

1. Introduction

The idea for a proposal to study the socio-economic and spatial impacts of large infrastructure projects on the periphery of Bangalore arose within CIVIC in 2005. There was insufficient information regarding the 8 urban local self governments (ULSGs) surrounding Bangalore although it was known that the most rapid development was taking place there. CASUMM's involvement in the project dates back to November 2006 when its members started discussions with CIVIC on how such a research study could be carried out. This was also around the time that the state government announced plans to create a Greater Bangalore Municipal Corporation (what came to be known as the Bruhat Bengaluru Mahanagara Palike- BBMP) by annexing all the 8 urban local self governments (ULSGs) around the Bangalore Municipal Corporation as well as 110 surrounding villages. CASUMM and CIVIC agreed that this provided a timely opportunity to understand how the transition in governance was taking place on the ground from Gram Panchayat (GP), City Municipal Council (CMC), and Town Municipal Council (TMC) to BBMP, and the larger implications for decentralized governance and local democracy. The project titled "Urban Local Government, Infrastructure Planning and the Urban Poor" formally commenced in March 2007.

Research Objectives

In the project we seek to understand two key objectives:

1. To study provision of basic services and large infrastructure development in 3 peri-urban areas of Bangalore (Mahadevpura CMC, Kengeri TMC and Bellandur GP) to understand the process of provision of services and the spatial and socio-economic impact on different groups, particularly poor groups.
 2. To explore (preliminary) implications the transition of governance (from CMC, TMC and Gram Panchayat respectively to BBMP) will have for provision of services and infrastructure in these areas as well as for the implementation of the 74th Amendment and decentralized governance.
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1. *Disparities in provision of large infrastructure and basic services*: In the peripheral areas of Bangalore, as in all Indian cities, an overwhelming proportion of development is what is known as 'unauthorized' or unplanned – ie., where the land supply system operates outside of the planning permissions and legal tenure system necessary in a master planned area. What typically happens is that over time people pay property taxes and/or betterment charges, these areas are supplied with basic services upon pressure from local people via local politicians and municipal officials, and the areas are subsequently regularized. The pockets of development which are 'planned' are much fewer and include layouts developed by the Bangalore Development Authority (BDA), industrial estates developed by the Karnataka Industrial Areas Board (KIADB), large commercial complexes developed by large private developers often with land acquired through the KIADB etc. The different land supply systems in operation in the peripheral areas (master planned, gramthana, revenue sites, squatter settlements etc) have a strong bearing on the nature of and manner in which basic services are provided. "Each have a different history, bring together different stakeholders and are shaped by a particular political process" (Benjamin and Bhuvaneshwari 2001)¹. The key objective here is to understand the disparities in the way that infrastructure and basic

¹ See Benjamin et al (2001) Democracy, Inclusive Governance and Poverty in Bangalore Working Paper 26 Urban Governance, Partnership and Poverty University of Birmingham May 2001.

services are planned, developed, financed, and delivered in (planned and unplanned) peripheral areas and its impact on people, particularly poor groups.

Although information was collected on basic services in general (this included water supply, sanitation, solid waste management, power, roads, health, education, and the public distribution system), the research focused on 2 sectors: roads and water supply and dealt with the provision of local road and water services as well as larger cross-cutting infrastructure like the Outer Ring Road (ORR) and the Greater Bangalore Water and Sanitation Project (GBWASP). Key questions that were addressed included: What is the impact of large infrastructure projects planned and executed by centralized state level structures (i.e, parastatals) on different social groupings especially the poor? Who benefits most from this large infrastructure? How does large infrastructure differ from basic services infrastructure provided incrementally by local municipal funds?

2. *Implications of transition in governance:* The creation of the BBMP in January 2007 has greatly increased the size, population and area now included in the city of Bangalore. This impinges on basic services and infrastructure needs, (the transition to new/standardized) administrative systems like property tax and accounting, planning procedures and norms, and the additional finances required. It also has tremendous bearing on political systems of representation, local democracy, decentralized governance, and the transition from rural to urban forms of local self government (i.e, Gram Panchayat to BBMP). The study explores preliminary implications of this governance transition with regard to administration of basic services and infrastructure as well as for decentralized governance and local democracy.

Research Methodology

The study is framed conceptually by the links between land development systems, planning, and the nature and type of infrastructure provisioning. While the basic objective of the research is to study infrastructure and basic services, we pay close attention to the links between land and infrastructure because one cannot study infrastructure, particularly large infrastructure projects, without studying land, its ownership structure, land markets and impact on livelihoods. For any large infrastructure project, particularly road projects, land is critical. The role of the state is central in acquiring land and making it available to a host of new players- real estate developers, companies, home owners, entrepreneurs etc. But this is not empty space; the land is being occupied and used in a variety of ways. The choice to acquire the land for infrastructure and industrial development is a deliberate one privileging industrial development over agriculture, developers and companies over farmers and labourers. This is a course of action that faces considerable resistance from local groups who align themselves and use various strategies in an effort to negotiate a better position for themselves.

Further, there is a strong connection between ownership of land and access to water. In the peri-urban areas of Bangalore, as in many cities, there is almost complete reliance on ground water for drinking and other purposes. While anybody can dig a bore well and gain access to ground water, to be able to pump up the water one needs a power connections which cannot be obtained unless one has proper land documents. A land document via a legal form of tenure thus gives a person land rights as well as water rights (to use and to sell).

Links between land development, planning frameworks and infrastructure provisioning: The way in which land has been supplied (master planned legal tenures Vs customary 'unauthorized' tenures) has a strong influence on the type and quality of services and infrastructure provided. This is seen for instance in the nature and type of infrastructure provisioning that occurs in the

two institutional circuits of land development- one centred around local government and local land developers and the other centred around parastatal agencies and large developers in a planned setting (Benjamin et al 2001). Older, unplanned, and organically developing areas like villages and slums typically depend on local government to provide services. Investments are made from municipal funds incrementally, over time, in response to residents' demands and are channeled via local politicians, local leaders, sanghas etc. Infrastructure provisioning in these organically developed areas does not depend necessarily on being 'authorized'; often, services are provided on payment of property and other taxes with the understanding that they will be regularized over time. Infrastructure is thus provided based on demands articulated by residents.

By contrast, master planned areas are a product of deliberate intervention by parastatal agencies to shape the pattern of land development, most typically through land acquisition (of village land for an industrial estate for instance), development and resale, and the provision of infrastructure. This raises land values bringing in larger real estate players and developers who cater to higher end customers (locals and migrants). Infrastructure provided is supply-side because it is provided up-front following which customers of the property are actively solicited.

There are several critical differences between local services provision undertaken by the local government and large infrastructure provision undertaken by parastatal agencies. The former is closely tied to the local political process with politicians and local leaders having a crucial role in channeling and influencing service provision. This is in contrast to large infrastructure provision which not only operates in isolation from local political actors and the local political process but actually undermines it by bringing in a parastatal culture with its economic and political alliances consisting of large consultants, international financial institutions (IFIs), and large private companies and developers. Also important to note is that these provisioning systems cater to different sets of people: local services provision by local government generally serves local residents in 'unauthorized' areas, poor groups, and new unskilled and semi-skilled migrants. Large infrastructure provision typically services high end commercial and residential developments and high skilled (largely IT) migrants.

Studying how basic services are provided in organic, incrementally developing areas and more "planned" areas was done by:

- Mapping governance structures implicated in service provision and processes of decision making and budget making. This involved understanding how unplanned areas developed- such as through negotiations with local officials, representations to councilors and MLAs, through dalit associations- and how planned areas developed- such as through deliberate interventions of relevant agencies; how much money has been spent and where funds came from
- Analyzing and comparing types and qualities of basic services; are there any particular problem areas and how are local people dealing with them.

Studying how large infrastructure was provided across areas was done by:

- Mapping which government agencies are involved and the process by which the project was implemented. For instance, was there a parastatal involved and what, if any, was the role and control exerted by the local government
- Studying types and quantities of funds involved and their sources
- Tracing responses of local people to these large infrastructure projects. For instance, was there resistance from local groups, how did it manifest, what was state response to it and what was the outcome.
- In what ways have large infrastructure projects had an impact on local people's lives

Studying the transition in governance to BBMP was done by:

- Understanding the changes taking place at GP, TMC and CMC level as a result of their inclusion in BBMP – in service provision, taxation and budgeting systems, planning norms etc
- Exploring the impact on decentralization and local democracy by tracing changes in the structure of political representation and power dynamics, and the impact on accountability and responsiveness to their constituencies

Research methods used

The research team believes deeply in the necessity for grounded field work and micro-level analysis. Considerable time was spent at the micro field site to trace both visible and more covert changes in systems and power relationships. Four main research methods were used in the study:

1. Semi-structured interviews
2. Focus groups
3. Collection and analysis of secondary data from government zonal and head offices, newspaper archives, and related documents
4. Photo documentation and visual mapping of each area

Areas of study and selection of sample areas

The 3 areas under study are Mahadevpura CMC area, Kengeri TMC area and Bellandur Gram Panchayat area (see Figure No. 1). They were chosen according to several parameters. Geographical spread was one with Mahadevpura being in the North-East of the city, Bellandur being in the south-central east quadrant, and Kengeri being in the South-West of the city. A second was differences in socio-economic development. Mahadevpura and Bellandur are in the Eastern section of the city which comprises the IT corridor. Land prices are very high here and the pace of development has far outstripped that seen in the Western section of the city. Kengeri in the Western portion has less large IT and ITES companies and the overall income is less than the other two areas. A third criteria was selection based on governance structure. Mahadevpura was chosen as a former CMC, Kengeri because it was a former TMC and Bellandur because it was a former GP. This enables comparison of existing levels of services and infrastructure and their administration across the spectrum of urban local self governments. It permits understanding the different degrees of transition GPs, TMCs, and CMCs have to go through to be included in the municipal corporation of BBMP.

Since an objective of the study was to understand the differences in provision of basic services and large infrastructure as they relate to two rather distinct types of land use settlement patterns and legality, the selection of sample areas was stratified by planned areas (typically high end IT campuses, affluent highrises and BDA layouts) and unplanned “unauthorized” areas (villages, slums, revenue layouts, DC converted revenue sites, and temporary migrant sheds). In each of the 3 areas under study, therefore, several samples were chosen to represent planned and unplanned areas. Since we chose sample areas from among planned areas, older village settlements, and more organically developed "unauthorized" settlements, it has been interesting to trace how sample areas have been developed over time and whether and how provision of services varies in each case.

Table No. 1 Number of interviews conducted in sample areas

Mahadevpura CMC	Kengeri TMC	Bellandur GP	Govt head offices
1. Hoodi village 2. Kaverinagar slum 3. EPIP 4. Zonal office Tot interviews: 46	1. Kengeri village 2. Kasthuramma slum 3. Kengeri Satellite Township (+EWS Quarters) 4. Zonal office Total interviews: 49	1. Bellandur village 2. Devarabisanahalli 3. Migrant sheds 4. Zonal office Total interviews: 43	1. BBMP 2. BDA 3. KIADB 4. BWSSB Total interviews: 12
TOTAL INTERVIEWS: 150			

Criteria for selection of interviewees from residential areas:

There were several criteria according to which we selected interviewees.

- Natives and migrants: First was whether they were native to the area or were migrants, stratified according to the length of time they had settled in the area. Thus we covered families native to the area (more than 25 years), those who had moved there between 10-25 years ago and more recent migrants divided up by those who had migrated between 3-10 years and those who had settled down in the last 3 years.
- Owners and renters: we ensured that both households who owned houses and those who rented them were included.
- Type of occupation: we included interviews with householders who are daily wage labourers and those who are owners of small scale enterprises.
- Political representatives: we spoke to former representatives of local government- Gram Panchayat and CMC/TMC
- Key informants: These included interviews with informants who could give us information on particular topics such as senior citizens who could tell us about the history of the area, teachers who could discuss the status of education, health and migration, and association leaders who could describe the history and progress of collective action and negotiation with government for local amenities.

Criteria for selection of interviewees from commercial areas:

Interviewees in commercial areas like EPIP and Eco soft Park were selected on the basis of four criteria:

- Size of the company: Need to include big companies and smaller companies;
- The nature of business: IT/ITES companies and manufacturing companies
- Length of time in operation
- Representatives from company associations if any

Timeline of study

The project formally began in the first week of March 2007. Field work in the sample areas took place over the period April-August 2007. Interviews with zonal officials and officials from head offices of BBMP and other government agencies took place from September-November 2007. CASUMM organized 2 small group meetings in August and September at 2 of the sample areas

(in Hoodi, Mahadevpura and Bellandur) to discuss preliminary study findings with local residents and obtain their feedback and comments. CASUMM and CIVIC then held a joint public meeting to discuss the presentation of key empirical findings on December 18, 2007. The feedback from these 3 meetings informed the analysis and the final study report.

Structure of the Report

The report is divided into 5 chapters. The first chapter is an Introduction to the study. This describes the research objectives, the research methodology that provides a conceptual frame for the study, why particular areas were selected as samples and the criteria for selection of interviewees in residential and commercial areas. The second chapter describes the history of the development of the sample areas. The locality histories related provide insight into the processes by which the land was developed and infrastructure and services were provided. The focus is on the developmental politics that drove/drives these processes, the key actors involved and the nature of their involvement. The third chapter begins with a description of the access to, quality and quantity of facilities available in each area. This is followed by intra-area and cross-area comparisons of infrastructure, governance and decision making processes to study the impact on different groups, in particular poor groups. The final section focuses on the differences in local service provision (largely in unplanned areas) and large infrastructure provision drawing on the case of the GBWASP. This enables exploring whether a large infrastructure project like GBWASP actually delivers better water supply for the poor in the peripheries.

The fourth chapter explores the transition in governance from GP, TMC, CMC to BBMP. This includes examining impacts on basic services and infrastructure needs, administrative systems like property tax, planning procedures and norms, and the additional finances required. It also involves understanding implications for political systems of representation, local democracy, decentralized governance, and the transition from rural to urban forms of local self government. The fifth chapter reiterates some key findings of the study and ends by making some concrete recommendations.

2. Locality histories: how land is developed and infrastructure provided

This chapter describes the history of the development of the sample localities. Explaining the locality histories, as Benjamin et al (2001) describe them, involves examining the process of how the landscape was shaped and infrastructure and services were provided, and tracing the developmental politics and circuits used, which actors were involved and in what manner.

The conceptual framework builds on Benjamin et al's (2001, 2006)² insights that there are two institutional circuits of land development, one centred around local government and local land developers and the other around the interventions of parastatal agencies and large land developers. Each of these circuits have a different set of actors and are embedded in different political, and infrastructure provisioning processes.

The chapter reveals that older, "unplanned" and organically developing areas like village settlements, slums and unauthorized revenue sites typically rely on the local government to provide basic infrastructure. Services are provided incrementally in response to demands from local residents and are channeled through local leaders, politicians, sanghas and municipal officials, particularly at the time of elections. The funds for this infrastructure come from local municipal budgets. Property taxes are collected and infrastructure so provided is not necessarily tied to whether the settlement is authorized (i.e., settlements that are unauthorized can still get serviced on payment of fees like betterment charges with the understanding that over time they will be regularized). What is important to note, however, is that regularization provides the means for greater access to public resources and infrastructure (Benjamin et al 2001).

By contrast, the more 'planned' localities studied reveal the interventions of parastatal agencies like the KIADB and the BDA in the form of providing infrastructure (eg. the ORR) and influencing the nature of the land market and the pattern of development in the area. One of the most important factors triggering development has been the construction of mega road projects like the ORR and the Bangalore Mysore Highway. Higher land values bring in large developers and a more high-end pattern of development. This caters to the middle, upper and professional classes in gated communities, farmhouses and villas, and large IT campuses. 'Planned' localities are characterized by the upfront provision of infrastructure which is followed by soliciting clients/consumers. This is thus a supply side model of infrastructure provision in comparison to organic settlements which is demand driven.

MAHADEV PURA

Hoodi village is situated in Mahadevpura Zone of BBMP. The village comprises 2 wards (12 and 14) located just off the Whitefield Main Road in the heart of Bangalore's IT belt. The dominant caste group in Hoodi village is the Reddy community (about 40%) which also owns a majority of the land. The Gowda community accounts for about 35% of the population and the SC/ST population consists of 25%. Hoodi village has a population of about 20-25000 and a voters

² See Benjamin et al (2001) Democracy, Inclusive Governance and Poverty in Bangalore Working Paper 26 Urban Governance, Partnership and Poverty University of Birmingham May 2001. Also see Benjamin, S. Report 1 Inclusive or Contested? Conceptualizing a Globalized Bangalore Via a closer look at IT dominated territories in East and South Bangalore. IDPAD May 2006.

population of more than 15000. Earlier all the people were agriculturists. Approximately 50 % of the land was irrigated and the other half depended on the rains.

