategy that works for them. Without the household survey data in place it is impossible to engage the city in constructive dialogue around alternative options. Until there is internal agreement on criteria for inclusion, there can be no

negotiation on challenging external exclusionary definitions of who is entitled to what recognition by the city. The household information can be used for many purposes, for instance to design a housing financing strategy based on what people can afford; or to manage the technical aspects of an upgrading project; and even to open up discussion with other departments such as education, health and welfare. Having a sound data set also helps in times of grievance redress, when claims are made by vested interests or in a court of law. Proof of a structure on a map, along with the corresponding data in the household registers, has been used in a court of law to stop evictions.

**Vacant land surveys** are less common than the other two forms of enumeration, but they can be critical in a proactive approach to finding suitable land in the city for the resettlement of specific groups or communities. While master plans do record information on land within cities, identifying vacant land is a cumbersome process requiring skills that have generally been mastered only by those with clear vested interests – such as the housing and construction industry. The very poor, struggling with insecure tenure, also need this information, but have to learn how to access and use it to advance their interests. SDI affiliates are beginning to realize that land allocation and land use are deeply political aspects of city development plans, and their access to land has to begin with an understanding that while there may be no land available to them in a city development plan, there remain large tracts of vacant land that they can make demands on.

In 1986–1987, the first vacant land survey was done by Mahila Milan, the organization of women pavement dwellers in Mumbai, to identify and access suitable land in the city as an alternative to the pavements from which the city wished to evict them. Groups of women without tickets travelled by train and visited as many vacant land areas as they could. They went to these areas on a picnic and checked out the ownership, available infrastructure, job options and cost of the commute to their present place of work. What they found exploded many myths around the availability and affordability of land and the capacity of the poor to identify solutions for themselves.

This knowledge about vacant land, along with the process of enumeration and backed by the discipline of community savings,<sup>(4)</sup> gives the federation leadership the confidence to design slum upgrading and resettlement options that work for the city, the landowning authorities and affected communities. These solutions are sometimes instigated by the community and sometimes by the government in response to public works or other large-scale projects, and in some instances with the government seeking a loan from the World Bank, which then seeks documentation of who will be affected by the investment in infrastructure. The point is that the federation, by doing its homework before a crisis hits, is in a position to pre-empt evictions and unwanted redevelopments in whatever context, even in the case of a natural disaster. When city level federations are not prepared or equipped to undertake such processes themselves, an exchange is organized with other federations in the network, whose skills are brought in to give the necessary input to speed up the process. Ideally, SDI seeks to ensure that national affiliates include every settlement in the process of development in the city and the right of every household to decent and secure shelter.

4. Mitlin, Diana, David Satterthwaite and Sheridan Bartlett (2011), *Capital, Capacities and Collaboration; The Multiple Roles of Community Savings in Addressing Urban Poverty*, Human Settlements Working Paper 34, IIED, London, 56 pages.

## b. The flexibility of enumeration

By 2005, SDI had grown significantly in terms of its size. With many affiliates undertaking surveys, savings and exchanges, interesting trends were emerging. It was becoming clear that enumerations were a robust tool, particularly due to their flexibility; the process adapts very well to local and national contexts, serving a different purpose for almost every federation that uses it. With different affiliates exploring different dimensions of enumerations, the repertoire of uses added insight and possibilities for all affiliates. The most dramatic impact of enumerations often relates to settlements facing evictions. In this context, the process can lead to a positive shift in negotiations with city and national governments, transforming evictions into resettlements or in situ upgrading. An excellent illustration is the case of Old Fadama in Accra, which faced a major eviction in 2010. As an outcome of the enumeration, eviction threats have been deferred and discussions have been initiated.<sup>(5)</sup> In other cases, for example in South Africa, enumeration data have led to better delivery of state subsidies and a more active involvement of community networks in housing and infrastructure policy.<sup>(6)</sup> In Uganda, enumerations have helped to address the underlying politics of land tenure, defining the complex layers of landowners, land appropriators, structure owners, tenants and sub-tenants in a settlement, all of whom need to participate in an internal dialogue and negotiations over entitlements and rights before any state investments in the form of infrastructure and housing subsidies can usefully begin. For the first time in the history of Uganda, local government is learning to work with and engage poor communities in creating slum upgrading strategies.<sup>(7)</sup> In Namibia, the process led to the state commissioning federations to undertake surveys.<sup>(8)</sup> In India, the federation and SPARC were contracted to undertake a baseline slum survey of project-affected communities in the city of Mumbai (see the account of the MUTP2 project below). This engagement created a space that allowed government officials to come into communities, discuss their needs and work together to solve, through dialogue, seemingly insoluble problems – particularly around land tenure.<sup>(9)</sup>

