



GUNI SERIES ON THE SOCIAL COMMITMENT OF UNIVERSITIES

Higher Education in the World 6

Towards a Socially
Responsible University:
Balancing the Global with the Local

Higher Education in the World 6.
Towards a Socially Responsible University: Balancing the Global with the Local

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The Path to Real Partnerships: Exploring the Relationship between Academics and Social Movements

Jack Makau and Sheela Patel

The challenges of creating partnerships to produce true peer behaviour between formal and non-formal knowledge

In the absence of incentives in systems of formal education and learning within university frameworks, the examination of what social movements do in the production of knowledge, its refinement and its usage, remains a hit and miss process. There is an urgent need to examine the sensitivity of development, and training in development, to the practices and strategies of social movements of the poor and indeed of communities, and to reassess the values of such training in order to correct a basic assumption that treats the poor unequally, as if they were empty vessels to be filled with knowledge and wisdom from the mainstream. The failure to understand how community practice contributes to knowledge is a missed opportunity for understanding why seemingly sensible insights emerging from educational curricula are not accepted by the poor. The most significant consequence of this failure is the lack of critical analysis of policies and legal frameworks, which are underpinned by university-produced knowledge and are exclusionary, such as property rights, entitlements and delivery of goods and services.

The Indian alliance and Slum Dwellers International

The alliance of the Society for the Promotion of Area Resource Centers (SPARC), the National Slum Dwellers Federation (NSDF) and Mahila Milan is now about 30 years old. It reflects a new form of alliance between organizations of the urban poor and their social movements and professionals seeking to work with them in a spirit of partnership. While such relationships may have been explored to a greater degree in rural tribal and trade union movements, the manner of exploring this partnership is relatively new and less researched and articulated in the urban context. While the urban poor have occasional access to health, welfare and educational activities arranged by NGOs, their need for secure tenure, basic amenities and identity in the city has largely been unexplored as they fall into the realm of political action which needs to change regulatory frameworks that are exclusionary and make the urban poor invisible in the eyes of the law (see www.sparcindia.org and www.sdinet.org for further information).

Slum Dwellers International (SDI) is a transnational institution whose primary members are national federations leading social movements of the urban poor to fight exclusion in their cities and countries. It emerged formally in 1996 through the reproduction of variations of the Indian alliance; first in South Africa and now in

over 42 countries in Africa, Asia and Latin America. This paper explores SDI's national federations' attempts to engage academia – originally initiated in India and South Africa, but our case study specifically focuses on SDI's Kenyan federations' association with the University of Nairobi.

The production of knowledge and the urban poor

Without dwelling on the semantics of why this attitude and value framework results in the urban poor being excluded in cities and urban areas, the reality is that cities and towns were created for trading and commerce and governance of cities emerged to manage this and produce finance in the form of taxes to make cities work for traders. The poor were expected to fend for themselves and legal frameworks emerging from this historic fact reflect this, as does the knowledge that informs the regulatory framework. The urban poor are impacted by this perspective in many ways: they face evictions, destruction of their humble dwellings, lack of access to water and sanitation and are trapped in situations of informality and invisibility of their habitats and livelihoods.

The urban poor's desire for change needs new narratives, a new exploration of reality through their own pursuits to produce knowledge and insights that do not trap them in the paradigm of mainstream city planning and knowledge. Instead they need to begin to utilize the modern governance framework in which democratically elected national and local bodies are made accountable to all their citizens. In order to facilitate this transformation and produce social movements that make demands on their cities and states, the alliance began to explore rituals and practices that change the narrative of how the poor perceive themselves through the eyes of the mainstream. As unwelcome intruders, mi-

grants undertake jobs others are unwilling to do, but the city appears not to tolerate their presence, as they are seen as undesirable elements in cities.

The challenge of embedding this new insight and knowledge in mainstream knowledge

This process of engagement has evolved over the years, but in summary the alliance highlights:

- » Women-centred collective peer dialogues which help individuals (men and women) to learn to tell their stories of growing up, their lives in cities and transition from rural areas, and begin to see amazing value in how they survived, including their contribution to their city.
- » The strategies these people have developed to produce communities and raise children and find livelihoods in cities without assets or skills and with no initial knowledge of the city.
- » This sharing is then expanded to network levels, where acts of violence in the city, evictions by the city authorities, confiscation of informal livelihoods, the exploitation of labour through various means and dealing with constantly being invisible in the eyes of the city impacts on people whose real survival increasingly depends on their labour, leading the alliance to understand that this is a universal reality and combating it requires networks for solidarity and new knowledge for change.