Formation of industrial estates for Small Scale Industries by KIADB

During the late seventies and early eighties, the KIADB identified Whitefield as an area to develop industrial estates, primarily for small scale industries (SSIs)³. It acquired land from the surrounding villages (including Hoodi) and developed 4 industrial areas. They were Sadaramangala Industrial Area, Mahadevpura Industrial Area, Kadugodi Industrial Area, and Doddanekkundi Industrial Area (see Figure No. 2). While Mahadevpura Industrial Area borders Hoodi village on the left, Sadaramangala Industrial Area is beyond the village on the right. Many of the factories manufactured steel although some manufactured ancillaries, alloys, medicines, biscuits, gunny sacks or were involved in bottling.

The development of these SSI industrial areas contributed significantly to the local economy and to local employment generation. Around 20 % of Hoodi's residents worked in the steel plants. Migrants from other places also started coming to work in these companies. A proprietor of an SSI said that training was provided before employing people so many unskilled labourers benefited. In the late nineties, more than 10000 people were employed in Sadaramangala industrial area alone. Locals report that these companies used to pay salaries ranging from Rs. 1200 to Rs.2000 per month. A number of petty shops, hotels, food vending services and home based enterprises sprang up to cater to this clientele. This also resulted in greater demand for housing in surrounding areas. In 1991 there were no houses for rent but after that rental houses started increasing.

Occupation and contests around gomala land

Up to the early nineties, Hoodi village's common property or *gomala* land was more than 250 acres⁴. More than 50 people of Hoodi village were living on the *gomala* land and doing farming there but the land was not registered in their names. These were mostly Scheduled Caste and Scheduled Tribes (SC/STs) people who had sold their lands early on or who were landless. Benjamin et al (2001) explain that most categories of *gomala* land have been taken up by farmers for cultivation, made possible by a State government order '*Begar Hukum*' (without order) via form 22 from the tahsildar's office. Form 22 provides occupiers authority to cultivate land. Upon application under form 22, the tahsildar can, via form 56 or 9 collect revenue from the '*Begar Hukum*' land. This system of regularization of occupancy, Benjamin et al argue has parallels with land occupied for urban settlement even before it is officially 'converted' to urban use. What is important to note is that this system of regularization, carried out via the sub-registrar's office, allows the local government to collect 'development charges' from occupants in return for infrastructure and services⁵.

During the tenure of Chief Minister S Bangarappa and Prime Minister P V Narasimha Rao, the then MLA A. Krishnappa along with Bangalore DC Halappa converted the *gomala* land of Hoodi village and claimed they would distribute it as free sites to physically handicapped people. In the beginning, they made 500 sites in the *gomala* land. It was decided that 40% of the total number of

³ Since the 1960s, Whitefield had several small industries like brick factories and a biscuit factory. It was also known for its active trade union movement.

⁴ Benjamin et al (2001) discuss the several types of land included in *gomala* land: i) Burial ground; ii) Tanks and wells for community water supply; and iii) Gunduthoppu – land used by the villagers for resting which could be considered the equivalent of a park, also used for grazing.

⁵ If the occupants wish, they can follow this by a 'DC conversion' which permits their access to financial institutions and greater security of tenure (Benjamin et al 2001).

sites would be distributed to the local people and the remaining 60% to outsiders. A few sites were given to physically challenged people but locals report that the majority were allotted to Congress supporters. Sites were sold for between Rs.20,000- 40,000 each. Some still possess the documents of those sites.

There was tremendous local opposition to this. *Hoodi Horata Samithi* (Hoodi Protest Group) was formed and for 3 months they protested the way in which sites were allotted. They appealed to the State and Central Governments. Many meetings were convened. The issue was highlighted, not only in local newspapers but also in papers published in neighbouring states. In the agitation, local people who were living on the *gomala* land in thatched huts that they had constructed had their houses set on fire. The police and other government officials camped in Hoodi for about 30 days during that period. 2 persons died during police firing. Finally, in response to the agitation, the High Court announced a stay regarding the distribution of sites. The state government appointed a special DC to investigate the scam related to Hoodi *gomala*.

The DC's investigation report recommended that the area was primarily an industrial one and not suitable for conversion into a residential area because it had many SSIs and was also near the airport. Based on this report from the DC, the order related to the distribution of the sites became null and void. To this day many local people remember vividly the violence of those days and are resentful of MLA A Krishnappa's role in this land scam.

The genesis of EPIP and local resistance to its formation

When Hoodi Panchayat, consisting of 8 villages, was formed, the people of Hoodi were engaged in agriculture and also working in SSIs. They report being satisfied with existing amenities. The village consisted of about 500 houses and had two bore wells. There was no water problem and water quality was good. The few roads in the village were in decent condition. But with industrial development and the rise in land values, people started selling their land. By 1995 nobody was cultivating any more.

Meanwhile the KIADB who had first started to acquire land for SSIs in the area in the 1970s, intensified their acquisitions in the eighties. Initially for SSIs, it diverted some of these lands to an 'Export Promotion Zone' in the early 1990s. Hoodi village's *gomala* land was also acquired by KIADB and the Export Promotion Industrial Park (EPIP) was created. A real estate developer in the area reported that the land acquired by KIADB for EPIP was from several villages (see Table No. 2) and 90% of EPIP land was originally *gomala* lands from surrounding villages.

Table No. 2 Village land acquired for EPIP

Village	Land acquired for EPIP (acres)
Hoodi	240
Pattandooru Agrahara	150
Sonnenahalli	100
Kundalahalli	150
Nalluruhalli	120
Total	760

Source: interviews

There are considerable complaints regarding the KIADB land acquisition process. Local resistance to it took various forms. The first centered around issues of compensation. The compensation amount for those who lost land was deemed to be Rs.3- 6 lakhs per acre. This led to protests and local politicians and the MLA negotiated on behalf of farmers after which the compensation amount was increased to Rs. 12 lakhs.

While buying land from the farmers, the officials of KIADB promised them they would provide employment to one member in the family. But none of them got jobs in EPIP. Local residents complain that their lands were acquired for the development of industrial estates but the employees are mainly migrants from outside.

Thirdly, as is commonly practiced by government during land acquisition, the KIADB did not compensate the villages for *gomala* land⁶ although a large proportion of the land acquired came from *gomala* land⁷. While lands were purchased at Rs 6-12 lakhs per acre, they were sold from Rs 40-60 lakhs per acre to developers and companies resulting in large profits for KIADB. KIADB spent Rs 790 million on developing Phase I and II of EPIP. 77% (605 million) of the total expenditure incurred on this development was met by revenue generated through sale of plots. Thus KIADB subsidized the development of EPIP for large export companies at the expense of the common property lands of local villages. SC/ST people were hit hardest here as they were the ones who were using *gomala* land for living, cultivating and grazing purposes.

Finally, local residents accuse a senior official from KIADB of favouring big developers when allotting sites within EPIP. A local real estate developer states that his application for a site in EPIP for a hotel was turned down on false grounds purely because he was from the local area and was not a large company.

The entry of high end real estate development and large infrastructure through EPIP and ITPL

In the early nineties, part of the EPIP land was allocated as an IT park to form the ITPL. The decision to locate IT industries in the area in 1993-94 had profound consequences for land values, land markets and infrastructure development. In particular it affected the numerous occupiers of the land being acquired, who claimed the land despite not being clear of the tenure of the land or their status. These groups assumed that the land was *gomala* and government would find it difficult to acquire it using the Land Acquisition Law (Benjamin et al 2001). However, three factors went against them (ibid). First, rather than the Land Acquisition Act, the Government used the far more draconian Karnataka Industrial Areas Development (KIAD) Act⁸. Second, much of the land was classified as *Jodidhar* and was appropriated by the state as, technically, its single claimant (the '*Jodidhar*' or protector of the land) was missing. This allowed for easier acquisition. Third, the formation of EPIP and ITPL had tremendous state support (the state was a partner in ITPL and the developer of EPIP) and high visibility funding. Increasingly this was a time when the IT elite and their large developer partners, in seeing a possible market in returnee NRIs and investors, were consolidating their political clout. Paralleled with this, were the growing regulations against small developers and stalling of revenue land development by banning registration of its sale.

⁶ In the urban situation there has been insufficient debate on how common property (*gomala*) land is to be treated when village land is acquired by government or when villages are subsumed within cities. *Gomala* land is treated for all intents and purposes as government owned land and no compensation is paid to the village for taking this land for whatever purposes government chooses. The KIADA further dilutes the provision that government should acquire land only for a public purpose. See Liang 2007 for more information.

⁷ KIADB said they could not give us information on how much land they had acquired, from whom, and at what rate for EPIP citing unavailability.

⁸ For a review of critical differences between the Land Acquisition Act and the KIAD Act see Lawrence Liang's unpublished 2007 paper on "Land Acquisition under the Karnataka Industrial Areas Development Act".

The decision to set up ITPL happened soon after the decision to liberalize the economy in 1991. Veerappa Moily, the then Chief Minister, held high level talks with an official delegation from Singapore on the setting up of the ITPL. As soon as this was made public, NRIs, foreigners from Singapore and Malaysia, and real estate agents started to visit the areas surrounding ITPL and EPIP, including Hoodi, and invest in them. Emphasizing ‘single window clearances’ and special incentives for investments in mega projects, a branch office of KIADB was started in Whitefield in 1995. This moved land markets upwards and also brought to centre-stage industry demands for high end development and large infrastructure.

EPIP: the corporate circuit of land development centred around KIADB

The EPIP, set up by KIADB in the mid nineties, covers an area of about 660 acres. A large chunk of EPIP was *gomala* land for which the KIADB did not pay any compensation. The remaining land was acquired from farmers at prices ranging from Rs 6-12 lakhs. Once KIADB developed this land, it started selling it initially at Rs 30 lakhs. This covered acquisition costs and development costs and included a healthy profit. EPIP initially had almost no takers. Starting from 1997 there was recession and the economy only started picking up in 2000. After 9/11 there was again a slowdown in software exports. The real boom started after 2002 since when there has been tremendous growth. The site prices reflect this steady increase in value over time.

Table No. 3 Profits made by KIADB from sale of sites in EPIP

Price of sites (Rs lakhs)	Year
30	Till Oct 1996
40	1.10.96-6.12.03
55	6.12.03- 28.6.04
60	After 28.6.04

Source: KIADB

How sites were allotted in EPIP and infrastructure was provided

The KIADB followed a single window clearance – Karnataka Udyog Mitra- for allotting sites in EPIP. Projects worth between Rs 3- 50cr were evaluated by a Single Window Clearance Committee. The Principal Secretary, Ministry of Commerce and Industries is Chair of the Committee and the Managing Director, Karnataka Udyog Mitra, is the Convenor. Projects above Rs 50cr went through a State High Level Committee chaired by the Chief Minister and convened by the Commissioner of Industries.

When submitting their application for a site, companies had to specify the amount of water they required. There is no maximum ceiling stipulated. KIADB then paid BWSSB for water at Rs 60/kl and supplied it to companies at Rs 70/kl. KIADB also asked companies to get individual approval from the Karnataka State Pollution Control Board (KSPCB). Each site came with a septic tank. No UGD was provided nor does EPIP have a Sewage Treatment Plant (STP). KIADB representatives argue that if they had supplied UGD then site prices would have shot up to Rs 80 lakhs/acre. They claim that there is no effluent discharge because these are all IT and service companies and therefore there is no need for a STP.

All companies in EPIP pay an annual maintenance charge (AMC) of Rs 10,000/acre per year to KIADB who uses this for maintenance of services within EPIP. Representatives from several companies complained that they were not seeing any improvement, that KIADB does not do proper maintenance. The list of complaints included roads within EPIP worsening, hawkers entering EPIP, roads not being cleaned, drains not being cleaned, street lights not working and delays in changing the bulbs/fittings, and no trees being planted. Outside EPIP, the complaints are

mainly to do with service roads being of poor quality, constant traffic jams, and problems due to haphazard parking.

Contribution to the national economy but little connection with the local economy

The KIADB is proud of EPIP’s increasing contribution to national exports over the years (see Table No. 4 below). Particularly spectacular increases in exports were witnessed between April 2004 and 2005 and April 2005 and 2006.

Table No. 4 EPIP contribution to National Exports

Year	Rs In Crores
Jan-Dec 1998	35.59
Jan-Dec 1999	88.21
Jan-Dec 2000	69.66
1-4-2000 to 31-3-2001	361.36
1-4-2001 to 31-3-2002	774.75
1-4-2002 to 31-3-2003	1043.31
1-4-2003 to 31-3-2004	1469.46
1-4-2004 to 31-3-2005	2963.12
1-4-2005 to 31-3-2006	7056.91
Total	13862.91

Source: KIADB interviews May 2007

Despite the tremendous export contribution, there are minimal positive spillovers of this large industrial park on the local economies of surrounding areas (including Hoodi village and Kaverinagar slum). EPIP has not resulted in the creation of any jobs from the surrounding areas except indirectly through creating higher traffic on the main roads. To cater to this higher foot traffic, vendors from Hoodi and Kaverinagar have started small businesses. There are around 35 – 40 cart-vendors on both sides of the Whitefield main road. Juice, food, cigarettes, pan and fruits are sold in these shops. There are telephone booths, tea and coffee shops and tender coconut shops too. Most of the vendors are localites. The engineers and other staff of the companies shop from these carts. Pan and cigarettes are sold more compared to other products.

No connections to local government, instead advocating for governance of EPIP as an independent enclave

EPIP companies also have almost no connections with the local government. Even revenue contributions to the Mahadevpura CMC were lower than expected. The CMC collects about 8-10 crores per year from EPIP in property taxes but many companies do not pay. They argue that even if they pay they do not see any result. There is no money that is ploughed back into infrastructure in EPIP from the property tax they pay so why should they pay?

About a year ago, some EPIP companies created and registered their association, called the Export Processing Industrial Park Association. It is presently conducting discussions with KIADB to get control of maintenance in EPIP. While the association might decide to charge more from each company, companies will be ready to pay because they will know that it will be used properly, claims an association representative. Right now they’re not getting anything for their money. The EPIP Association plans to model itself after the Electronic City Association⁹ which,

⁹ Most industry associations are trying to gain independent status because, they argue, managing their area by themselves is more cost effective, results in better services, and they do not want to come under the authority of a civic authority.

while it doesn't have full powers to govern over its area, does have considerable powers because its association was formed many years ago and is rich from collections from Electronic City companies over the years. The Electronic City Association has authority over the maintenance of their facilities. They actually employ 90 security guards along Hosur Road to guide traffic; traffic regulation is not done by the traffic police. Electronic City association is now trying to get designated as a township. It will then have complete control over its jurisdiction and its only connection with the ULSG where it is situated will be to surrender to it a proportion of the property tax it collects.



Cleaning windows in ITPL



A house in Hoodi Village

Decline in SSIs and deindustrialization

By 1995 Hoodi locals report commencement of rapid sale of lands and the complete cessation of agricultural activities. KIADB had started allotting sites to companies in EPIP and ITPL and construction started. As a result, migration of sub-contractors and workers increased and they came to reside in surrounding areas. Demands for rented houses increased and rents increased dramatically. At about this time multinational companies also started coming in. This period also witnessed a decline in SSIs in Whitefield. The reasons cited for the closure of SSIs are many: power and water shortages, non-construction of units after taking loans, lack of manpower, breakdown of machinery, bad management, selling due to increase in land value, union problems, and lack of demand for products. Many of the SSIs were closely linked to each other, each supplying the other; therefore when one closed it set in motion a ripple effect which prompted the closure of other SSIs.

Some SSI companies were sold to developers. Some SSIs who were subcontractors sold their lands to software companies and shifted to other industrial estates like Malur¹⁰, Nelamangala and Peenya to be closer to their buyers. Subcontractors manufacture one specific product which they then send to different industrial areas for alignment. This increases transportation costs and time spent on transportation. It therefore made sense for these companies to shift to a less expensive location nearer to where their product is sent. Bhoruka steel company, for instance, sold its premises to a software company and shifted to Doddaballapur where there is a KIADB industrial area which provides the same facilities. Many employees have shifted from Hoodi to Doddaballapur although a few people still commute from Hoodi in a company vehicle.

¹⁰ There are also plans to build a direct road from Malur Industrial Estate to Hope Farm on the Whitefield main road.

Some SSIs like Andhra steel company closed because of labour union problems. Sometimes the management filed cases against the union leaders which might result in a settlement being made between workers and company owners. SSI workers then had to look for other means of livelihood. Ex-employees report that many of them took up daily wage labour as a way to make a living.

Several SSI owners and employees explained that KIADB gives undeveloped land to SSIs but SSIs do not have the capacity to develop the site on their own or to invest in backup infrastructure, like generators, but depend solely on publicly provided infrastructure. The end result is that SSIs have poorer quality infrastructure and facilities. They compared this to the ITPL and EPIP which were developed to “world class” standards by the KIADB and large private developers and/or companies. One SSI owner said that KEB took months and sometimes years to give them new connections and raided them regularly to collect bribes. By contrast, big industries in EPIP are not raided and they also got 24 hour dedicated power supply. He added that if government had invested 10% of what it invested on the IT Park on SSIs for power supply, most of them would not have closed down and more employment opportunities would have been created for unskilled workers in the rural areas (see Figure No. 3). As it is, more than 1500 workers lost their jobs due to closure of factories.