## c. The challenges of scale and the use of technology

Many of the older leaders of SDI federations began their work using manual tabulation to organize the data collected. However, as the scale of data collection increased, there has been an increased dependence on computerized databases. This has not been without its challenges. As the federations and the local support NGOs struggled initially with developing and adapting software to manage the large volume of enumeration data, the delays in giving data back and the time taken to enter data into computers often had the effect of heightening an apprehension and even suspicion of technology. Over time, this first hurdle was overcome with an agreement that all survey forms and data would be manually tabulated by communities for the kind of simple and basic information that could help them articulate their identity and aggregate their numbers; then the survey forms would be handed over to support NGOs for digital entry into a computer database.<sup>(10)</sup>

The sheer volume of data produced by communities and their federations has been a challenge for all the support organizations to

5. See Farouk, Braimah R and Mensah Owusu (2012), "If in doubt, count": the role of community-driven enumerations in blocking eviction in Old Fadama, Accra", in this issue of the Journal.

6. See Bishop, Carrie and Joel Bolnick (2012), "Participatory enumerations, in situ upgrading and mega events: the 2009 survey in Joe Slovo, Cape Town", in this issue of the Journal.

7. See, in particular, Makau, Jack, Skye Dobson and Edith Samia (2012), "The five-city enumeration: the role of participatory enumerations in developing community capacity and partnerships with government in Uganda", in this issue of the Journal; also Karanja, Irene (2010), "An enumeration and mapping of informal settlements in Kisumu, Kenya implemented by their inhabitants", *Environment and Urbanization* Vol 22, No 1, April, pages 217–239.

8. See the paper by Muller, Anna and Edith Mbanga (2012), "Participatory enumerations at the national level in Namibia: the Community Land Information Programme (CLIP)", in this issue of the Journal.

9. Patel, Sheela, Celine D'Cruz and Sundar Burra (2002), "Beyond evictions in a global city: people-managed resettlement in Mumbai", *Environment and Urbanization* Vol 14, No 1, April, pages 159–172.

10. See reference 8.

manage in order to produce outputs useful to the communities. The first such output is a detailed “register” of the community, with all the names and detailed information on each family and its individual members. Every household has to check and sign off on this, ensuring that when these lists are handed out externally, they have been verified and are accurate.

The ease with which a computerized database can allow information to be aggregated and disaggregated, depending on the needs of the federation, has been the single most important reason for it being accepted. Over time, young boys and girls from local neighbourhoods have become the teams that enter and manage data, further de-mystifying the computer process and helping their elders feel comfortable about this data.

Spatial and visual mapping and the use of Geographic Information Systems (GIS) with digital maps represents the next level of challenge for federations. As city and national information management systems increasingly rely on GIS to map cities, federations see the potential to increase their control over how enumeration data are used and interpreted by planning and development agencies. Most initial explorations have begun by using maps in the public domain, such as Google Earth, to start documenting the existence of slums and linking them to enumeration data, settlement profiles and GPS-marked settlement boundaries (for example in South Africa and Orissa, India). In Namibia, Kenya and Zimbabwe, more accurate satellite maps have been used to produce details of structures and settlement boundaries. Such visual mapping has some startling impacts. By visually locating informal settlements, informal markets and sometimes even garbage heaps, maps can generate a productive dynamic and be used to seek acknowledgement from the city about the locations and numbers of informal habitations and places of work in the city.