Gradually, practices of knowledge creation emerged from this reflection. The urban poor's invisibility was countered by communities mimicking data collection in the form of a census, only now it was conducted by individual households, asking questions that addressed their col-

lective story. This process had many impacts, it produced networks and organizational mobilization; it helped communities understand how data was valuable for setting priorities and exploring possibilities and how they could make representations about their demands through this method. It was the beginning of creating identity and challenging the manner in which others, the state and researchers portrayed them.

The Indian alliance began to explore alternatives to how it could create identity, manage money, explore solutions to the problems of the poor and make representations. Gradually this created a very solid and robust set of practices which in turn expanded the movement across cities in India as well as internationally, as other poor communities in cities entered this peer-learning circle and learnt of these practices and created their own federations, ultimately leading to the formation of SDI. Cities and national governments began to heed their demands and expectations (not as quickly as would have been liked), but engagement with the state was initiated and reflected in many policy changes in various cities and regions in India and around the world.

The potential role of higher education and academics in this process

In the case of universities, researchers and academics, the movement faces many challenges. Clearly the strong rural gap is evident and the theory-building base came from that experience. Today, even if the world is now more urban, there is continuing disagreement about focusing on rural development to stop urbanization and treating urban and rural investments as competing rather than being a continuum. By that we observe that most of the theory building in advanced education and its research is based on rural issues, located in rural areas (and rightly

so, as in the last five decades rural development has been the basis of development investment). Inversely, the laws which govern cities and their development in the Global South, especially those former colonies, end up legitimating the existing legal framework, which includes developmental regulations that were framed around making cities work for commerce, secure trade, and development laws around these needs, ignoring, for the last several centuries, the migrants who could work in the city but did not have citizenship rights. This made all the urban poor, who squatted on land for lack of allocated lands, illegal and criminal. We have identified several educational/academic streams to initiate dialogue, planning, architecture, engineering and development education. In our opinion, the jury is still out on how much we can explore and contest their ways of knowledge production and how this impacts on state laws and strengthens the bias against the urban poor. However, after at least two decades, we can now create a road map of our processes with several milestones with which to hopefully develop a partnership.

In Kenya (where we present the case study), from looking at the newspapers, there seemed to be a correlation between the eviction notices served on slum dwellers and announcements by various banks auctioning the land. Further enquiry, especially in one urgent eviction context, led to a stunning revelation. The government had given the land in question to an industrialist to set up a business, but it was instead used as surety with the bank to borrow money which was never returned. The agreement stated that the land would have to be returned to the government if the job-creating industry was not set up. Yet neither the government that facilitated the evictions, nor the courts that initially did not hear the appeal, acknowledged this fact and the law only saw the poor as encroachers.

Colonial rule in Kenya, as in other countries, appropriated land and gave it to those it chose. After independence in Kenya, the new government gave this land to industrialists, army officials, judges and politicians to stabilize the new state. More recently, the International Development Research Centre (IDRC) has commissioned a study prompting the university's law department, School of Management, Planning School and the community federations to launch a deeper investigation which should definitely shed light on how land is owned and transferred, mortgaged and auctioned, thus producing new insight and knowledge to address the issues of land use in the city.

The experiences of the Indian alliance and SDI to explore this partnership

It all begins with presenting our work, which is initially done by professionals associated with federations, and later by community leaders who give lectures about their processes and strategies in university departments, or work with a researcher who may conduct a study. In most instances there is interest, but this does not lead to any follow up. In a few cases, where there is follow up, it is only meaningful if there is a two-way exploration seeking each other's views and paradigms. Often, a long time passes before each side can ask the correct questions. Even at this stage, many educational institutions that come to visit communities, do not feel the need to send feedback or copies of what they have written or documented back to communities. Both within the alliance and the SDI network, often this initial experience produces a feeling of time wasted.

