



## Information Management in the Basic Services to the Urban Poor (BUSP) Scheme in Kalyan Dombivili (Maharashtra, India) and Implications for Geographic Information System (GIS) Development

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*Urban poverty alleviation schemes in India continue to target mainly slum areas. An important aspect in the planning, implementation, and monitoring of such government schemes pertains to the procedure and practices of spatial and socio-spatial information management in municipal administration. Critical junctions in these practices include the selection of target areas and populations, land selection, land ownership clarification, and potential transfer of rights and ownership of land for construction of new buildings and relocation of slums, as well as the allocation of new housing units to scheme beneficiaries. Information management embedded in scheme implementation is therefore highly complex involving various administrative departments as well as non-administrative governance actors, including political representatives and private sector. This complexity makes the development of digital information and communication technology (ICT) in administration to manage information about slums, for instance through Geographic Information Systems (GIS), a difficult and politically non-neutral undertaking.*

The policy brief is based on research conducted in April and May 2012 in Kalyan Dombivili<sup>1</sup>, Maharashtra. Kalyan Dombivili is a fringe city within the greater Mumbai metropolitan area with a population of approximately 1,250,000 people in 2011. The city is considered a forerunner and state-wide example for the development of ICT in administrative processes, especially the development of municipal property tax GIS. However, implementation of poverty alleviation schemes in Kalyan Dombivili currently does not involve the use of integrated GIS databases in administration, but instead makes use of diverse technologies, including paper-based records and stand-alone desktop applications.

Three poverty alleviation schemes dominate the urban administrative scene in Kalyan-Dombivili. The oldest and ongoing is Swarna Jayanti Shahari Rozgar Yojana (SJSRY). The most recent (since 2013) is the Rajiv Awas Yojana (RAY) national slum improvement scheme. RAY guidelines explicitly require GIS-based collection, processing and management of information about slums and residents. A third central government scheme underway between 2005 – 2012 was Basic Services to the urban Poor (BSUP). In this policy brief the process of implementing BSUP is sketched out, and causes for the ambiguity and opacity in information management distilled. Based on this discussion implications for policy are outlined, specifically with respect to the development of GIS in the context of poverty alleviation schemes.

<sup>1</sup> [http://www.chance2sustain.eu/fileadmin/Website/Dokumente/Dokumente/Publications/pub\\_2013/C2S\\_CR\\_No02\\_Development\\_of\\_Kaylan\\_Dombivili\\_V1-6.pdf](http://www.chance2sustain.eu/fileadmin/Website/Dokumente/Dokumente/Publications/pub_2013/C2S_CR_No02_Development_of_Kaylan_Dombivili_V1-6.pdf)



BSUP is a sub-mission of the Jawaharal National Urban Renewal Mission (JnNURM). The main thrust of the scheme is the “integrated development of slums through projects for providing shelter, basic services and other related civic amenities with a view to providing utilities to the urban poor.”<sup>2</sup> The Maharashtra Housing Development Authority (MHADA) oversees the BSUP mission and channels central and state funding for the same to ULBs. Coordination between general urban infrastructure projects under JnNURM and infrastructure provision under BSUP takes place mainly at municipal level. BSUP implementation in the city is coordinated through the BSUP engineering cell of the Kalyan-Dombivili Municipal Corporation (KDMC). BSUP does not require development or use of any specific ICT for information management, but uses diverse technologies, including analogue means and stand-alone desktop applications as well as technical drawing software (e.g. AutoCAD), for the collection and processing of information about slums, residents, and land, as well as budgetary management.

### **Ambiguities and opacity in information management: the mistaken assumption of linear scheme implementation**

Information about slums, especially the criteria to select areas and residents, is very ambiguous. There are multiple lists of slums and beneficiaries in circulation, partially overlapping in content between departments and different poverty alleviation schemes, and with content changes through time. Selection criteria for areas and beneficiaries and the process of constructing information about slums are very opaque. This is because implementation in practice does not follow a strategy according to a linear procedure. As per scheme procedure it is assumed that all slums are first selected comprehensively across the entire city, and information then collected about slums and residents. Afterwards and based on this information budget would be allocated, construction companies hired, and houses and infrastructure built in-situ or on newly developed land (usually at the outskirts of the municipal administrative area). Finally, new housing units would be allocated to the originally listed beneficiaries (for details about implementation as per procedure see figure 1).