These are still new processes, and most federations are experimenting with them while at the same time petitioning their governments to engage with the process and legitimize the data. In India, where the national government is developing a policy (Rajiv Awas Yojana) to provide universal secure tenure and habitat upgrading, all cities have been asked to map slums and, through the peculiarities of the tendering process, have had no option but to hand the task over to private companies. So the process of adapting technology to the needs of the urban poor and petitioning for the right to use those technologies legitimately go hand in hand. The Indian Alliance is currently working both to support communities’ capacity to map slums using GPS and also develop a partnership with cities to undertake this process with communities, so that the data can be used as the basis for determining land tenure and planning development, not just for slum areas but for the entire locality and the city.<sup>(11)</sup>

Through this profiling and mapping, as well as through SDI’s engagement with research organizations such as IIED<sup>(12)</sup> and other non-state partners, the slum profiles are now also yielding information on perceptions of vulnerability of different communities around the risk of flooding, landslides and other disasters that are (or are likely to be) exacerbated by climatic changes. SDI believes that the discourse related to cities and climate change could increase evictions under the guise of promoting “safety” or environmental sensitivity, without really producing viable pro-poor alternatives in which communities participate. Only

11. See Livengood, Avery and Keya Kunte (2012), “Enabling participatory planning with GIS; a case study of settlement mapping in Cuttack, India”, in this issue of the Journal.

12. The International Institute for Environment and Development (IIED) in London, home also to this Journal.



citywide networks of informal settlements in dialogue with cities and with access to the same information as the cities can redress this misuse of data and instead produce constructive engagement on adaptation measures.

#### IV. LEGITIMIZING AND MAINSTREAMING DATA

For SDI, a fundamental objective of enumerations is to create internal organizational agreements within informal settlements about data and then to engage with government. A major challenge is for government to accept that the data collected by communities has the necessary legitimacy for implementing state projects and for policy making and execution. Often, the assumption is that only professionals can handle this kind of task.

The first time a government office actually commissioned an SDI federation to survey some informal settlements was in 1989. At the request of the Collectors Office in Mumbai, the NSDF and SPARC mapped the settlements along the city's railway tracks. This set a precedent, and the government went on to commission SPARC/NSDF to undertake a baseline survey of settlements along the railways, home to about 18,000 households, which would be affected by a large World Bank-supported transport project, the Mumbai Urban Transport Project Phase II (MUTP2).<sup>(13)</sup> The resulting data and cadastral maps were signed and validated by the Railway Authority, the state government and NSDF and used for implementing the MUTP2 project.

13. See reference 9.

It takes time to achieve this kind of legitimacy. In this regard, in the experience of SDI, federations often go through the following phases. First, they need to develop the basic skills to successfully undertake an enumeration and to manage these data at scale and with accuracy. Second, they must seek engagement with city or state officials to demonstrate the viability, accuracy and value of this community-generated data. The information they present is often the first data actually available about these settlements and their inhabitants, making it valuable and unique. This is a long and often tough phase; the federation can face resistance not only from government bodies but also from professional data collection agencies whose task the federations have taken over. The arguments are several and the contestation can be heated and prolonged based on various political factors, assumptions about the poor and institutional resistance.

However, in most cases the legitimacy of the data finally becomes apparent. It is accurate and inclusive, and this often becomes apparent when enumeration data are compared to conventionally collected data. Communities own and check the data and have an internal rationale for wanting to ensure its accuracy. And unlike the situation with professionals, who leave the process after the data collection phase, communities begin to work with the data, making it the basis for dialogue with the city. This deepens the foundation and robustness of the project delivery process as well as the subsequent sustainability of the outcome. Also, most cities "lose" data; information, often gathered at great expense, may disappear when, for instance, there are changes in government or transfers of key staff. By contrast, communities own their data, and the federations always keep it both safe and accessible. Nothing is gained by federations maintaining secrecy; they make great efforts to share their information and practices as widely as possible.