However, this process has, in some instances, led to gradual but fruitful joint work that is meaningful. Professor Appadurai (then at Uni-

versity of Chicago and now with NYU) (Appadurai, 2011) even took a sabbatical to spend a year exploring what the alliance in India does and he has written extensively about us in ways that have given us new language and concepts to describe what we do. James Coburn, from Berkeley University, and Professor Peter Ngau, from the University of Nairobi, have worked together over several years, undertaking studies with slum dwellers and assisting them with planning and design challenges. In addition, SDI sends a delegation to the University of Manchester each year to spend a week with multidisciplinary students where they lecture to students. The Development Planning Unit (London), the New School (New York), the University of Melbourne and the University of Cape Town, among others, send students to visit our association and are now exploring these possibilities with us.

The Kenya link to universities

As much about individual efforts as it is about organizational strategies

In 1995, Peter Ngau, a Nairobi University lecturer who would later head the Department of Rural and Urban Planning, carried out an academic study on informal settlement in Nairobi. The study showed that 50 per cent of the city's population lived in informal settlements occupying five percent of the city's land. An emerging urban social movement in Nairobi against forced eviction took up these figures from slum land. The university, meanwhile, remained in the realm of scholarship, separate and dissociated from the politics of the urban land movement it had inadvertently helped catalyse.

Over the next 10 years, slum communities consolidated their advocacy under the movement, Muunganowa Wanavijiji (Swahili for Slum Dwellers Federation) and deepened links with civil so-

ciety. The movement affiliated to SDI in 1999. This link added community enumeration to the movement's set of strategies. Collecting data about slums became the way the movement builds relationships with city and national government.

Meanwhile, the university set up a centre for alternative building technology – a platform that assumed a critical tone for the fledgling, often loud, efforts of civil society to address urban informality; a position that added up to questioning whether poor communities had anything to contribute to solving the city's problems. The study of materials for incremental housing upgrading, valuing design options selected by the communities and other such reality checks changed focus and choices for explorations.

By 2004, Muungano was a regular visitor at the Kenyan Ministry of Lands and Housing to present community enumeration data. That year, several seemingly unrelated events occurred that would later converge into a joint university/community process of coproducing slum upgrading.

Firstly, the Land and Housing Ministry's slum upgrading programme, supported by the Swedish International Development Cooperation Agency (SIDA), acquired a satellite map of Nairobi and started to develop a slum GIS database parallel to the Muungano database. GIS mapping was new, and the ministry drew in interns from Nairobi University's Planning School to assist it. Whenever Muungano went to the ministry to present its data, it ended up in the GIS lab working out how to share data with the university interns. When the ministry planner in charge of the GIS lab, Musyimi Mbathi, left to join UN Habitat, Muungano was left to a large extent to remotely mentor the interns. Ten years later, Mbathi would reconnect with the movement as

a lecturer in the Department of Rural and Urban Planning at Nairobi University.

Secondly, Cities Alliance launched their 'Cities Without Slums' programme in the same year. SDI introduced Muungano to Cities Alliance manager Mark Hildebrand. Muungano was a possible candidate to undertake the citywide enumeration in an African city that Cities Alliance wanted to achieve. A few years later, Mark Hildebrand, former manager of Cities Alliance now teaching at Berkeley, would help to form a link between Muungano and the University of California at Berkeley.

As a result of these discussions Kisumu, Kenya's third city, was selected as a pilot for the Cities Without Slums programme. Then needing to deliver GIS maps of Kisumu's slums, and lacking this capacity, Muungano like the ministry did before, turned to the University of Nairobi's planning students. The sheer scale of enumerating and mapping slums in the whole city required Muungano to engage the entire undergraduate planning class of 2005.

The university's planning faculty remained disinterested in this engagement. The faculty's involvement was limited to declaring that internships with civil society were admissible for fulfilment of the students' course work. The students, on the other hand, were particularly keen to undertake an internship that removed them from government offices and gave them a real-life field experience in the slums. Half a dozen years later, five students from the planning class of 2005 would be employed as city planners in five cities where Muungano works.

In 2006, eight planning students from the University of Nairobi wrote their final-year thesis on slum-related topics. Two of the best planning students were then absorbed into Muungano's

support organization as community enumeration programme officers. The move seemed potentially explosive in SDI cycles, where communities and not professionals were supposed to collect data. The Kenyan movement was unsure how to broach this discussion with SDI, until it emerged that the far more established SDI affiliates in India and South Africa had similar links to academic institutions. For instance, the Indian SDI affiliate was working with the Royal College in Stockholm to produce plans for Dharavi slum in India. This provided an affirmation to the linkages that Muungano was starting to explore.