When faced with increasing land values and high operating costs, SSIs starting closing. Now there are very few still functioning SSIs in this area. The few that remain face additional pressure from the KIADB and IT companies to vacate for higher value adding IT industries. Residents claim that the KIADB and large IT companies are pushing for eviction of SSIs citing high levels of noise and environmental pollution¹¹. The entry of IT companies, campuses and high-end residential developments is therefore associated with deindustrialization and the shift of industrial activity south-east (towards Bommasandra and Hosur) and further north (Malur).

Figure No. 3

¹¹ The notion of assembling and converting industrial plots into larger complexes for commercial or high-end residential developments was facilitated and opened up as an institutional procedure during the Chief Ministership of Deve Gowda in the mid nineties, says Benjamin et al (2001), a practice that became more widespread in early 2000s.

Govt policy for SSIs Vs Software

Policy for SSI Industrial areas	Policy for EPIP
No assured power, water, road infrastructure	Dedicated power, unlimited Cauvery water, GOI-GOK supported roads
Generates considerable local employment	No direct local jobs; indirect opps from vending, petty shops, selling water
Size of site allotted less	Size of site allotted much more
Minimal or no tax waivers	<ul style="list-style-type: none"> •Many tax waivers under Mahiti (Millennium IT Policy) •Under EPIP Scheme, GOI supplied 100 mn grant and GOK 85 mn grant to set up Phase I; KIADB given maintenance grant of 2% of export turnover of units for 1st 5 yrs (88 mn recd till 2002)
Many spillover effects locally-jobs	Contribution to national economy but minimal local spillovers

Local land development circuits

The construction of apartment buildings and private layouts were major activities in the Hoodi area from 1995 to 2000. These catered to the rush of highly skilled migrants working in software into the area. Constructing houses for giving out on rent became one of the most common ways to make a living in Hoodi. Hoodi town developed from the site of the Hoodi bus stand situated on the main Whitefield Road. Private layouts were developed around the old village settlement (see map) on both sides of the Whitefield main road. In 1996, with the real estate business just taking off in Hoodi it was no coincidence that Hoodi village, which had been notified as part of the newly created Mahadevpura CMC just prior, had its first elections to the CMC. As a CMC, urbanization and development could proceed at a much more rapid pace.

Developers used members of the CMC as middlemen in getting lands. CMC members approached farmers to sell their lands by giving a few thousand as a token advance. They then sold the land to developers at thrice the amount they purchased from farmers. Politicians thus benefited greatly from land transactions and urbanization. Localites cite the example of Gopal Reddy, a big land owner in Hoodi. He won the first CMC elections and, during his tenure, earned crores of rupees through buying and selling real estate in this way. He also constructed 2- 3 layouts and is getting Rs.75,000 in rental income per month. In the next elections, as the area was reserved for women, he made his wife contest from Congress ticket and she won the elections.

Initially layouts were developed by small developers- sometimes by localites such as the Shirdi Sai layout- for lower to middle income groups. Infrastructure investment in these locations was done incrementally. A road was built or improved slowly, bore wells were dug over time. In parallel, the occupants regularized their claims through various government programmes, like Ashraya, or with the support of dalit organizations like DSS and KJS. Hoodi villagers got loans through councilors like Gopala Reddy which they used to build houses.

Box 1 Dalit sanghas in Hoodi

In the name of countering historical oppression and lack of resources, dalit and bhovi sanghas have emerged. Dasappa, a dalit leader and an activist from Karnataka Janandolana Samithi (KJS), and D Nagaraj are prominent in Hoodi. They formed the Ambedkar Youth Association which is led by D Nagaraj. This organization is also part of the Karnataka Dalit Association. The Ambedkar Youth Association has been active in the development of the area: it got funds from Mahadevpura CMC to build a community hall (Ambedkar Bhavan); it helped access loans for dalit youths; and it has pushed for better roads and the supply of water through public taps. While the sangha has negotiated with the Mahadevpura CMC on behalf of the Dalit community to get access to CMC resources, by far the more prominent part of its activities have been related to land. Local KJS branches have supported the identification and occupancy of *gomala* land by dalits and state level leaders of KJS negotiate with state level political leaders to get this land regularized. KJS state leaders also negotiate with state government and KIADB for better compensation when grant land is acquired. The sangha even runs a real estate office in K R Puram.

Dalit sanghas are characterized by close connections with local political circuits. All the committee members of the Sangha are part of JD(S). One member served as Panchayat member and later became president of Hoodi Gram Panchayat. Earlier, members of Ambedkar Association and Bhovi Sangha were the supporters of JD(S). Due to a falling out with JD(S) party in 2001-02, they became supporters of the Congress Party.

While sanghas have emerged ostensibly to advance the dalit community at large, several dalits talk of their disillusionment with dalit sanghas due to inactivity, fractures within the dalit hierarchy or the corruption of its leaders. Particularly with respect to land cases, dalit leaders are reputed to have cheated many dalit families.

Financing of infrastructure was through municipal funds and those allotted to various schemes at different levels of local government. Residents lobbied for better infrastructure through their leaders connected to different parties and different levels of government – gram panchayat, CMC and the state government. The move to becoming a CMC in 1996 meant political leaders could tap into larger funds. Benjamin et al (2001) notes that the number of members in local government representing a particular area strongly influences allocation of investments to that area. Tapping into a consolidated pool of funds like MLA funds via their leaders can be key to sanctioning larger investments like those needed for water supply.

By the late nineties, however, soaring land prices had attracted the bigger developers. Layouts began to be developed by larger construction companies like Puruvankara, Golden Apartments, Gopalrao apartments, and Sai apartments. All these companies entered the area with the help of local real estate agencies. The layouts are characterized by better amenities and higher rents than Hoodi village. Most of the sites in the layouts have been purchased by higher skilled employees working in the IT sector, many of whom are migrants from other states.

By 1997, the constant demands from industry to improve road connectivity bore fruit. The KIADB through the GoI's Critical Infrastructure Balance Scheme got matching Central and state funds to upgrade two roads connecting EPIP and ITPL with the city and with the airport. The KIADB also hoped that pushing through this large investment of Rs 19 cr would result in increasing occupancy and construction in EPIP, which was rather low before 2000. Local informants recollect that the KIADB provided huge subsidies to General Electric, the Sai Baba hospital, and Vaidehi hospital in EPIP.

During 1995, the price for one acre was between Rs 20-40 lakhs. By 1998-99, with large IT companies and apartment buildings being constructed here, the demand for land increased and the price increased to Rs.50-80 lakhs. The number and volume of land transactions increased and real estate became big business. Several residents report resigning their government jobs to become real estate agents. In 2001-2002, the land values touched Rs.1 crore per acre. Now land prices are reported to be Rs 1500-2200/sft in the village, Rs 1200-2000/sft in *gramthana*, Rs 2000-3000/sft

in layouts on the main road, and Rs 2500-2800/sft in BDA approved layouts. As can be seen, prices are directly proportional to access to higher quality infrastructure, with layouts with better road connectivity and authorized BDA layouts with planned facilities being more expensive.

The story is similar for rental housing. Twenty years ago, the rent of a normal house in Hoodi village was around Rs.20. Even in the early nineties, houses were available at Rs.300/month. Now rents have increased by an average of 3 to 4 times and rental deposits have increased from 2 months rent to 10 months. In Hoodi layouts rents have begun to be calculated according to square footage. Rents range from Rs.2500- 3500 for single bedroom houses to Rs. 75000- 3 lakhs for a 3 year lease.

Livelihood characteristics and shifts over time

There has been a complete shift from agriculture to other means of livelihood. Those who have sold their lands can be categorized on the basis of land ownership. The large farmers (ownership over 5 acres) mostly comprise Reddy and Thigala farmers. They have reinvested the money in land (buying between 20-40 acres) in other cities and towns of Karnataka, including Malur, Kolar, and Hosakote. They have also invested in rental housing and their monthly rental income is high, typically more than Rs 1 lakh per month. Some of them have gone into the real estate and developer business. 30 families have bore wells and are selling water but 2 families out of these are the major sellers of water. Some of them are graduates.

The medium farmers (ownership 2-5 acres) are of different castes- SC/STs, Kurubas and other minority communities. Rental income is one of their main sources of income although some are in the finance business, and some have reinvested the money from selling their land in two wheelers, mini tempos/matadors, and auto rickshaws. The small farmers (less than 2 acres) are mostly SCs. Some of them have invested in rental properties and in small businesses and petty shops. Some of these families have lost their profits from land sales due to their alcoholism and lavish life style. Presently this group of people is working as daily wage labour, as domestic help, factory employees, garment employees, security employees, as vendors and in petty businesses.

There are 150-170 Muslim families in Hoodi, most of them fairly recent entrants to the locality. Many of them are engaged in collecting old materials like paper, steel, and iron. Some run meat stalls. About 25-30% people in Hoodi are employees of SSI factories. In the last 5-6 years, there is considerable business activity in Hoodi. People from other places come here in search of work and settle here. There are many companies in the area. As a result, people report that there are considerable job opportunities.

High rates of migration

There is a very high proportion of migrants to original settlers in Hoodi, some estimate as many as 80% are migrants. Older migrants are from Tamil Nadu and Andhra Pradesh. Newer migrants are from North Karnataka and North India. Migrants do a variety of work: in construction, as painters, plumbers, masons, marble cutters, in garment factories, in tailoring, as helpers. Some have their own small enterprises like running autos and taxis, operating small workshops like road repairs, small scale industries. A few work in companies as drivers, security guards, and in house keeping, jobs outsourced by IT companies and apartments in the Whitefield area. They typically earn Rs.3500/- to Rs.5,000/- per month as salary. 3- 4 members in the family go for work.

Most migrants are farmers who come to Hoodi because of failure of rains in their native place and the lack of employment opportunities there. Wage labour also pays better in Bangalore. One

informant cited wages of Rs 200-250 in Bangalore compared to Rs 100-120 for similar type of work near his native place in rural Andhra Pradesh. Migrants in Hoodi maintain strong ties with their native places. Sometimes some family members remain to look after parents or lands. Sometimes, they send money and go back periodically to take care of land. In general, they go home for festivals.

New migrants in construction work in Hoodi (and in Bellandur as we will see later) typically live in temporary sheds that have been constructed by developers of asbestos sheets. Often called tents, each fetches Rs.250- 300 as rent. There are around 300 – 400 tents in Hoodi. Typically, 90% of the migrants living in these tents will go back to their native places and only 10% will settle here.



Migrant Workers Sheds in Bellandur

Migrant Workers Sheds in Hoodi

No changes in pattern of inequality and wealth in a transformed locality

What stands out in this narrative of Hoodi's transformation is the fact that the basic pattern of inequality and wealth has not changed: tremendous benefits have accrued to the land-rich Reddy and Gowda communities while the SC/ST community largely remains poor. The Gouda and Reddy communities own 80% of the total land in Hoodi village. The remaining 20% of land was owned by SCs and STs but the average size of their landholding was much smaller. Over time, as and when they needed money, SC/ST families leased or sold their land to Reddy families, or mortgaged it to banks. Much of this was sold well before the boom in land prices, starting in the 1950s. These families thus did not benefit from the increase in land value. There were cases where farmers like Appanna Shetty claimed they repaid their mortgage but did not get their land back.

Secondly, the SC/ST community occupied (mostly *gomala*) land through the support of KJS and local politicians. Their claims over land were typically embedded in customary forms of tenure like using *begar hukum* to cultivate gomala land or getting approval from *Bhoo- Nyaya Mandal* (land tribunal) and the Tahasildar (through forms No.7, No.7A and 56) for sanction of agricultural lands to them. However, dalit informants describe these efforts at land ownership as often unsuccessful. They say that the biggest reason for this was that the SC/ST community was not politically united and were easily manipulated by local landlords. During 1980-85, a few dalit leaders emerged to represent their community but mobilization proved difficult. Most dalits were surviving by doing daily wage labour. Many of them had been bonded labourers working in Vokkaliga and Reddy houses for between 15- 20 years. The large-scale acquisition of this land by

the KIADB (without compensation in the case of *gomala* and *jodidhar* land) therefore hit the SC/STs very hard because many of them were living and working on these lands and at one stroke they lost access to both a place to live and cultivation rights.

After losing their lands, some SC/ST families migrated away from Hoodi and some stayed on to do daily wage labour. To make enough money to live on, some dalits also do latrine pit cleaning work (similar to those Kengeri). While pit cleaning work pays more than wage labour, work conditions are very hard and informants talk about needing to drink heavily before they can do this work. Thus while the Reddy community is one community which has actually witnessed immigration with other Reddys migrating to Hoodi and buying lands from SC/ST families, SC/STs who have lost their lands have either left Hoodi or survive from day to day.

Kaverinagar Slum

How Kaverinagar was occupied and came into existence

Kaverinagar Slum formerly was in Mahadevpura CMC and now is in Mahadevpura Zone of BBMP. It has been in existence for the last 30-35 years. It was earlier part of Hoodi Gram Panchayat. It is situated on 23 acres of government land. SSI Industrial Areas surround Kaverinagar on three sides with the railway track bordering it on the fourth side (see Figure No. 2).

The slum was originally settled by members of the Bhovi community. 20 families first came and settled there to work as labourers in quarries in Kaverinagar. They built thatched tents for themselves. They were followed by migrants searching for work as agricultural labourers. An early settler described Kaverinagar as a jungle then. During 1980-85, small scale industries started functioning in the local industrial estates. Daily wage labourers who were employed in SSIs and in some of the steel factories like Cap Steel, Sharavati and Andhra Steel companies settled in Kaverinagar slum. People from neighbouring districts and states also started coming here in search of work and slowly settled here.

In the early nineties, D. Dasappa (the first member representing Kaverinagar Ward in Hoodi Gram Panchayat) encroached 5 acres of *gomala* and other land in the vicinity of Kaverinagar and started cultivation. There was no information on the ownership of this land in the records or in the Tehsildar's office. In 1996 people came to know that this was government land. This was when Mahadevpura CMC was dominated by the Congress Party. Then, under the leadership of MTB Nagaraj from Garudachar Palya, who was first councilor and later MLA, around 500 tents were constructed on this land. Free sites measuring 15x15, 11x8, and 10x15 were distributed by him. As there was no written document about the ownership of the land and as it was government land, there was tacit consent from the CMC allowing these people to live on this land and construct houses. No property tax has been collected to date and people do not possess any ownership documents or khatha for these houses.

Today, the population of Kaverinagar is about 25000 of which registered voters comprise 16000. 80% of them are SC/ST and Bhovis. The remaining include Gowdas, Kurubas, and Reddys. The number of Muslims has increased in recent years with the Muslim population now comprising around 2% of the total population. The ex-councilor, Mohammed Nasru, is a Muslim.

Kaverinagar has a large vote bank of 11000 registered voters. Locals have used this vote bank to consolidate their claims over land and to bargain with local elected representatives for infrastructure and basic services. Most residents have ration cards, voter identity cards and Below

Poverty Line (BPL) cards, enabling them to access government resources. Over time the settlement has grown in size and has gained access to water supply and electricity although drainage and toilets remain a huge problem. Sanitation is one of the biggest complaints of local residents, particularly women. There are only 2 working toilet complexes for the whole slum. These constantly get blocked and the situation is considerably worse in the monsoons when there is severe flooding. All the thatched houses have been converted into sheet houses (about 80%) and a few RCC houses (20%). Land prices have steadily risen with rented houses charging from Rs.500- 1500.

Livelihood characteristics and shifts over time

Formerly about 40% of SSI employees were staying in Kaverinagar. Now quarry work and SSI work has declined and those who were engaged in it are now going outside for work on construction sites, as petty traders, in small enterprises and as domestic workers. Many of these are BPL card holders. There are some middle income groups as well who work in private companies or in more skilled jobs like tailoring, electrical work, masonry work etc.

In Kaverinagar 70% of people are migrants. A majority of people in Kaverinagar slum are renters (80%). People migrate from within the state and outside, from places like Malur, Mandya, Hoskote, Srinivasapura, Mysore, Coorg, Gulbarga, Uttara Pradesh, Andhra Pradesh, Tamil Nadu. Most people are forced to migrate due to difficulties faced in making a living off agriculture. Local people boast that once people come to Kaverinagar, then they do not go to other places as the employment opportunities there are plentiful and rental housing is cheaper in Kaverinagar than in other areas in Whitefield.

Role of political representatives

MTB Nagaraj, former councilor and now MLA from neighboring Garudachar Palya, has played an important role in Kaverinagar's development. In the second CMC elections held during 2001-02, MTB Nagaraj contested from the area and won with big margin thus becoming a member of the CMC. Residents report that he did good work in the area. He is credited with paying Rs. 500 out of his pocket at the beginning of every month to several aged and physically challenged people living in the area. He has also helped people in the performance of weddings and other ceremonies. He has provided free sites, toilets, community bath rooms, and water tanks in the area. Later he contested legislature election from Hoskote constituency and won the seat. MTB Nagaraj still maintains his local connections by regularly taking part in celebrations like Ambedkar Jayanthi and other functions organized by local sanghas.