This assumption of a linear strategy with comprehensive, unambiguous information as basis for further implementation processes does not hold in practice. Instead, the categorization of slum and slum residents does not take place before the scheme is implemented, and not comprehensively at one point in time across the administrative municipal area; information construction, especially of slum and beneficiary lists, is ongoing during implementation.

The main causes for disruptions of a linear implementation strategy and resulting ambiguities and opacity in information management are as follows:

- a) Within the administration there are delays to process documents and records. One reason for this is the mediating role of administrators in adjusting scheme requirements to local situation and interests (see also point e).
- b) There are changes through time between submission of Detailed Project Report (DPR, required for funding release for a given project or area) and present situation of slums and households. These changes pertain to the availability of land and related ownership, documents available to residents to prove eligibility under BSUP, and changes in beneficiaries’ household structure and size. In addition, ambiguity and opacity in information content and management are also a result of multiple schemes being implemented in parallel to each other, but with different starting and end points. There are partial overlaps between slums listed under one scheme versus another.

2 <http://jnnurm.nic.in/wp-content/uploads/2011/01/UIGOverview.pdf> - page 6.

**Figure 1:** Linear implementation of BSUP scheme in Maharashtra according to procedure**BSUP implementation process (as per procedure)**

1. Areas and beneficiaries are identified by ULB through a project management consultant (PMC) hired by ULB
2. Beneficiary lists goes to Commissioner and Mayor for approval and from there to central government
3. DPR is prepared by PMC and submitted to MHADA
4. MAHDA checks the DPR if it is acceptable based on norms set forth by central government as follows:
  - a) *Minimum of 25 square meters per unit*
  - b) *Availability of land*
  - c) *Beneficiaries' consent*
  - d) *Within five kilometers from original slum pocket*

After MAHDA approval the DPR is sent by MAHDA to the following three:

- a) Central government appraisal agency (Housing and Urban Development Corporation), who scrutinize DPR
  - b) State Level Screening Committee (SLSC), who accept the DPR if MAHDA has approved it to release state level funds
  - c) the central government appointed Building and Material Testing and Procurement Council (BMTC), who check the technical/material information in the DPRs
5. HUDCO sends DPR to the Central Sanctioning and Monitoring Committee (CSMC) for release of central government funds
  6. Funds are released from central and state levels to MHADA, who channels them to ULBs
  7. After 70% of released funds have been spent MHADA issues utilization certificate based on progress report (mainly based on photographs of construction sites)
  8. Utilization certificate is then sent to CSMC for approval of release for further installments
  9. Final document is the completion report

Source: interview with MHADA officials 4 May 2012 and interview with contractor/builder on 25 April 2012

- c) Litigations and contestations over land rights and ownership are a constant and ubiquitous factor interfering with (linear) scheme implementation. These are partially due to real estate development interests and unauthorized development, and partially because of mistakes in land surveys, and multiple, sometimes contradictory or outdated land records.
- d) A multiplicity of contradictory interests converges in the construction of information about slums, including interests unrelated to the goal of poverty alleviation. This leads to the use of surveys, beneficiary lists and occupancy documents as a form of tokens or vouchers, for instance to favor influential politicians' families, by listing people or providing them with documents in return for money or votes. Related to this are problems of "bogus records<sup>3</sup>," such as the use of forged identity documents and reporting larger number of household members. Accusations of fraud and list tampering can bring project implementation to a complete halt in a given locality.
- e) Administrative staff in charge of implementing the scheme have difficulties putting into action the "mantra of participation," because, on the one hand, they are required to implement the scheme and hence convince residents to agree to scheme implementation (i.e. be listed as beneficiaries), but on the other hand, know that this can create problems for beneficiaries. In addition, problems in participation in the planning stage (information collection and target area selection) occur, because often residents can-

3 As referred to by administrators and project consultants involved in scheme implementation.

not imagine how changes may affect their lives in future and are thus more likely to give consent (be listed under the scheme). Opposition comes afterwards during scheme implementation, when beneficiaries realize the implications of the scheme, and not during the initial phases when consent is sought and areas and beneficiaries listed. Especially when effects on livelihoods become apparent at the time of demolition and relocation, residents oppose the scheme through a variety of formal, informal, political, and administrative channels. Problems related to relocation to the outskirts of the city include insufficient or expensive transportation to places of employment, lack of access to employment on location, and the loss of access to political and social networks in the new locations, as well as building arrangements, especially the necessity of living in high-rise buildings (see figure 2).