The most valuable and convincing feature of enumeration data in terms of legitimacy is the fact that its usefulness is demonstrated time and again; it is reinforced through tenacious practice and repetition. Enumeration data help community federations to negotiate within informal settlements and develop resolutions between different factions, especially between owners and tenants within a neighbourhood, who often have a contentious relationship. Every project manager knows that the success of a project at the community level is ensured by the degree of local consensus. In the experience of SDI, a pro-poor housing or infrastructure project is much easier to complete well if undertaken by empowered communities themselves, with their national federations overseeing them and ensuring inclusive values.

A final but no less important and frequently used strategy to legitimize community data is through peer exchanges to other regions or countries, especially when there is initial resistance to the idea of community-collected data. In the course of these exchanges, government and city officials, NGOs and community members all meet with their counterparts and absorb how an enumeration process is initiated, designed and executed, and what its impacts are. This is an invaluable process for transmitting precedents across borders and facilitating new processes within a particular area. While a community-led enumeration might sound utopian or improbable on paper, when it is experienced the process is incredibly powerful and persuasive. Those who receive this kind of exposure can then copy, modify and expand what they have witnessed in ways that address their particular challenges, to produce their own solutions in their local area. For instance, when the settlements along the railway tracks in Nairobi were threatened with eviction, there was an exchange from Kenya to Mumbai of railway officials and community representatives, who met with their Indian railway counterparts affected by the MUTP2 project. This was an eye opener for both officials and community members, who understood why it was important for each to engage with the other in order to find a solution that worked for the community and the city.

One downside of sharing data with the state is the possibility that the data will be used against the poor. Eviction notices can result, and this is a strong fear for many informal residents; in many ways, they see invisibility as a shield against eviction. This can only be faced by organizing settlements as a whole and creating strong federations that can withstand these threats and negotiate instead for solutions and development investment. This places a great deal of responsibility on the national SDI affiliate to ensure that they strengthen local and city federations while taking on enumerations and surveys. Even well-intentioned professionals cannot guarantee that the information they collect on informality will not be misused.

Increasingly, city governments and other development actors accept that while the actual data that communities gather could also be gathered by other more professional agencies, the community information is more likely to be accurate. They also come to understand and accept that a unique aspect of community enumeration is the collective identity formed as part of the process; also the growing capacity of a community to set its priorities and negotiate its needs. These are necessary pre-requisites for producing a workable development strategy or project, whether in situ upgrading or a resettlement. Enumerations form the basis for entitlements

and dialogue between the community and policy makers, making it possible to buy time, build the case and avoid many of the pitfalls and difficulties that have plagued many other housing projects to date.

By 2008–2009, SDI enumeration strategies had begun to attract the attention of many development agencies at city, national and international level. The understanding of these agencies was gradually being sharpened, and they saw that community-led and managed surveys were a crucial foundation for the formation of citywide federations, whose voices and aspirations were critical to successful development investments by the government. The positive chain of relationships between project success, empowered communities and enumerations had finally been understood.

Several strategies have emerged within SDI based on this understanding of the potential of citywide slum surveys to build citywide federations that can engage in development projects and policies at the citywide level rather than only at the settlement level. Ideally, this will replace the present practice in many countries where only pockets of informal settlements are involved in these activities. While this scaling up of SDI processes is desirable, federations have also been conscious of the need to maintain the integrity of their fundamental processes – their work on daily savings groups, enumerations and peer exchanges. Without this foundation, it would be all too easy for federation processes to become co-opted or diluted as they are scaled up.