While Kaveri Nagar belongs to Varthur constituency, the territory of A Krishnappa, people do not go much to him for help. They do not participate if he organizes any functions. They say that he has not done any developmental work in the area nor is close to them. People still remember the injustice he perpetrated with regard to Hoodi's *gomala* land. This is in contrast to MTB Nagaraj who they have known from his first entry into politics as a member of the CMC.

MTB Nagaraj subsequently sponsored the candidacy of Mohammad Nasru and helped him to contest and win from Kaverinagar as the first Muslim councilor from the area. Mohammad Nasru lives in Kaverinagar slum and has also helped develop the area in several ways. He has distributed free sites to the poor- in 2006 he distributed 450-500 sites to poor groups for which he charged Rs 2500 sft. No legal land documents were given for these sites; people purchased them through general power of attorney (GPA). During his tenure the main road was tarred and cross roads were cemented. Nasru also used his contacts with the CMC to get government contract works for doing the roads and drainage in the area.

The Box below reveals the longstanding relationship between local politicians, MTB Nagaraj and Nasru, and a local dalit resident, Muniraju. Muniraju uses this relationship to move upward in life and the politicians gain the support of not merely one family but the local dalit sangha and its district level network.

Box 2 How residents access connections of councilors to improve their quality of life

KC Muniraju is a native of Malur taluk. His family is one of the original settlers of Kaverinagar whose members came here 40 years back and started living in thatched houses. His father was a bonded labourer for about 10-15 years in MTB Nagaraj's house in Garudachar Palya. Later his father joined Andhra Steel as a daily wage labourer and subsequently became a permanent employee. Then due to union problems, the company declared lock-out. It settled money on the employees. His father has 4 daughters and one son. 3 of his daughters were married to local people living in Kaveri Nagar. MTB Nagaraj helped them during the marriage of one of his sisters. All the three daughters got free sites distributed by MTB Nagaraj and constructed their own houses.

Muniraju is a member of the local Ambedkar Sangha and in 1996-97 was a JD(S) activist. All the committee members of the Dalit Sangha were part of JD(S). During the election in 1996, JD(S) Party promised Rs.50, 000 to improve the Ambedkar Sangha. KC Muniraju at this time was appointed as the president for SC/ST wing in Bangalore East Taluk. But later, when the promised money was not sanctioned to the Sangha, Sangha leaders switched to supporting the Congress party and KC Muniraju and other Sangha members followed him.

During the 2001-02 CMC elections, the Dalit Sangha supported MTB Nagaraj. Muniraju is well known to MTB Nagaraj and says: "He remembers my name very well." Presently, Muniraju is associating with the local CMC member Mohammed Nasru, who was given candidacy by MTB Nagaraj. Nasru normally gets government contract work through tender for doing roads and drainage. Muniraju executes these projects for Nasru. In the last 8-10 months, he has completed 5- 6 major works. Nasru pays Muniraju well for this. People consider him as Nasru's secretary.



Entrance to Kaverinagar Slum

Private layouts behind the railway line in Hoodi

The takeover of SSI land by corporate circuits and the advent of BBMP leads to an uneasy future for Kaverinagar

Although there are around 8000 households living in Kaverinagar, only a small portion of the slum is recognized and only 148 houses have ownership rights. While there is no formal security of tenure for most of Kaverinagar's inhabitants, to date they seem to have no visible fears of

eviction. The close connections with local politicians and MTB Nagaraj (who became MLA after being a councilor) and the tacit support of the local government in their occupation of the land are the main reasons for this. Areas like Kaverinagar have contributed to the political fortunes of people who are today significant political leaders and this has worked to support residents' claims over land and their struggle to access infrastructure. However, with the advent of BBMP and the resultant shifts in political structure and power dynamics, this could change. The support of the CMC – turning a blind eye to occupation of the land and providing infrastructure– has been an important factor in Kaverinagar's development. With the formation of BBMP and the greater distance between residents and the local political process and leaders, residents' bargaining powers have been weakened.

Kaverinagar is in a prime location situated adjacent to industrial estates that are slated for closure and conversion into high end commercial and residential developments catering to the IT sector. Its physical proximity to the institutional circuit of land development centred round the KIADB and large developers poses a threat to its existence, one that has become stronger in recent years with the tighter controls over land markets in favour of large developers and large IT companies. The trend towards 'reforms' by parastatals like BWSSB in recent years and furthered by BBMP's formation, has served to exacerbate the contest for investment and infrastructure between poorer unplanned areas like Kaverinagar and more planned higher-end developments driven by KIADB.

KENGERI

Kengeri has an important place in history being the site of Tippu Sultan's Rest House and on the main route to Mysore. The Vrishabhavathi River runs to the south making Kengeri a water-rich locality in contrast to those in the north of the city, such as Mahadevpura. Kengeri town has grown up around the original Kengeri village, an old settlement covering wards 1-7 of present-day Kengeri TMC (see Figure No. 4). To most people Kengeri brings to mind the BDA developed satellite township (Kengeri satellite town- KST) conceptualized in the sixties as a place for people to live while working in Bangalore. KST comprises wards 11-13, 15-16, 18-19, and 20-22. Situated beyond Bangalore University's Nagara Bhavi Campus, Kengeri town is 15 km from the centre of the city.

Role of BDA: forming the Kengeri Satellite Township and Economically Weaker Section Quarters

The BDA has played a significant role in shaping the spatial and physical development in Kengeri. In the late sixties, the City Improvement Trust Board (CITB) as BDA was then, decided to develop a satellite township in Kengeri where people could live and come in for daily work to Bangalore city. In 1973-75 the BDA acquired about 100 ha land from 2 villages- Kengeri and Adgeri- to form KST. Only after the final notification was received did people realize land was going. The then Chairman of 17 villages, Chinappa, organized farmers to protest the acquisition. They submitted a memorandum to the government and to BDA. They marched from Kengeri to Vidhana Souda as a mark of their protest. In response the BDA used the police to threaten them. Although protests continued for about a year, there was no involvement of politicians in the farmers' struggle. Finally, bowing down to pressure from the police, farmers stopped their protests. All of them took compensation for their land, except 5 people who filed a case against the BDA. On facing continuous harassment, they withdrew the case 2 years later.

KST was designed as a series of 30x40, 40x60 and 50x80 sites set around a park. Sites were allotted in the 70s. Some of the initial allottees in KST sold their sites and shifted to other places. People nearby to Kengeri then bought the sites. However, most people did not construct houses or

occupy the area until much later- in the 90s and after 2000- and, similar to other BDA layouts, this one remained mostly vacant for a considerable time.

In the 70s, BDA also developed 3000 houses for D group government employees in the KST. These quarters came to be known as the economically weaker section (EWS) quarters. They were constructed on sites measuring 16x23 and located some distance away from the KST Park. Chief Minister Gundu Rao inaugurated the EWS Quarters which was constructed during his tenure. Allottees in EWS Quarters paid Rs 7000-12000 for their houses. Now, however, only 10% of the original allottees are living in EWS Quarters; many of them sold their properties and moved away. Only 10% of houses are the original construction.

In the early 90s, the BDA conceptualized an Outer Ring Road (ORR) for Bangalore. The ring road alignment was initially planned to go via Kengeri but then was changed ostensibly to save a distance of almost 12 km (from 17 reduced to 5.5 km). This is the alignment given in the Master Plan of 1995. The BDA explained that the ORR did not go via Kengeri in order to reduce ORR costs. What seems clear, however, is that there was no strong industry lobby in Kengeri, as in Mahadevpura, to demand better road connectivity. Kengeri was still a small town with a largely retired service population. There were almost no large commercial developments and only a few large industries close by (eg. the Toyota factory in Bidadi industrial area). Kengeri with its middle to lower middle class population (compared to the upper middle class and rich population seen in Bellandur and Mahadevpura) was therefore not considered 'high growth'. In fact, Kengeri village and the main street, Bazaar Street, which is the former Bangalore Mysore road, remains much the same as it used to be.



BDA Park in KST



SJR School in KST- built 3 years ago



Original construction in EWS Quarters



New construction in EWS Quarters



Ward 3 of Kengeri Village



Kasthuramma Slum in Ward 3 Kengeri

The fact that the ORR did not go via Kengeri meant that land values did not rise sharply from the late nineties (as in Bellandur) but remained relatively stable till after 2003 when the Bangalore Mysore Highway began to be upgraded and an arterial road under the TMC's jurisdiction was improved and used as a link between the ORR and Kengeri. Even after the Mysore Highway was upgraded, land prices were lower than Bellandur and developments along the main road are smaller and cater less to the upper classes. Perhaps this is because Kengeri is dominated by Kannada-speaking, older middle classes and newer migrants as Mysore road is one of the first destinations for within-state migrants to Bangalore. It is also more congested.

In the 90s the BDA also began large scale land acquisition for several planned layouts in the vicinity of Kengeri- the Nagara Bhavi layout, Banashankari 6th Stage layout, and Sir M Visveswaraya Layouts. Since land prices were lower in Kengeri and there was less private layout and construction activity, it was easier for the BDA to develop layouts in the area¹². More than 5000 acres of land was acquired for these layouts as well as for the ORR in these sections. Banashankari 6th Stage Layout is in the vicinity of the Bangalore Mysore Infrastructure Corridor (BMIC), a mega roads project that was initiated in 1995. BDA sites come at a premium because they have reliable, well planned infrastructure- a commitment to provide Cauvery water, UGD, and roads, and largely middle class occupants who can afford to pay for these services. In 1997,

¹² This is in contrast to Mahadevpura and Bellandur which are dominated by private developments and where there are almost no BDA layouts.

the BWSSB set up a service station in KST and started providing Cauvery water. In between BDA sites, however, there are plenty of revenue sites where there are no facilities available.

With the allotment of sites in nearby BDA layouts in the late nineties and after 2000 and the provision of Cauvery water to KST in 1997, Kengeri became a more attractive place to live. Within KST, people started constructing houses. With greater development, also came plans to upgrade the Bangalore Mysore Highway. Under the Land Acquisition Act, the Karnataka Road Development Corporation Limited (KRDCL) acquired land for the Bangalore Mysore Highway. The Bangalore Mysore Highway which was started in 2000 and completed in 2005 has had a considerable direct impact on Kengeri. It has led to increases in real estate prices, and development along the main roads. There has been a spurt in educational institutions along the highway and in KST in the last 3-4 years. While the BMIC does not come within the jurisdiction of the TMC and so has had no direct impact, it has contributed to an increase in land prices and a shift from agriculture to other livelihood activities.

One of Kengeri's biggest advantages is that it is water-rich. Increasing water scarcity in northern and north-eastern portions of the city, has forced attention on the Kengeri area as an area of future growth. The Bangalore Mysore highway is proposed to become a national highway and the nearby Bidadi township to be developed by DLF, is strategically poised to become an IT township. This might well bring in considerable changes in the development pattern and kind of people living in Kengeri in the future.

Land values and land market

Currently about 70% of land in Kengeri has been developed or sold. People from the SC community owned land in prime areas but many sold it before land prices rose and so did not benefit from the boom in land prices. Before real estate prices rose (i.e, before 2000), land was valued at Rs.200 per sft. Now it has gone up to Rs.2500-3000/sft in KST. Single bed rooms are going for rents of Rs 3000- 5000/month. On the main road commercial rents are fixed at Rs 5000-10,000/sft. People have taken vacant land on the main road on rent, constructed temporary shops, and are doing business there. Sites in the EWS Quarters have increased in value by 3-4 times to Rs 12-15 lakhs per site (16x23 sft), and houses are valued at Rs 40 lakhs.

Livelihood characteristics and shifts over time in the sample areas

Ward 3 has a population of 10000 (voting population of 5000) and consists mainly of SC/ST people. One of Kengeri TMC's 3 recognized slums, Kasthuramma slum, is in ward 3¹³. Kasthuramma slum has been in existence for 30-40 yrs. It is located on 36 guntas of government land. In 2002-03 it was declared a slum by the Slum Board. The slum comprises 32 houses and 110 hutments where many coolies, sweepers and domestic workers live. All are SCs and most come from Andhra Pradesh.

In Kengeri village a few factories (mainly garment and juice factories) and construction activities (masons, carpenters, etc) provide employment. Garment workers are mostly migrants from within Karnataka- from places like Kanakapura, Ramanagaram, and Channapatna. There are about 30-40 street vendors in Kengeri village. Richer landlords and others in the village have initiated real estate and financier (lending) activities since land prices have been increasing since 2000. Those who own land have been selling their land or constructing houses for rent and living off the

¹³ The other 2 slums are Shivanagar (ward 14), and TMC slum (ward 4). Both were declared slums by the Slum Board in June 2007.

proceeds. The result is that about 20% of Ward 3's population are renters and rental houses are increasing in the village area due to rising demand. There are about 200-250 employees of the Maruti Toyota factory who live in rented houses in Kengeri- in KST and village area. This shift in livelihood and incomes has meant that people who suddenly have lots of money and time on their hand take up bad habits like drinking and gambling. This has caused accidents and harmed their health.

Most of Kasthuramma slum people were agriculture coolies in Kengeri who have now shifted to being vendors, housemaids, garment employees, plumbers, electricians, and operating their own businesses. A substantial amount of people living in Kengeri village, Kasthuramma slum, and KST are government employees - state level class I workers (IAS and IPS officers living in KST) and class III and IV workers (especially sweepers) living in EWS Quarters, village and slum respectively.

In the EWS quarters, 80% of people are government or private factory employees and street vendors. There are also real estate agents, construction labourers, maistries and people working in KST as housemaids. A few people are doing agriculture in surrounding areas of Kengeri. Many shops (including provision stores, wood works, and small hotels) have come up in EWS Quarters. The people running these shops are Malayalis, Andhras and Tamilians. Due to soaring land values, people have demolished the old structures. Some people have sold a portion of their land and have deposited the money in a fixed deposit in the bank. On the remaining portion they have constructed two to three storey houses. They are getting rents of 30,000- 50,000. Some local house owners in the village have divided their houses into 10 to 15 rooms which they give out to Rajarajeshwari Medical College students.

There are many educational institutions in the Kengeri area, particularly KST, which provide some employment and rentals for students and some staff (typically lower level) working there. Higher level staff tend to live in Bangalore and commute to Kengeri every day.

Local institutional circuits of land development: Dalit Sanghas, local government, and Slum Board

Kasthuramma slum has a Kasthuramma Slum Dwellers Welfare Association. The sangha formed with the objective of providing basic facilities through government. Senior DSS leaders have supported these demands. In 1996 Satyappa (Congress leader and TMC President) suggested registering the sangha, joining with DSS, and through DSS trying to get basic facilities and houses. After that all the slum dwellers went to Mavalli Shankar and joined DSS Ambedkar Vadha. For the last 10 years the sangha has negotiated with the TMC and with Slum Board for different amenities. However, a large part of their activities revolve around consolidating their claims over land and getting housing from local government and the Slum Board.

The DSS and its sister organization, the KJS, have played a crucial role in identifying gomala lands and supporting dalit occupation of these lands. In Ward 3, for instance, Kasthuramma Ambedkar Sangha members identified some *gomala* land near the railway station. Together with a maistry working in Kengeri, huts of 15x15 dimensions were constructed and distributed to dalits. Ponappa, who was working under the maistry worked free of charge for more than one week for the construction of Ambedkar Community Bhavan. In return Ponappa built a hut for himself and lived there for one year. Later he and his wife worked together, spent Rs. 15,000, and built a sheet house measuring 15x15.

There are a total of 142 BPL card holders in Ward 3. Everyone in the slum has a ration card and voter's identity card. Kasthuramma Ambedkar Sangha has played a key role in getting BPL cards,

ration cards and voter's identity cards. There are a substantial number of voters in the slum- about 800. With this vote bank, the sangha bargains for better services for residents at the time of elections. The sangha also effectively uses protests to lobby for infrastructure. If there is any DSS protest, 3-4 tempos pick up people and take them for the protests. A resident narrated how in the last 5-6 yrs, government officials have come 8-10 times to evict the slum so that the road can be widened but DSS is very strong and each time they have protested and managed to stop this.

During the Mysore Bangalore highway construction (2002-05) sangha members protested because the government demolished 110 of their huts. From Kengeri to Vidhana Souda they had a jatha and they also met the Chief Minister and the DC. Caving in to the pressure, government stopped the construction work and constructed a 2 storey building in Kasthuramma slum for 36 households who lived in the huts. At that time Mohan was an engineer in the Slum Board. He belongs to the SC community. The 32 houses constructed by Slum Board in Kasthuramma slum were under the VAMBAY scheme and originally allotted in Mysore, but Mohan got them transferred into Ward 3. These houses were allotted in the slum through the influence of Sanjeevappa and Shivanna, DSS leaders in the slum. Slum Board contributed Rs 60000 for each house of which 50% is a subsidy, and 50% has to be repaid. About 60% of people have bought their houses from Slum Board. 40% people are still paying monthly rent of Rs 300 to Slum Board. However, no legal documents stating ownership have been given to slum dwellers.