### **Policy relevance: implications for GIS development in poverty alleviation schemes**

Two characteristics of information management in BSUP implementation are relevant for the development and use of GIS, for instance under the recent RAY scheme.

The first is rather problematic and as such offers GIS development with the chance to improve information management in poverty alleviation schemes. A main reason for ambiguity and opacity in information management is the appropriation of the label “slum” and related lists of target areas and beneficiaries by interest groups unrelated to or in conflict with the aim of poverty alleviation. This is especially problematic because of the negative connotation of the term slum in the context of city beautification and urban pro-growth development. Furthermore, information management about slums per se is embedded in a much wider sphere of urban governance processes, especially processes of land administration, contestation, and related regimes of documentation and record-keeping, which go beyond the implementation of any one singular and temporary poverty alleviation scheme.

**Figure 2:** “Barave BSUP site:” newly constructed housing at a relocation site near Barave village north of the city of Kalyan. The site is in close proximity to a Water Treatment Plant.



The narrow focus on slums in GIS development (for instance as proposed under RAY) is therefore unlikely to eliminate ambiguity and opacity in slum information management. In addition, the focus on slums within the context of poverty alleviation schemes bears the risk of inscribing a policy discourse of “slum free cities” more tightly into integrated databases. While potentially allowing for interests contrary to poverty alleviation to take over GIS database development, the centralization and integration of slum information management can at the same time exclude socio-economically weaker and marginalized sections of the urban population from processes of information management. So far these sections of the population have some influence over the process of listing target areas and beneficiaries, and housing allocation through access to administrative paper work via formal and informal mediators and representatives.

GIS development in poverty alleviation policy currently provides a unique opportunity to change a singular, overly simplistic, and – especially for the poor - risky discourse on “slums” as target for poverty alleviation and to incorporate a multi-dimensional discourse on poverty and deprivation (multi-dimensional indexes of deprivation), potentially with less fixation on spatial delineation<sup>4</sup>.

There is another characteristic of current information management, which is more positive and which GIS development should maintain carefully. The non-linearity in implementation and corresponding opportunities to change information content are indicative of the potential to revise decisions previously taken, as well as reflecting the ability of non-administrative actors, including slum residents, to participate in a situation-specific manner in administrative information management practices. The ability to directly or indirectly change the content of information and influence who is included in beneficiary and slums lists and who is not while implementation takes place are important for people, who may be negatively impacted through redevelopment and relocation, but to whom these problems become visible only after initial target area and beneficiary selection have been established.

In order to avoid deleting this potential of revisions and residents’ leverage to influence scheme implementation requires an incremental development of GIS database terminology and content and careful consideration of the actors and interests, who become enrolled in the database development through time. Instead of aiming at comprehensive coverage of the city and database design through a top-down, technology driven approach envisioned to precede the implementation of a given poverty scheme, GIS development may consider focusing on a smaller number and diverse types of neighborhoods in order to incrementally design the database, monitor the information content as well as the actors and interests that become included or excluded, and in turn allow for the adjustment of database design, content and use. In this process it is important to avoid deleting existing, dispersed nodal points of communication, where urban residents, political representatives, administrators, and private agents currently interact and negotiate.

4 Targeting poverty based on specific areas is problematic also, because it more or less automatically excludes deprivations experienced by the so called “floating population,” a sizeable part of the urban population without residency, occupancy and/or identity documents.

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**Chance2Sustain** examines how governments and citizens in cities with differing patterns of economic growth and socio-spatial inequality make use of participatory (or integrated) spatial knowledge management to direct urban governance towards more sustainable development.

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