The exposure of development agencies to the enumeration methodology has led to SDI playing a more strategic role as part of the Cities Alliance's Land, Services and Citizenship initiative, financed by the Bill and Melinda Gates Foundation. As part of this initiative, SDI is assisting in the formation in Uganda of five city level federations that have the capacity to undertake both settlement profiles and household surveys.<sup>14</sup> Through the institutional partnership with Cities Alliance, influenced by the Gates Foundation's experience of working with organizations such as SDI and other similar networks, the space for using enumeration data to engage with local government is more quickly and easily created. A process is laid out in which communities' needs and priorities define the development agenda funded by the initiative, which is a more pro-poor path towards universal access to basic amenities initially, and to overall development later.

A special exploration has also begun with the African division of the United Cities and Local Governments (UCLGA) to work in two selected cities (Lusaka, Zambia and Ouagadougou, Burkina Faso) where the mayor and the communities will map the informal city. Through a campaign within the UCLGA, mayors in Africa will hopefully be mobilized to support these community practices. Of course, these processes are very new and it is not clear how they will play out in the next few years. However, these initiatives demonstrate a growing, evolving strategy whereby a tool for data collection facilitates the organization of inhabitants of informal settlements and opens the space for a pro-poor dialogue and project development within cities.

## V. REFLECTIONS ON ENUMERATION: A PRACTICAL AND INCLUSIVE APPROACH TO THE PROCESS OF DEVELOPMENT

Within SDI, there is deep and experienced insight into the fact that while developing accountability at the local neighbourhood level is important,

14. See reference 7, Makau, Dobson and Samia (2012).

most informal settlements operate in isolation and have very little chance of changing the greater circumstances within which they feel trapped. Owing to the manner in which both state policy and philanthropy operate, interventions are, by and large, sporadic and ad-hoc, based more on whims and chance than on a coordinated, considered, consistent effort or strategy. The power differential at work is significant; at the end of the day, residents of informal settlements are too often forced into the role of beneficiaries, unable to hold any real sway over the planning, design or timeline of a project. These agencies, because of a range of political, bureaucratic and financial constraints, are generally most interested in exploring improvements in less controversial areas such as health and education. They are particularly drawn to solutions that can be standardized easily and implemented fairly “cleanly”. However, the very nature of the illegality that encompasses land occupation can lead to forced evictions or the threat of eviction, and can negatively affect livelihoods and preclude formal access to water, electricity or sanitation. Messy and deeply political, security of tenure, access to services and livelihoods are the root issues underlying inequality, poverty and urban civic exclusion. Depending on the specific national context, they must be addressed at the local level, but also at city, regional and national levels; these are the spaces where the institutional and legal aspects of these concerns are decided.

Many attempts by valiant community associations as well as NGOs have failed to have a broad impact because they operate only at the local level. They have been unable to link to the national or global levels where, for many decades, the challenges of informal settlements were given little or no priority. Often, the larger development context was based on the assumption that if rural development is done well, there is no need to address urban poverty – people will simply not come to the city or will go back to their presumed rural homes. It was also claimed that giving services to the poor would legitimize their claim to their “encroached” land and encourage more people to come to the cities.

Today, urbanization is clearly shown to be irreversible (unless an economy is in crisis). More than that, it is closely linked to economic success. While the rate and scale of urbanization might be affected by national and regional policies and investment strategies, the inevitable outcome in cities in low- and most middle-income countries is that a large and usually growing proportion of the urban population lives in informal settlements and works in the informal economy. Many development actors remain blind to this – even though these informal residents and workers can represent half or more of a city’s population, and even though the formal and informal economies of a city are highly interdependent. But this demographic shift also provides opportunities to explore strategies that refocus the debate and encourage investment into these informal localities. Enumerations can be a non-threatening tool to begin to engage cities in these critical issues.