As the above narrative reveals, the DSS is a controlling influence in Ward 3. Whatever people want, they approach DSS and get it done through them only. Shivanna, the DSS Sangha leader who lives in Kasthuramma slum, is Bangalore South taluk DSS Secretary and has close connections to senior DSS leaders in the city and district. In the TMC's first election the Sangha supported a DSS activist's wife from Kasthuramma slum. She got elected and provided basic facilities like water, electricity, street lights, bore wells, widow pensions, and scholarships for students. It is connections with senior DSS leaders and with elected leaders that have enabled the sangha to effectively consolidate their claims over land, get access to housing, and get the Slum Board to declare Kasthuramma slum as a recognized slum in 2002-03.

The sangha also claims credit in getting the Slum Board to construct 86 new houses in Ward No. 14 (Arundathi Nagar) under the VAMBAY scheme for dalit people. Some people have shifted there. Currently, 75 more houses are being constructed by Slum Board through the VAMBAY scheme in Kasthuramma slum. 110 Slum dwellers have paid Rs 5100 to Slum Board as deposit. The cost of these units is the same as the earlier houses built. Slum Board will contribute Rs 60000 for each house of which 50% will be a subsidy, and 50% has to be repaid. Slum Board called a construction tender. The housing contract has been given to Sri Venkatesh Reddy from Kengeri itself. After the construction is over, slum people are planning to ask for a community hall and an anganwadi. The new houses have UGD, water connections and a toilet inside the house. They do not come with legal land documents however.

There is, however, considerable disillusionment with the dalit leadership in Kengeri. Lakshamma, a state level DSS women's federation member states that DSS groups collect money from members but often do not do good work. DSS leaders are affiliated with political parties and with local governments and they also have considerable muscle power at their disposal. They exploit their powerful position for personal gain. One of the most common ways of doing this is by identifying government land for sale, forging land documents, and then selling it to several sets of buyers or for inflated prices. It is therefore common for dalit sangha leaders to do well for themselves at the expense of the poor dalit members who they are supposed to be representing.

Local residents report similar disillusionment with regard to local councilors where the prime focus of their activities seems to be making money for themselves. One ex-councilor owns many houses in Kengeri village. He influenced the location of TMC bore wells placing them in proximity to houses he owns. He also made lots of money by giving illegal water connections to about 4500 people and charging them more than that charged by the corporation. Another councilor, Ramdoss, has for years been getting the contract for toilet pit cleaning and maintenance.

While levels of exploitation and oppression from agents like DSS sanghas and local politicians are high, it cannot be denied that these are deeply implicated in local institutional circuits of land development which are closely associated with incremental provision of infrastructure and services through municipal funds and government programs like VAMBE and Ashraya. These circuits are the only ways in which poor groups can access contested city resources to develop their unplanned, unauthorized localities.

Depressed condition of dalit contract sweepers

While the quality of basic services and infrastructure in Kengeri village and slums is in general poor, it is the condition of dalits that is particularly depressed. Many dalits living in Kasthuramma slum are contract sweepers for the TMC. Due to low salaries and not being paid on time, many TMC contract sweepers also do Bath Room/Toilet Pit cleaning work. By doing this sort of work, they earn a higher wage Rs. 500-1000 per day. But working conditions are very difficult and they have to drink heavily before they can do it. They regularly spend Rs.50-150 per day on alcohol. Apart from this, if any death occurs due to accidents in the TMC area (for e.g. death by falling under a train or death by falling in wells/tanks) the local police use dalit contract sweepers to remove the bodies of the deceased. For this work, the police pay very little, dalit informants report. Moreover, they are forced to drink heavily to be able to do this work.

Dalits also have to combat a long history of oppression. Till 1985 untouchability was practiced in Kengeri. 50 years ago in Kengeri village, Scheduled Caste people worked as bonded labourers in the houses of Gowda and Thigala communities. A resident narrates how he worked as a bonded labourer for 9 to 12 years in a Thigala household for payment of Re.1 per month. Besides this, he would also get two pairs of dresses per year and food.

How planned development translated to better services for KST

In KST almost all houses are owned and only 10-15% are tenants. KST is primarily middle class with Brahmins and Lingayats being the dominant communities. There are no BPL card holders in KST. In the EWS quarters there are more Kurubas, Gowdas, Lingayaths and SC/STs. Several informants testified as to the much better level and quality of amenities in KST compared to EWS Quarters and Kengeri village. All of Kengeri TMC was supplied with bore well water in the 70s and 80s. In 1997, BWSSB started service in KST including EWS (they set up a service station there) and from that time on Cauvery water has been provided in KST. Since water charges were included in site payments to BDA, no separate charge or Beneficiary Capital Contribution (BCC) was paid for Cauvery water. Now new houses are paying Rs 5000 to BDA for Cauvery water supply. UGD also was supplied upfront by BDA. This is in complete contrast to how services were provided in Kengeri village and Kasthuramma slum: incrementally over time, through the influence of local politicians and lower level TMC officials, and the advocacy of local associations, particularly dalit sanghas in association with district and state level dalit networks.

In return for better services, 85-90% of people in KST and 80-85% people in EWS Quarters are paying property tax. This is in contrast to Kasthuramma slum and Kengeri village where only 20% and 50% of residents are paying property tax respectively.

The distinctly better quality of infrastructure provided in KST (as compared to Kengeri village) was made possible because BDA obtained village land at little or no (in case of *gomala* land) costs and this together with the revenue generated by allotment of sites, subsidized its infrastructure development costs in these areas. BDA then remained in control of KST up to the early 2000's until a severe conflict erupted between BDA and the TMC for control of KST. The conflict centred round wresting control of the revenue from property tax collections in KST. The TMC took their struggle to the High Court. The Court judgment ruled in favour of the TMC and the BDA was forced to hand over KST to the TMC in 2003¹⁴.

BELLANDUR

Bellandur has been the only Gram Panchayat (GP) partly within the boundaries of Bangalore's Outer Ring Road. Constructed in the late nineties, the ring road was aligned such that it split the village of Bellandur. Located strategically off Hosur road and smack in the IT belt of the city, Bellandur has witnessed tremendous transformation (see Figure 5). Most of the big developers are developing large residential and commercial buildings in or near the GP. Construction activity and migration are dominant features of the local landscape. Earlier the population of Bellandur village comprised 50% from the Reddy community, 25% SC/ST population, 20% Thigalas and Madigas, and 5% Muslims. Today, migrants from Karnataka and North India comprise a large proportion of the population.

During 1989- 93 people in Bellandur became aware that KIADB and BDA were going to acquire land in the area for the ring road. Anticipating a boom, developers from Koramangala and Agara started buying lands from farmers. Farmers report that before buying they created fear in the minds of farmers that the government would forcibly acquire lands from them. And so some farmers sold their lands to these developers for Rs.2- 5 lakhs per acre. Most of the lands were sold to Krupendra Reddy and Gurusurthy Reddy based in Agara and to a few developers in Marathalli. Within weeks and months, the cost of the land increased. Thus when the Bellandur GP was formed as a response to the 73rd Amendment in 1994, farmers had started selling their lands and agriculture had stopped being the mainstay of the local community.

Resistance to BDA's land acquisition for the ORR

Land acquisition for the ring road started in '95-'96 by the BDA. The road that existed earlier was widened and upgraded to a 6 lane road corridor with a service road on each side. It has split Bellandur village which now lies on both sides of the ring road. This led to a severe struggle opposing the ring road by the Raitha Jagrithi Horatta Sangha. The Sangha was formed in 1996 comprising 14 villages (including Bellandur) on both sides of the ring road from Sarjapur Road to Old Madras Road. Due to local and high level political support, they stalled the land acquisition process for some time and were successful in reducing the amount of land acquired. The ring road main carriageway for this stretch was completed in July 2000.

The BDA initially wanted to acquire 250 m for a development zone on either side of the ring road from Sarjapur Road to KR Puram. Half of Bellandur village came within the development zone. A GP member argued that the BDA wanted to do this because it did not have money to build the ring road and so proposed to generate money for it by acquiring land from farmers at Rs 1.5 lakh/acre and then selling it to builders at Rs 700/sft to build layouts. Ultimately this didn't happen: the BDA was forced to drop the idea of the development zone due to the protests of

¹⁴ The BDA's bye laws do not insist on a definite time period by which BDA layouts need to be handed over to the relevant ULSG; all it says is that once all civil works are complete then the layout will be handed over. This means that handing over can be delayed for many years after sites have been allotted.

villagers. The extremely valuable land abutting the ring road still remains with Bellandur and farmers have constructed 1-2 floor buildings and given them out on rent.

Corporate institutional circuits: Land acquisition for big developers and IT companies via the KIADB

The ring road led to an increase in land prices and considerable real estate speculation. It created a spurt in the construction of high end commercial and residential buildings, which include auto showrooms, interior decoration shops, clubs (such as Country Club), restaurants, international schools and colleges. The high value of land and the proximity to the IT belt led to many companies demanding land in this locality. Similar to Whitefield, the KIADB stepped in to acquire land and pass it on to individual companies and developers. This saved developers and companies from messy one-on-one negotiations with local farmers that took time, and were more expensive and difficult.

Acquisition by the KIADB mainly started after the ring road was complete and road connectivity was established. Before that villagers had not even heard of KIADB. A panchayat member reports that first 120 acres was acquired for Infosys which, after protests was reduced to 90 acres. KIADB has since acquired a total of about 380 acres + some wetlands near Bellandur lake. This is part of KIADB's plans to convert the valley zone into a hi-tech zone claims Jagannath, the ex-GP President. Now about 80% of Bellandur lands have been acquired.

While real estate developers, village politicians and bureaucrats have benefited from the KIADB's land acquisition, it is smaller local land owners and landless who have suffered, say local farmers. "KIADB acquisitions are a complete threat to farmers. They have merciless rules, they don't consider our objections," says Jagannath. Locals say that when SC/ST people gave a memorandum to A Krishnappa, MLA, for Ashraya housing scheme in 1990-93, there was no government land in Bellandur village area to give them so they were allotted land 5 km away in Halanayakanahalli. Only 16 families went there even though they got khathas, ration cards and 30x40 sites to construct houses. This was because many people did not like that area so they did not go.

Local residents did not take the land acquisition lying down. Farmers of Bellandur and people from 5- 6 surrounding villages together formed the Raitha Horatta Samithi (Farmers Protest Campaign). The Samithi had several protests and gave appeals to the AC, DC, and KIADB. However, the Campaign lost its effectiveness more recently when it split into two groups. Some members took money from developers to stop their protests and when the others found out about this it created problems within the group, leading to the split.

The first major spurt in land prices happened in 2001. During 1993, the cost of the land was around Rs. 2.5 lakhs per acre and by 1995, it went upto Rs. 45 lakhs. By 2001, the price rose to Rs. 60- 75 lakhs per acre. Since 2006- 07, the price is calculated per sft and now ranges from Rs.3,500- 4,000/sft. With the entry of KIADB into the local land market after 2000, and particularly since 2003, has come mega commercial and residential projects and large developers. Big real estate groups like Mantri, Sobha, Salarpuria, Sun City, Primal Developers, and Prestige are big land owners/builders in this area now. They have developed approximately 400 acres in Bellandur GP area. Most of them have used the KIADB as a real estate broker to acquire their lands. Protests still continue in Bellandur at acquisition. When Sobha Developers applied for 900 acres to KIADB farmers protested so much that KIADB dropped the acquisition and now Sobha is directly buying from farmers. The deep local resistance to KIADB's land brokering role has meant that large developers can no longer solely rely on it for land. Rather they also forge links

with small local real estate developers and agents. A local real estate agent (see Box below) describes how private land acquisition works in Bellandur.

Box 3

How farm land is acquired privately: Linkages between real estate agents and big developers

There are many real estate agents in Bellandur ranging from big to very small. Each works in a different area. Some companies give each agent a project by fixing land requirements. Agents buy lands at cheaper prices from the farmers and then sell it at higher prices to the big developers. They get a profit of Rs. 15- 30 lakhs per acre. 60 % of the land in the GP has been sold in this way.

Normally the real estate agent and farmer fix a rate for a parcel of land after considering the status of the land and how much money would have to be spent to complete the legal formalities (khatha etc). The farmer gives the agent 1- 2% of that amount. Then the developer pays the farmer part of the total value for the land as an advance. Developers also give the agent 1% of the money they have given to the party. Normally, to get the details of the land from Taluk office, land records section, and registration office, agents have to spend money from their own pockets. Sometimes they do not recover this money due to problems with the land title, or if disputes between land owners and developers arise regarding the percentage to be paid. If the process goes off smoothly and agents know the procedures related to land documents properly then they recover their money.

Most of the big developers have offices in Koramangala, Jayanagara, Ulsoor. They normally do not stay in one place for long but often shift their offices. Most of the developers have a political background, with connections to MLAs and MPs. They normally appoint people in their offices who have served in various government departments and in the Judiciary- like retired judges of Civil and High courts, retired tehsildars, retired revenue officials, retired IAS officers and retired police officials.

If any land is in dispute and the court has to be approached, all these people discuss the case and then take a decision. If they all agree there is a high likelihood of winning, then only they file a case in court. They have won several cases in High Court and even in Supreme Court. They make an agreement with the land owners before filing the case saying only if we win the case will we give you money for the land. If we lose, you can keep the amount paid to you as advance. The big developers who have good contacts with government manage to convince the concerned officials and resolve disputes. They also discuss with acting judges to ensure the case is won in their favour. If money is there, anything can be done. The developers have a lot of money; most of them have black money. They have cheated farmers and they cheated real estate agents (middlemen).

Livelihood and demographic characteristics and shifts over time

The population in Bellandur GP used to depend mostly on agriculture. The Thigala community cultivated vegetables and flowers. The SC/ST community depended on daily wage labour, dairy farming and worked as contract farmers in Reddy community owned land on the basis of 50% sharing the yield. Still some paddy is cultivated in nearby lands. At the time of the construction of the ring road in 1996, the construction of big apartments started. Real estate business activities also began locally during that time. High land values meant that no one wanted to farm any more as land owners could make Rs 1.5 lakhs a month on 1 acre by constructing houses for rent or a temporary shed for use by migrants. Now the Reddys who are the big landlords in the area are involved in the business of real estate, finance and selling water. The Thigala community depends on retail business, selling flowers, selling vegetables and dairy. The SC/ST community sells milk, does daily wage labour and some people also work in the garment industry.

The demographic makeup has changed with the increase in rental houses, and the entry of different migrant populations such as labour classes, students, and software employees. To cater to these populations, shops and hotels have sprung up. Villagers are involved in real estate

activities, operating small enterprises like petrol bunks and petty shops and one person from the village, Sun City Developers, is involved in large scale land development.

Traffic has also increased considerably. The coming of the ring road and increased development has led to an increase in incomes, primarily of land owners, but also due to increase in entrepreneurial opportunities. There are less BPL card holders in the GP and more APL card holders. Tile houses have become sheet and then RCC houses. Despite this development, several villagers say that only local politicians and the richest ten percentage of people (i.e, those who own land) in the village have improved their quality of life as a result of the increase in land prices and the development spurred by the ring road.

Bellandur GP has witnessed record numbers of migrants over the last few years. In Bellandur many migrants construction workers live in temporary sheds constructed by large developers. Bellandur has many more sheds than Hoodi. The company rents the land, constructs the sheds, and provides basic facilities like water and toilets. Each shed holds between 2-6 people. They cook for themselves using firewood from a coconut grove nearby and what is available at the worksite. These workers don't have ration cards and voter identity cards however and do not have any real bargaining power. They have to rely on the good will of developers to provide basic services. But they report being satisfied that the pay they get here is better than what they would be earning at home.

Women work as domestic help and as cooks in nearby apartments. Men work as lift operators, security guards, office assistants, electricians, plumbers, tailors, ironers, drivers and civil contractors. They also work in gardening, house keeping, operating small workshops, businesses, hostels, and schools. The number, variety of and scope for jobs has increased with the completion of the ring road, the setting up of IT/BT companies and construction of new apartments. Because of this the population of the area has increased, business activities have also increased and this has resulted in an increase of restaurants, provision and other stores.

Where do migrants come from and how do migrants land up in Bellandur

A majority of the migrants in Bellandur and in Devarabisanahalli are from districts in Karnataka (Raichur, Gulbarga, Kanakapura, Mysore and Mandya), neighboring states (Andhra Pradesh- AP) and North India (Rajasthan, Orissa, and West Bengal). Preference in the construction work is given to outsiders, because they are said to be more hard-working than the locals. Typically each region has its own skill specialization. Rajasthanis for instance are involved in carpentry, marble, painting and in construction work. Painters, carpenters, bar benders, construction coolies and maistries are migrants from AP. Many of these people are living in rented houses in the newly developed Janata colony of Devarabisanahally. Compared to other areas, rent is low in the new colony although facilities are commensurately poor.