In 2007, Chair of the Nairobi University Planning Department, Peter Ngau, called a meeting with Muungano. He observed that something interesting was happening in the slum space. The students' final-year thesis papers on slum topics were of exceptional quality. Professor Ngau therefore proposed that for the next class, Muungano provide small grants for students taking up slum topics and that the faculty get more involved in the way the students developed their research. The Rockefeller Foundation supported the small academic grants programme.

Later in 2007, Mark Hildebrand, now a visiting lecturer at UCB, came to Kenya as part of a scoping study on community-generated data practices. He visited Nairobi with a team that included planning and public health professor Jason Corburn.

The backdrop to the visit was a community without water and the building of a national infrastructure programme for informal settlements. In order to root out the Mungiki, a cultish organization sustained by controlling services in slums, the government had switched off the water supply to the Mathare slum. The slum had 26,000 households and the situation was critical, so the community leaders asked Muungano

to assist them in renegotiating water supply with the city authorities.

At the same time, Muungano was participating in discussions between the government and the World Bank to set up a \$300 million infrastructure fund known as the Kenya Informal Settlements Improvement Project (KISIP).¹

In both instances the skill sets that universities offer were exactly what Muungano required. In Mathare, Muungano negotiated with the city for some free water stand points and promised to deliver a long-term water reticulation plan. For KISIP, Muungano was negotiating that community enumeration data be used as the baseline for the KISIP project. By working with the universities, it was hoped that the government and the World Bank would see community data as a legitimate.

Within three months of the visit, the planning schools in Berkeley and Nairobi had developed a joint urban studio¹ class to develop a water reticulation system² for a cluster of 2,400 homes in Mathare. In a completely unprecedented move, the Mathare community uprooted all informal water connections and created pathways for laying new pipes as per the plan. For its part, the city and the water utility company installed water pipes so that the furthest each shack was from a possible connection was 15 feet. In six months Mathare had 400 new individually metered household water connections.

This may not have happened without a rare funding arrangement by the Rockefeller Foundation, where the Universities of Nairobi and

1 <http://www.projects.worldbank.org/P113542/kenya-informal-settlements-improvement-project-kisip?lang=en>

2 An urban studio is a conventional practice in schools of architecture and planning to undertake a field visit to document the field experience and develop design or planning changes; only now, the communities of slum dwellers would be partners rather than objects of study.

Berkeley and Muungano received grants that allowed them to collaborate. The early success of the partnership was dampened when the KISIP project decided to work with private consultants rather than civil society, communities and universities. Yet, this disappointment also served to strengthen the view that public universities lend the movement different and powerful access and advocacy. The terms of reference for the KISIP project had been greatly influenced by the joint contributions of the universities and Muungano.

Fuelled by its earlier success with water, the partnership embarked on a more ambitious plan in 2010. Again the vehicle for planning was an urban planning studio supported by organized community groups. The partnership set out to undertake a zoning plan. Rather than responding to conditions within the settlement, the plan sought to integrate Mathare into the city. The plan demonstrated how the city's trunk infrastructure (water, sewer, electricity, transport, etc.) could be extended and laid out in Mathare. Through successive urban studios the Mathare zoning plan was completed in 2012. It has been the basis for the installation of a trunk sewer line

in Mathare, reticulation of water trunks throughout the settlement and the opening up of access roads.

Even as the collaboration continued in Kenya, SDI and the Rockefeller Foundation facilitated exchange visits with universities in Uganda, Tanzania, Zimbabwe and South Africa. This aimed at encouraging slum federations and public universities in those countries to work together. Significantly, the African Association of Planning Schools adopted the community-university planning studio as a key element of their mandate. On the other hand, the federations adopted the studios as a tool that picks up from community enumerations and allows slum communities to participate in planning, while ensuring that the future generation of planners and city managers are sensitive to, and know how to approach situations of informality.

References

Appadurai, A. (2011) *The Future as a Cultural Fact: Essays in the Anthropology of Globalization. Essays on the global Condition*. New York University: Verso.