The importance of the informal and still invisible parts of the city was clear to the original federations that constituted SDI in 1996, and it has remained a crucial insight. However, as SDI has grown it has witnessed how challenging it is for affiliates to master the balancing act necessary to communicate this insight to others. They have to maintain a critical downward accountability to the locality and members, while at the same time creating a national and international voice for informal inhabitants,

influencing policy and investment. **Community-led enumerations remain the most valuable mechanism to link the numbers, the voices and the demands and aspirations at all levels, from local to global platforms.**

This process begins with the way cities respond to federations of the urban poor. With the decentralizing framework evident in most countries, city governments have become the face of the nation state, dealing with the claims of the poor. Each national federation (and SDI) needs to change the all too common response to informal settlements, which is to evict the residents – thus destroying their habitats and livelihoods – because they are deemed illegal by planning statutes (which the rich often break with impunity) and are thereby excluded from the benefits of living in cities.

An enumeration undertaken by a community is of value, first, to the settlement where it occurs. It binds together those who live in the neighbourhood. When many neighbourhoods are surveyed, they further expand their identity to cover large numbers and can potentially produce a collective voice that cannot be easily denied. A strong political constituency is created. Since cities often hide behind exclusionary policies and norms, changing this status quo calls for community federations to work with federations in other cities, to demand changes by the regional and national governments that dictate policies from above.

This can be a slow struggle, and while enumerations provide the specific information on which claims and voice can be based, daily savings groups form the engine of the federations, providing the organizational strength to sustain this process over long periods of time. Bureaucratic demands cause many delays, and unless the organization has the capacity to survive this run-around, there is no change in policy. Over time, SDI has defined many strategies to leverage political pressure from one level of government to another or one agency to another, and this can be useful in cutting through these delays. At other times, it only happens through more direct political pressure from the residents of informal settlements. An example is the 2007 Black Flag Day in Dharavi, Mumbai where, through protest, residents demonstrated their organization, conviction and practical strength in numbers, when they peacefully disrupted major thoroughfares in the city by occupying the adjoining roads in their tens of thousands. This added power comes from the numbers and economic contributions of those living in informal settlements, a reality that enumerations help bring to light.

Often, and increasingly, international agreements on rights and the obligations of nation states towards their citizens are signed by national governments, but these are rarely used or interpreted in a way that applies to informal residents within the countries that have signed these agreements. It is easier to have a right on paper than to have it guaranteed in practice. Bringing the debate regarding informality to the global stage is often a valuable parallel activity of federations of the urban poor. SDI affiliates have understood through their experience that while the real engagement, solutions and practical outcomes have to be at the city level, advocacy at all three levels – local, national and international – is vital. When a local federation or a neighbourhood needs services and legitimacy within a city, city federations, national federations and SDI often have to undertake many advocacy processes to make that happen, asserting the rights to the city of those currently excluded.

Surveys and enumerations have strengthened the hand of local communities – they can go to the negotiating table with alternative

solutions based on hard facts and figures. For federations, precedent setting is critical; it shows what is possible in the face of a pervasive, deeply held stigma against the poor and scepticism about their capacities. The experience of SDI demonstrates that when a community or city level federation manages to get an agreement with their city or pioneer a new process, other neighbourhoods or other city federations cannot automatically expect the same benefits. However, this breakthrough produces a precedent that somehow breaches the barrier that has hitherto excluded informal neighbourhoods from certain benefits, be they land security, improved housing or basic amenities. The precedent is set; it demonstrates that such an act is possible. This creates opportunities for federations to begin pressuring officials to explore similar processes and outcomes in other areas, other cities and other countries.

The Mumbai railway slum federation challenged MUTP2 for the right of communities to survey themselves as part of designing their own relocation. Since their houses were situated dangerously close to the railway tracks, in situ upgrading was not possible in this case.<sup>(15)</sup> Now the same strategy is being used in other communities that have to accept relocation because they live on dangerous land or in spaces where land titling is impossible (for example on the pavement). This process was shared through exchanges with Kenya, and now Uganda and Liberia are exploring the same strategy.