Some migrants come directly to Bellandur while some come because they have relatives in Bellandur who help them to get jobs and find houses. Venkatappa's relative was involved in selling bananas in Bellandur but then he got a job as a driver. So Venkatappa moved to Bellandur from Andhra Pradesh as there was no rain in his native place and took his place vending bananas. His family land is being cultivated by his brother and the yield is shared by them. His family came with him. His wife and daughter work as helpers in nearby Shahi Exports earning Rs 2500 each per month. His son is now learning the banana business.

Other migrants come through maistries or contractors. One migrant, Lal Sab Sheikh Syed, is a native of Raichur and got work as a construction labourer in a company because the maistry working for the company is also from Raichur. All employees living in the migrant workers shed

settlement are from Raichur or Gulbarga, and 15 of the families are from the same village as himself. There are 3000 labourers working in this company. Many other migrants learn of construction related work available here through friends and relatives. They work 2 years with one contractor mainly on apartment buildings. After one project finishes, it takes them about 2-3 months to find the next construction project. There is a higher chance of finding work for specialized skills. After living in Bangalore for some time, migrants hope to consolidate themselves and move into a pucca house.

Men get Rs. 80/day and women get Rs.50- 60/day as wages. Work timings are from 9.00 – 5.00 pm with an overtime of Rs 15/hour. The company provides food for those who work after 5.00 pm. There is wide variation in wages according to skill levels with masons being paid Rs.150- Rs.200 while those who lay tiles are paid Rs. 100. Wages are paid every 15 days. Employees can get an advance in the first week and third week from the Maistry. Only after completion of the project does the maistry pay workers their complete dues. The maistry gets a much higher income as he is directly linked with the company and serves as a middle man.



New construction in Bellandur Village

Low income rental housing in Bellandur Village

Impact of high migration on the local economy

The migrant population is a shifting population. Due to their constant mobility, it is difficult to include them in the census or ensure they have ration cards and voter's identity cards. The Bellandur anganwadi worker said "If we go to collect data for issuing ration cards only 25 out of 100 will be correct; 75 % would have gone to some other place or will not be available." This has been a big problem for the GP in the last 10-15 years. Every year the voters list changes because new people have come and others have left. This is not confined to migrant workers in sheds. In the main road, 95% of people living in the large apartments are not on the voters list because they too frequently move.

With the huge influx of migrants, rental units are in great demand. Infrastructure is also under greater strain. Over the past 6 years, the number of children coming to the GP school has increased and the population of the village has also increased due to in-migration. Locals complain that the ration shop does not distribute rations to them citing unavailability but instead sells them to migrants who are living in the sheds. A flourishing black market exists for rations because migrants do not have ration cards and are prepared to pay extra to get rations. Overall, leaders like Jagannath bemoan that there is no agricultural land left, that the unity and identity of

the village itself has vanished. Another serious issue is that the village has had all its common lands acquired and now has no land for common facilities like landfills or playgrounds.

Local provisioning of infrastructure: Bellandur GP as exemplar of decentralized governance

In 1994 itself Bellandur GP had a 20 member elected Panchayat in place- well before the formation of elected councils in the 7 CMCs and 1 TMC around Bangalore in 1996. This was a Panchayat with a vision of planned development and responsibility to the citizens and electorate which was able to provide services such as water supply and sewerage as well as solid waste management and roads in a phased manner.

In 1993 the water facility was good. A drainage system was in place but during the rainy season water did not flow so at times people would fall due to the muddy condition of the roads. Roads were very narrow and only the main road located along the lake was tarred. Streets were lit by small bulbs. With the coming of the GP, the roads were widened, stone roads and overhead tanks were laid. Underground drainage came to Bellandur village in 1996-97 along with tarred roads. Sodium vapour lights and tube lights were put on the streets during the same period. Under the Grama Nirmala scheme, all the roads became cement roads, each road was named, and cross roads and mains were given numbers. This work happened in response to enlightened local leadership and demands articulated by the well-functioning Gram Sabha.

The GP had an annual budget of approximately Rs 2-3 cr and this meant that each of the 10 wards got about Rs 25 lakhs. Out of this 22.5% was dedicated to expenditure on SC/STs¹⁵. The GP conducted a comprehensive action plan process that consisted of reviewing the previous year's balance (April to March), disclosing to the gram sabha how much tax was collected the previous year and how much was projected to be collected in the current year, the total available for current year expenditure as well as expectations and needs according to headings (health, education etc). Some money was also kept for emergency works and non planning works. All ward works went to the gram sabha for people to articulate their demands; this list was then prioritized and a final action plan devised and implemented.

After the ring road came, the tax revenue received from apartments, sites and shops increased tremendously and the GP used this money to carry out further village development works. In 2003, the Panchayat President, Jagannath Reddy, started ward sabhas comprising all the voting residents of the ward (about 400 voters per ward)¹⁶. The ward sabhas further decentralized governance in the GP with the GP Secretary publicly giving ward level information on works done in each ward and how much was spent on each. The ward sabha then decided what works they wanted to do the following year. This then went to the gram sabha where a final decision was taken.

Local institutional circuits of land development

¹⁵ If there are no SC/STs in ward then they have to reallocate it to those wards that have SC/STs. About 6 wards in GP have SC/STs

¹⁶ Both the gram sabha and ward sabha comprise registered voters- not all those above voting age but whose names appear in voters list. They have to be called every 6 months but the GP can call them earlier- every 2 months- if necessary.

Local political leaders were instrumental in Bellandur's development. Jagannath Reddy is the best known political leader in the area. He served as president of Bellandur Panchayat for 7 years and played a vital role in developing the village. Under his tenure all the documents relating to the Panchayat were computerized, the first in the entire country. The JD(S) Party controlled the Bellandur Panchayat for almost 10 years. Now there has been a shift in political fortunes with the BJP dominating Bellandur (60%), followed by the Congress Party.

Political leaders play a key role in helping poor groups gain access to land (see Box 4 below).

Box 4

How SC families got access to land in Devarabisanahalli and its current uncertain fate at the hands of BBMP

Many of the SC community in Devarabisanahalli live in a new colony called Janata colony constructed by local political leaders on *gomala* land. Formed about 35 years ago it is about 45 acres in area. Political leaders got gramathana land allocated by the BDA and sold it to 13 households who were given land documents. Subsequently, political leaders sold surrounding *gomala* land in guntas to SC families at prices varying from 30,000- 300000 per gunta. The SC families first constructed huts and then houses. Gradually electricity and water supply was given to these houses through the influence of local leaders. But no UGD was provided because no documents were available proving ownership. In 2000, 5-6 houses were built through the Ashraya scheme. No registration of the land was possible. An informant revealed that as soon as one bought the site, one should build a house and live in the house otherwise the same land would be sold to 3-4 other people. In this way the construction of houses increased day by day and about 1200 houses were constructed in the area in 2004. Today there are about 3000 families living in Janata Colony.

Local politicians claim that they have applied to the government to legalize the houses. A court case is pending in high court in this regard. But nobody knows what will happen now that the village falls under BBMP. The local people are very fearful. Local leaders too are silent on this issue. Earlier the tehsildar, and the Revenue inspector would issue regularization documents. Now they are under pressure by the higher authorities. A majority of the people of the colony belong to the Dalit community. They have low levels of education and depend on daily wage labour for a livelihood. This is why people suspect they have not got authorization for the colony. Recently the DC announced that 246 houses will get patta but there is no certainty about whether and when this will happen.

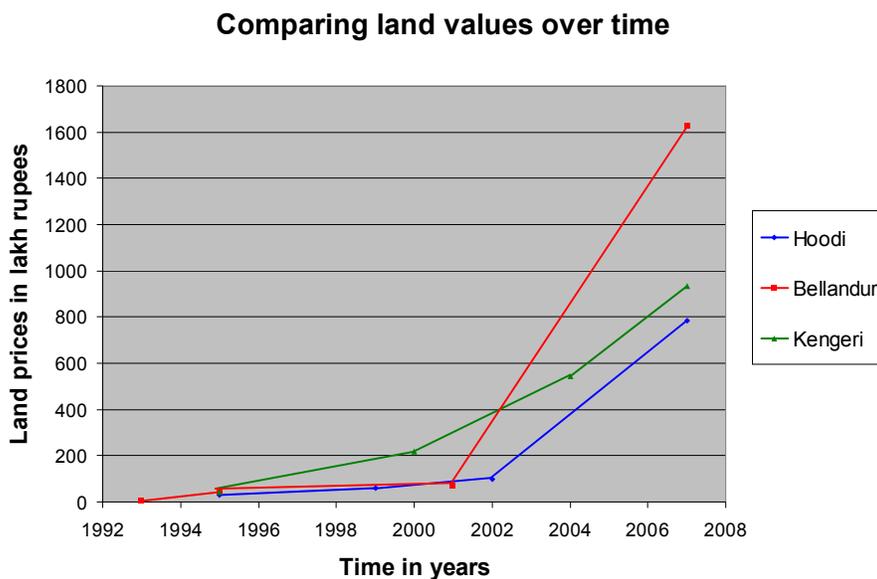
Bellandur became such a hot real estate destination after 2000 that large developers began queuing up to enter the land market. The GP used this position of power to effectively negotiate with them to provide infrastructure, particularly that which required large capital investments like UGD. About Rs 3-4 cr worth of culvert drains, sewerage, and metal roads has been done in Bellandur GP through partnerships between the GP and companies who have located there. The GP would sometimes give rapid or free individual connections (which cost Rs 2000/connection) in return. Both parties have benefited from this, a former member of the GP explained. The GP didn't have money for UGD or metalling of roads, and so they approached the company and asked if it could do it. Where it benefited them, they came forward. For e.g. Trinity Meadows contributed the overhead tank above the GP, Vaswani Group built the Post Office building, and Shahi garments and Intel did the service roads near them. A zonal engineer from Mahadevpura Zone said that many villages located on main roads in surrounding areas, like Ramagondanahalli and Siddapura, have built similar partnerships in infrastructure.

These partnerships were also a point of conflict within the GP with other GP members saying that many illegal water connections were given to big apartments like Trinity Enclave and Trinity Wood by the GP President, without the permission of the GP. In return, the President collected huge bribes from developers. Roads leading to these apartments also got preferentially built from the Panchayat budget. The tremendous revenue being generated from property tax (Rs 6 cr in 2006) was utilized for this purpose. This was possible because only the President and Secretary of

the GP could withdraw the GP's tax revenue from the bank account¹⁷. A quick look at overall development within the GP reveals that while basic services reached a majority of the population, the Reddy community dominated local politics and owned the most land, and the SC/ST community received the lowest quality services. This is despite the fact that Bellandur GP's President was twice reserved for an SC/ST candidate, positions held by B Y Dasharath, a practicing lawyer and Congress supporter, and Soosamma.

The figure below compares land values over time in Mahadevpura CMC, Kengeri TMC and Bellandur GP.

Figure No. 6



Why is there uneven development in Bellandur GP

Very high levels of development are observed in Bellandur village and much less development observed in Devarabisanahalli. In Bellandur one finds offices of major banks like HDFC Bank, and malls like Subhiksha and Namdhari's Fresh. 50% of people in the Bellandur anganwadi area do not have BPL and Antyodaya cards¹⁸. Devarabisanahalli by contrast is less developed than Bellandur. The more ordered and structured development of Bellandur is not visible here. The main roads and cross-roads are all kutchra except for one small stretch, which is concreted, unlike the cemented roads of Bellandur. There are fewer large buildings, less construction activity, and predominantly small local shops as compared to Bellandur.

Several factors could explain the uneven development. Devarabisanahalli is a smaller village than Bellandur and has less GP members representing it than Bellandur (4 compared to 9). One of the most dynamic members of the GP, Jagannath, is a resident of Bellandur and strong local leadership has played a big role in developing Bellandur village. Devarabisanahalli is also mostly

¹⁷ GP members stated that the usual practice is for the President to make one of his follower's the Secretary so as to enable easy sanction and withdrawal of money.

¹⁸ Bellandur village has a target of 20 girls for Bhagya Lakshmi scheme every year but they were not able to fulfill this quota because there were insufficient BPL card holders.

surrounded by large enclave type developments like IT company campuses and a Special Economic Zone (SEZ). This contrasts with Bellandur which has mostly standalone real estate projects surrounding it. While enclave type developments are more cut-off from the rest of the environment they're located in, standalone developments stand to suffer/benefit more from poor/good local infrastructure and have a higher incentive to contribute to improve it.

Devarabisanahalli is situated a little further from the ring road than Bellandur. As such land values are lower and development occurred later than Bellandur. Perhaps most importantly, Devarabisanahalli has a much higher SC/ST population compared to Bellandur (50% compared to 15%). There are washer men, barbers and other SC/ST communities along with some Reddy families. The SC/ST population is much poorer and less well educated than the rest of the population and less influential. Some of the SC/ST families who owned land sold it many years ago for a mere Rs.50- 100. While a few SC/ST families have *inam* land given by the state government, over time, due to natural increase, each household's landholding has reduced to 0.4-0.5 acres of land. The majority of land in Bellandur village is owned by Reddys (75 %) with SC/STs owning about 10%. In Devarabisanahalli, the situation is very similar. Despite the higher proportion of SC/ST families, 80% of land is owned by Reddy community and only 20% is owned by SC/STs (washermen and barber community).



Janata colony in Devarabisanahalli

Kutch main road of Devarabisanahalli

Conclusion

Development in the village areas of Hoodi, Kengeri, Bellandur and Devarabisanahalli up to the mid to late nineties saw a low end real estate market draw on land development processes underpinned by local institutional support and small players. Development in locations outside the old village area was spurred by the interventions of parastatal agencies- the KIADB, the BDA and the KRDC. The KIADB was set up to develop industrial land and its strategy of large scale land acquisition and improving road connectivity for EPIP had the effect of pushing up land prices in the locality and displacing poor groups, particularly ST/ST groups. This brought larger real estate players into the land market. The BDA entered the land market in Kengeri to develop planned layouts and in Bellandur to develop the ORR which tremendously increased land values and similarly displaced poor groups. The Bangalore Mysore Highway built by the KRDC in Kengeri increased the price of land and displaced Kasthuramma slum dwellers.

As the locality histories reveal, we can trace smaller and local developers connected to local political and financial circuits operating freely till about the mid 90s after which they are confined to a limited area following the entry of larger developers. Following Benjamin et al's (2001) analysis, both these real estate markets were spurred by different types of land development. The political economic circuits involved in the development of these two markets are also different: one circuit is that of politicians connected to local governments and small land developers. The second circuit is linked to the political and economic alliances of parastatals.

Each of these circuits serviced different localities. The local government circuit provided infrastructure to the "unplanned" organic settlements and the parastatals provided infrastructure to the "planned" settlements. This has important implications for urban poverty because it is the "unplanned" organic settlements that provide some space and opportunities for poor groups. The more "planned" settlements by virtue of the higher costs associated with being "legal" typically cater to middle, upper and professional classes, including highly skilled migrants.

III Comparative analysis of infrastructure and services in poor and affluent localities

The previous chapter describes the history and development of the sample areas. While areas like Hoodi village, Kengeri village and Kasthuramma slum grow organically and incrementally over time, the formation of ‘planned’ areas like EPIP and KST have seen deliberate intervention by government agencies, most particularly for their role in land acquisition. Importantly, the chapter also highlights that it is the “unplanned” organic settlements that provide some space and opportunities for poor groups. The more “planned” settlements by virtue of the higher costs involved in being “legal” typically cater to middle, upper and professional classes. Differences in the way settlements develop have important implications for the types and qualities of services and infrastructure provided, the processes of decision making involved and the governance structures underpinning them.

This chapter will begin with a description of the access to, quality, and quantity of facilities available in each area. Special attention will then be paid to developing intra- comparisons and cross-comparisons of infrastructure, governance structures and decision making processes across sample areas to study the impact this has on different groupings, particularly the urban poor. The next section will focus on the differences between local service provision and large infrastructure provision exemplified in the case of the GBWASP. Local service provision comprises the broad spectrum of strategies and alliances residents (largely those in ‘unplanned’ areas since these comprise a majority in the peripheral areas) use to obtain infrastructure. Residents use their vote at the time of elections to get investments in infrastructure in their localities although it is by no means the only strategy they employ. Thus local service provision is very much tied to the local politics of the area.

This is in contrast to the GBWASP which is a structured, planned, professional and commercial approach to water service provision in the peripheral areas of Bangalore. Not only does it operate in isolation from the local political process but it actually undermines it by bringing in a parastatal culture with its economic and political alliances comprising large consultants, IFIs, and water companies. A snapshot of how the GBWASP is working in the sample areas enables exploring whether the move toward providing water supply through large infrastructure projects like the Greater Bangalore Water Supply and Sanitation Project (GBWASP) in the peripheral areas actually delivers better water supply for the urban poor.

MAHADEVPURA

Hoodi village and Kaverinagar slum in the ex-CMC of Mahadevpura have developed in an organic, incremental way. Local municipal officials and elected councilors have played an important role in providing basic services and access to city resources. For the most part services have been provided in response to demands by residents of Hoodi and Kaverinagar using local funds at the disposal of elected and non-elected officials of the Mahadevpura CMC. This is in contrast to the Export Promotion Industrial Park (EPIP) set up by KIADB. EPIP is a ‘planned’ area where infrastructure has been provided upfront prior to soliciting applications for sites from developers and individual companies. Instead of local officials and elected councilors, state and national level institutions and funds were involved in its establishment. Below is described the sector-wise provision of basic services and the processes of decision making and the governance structures underlying these processes.

Water

Scarce water supply

The main source of water in peripheral areas is bore wells. The former Mahadevpura CMC area has 475 CMC bore wells with electric fitted pumps. In declared slums like Kaverinagar and in Hoodi village the CMC has installed mini and overhead water tanks supplied by bore wells. Several public taps have also been installed in the area by the CMC although many of these are not working. Those with higher incomes in Hoodi village and the private layouts surrounding the village have individual water connections. Water used to be released twice a day by the CMC for about 1 hour each time. People pay Rs 44/mth as flat rate if there is no household connection/meter charge. If there is a meter, the rate is Rs 25/kl water. In general locals in these areas say they have no water problem. However, in the longer term continued availability of water is becoming a serious issue.

Falling water table and contamination of ground water

An increasing problem in the area is the drying up of bore wells. A resident of Hoodi village reports that earlier there was no problem for water. But current shortage of water in these bore wells are due to the installations of similar bore wells in the nearby SSIs and in EPIP where people have dug wells upto 1000ft. The depth of the older bore wells in Kaverinagar and Hoodi is not more than 400 ft. After ITPL started functioning, people from different places started coming and settling here. The population greatly increased which resulted in further water scarcity. Today, in the Mahadevpura CMC area there are 12 wards marked as water scarce wards.

Due to growing scarcity of ground water, there is an ever growing market for buying water. Tankers ply at Rs 250-300 per tanker load although this varies according to the season. In the surrounding areas of Seetharamapalya, Basavannagar, Thiglarpalya, Aiyappanagar, and Sadara Mangala people are also selling bore well water. CMC officials say they have no way of monitoring or regulating private tankers. Bore wells are increasing daily. Locals report that every year 30-40 bore wells are being dug in Hoodi village itself. Only in half of them do they get water. This has led to a fall in the ground water table. New bore wells have to be dug up to 1000 ft to get water. Drinking water from below 1000 ft has serious risk of contamination and can lead to various health risks.

An engineer with the Zonal Office said that recharging of ground water does not occur with increasing concretization, encroachments and construction activity. Recharging surface water and ground water does not seem to be a priority nor does integrating surface water and ground water in a coherent water policy for the region. The new Mahadevpura zone has 24-30 lakes. In 24 lakes BBMP has given orders to fence the lakes and give them for development, similar to the core BMP area. This is despite the experience in the core BMP area that development is more about beautification and commercialization than ecological sustainability.

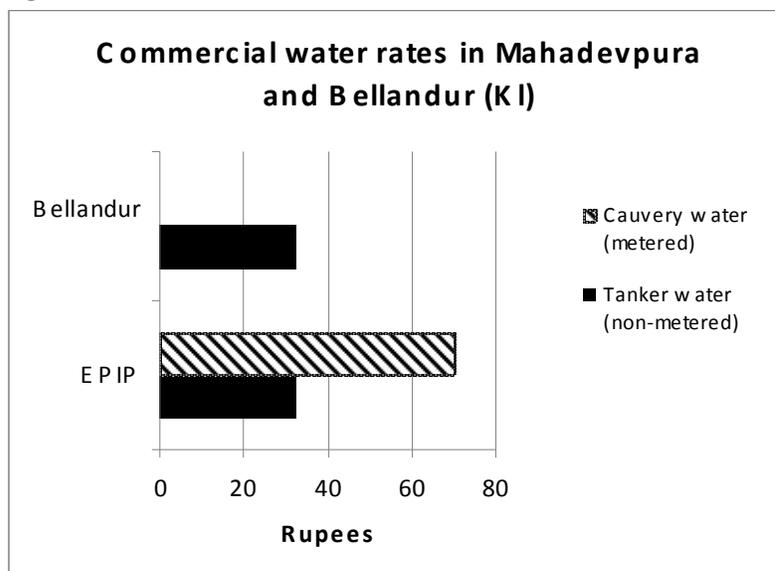
Differences in water supply between Hoodi village and Kaverinagar and EPIP and large apartment buildings:

While almost all of the CMC area relies on bore well water, there are a few pockets where large apartments and companies have been getting Cauvery water for the last few years. From the start (i.e. 1995), ITPL and EPIP have got Cauvery water. The KIADB buys water from BWSSB at Rs 60/kl based on requirements of companies in EPIP and then makes it available to them at Rs 70/kl. There is no maximum ceiling on the water they can request. Additionally, a water reservoir and BWSSB sub station is located in EPIP. The availability of water is not the problem in EPIP, said a representative, but the cost of it is. Cauvery water is expensive and companies want to minimize its usage so they also buy private water from tankers, he explained. They don't really

care about the quality of this water because they can use it for their gardens, toilets, cleaning¹⁹ etc. Since ground water is cheap and completely unregulated, it is a good option for companies (in EPIP, ITPL and others).

A BWSSB official explained the economics of tariffs in the BWSSB as follows. BWSSB production costs are Rs 12-13/kl and the minimum tariff it charges is Rs 6/kl- which is for lifeline supply. Lifeline supply is about 40 l/day in slums. Multiplied *6 for one family and it comes to 240 l/day or about 7.2 kl/mth for one family for which BWSSB charges a total lifeline cost of Rs 73 (Rs 48 + basic meter and sewerage cost). This doesn't cover the O&M costs and BWSSB's policy is to recover O&M costs, not capital costs. So BWSSB cross subsidizes lifeline supply from commercial tariffs. This is why Cauvery water commercial rates are expensive and companies would rather pay for much cheaper ground water (see Figure No. 7). But for how long will ground water last?

Figure No. 7



The CMC has been buying Cauvery water from the BWSSB at Rs 19/kl and distributing it to five areas in the zone after levying a Rs 6/kl operation and maintenance fee (total charge of Rs 25/kl). These areas are A. Narayanpura (ward 4), Garudacharpalya (ward 1), RHB Colony and Maheshwari Nagar (ward 2), B. Narayanpura (ward 11) and AECS Layout (ward 21). In AECS Layout, a private contractor has been appointed through open tender to distribute water. In the other 4 wards, the CMC (now BBMP) is distributing BWSSB water directly. A senior official from the BWSSB stated that this innovation of giving it to a private contractor was done years ago (in 2002) before all this talk of privatization. While there is no clear information on which buildings in these wards are getting Cauvery water a local engineer said that these wards were selected to be given Cauvery water because they are severely water stressed and bore well water is unavailable. Purely technical reasons such as proximity to feeder mains and less availability of

¹⁹ Buildings in Whitefield typically have large glass surfaces and the tremendous construction activity makes these dusty. In EPIP, windows are washed twice a week and this uses up a considerable amount of water.

water seem to be only part of the answer however and the process of getting Cauvery water typically involves complex negotiations between the developer, the BWSSB and the CMC.

Lack of proper drainage and sanitation

There is no underground drainage (UGD) in much of Mahadevpura CMC. In Hoodi there are soak pits. Kaverinagar on the other hand relies on 2 working toilet complexes for a population of 8000 families. Under the Nirmala Nagara Scheme, Mahadevpura CMC were supposed to have spent Rs 12 lakhs in Kaverinagar but residents complained that nothing much has been done to improve sanitation. While 3 Nirmala toilets were constructed, they are not functioning now. Samudaya toilets have been constructed by the CMC but they are not maintaining them properly making them difficult to use. Kaverinagar residents discussed in detail the severe problems of sanitation and flooding they face. Despite many complaints made to CMC officials and local politicians, the situation has not improved.

Lack of proper sanitation is a serious issue in Hoodi and Kaverinagar leading to diseases, stray animal menace, mosquito menace etc. Additionally, the fact that toilet pit cleaning and clearance of night soil is carried out by SC/ST households is a cause for grave concern. This is unhygienic, hazardous, and socially demeaning work. SC families involved in such work talk about how they have to drink heavily before they can begin doing this work.

KIADB developed each site in the EPIP with a septic tank. EPIP as a whole has no sewage treatment plant (STP). KIADB claims that the EPIP consists of mostly IT companies which are “non-polluting” and hence there is no need for a STP. However, a report evaluating EPIP in Aug 2004 states that 37 units (at that time 49% of the total number of units in EPIP) were manufacturing units. This begs the question of where is the sewage going and what are the negative environmental impacts from it?

Local residents report that companies and large apartments release sewage into surrounding lakes and storm water drains despite strict injunctions from the development authority, the BDA, not to do so. Sources from the BDA state that they are becoming much stricter about not giving occupancy certificates to big apartments and companies unless they connect their sewage lines to BWSSB main sewers (if there are any present nearby) or build a STP. However, there remain considerable loopholes with a high proportion of new buildings not even obtaining BDA approval.



Open drain with sewage in Hoodi



Tankers selling drinking water

Differences in road infrastructure provided to support EPIP/ITPL and Hoodi village and Kaverinagar slum

With the development of ITPL and EPIP, companies started putting pressure on the city and state government to improve road infrastructure in Whitefield. The Government of Karnataka utilized a Ministry of Commerce, GOI scheme called the Critical Infrastructure Balance (CIB) Scheme introduced in March 1997 to improve the road connectivity of EPIP. Using CIB Scheme GOK upgraded and developed 2 roads connecting EPIP. One was the Whitefield main road (KR Puram to Hope Farm- 8.5km) and the second was the Airport to Hoodi junction (10km). Both were completed at the end of 1999 with equal contributions from GOI and GOK and small contributions by KIADB. The CIB Scheme provides for critically needed infrastructure that would give a boost to exports.

Table No. 5 Road widening and improvement projects relating to EPIP

	Airport road to Hoodi Junction	KR Puram to Hope Farm
Length of road	10km	8.5 km
Project cost	9.5 cr	8 cr
Actual expenditure	9.82 cr	8.96 cr
GOI sponsorship	4.75 cr	4 cr
GOK sponsorship	4.75 cr	4.75 cr
Date of completion	31.7.99	31.12.99

Source: TECSOK 2004

In addition to this, the BDA acquired land for and completed the main carriageway of the Outer Ring Road (ORR) on a fast track basis in the Mahadevpura area in July 2000. While acknowledging that the ring road made a big difference to them, an employee from a company in EPIP stated that the entire ring road is not yet finished- there are stretches that need to be done. Further, now that lorries are allowed to come onto it, the ring road has become like a regular road and what companies now need is another ring road beyond the ORR. Moreover, all the other regular roads that EPIP employees have to travel on are not in good shape. The EPIP Association will continue to push for these changes.

The large amount of money spent on EPIP road connectivity has benefited Hoodi and Kaverinagar to the extent that they use these main roads. However, roads internal to Hoodi village and Kaverinagar slum are not in a good condition. While many buses run on the ORR and the main Whitefield road, there is no bus facility going upto Kaverinagar which is off the main road. A Volvo bus (route no 335E) runs on Airport Road terminating at ITPL. It is often half empty. When asked whether people travel in buses to work at EPIP, an employee said that most employees travel in their private vehicles or in company buses. Not many people travel by the public buses, even the more luxury Volvo buses. This is despite the fact that the more expensive Volvo buses claimed to operate on that road to cater to IT and IT related clients.

Health

For the most part people in Hoodi and Kaverinagar do not report any serious health problems although many people suffer from TB in Kaverinagar. With the increase in incomes, lifestyle diseases have become more prominent. With the high rates of migration, HIV/AIDS has also become a more serious issue although concrete data on this is hard to get hold of.

There is a wealth of healthcare facilities in the vicinity. Local residents say they patronize private hospitals more than government run ones. They go to the free Sai Baba Hospital in Whitefield for general cases. They say that healthcare there is good but they have to wait a long time. For heart

cases people go to Sai Baba Hospital in EPIP although this requires a wait time of 6 months to 1 year. Chinmaya Health Service Centre, which is in Hoodi, takes care of patients who are suffering from common ailments. It is also active in conducting health check-up camps for pregnant, women and children and on the first Wednesday of every month, inoculations are given against certain diseases. There are also several private nursing homes and clinics like Meghana Nursing Home in Hoodi village itself. Kaverinagar has 5 private clinics in the slum. Migrants living in the migrant sheds are the worst off when it comes to health care.

While there is a government Primary Health Centre (PHC) in KR Puram and a PHC in Kadugodi not many people go there because they say healthcare is not good there and problems of accountability and responsiveness are compounded because the Kadugodi PHC is not under the control of the CMC but is under the jurisdiction of the Zilla Parishad.

Education

In general educational facilities in Hoodi and Kaverinagar are good. Two trends have been observed in recent years. One is that children are studying more- earlier their education would be over when they completed SSLC, but now they study further. The second is that a larger number of people in higher income groups are relying less on government schools and more on private schools and colleges. In the last few years there has been a mushrooming of private and convent schools in nearby areas to cater to this demand. Poorer groups, like daily wage labourers, however, still rely on the government system.

Table No. 6 Educational facilities in Hoodi and Kaverinagar

Location	No. of schools	No. of colleges	Anganwadi	Other
Hoodi	1 Urdu school 1 madarasa 1 government model school (I-VII) 3 Convent schools SM Education Society school (Pre nursery-VII)	PUC college for Arts and Commerce Govt Composite College	Anganwadi Kendra and Nirmithi Centre	Circle Resource Centre
Kaverinagar	Govt school (I-VII) Pvt English medium and Urdu medium schools		Anganwadi	

Source: Interviews 2007

KENGERI

Water supply

In Kengeri the TMC has been supplying bore well water to Kengeri village and slums, approximately two thirds of the TMC. In all 23 Wards of the TMC, there is a mini water supply scheme which is supplied by 80 bore wells. Bore wells have been dug in all the wards, pumps have been installed and locally 2 watermen in each ward have been appointed through contract. Water is released once in the morning and once in the evening (i.e., for about 4 hours/day) in most parts of Kengeri village although some villagers have to walk some distance to get drinkable water. While older bore wells used to range from 200-500 ft, now bore wells are dug to a depth of upto 800 ft.

Slum areas get water only once in about 2-3 days. The TMC gives water to these slums mostly through public taps and a mini water supply scheme. Earlier in Kasthuramma slum water was supplied through hand pumps. Then about 3-4 years ago the TMC constructed a mini tank and

now supplies water through that. Water is released twice a day to the mini tank. A few slum households have individual connections- for instance there are about 45 connections in Gandhinagara slum next to the EWS Quarters For these individual connections, charges are Rs 1990 which includes meter charges but does not include road cutting charges for which permission and payment needs to be made to BBMP (formerly to the TMC). Informants from the BWSSB service station in KST report having no plans for installing water and sanitation lines in these slums.

Controlling access to water: the role of waterman and local political leaders

Local politicians and watermen greatly influence access to water connections and distribution of water locally. In many slums the slum leaders themselves are watermen, as in Kasthuramma slum, or they work in close connection with each other. Two watermen report that while only 500 legal connections have been taken from the T.M.C in Kasthuramma slum, more than 5000 illegal connections have been taken with the support of the local councilor. To get a legal water connection a family needs a TMC khatha certificate, certificate of tax paid till date, a No Objection certificate from the TMC, and Road Cutting Permission from the TMC. For the many families who do not have these documents, illegal connections through the influence of local councilors and watermen is the only way to get access to water. These people are charged Rs.5000- 10,000 per connection out of which both councilors and watermen take a cut.

Besides giving illegal water connections to their relatives and others, watermen also collect Rs 10-20 per house per month. This collection serves to lubricate the regular release of water. This money amounts to 3-4 times the watermen's salary.

BWSSB's entry and role in KST

In KST the main pump station is operated by BWSSB and KST (wards 12-19) gets good water services. The BWSSB started operating here on January 1, 1997. A service station was set up and a collection kiosk for bills and complaints was established. This was probably due to the demands of the middle classes and retired government officials living in the planned layout that provided a good market for the higher BWSSB tariffs²⁰. Additionally, the BDA, which had developed KST and in whose control it was still under in 1997, gets preferential access to Cauvery water (interview BDA 2007). In 2002 BWSSB also started supplying Cauvery water to Bangalore University. A one mg storage tank was built in KST sub station at the same time.

BWSSB water (i.e. Cauvery water) is supplied through a total of 4574 individual connections in KST including 150 water connections in the EWS Quarters. A local BWSSB official mentioned that there are about 110 connections in not yet notified slums like Gandhinagar and Subhashnagar. These slums have developed near BDA layouts and over time he felt sure they would be regularized. There is no free water supply in the EWS Quarters although original sites were small (16x23) and it was initially considered as a slum. In all cases once houses/apartments are constructed then BWSSB gives a water connection. When more than 500,000 flats come up in one location then the developer needs to get a NOC and prior permission for water connections. However, a BWSSB official said this was largely a formality.