15. See reference 9.

## VI. GOING FORWARD

Enumeration is a process that unfolds, travels, adapts and morphs continuously. It is a challenge, but a useful challenge, to write and reflect on it. However, given the number of moving parts, the fast-changing local politics and processes, the many changes, transformations and refinements that are constantly taking place, by the time an account is written and published, it is already dated.<sup>(16)</sup>

Yet for those of us within SDI, sharing our processes and strategies, and their history and evolution, in a collective and cohesive way is critical for several reasons. These strategies demonstrate how to facilitate a genuinely participatory tool. Unless communities learn to design, own, manage and utilize the knowledge that is created from their own information gathering, these processes are not participatory. The way SDI conceptualizes its work can require a re-thinking of what a “participatory” process entails. Outside professionals and technical stakeholders have roles and contributions to make to these processes – they can bring added value and expand the possible use of the data sets in the immediate and longer term. But it is important that they do not use communities in an instrumental way; they need to work with them as valued partners, a process quite similar to what community federations seek to do with their city officials and administrations.

Governments and policy makers often take time to recognize the legitimacy of enumeration data, and even longer to accept that data and give it the stamp of official acknowledgement. But when they do, they put in place an amazing milestone of transparency. Data available to both people and the state can be the basis, as in Mumbai, for important decisions with the potential to produce significant policy and project impacts. These impacts are based on consensus and can be measured against the changes that actually occur. The use of enumeration data creates the potential for project and budget accountability that was often not previously possible

16. For more up to date information, see the SDI website and blog at [www.sdinet.org](http://www.sdinet.org).

for work in informal settlements. While it reflects the simplest of policy interventions, the universalizing potential is far reaching – data that is collected by communities and rigorously checked to make it official can lead to many innovations in policy formulation, project design and delivery.

These negotiations over legitimacy and data have many implications for community federations and, while obvious victories seem well celebrated, these very successes create internal and external challenges for the leadership of these federations. As the scale and volume of information gathering escalates, maintaining local control and ownership is vital; otherwise there is no difference between federations gathering data and consultants gathering data. It would be all too easy for the enumeration process to be co-opted. The rituals (including daily savings groups and community collection, tabulation and verification of data) that ensure ownership have to be maintained. Often, as engagement with government deepens and state demands rise, requests for quick project turnaround can tempt leadership to take short cuts and undercut the quality of community processes. Guarding the ownership, creating a voice and an ability to aggregate and disaggregate information requires vital back-stopping from NGO partners of federations, who are often faced with the possibility of becoming consultants themselves. Some federations are simply young and inexperienced, and SDI needs to support these affiliates until they have the capacity and confidence to take on this process independently. To date, SDI has navigated these kinds of challenges through the strength of the network as a whole and the quality of the leadership of national federations as well as the SDI network. A certain culture and set of expectations has been created and nurtured through frequent exchanges and close regional relationships between federations; if any one federation begins to feel pressured or compromised in terms of the integrity of its processes, other affiliates can step in with support and guidance.

Community-led enumerations – their scale, their uses, the quality of data collection and the measurement of its impact – continue to challenge SDI and its affiliates. Pressure to keep refining, sharpening and deepening the process of enumeration comes from the increased expectations of organized communities as well as from increased demand from city governments and national and international agencies. Communities of the poor are seldom seen as producers of solutions. It takes many kinds of capacity building from inside social movements for them to rise to the point of being able to demand a place at the decision-making table. Sustained capacity to produce relevant data through surveys, mapping and enumerations remains one of the powerful ways of achieving that goal.

## REFERENCES

- Karanja, Irene (2010), "An enumeration and mapping of informal settlements in Kisumu, Kenya implemented by their inhabitants", *Environment and Urbanization* Vol 22, No 1, April, pages 217–239.
- Mitlin, Diana, David Satterthwaite and Sheridan Bartlett (2011), *Capital, Capacities and Collaboration; The Multiple Roles of Community Savings in Addressing Urban Poverty*, Human Settlements Working Paper 34, IIED, London, 56 pages.
- Patel, Sheela, Celine D'Cruz and Sundar Burra (2002), "Beyond evictions in a global city: people-managed resettlement in Mumbai", *Environment and Urbanization* Vol 14, No 1, April, pages 159–172.
- www.sdinet.org.