In KST wards there are 6 watermen who release water twice a day from 6-10am and from 4-8pm. Many people use this water for gardening and cleaning besides drinking. Local watermen collect additional money from KST residents arguing that they do so because KST residents use potable water for cleaning purposes and gardening. Water demand in KST is about 33 million litres per month.

²⁰ BWSSB tariffs are higher than the TMC's tariffs, and are common throughout Greater Bangalore.

While there are not many commercial establishments in Kengeri- only about 34 commercial connections mostly for offices²¹, there are many educational institutions in the area that are BWSSB consumers. Government schools and hospitals are treated as domestic consumers. They pay a deposit and then pay the monthly domestic water tariff rates according to what they consume. They do not pay pro rata charges²². Private schools, hospitals and hotels are treated as commercial entities that pay pro rata charges. When developers make the pro rata charges to the BWSSB, the buildings get water connections, says a local BWSSB official.



Waiting for water in Kengeri Village

2 mg BWSSB storage tank in KST

Sanitation and STPs

When KST and the EWS Quarters were developed in 1977-78 the BDA provided UGD. In KST, water bills have a separate charge for sanitation and 30% sanitation connection charges are levied. By contrast, sanitation is a severe problem in Kengeri village and slums. Kengeri village has patchy UGD, and much of it relies on soak pits. In many cases in Kengeri village the sewers from houses lead into roadside or storm water drains. The slums rely on public toilets and defecation in the open. Kengeri village has 3 toilet complexes built under Nirmala Nagara Scheme and there is 1 Sulabh Shouchalya in Kasthuramma slum. These public toilets are maintained very poorly.

The Vrishabhavathi River is extremely polluted with the water colour being blackish and a strong smell of sewage in the air. Currently one STP is functional at Mylasandra with a 60 mld capacity. Two more are coming up under Cauvery stage IV Phase 2- one near the petrol bunk and at Chudayanapalya.

Roads

There are clearly visible differences in the way local roads of Kengeri village and slums have been developed compared to roads in KST and the EWS Quarters. Local roads in Kengeri village are bad - most are kutcha and have big potholes. The condition of roads in the slums is worse. A BWSSB engineer said that there are no proper road facilities in slums and people have

²¹ In fact BWSSB officials said that they recently stopped supplying water to about 13 industries due to arrears in payment.

²² Pro-rata charges are one-time service charges collected by BWSSB for providing new drinking water and sanitary connections to buildings. They are calculated at the rate of Rs. 120 per sq metre of built up area.

constructed on the roads themselves. This is in contrast to KST which has broad well-developed roads. These roads were developed and maintained by BDA until KST was handed over to the TMC. BDA developed the EWS Quarters as well. Here the main road is in good condition although considerably narrower than the main roads in KST. The cross roads of EWS Quarters however are only 10-15 ft wide. UGD pipes go right down the middle of the cross-roads making it difficult to use the roads if road cutting for repairing leakages needs to be done.

The main arterial road linking Kengeri with the ORR is maintained by the TMC. The TMC spends approximately Rs 1 cr annually on roads in its jurisdiction. BDA looks after the ORR that stops a few km from Kengeri. The BDA is finishing the last stretch of the ORR from Magadi Road to Mysore Road at present. This is expected to be completed in March 2008. The KRDCCL looks after the Bangalore Mysore highway. Under the Land Acquisition Act, the Karnataka Road Development Corporation Limited (KRDCCL) acquired land for the Bangalore Mysore Highway. The Bangalore Mysore Highway which was started in 2000 and completed in 2005 has had a considerable direct impact on Kengeri. It has led to a tremendous increase in real estate prices, and development along the main roads.

In the last few years, the number of BMTC buses to Kengeri has increased. Several new trains have started and a few existing train lines have been extended. About 35-40% of people from KST commute to Bangalore, Mysore and other places by train.

Health

In general, serious diseases are rare and common cold and fever are more common. Similar to Hoodi and Kaverinagar, better off people in Kengeri (from the village and KST) prefer using private health facilities while migrants and poorer people depend on government health facilities. There are nursing homes and more than 25 private clinics in the Kengeri village area which people frequent. The reasons for this are because the PHC deals only with minor cases - all serious cases are sent to Victoria or Vani Vilas hospitals in Bangalore. The PHC also operates only from 9.00 am- 4.30 pm. After 4.30 pm there is no checkup facility and no night duty staff. This is a serious problem if there is a medical emergency after 4.30 pm and people need to be transported to Bangalore, particularly because the PHC does not even have an ambulance. Additionally, the TMC doesn't give any monetary support to the PHC and exerts no control over the functioning or hiring decisions in the PHC. As such, there is little local accountability.

In contrast to Mahadevpura, people in Kengeri use the public health facilities more. This is because the PHC in Kengeri is more accessible being located in KST. It has 4 sub-units located within the TMC. Each of these four sub-units have five staff members each – a Junior Health Doctor, Junior Health Assistant, Pharmacist and D class helpers. Medicines need to be collected from the main PHC where the Senior Medical Officers, Stock Assistant, ANM and Head Pharmacist are located. There is also an anganwadi operating under SJSRY near the Kengeri sub-zonal office. Once in 3 months the government doctor does checkups.

Education

Education is generally not an issue in Kengeri due to the wealth of educational institutions both public and private although there are more private institutions than public ones. There are a total of 6 colleges, 10 schools, and 1 residential school in Kengeri. Most of these schools and colleges have been established within the last 5-6 yrs. Three educational institutions have moved from Bangalore city to Kengeri. There is a public library in KST.

In Ward No. 3 those who can afford it send their children to convent schools (about 20%) and the rest go to government schools. In KST people mostly go to private schools of which there are several in the area. Those who own houses send their children for higher education, with some of them going to Bangalore for higher studies.

Table No. 7 Educational facilities in Kengeri

Location	No. of schools	No. of colleges	Anganwadi	Other
Kengeri village	English and Kannada medium convent schools 1 government school 1 govt Urdu school		Anganwadi operating under SJSRY	
KST	10 pvt schools and 1 pvt residential school	6 colleges		Public library

Source: Interviews 2007

While educational facilities are good, people do complain of high donations and fees required of them. LKG/UKG students pay as much as Rs 12000 each year and high school students pay Rs 25000/year. Poor people cannot study in these schools because fees are high.

BELLANDUR

The Bellandur Gram Panchayat consisted of 5 villages, including Bellandur village and Devarabisanahalli, two of the sample areas under study. While both villages were part of the same governing structure, the GP, amenities and infrastructure in Bellandur are far superior to Devarabisanahalli. Now the GP has been split between 2 zones with 3 villages (including Devarabisanahalli) belonging to Mahadevpura Zone and 2 villages (including Bellandur) belonging to Bommanahalli Zone. Villagers talk of the increased difficulty of accessing local government offices and officials as they are scattered throughout 2 zones. Besides these 2 villages, the study also included large commercial developments that have been established within the GP area, such as Eco Space Campus and Intel Campus.

Water

Complete reliance on contaminated ground water

Four people are working as watermen in the Bellandur Panchayat office. As of now, the Panchayat gets its water supply from 5 bore wells in the neighbouring Dodakanehalli Panchayat. This water is pumped to storage tanks in Bellandur, chlorinated, and then supplied to houses through a piped water supply scheme. There are only metered individual connections now in Bellandur village, and no public taps since 2003. On average families in Bellandur pay Rs 100-150 per month for water.

Drinking water is becoming a serious issue in Bellandur due to increasing contamination of ground water although there is as yet no problem in accessing non-potable water. Surrounding villages do not have as good water access and the quality of their water is even worse. For instance, a neighboring village complains of bad smell in the water and villagers in Kariyamana Agrahara only drink water from packaged sources. In Devarabisanahalli old village there is generally no problem for water as people have dug bore wells. However, in the new Janata colony people are facing acute shortages of water. This colony comprising mainly SC and ST families was created by local politicians who formed sites on government land. Because of the non-availability of proper documents related to land, getting a power connection to pump water from

the bore-wells is not possible. Therefore, people in the colony cannot dig their own bore wells but instead must rely on water from the old village. This is not sufficient for their needs given the increasing population. Due in large part to non-availability of land documents, rents in Janata colony are low and it is a highly sought-after residential location for new migrants and poorer groups. It is thus these groups who face acute problems in water supply.

Water is also supplied by a few large developers like Sobha to the migrant sheds they have constructed. They pay for water tankers that fill up and store water in a huge tank near the shed. The company has built toilets also. While conditions are better than the plastic tents that construction workers often live in on the worksite, they are still poor. There is no certainty of access to or quality of basic services and workers depend on the good will of the developer to provide these services. Their bargaining position is weak as they are a shadow population not on government records and do not possess any legal identity or BPL cards entitling them to public services.

Table No. 8 Domestic Water tariffs levied by the Bellandur Gram Panchayat

Slabs	Rates
Upto 1000 litres	Rs.3 per Kl
1001 litres and above	Rs.4 per Kl

For non-domestic consumers like big hotels, educational institutions and companies, the Panchayat charges per 1000 liters. Earlier they were charging Rs 150- 175 per tanker (approx 4 Kl). Now they are charging Rs.250- 300 for 4 Kl.

High end IT companies in the area, such as Intel campus and Eco Space campus, rely mostly on private tankers. BWSSB does not supply water to them. The Eco Space campus has 11 buildings. Water is supplied through 20-25 tankers per day charging Rs.35- 40 per Kl. There are 9 STPs in the Eco Space campus where water is treated (each STP has a capacity of 1 Kl). Eco Space Campus uses 650 Kl of non potable water per day, including treated water, for gardening, landscaping, and toilet facilities. For drinking water, each company has their own supply, including canned water. There are 11-12 bore wells in the campus all of which are dry for which recharging of bore wells is being attempted.

Who gets Cauvery water?

While people in the Gram Panchayat for the most part do not have serious water problems currently, water is becoming increasingly scarce, particularly given the high rates of migration into Bellandur Panchayat and the huge requirements of high end developments in the area. Villagers of Kariyamana Agrahara say that earlier water was available 24 hours a day, but now it has come down to 6 hours a day due to the increased demand of water as a result of the development of the area. Some houses have built sumps without seeking permission. Additionally, the quality of drinking water is poor with many bore wells being contaminated by the highly polluted Bellandur lake. The GP therefore made efforts to get access to longer term and safer Cauvery water.

While Bellandur GP is not covered under the GBWASP project, the GP had asked BWSSB to prepare an estimate for supplying Cauvery water (part of IV stage) to them. They also submitted this to the BBMP. They argued that many large commercial and residential buildings were getting Cauvery water- in some cases the pipeline was passing right near Bellandur- so why cannot the GP get Cauvery water too. This struggle went as far as the courts who subsequently directed BWSSB to supply Cauvery water within a period of 3 months (from December 2006) to the GP.

So far this water has not been supplied and there is considerable resentment locally regarding the non-transparent and selective way in which Cauvery water is being allocated to large developments while leaving out the villages that are in the middle.

Who profits from ground water?

Many apartments, companies and migrant families rely on ground water supply for their needs. Not only is ground water the only option for many of these people but for large apartments and companies who buy such water daily and in bulk, it is a cheap and unregulated option. To cater to this demand, several local families have started selling water and tanker water, as it is known, has become a lucrative occupation for them. In Bellandur village there are mainly four families who sell tanker water. Each family has 5-6 bore wells with high speed water pumps. They have constructed water tanks on their land although they stock water in other places as well. Each family has 5-6 tankers for water supply. Each tanker supplies 20-25 tanks of water per day (a minimum of 4000l per tanker). They charge Rs 180-300 per tank.

A few local people who have bore wells also supply these families with water. The local people charge Rs 80-100 per tank and the four families then sell it at Rs 300 per tank to IT companies, apartments and for local marriages and festivals. The four families also have been supplying water to migrant sheds for last 2-3 yrs. Two of the four families depend on supplying these sheds. They make 3-4 trips daily to the sheds and earn Rs 20-25000 per month from this.

Every year 20-25 bore wells are being dug in the area and 50% of these are dry or become dry very quickly. Average bore well depth in Bellandur village has gone down from 150- 200 ft to 800-1000 ft in the last few years. The quality of ground water has also worsened, in large part due to the indiscriminate dumping of sewage in Bellandur lake and surrounding drains. This has led to Bellandur and Kariyamana Agrahara villages having their bore wells checked by the Panchayat and a notice being issued to boil the water before using it.

Shakti Water Company earns Rs 80,000/day from selling water

Shakti water suppliers is located in Green Grove layout of Bellandur GP. He has 5 bore wells and 8 tankers. Every day he supplies 20 tankers to construction sites and companies. Each tanker of water is Rs 500. Every day he earns Rs 10000/tanker which makes for a total of Rs 80000 per day. He is paying the tanker drivers Rs 5-8000/mth. The driver has to work 24 hours.

Sanitation

Bellandur GP has UGD in the entire GP except for Janata colony in Devarabisanahalli where unauthorized houses have been constructed on government land and hence the GP says they cannot undertake works there. In 1996 UGD was made a priority in Bellandur village by the Gram Sabha. At that time none of the other villages was interested in UGD, they wanted to develop their roads. Bellandur village's plan was to first develop UGD and then make metal roads. One of the former Presidents of the GP said, "We can do work only according to demands from the Gram Sabha and Ward Sabha." Once the demand is articulated from villagers and made a priority then it becomes part of the village plan and a budget is allocated for it. Other villages focused on building roads first and it was only in 2004 when villagers saw the example of Bellandur that they demanded UGD for their villages.

Savvy leadership in the GP has resulted in about Rs 3-4 cr worth of culvert drains, sewerage, and metal roads done through partnerships between the GP and companies who have located there. The GP said they did not have money for UGD or metalling of roads, and so they approached companies wanting to develop land in Bellandur and came to a mutually beneficial agreement. When no road and drain network exists in the villages where companies are locating, this is a

chance for them to ensure greater connectivity for their company. This often meant that roads and sewerage near large apartments and companies are developed first.

An engineer from Mahadevpura Zone states that many GPs that are situated on the main roads and in fast growing locations have gained access to infrastructure through these public private panchayat partnerships. Larger questions pertaining to regional management issues however remain. Where do the underground drains release sewage for instance? Kariyamana Agrahara reports that all the sewage from their village goes into the kaluves and the lake. Bellandur lake is already suffering from a very high degree of pollution.

Bellandur lake's slow death and local groups' attempts to stem the decay

Bellandur villagers remember the time when the water from the lake was used for drinking directly. This used to happen till 30 or so years ago. As the area started attracting developers due to its proximity to IT centers like Whitefield, farmland got reduced. From the 90s, BDA layouts, Koramangala, and HAL (airport and surrounding areas) started diverting untreated sewage into the lake. That was when the quality of the water started deteriorating and started emitting a stench. Local people led by the then Panchayat President, Jagannath Reddy, mobilized to do a satyagraha to protest at this situation. When locals protested near the STP (set up in the mid-90s) at the western end of the lake from where the inflow of sewage was, they were lathi charged by the police. Many people from the village used to work at this plant earlier but have stopped following the protests. Jagannath Reddy filed a case that has gone up to the high court.

The quality of lake water had deteriorated to the extent that on contact with the skin it produces rashes and other skin disorders. Given this condition of the water, Bellandur village's drinking water was then sourced from bore wells dug near another lake, Choulkere. Of late, that lake has also been contaminated. Villagers then organized a protest at the Doddakenahalli Panchayat office, under which this lake comes.

Encroachments around the lake are also a serious problem. Villagers said that someone had encroached 4 acres near Bellandur lake and built a layout. In addition to private individuals, even the KIADB has acquired more than 100 acres of wetlands that are supposed to be protected for development. Developers have built all around the lake, even at the outflow areas at the eastern part of the lake. This prevents water from flowing out to the BWSSB sewage treatment plant near the ring road. Additionally, the many software companies in this area, especially on the eastern part, do not tolerate the water flowing out from the lake to the STP as it emits a foul smell and do their best to block it from coming near them.

To make matters worse there are truckloads of mud and debris from construction sites of various real estate projects by groups such as Mantri, Salarpuria, Sobha etc. being dumped in the open area near the lake. While building contracts specify that debris should not be dumped indiscriminately, this work is subcontracted out and for the subcontractor its easier to dump debris close by (rather than in landfills) and save money, explain villagers. Debris is generally dumped at night and despite several attempts, villagers have not been able to stop it. Jagannath angrily said, "We should go and dump the garbage in front of the corporation. Every day for a week that's what we should do. Theres so much construction debris dumped here in the lake."

The struggle against pollution of the lake continues in the Lok Adalat. The Lok Adalat on June 4th, 2007, had ordered that sewage be diverted from the tank, polluting industries be shifted and solid waste content removed from the lake. A follow-up hearing was held on September 7th to ascertain whether Bellandur village is getting potable water and the progress on stopping pollution of the lake. At this hearing the BWSSB said out of the total STP capacity of 248 mld in

the Koramangala and Chellaghatta valleys only 110 mld is being utilized (with the rest still being discharged into the lake) due to non-connectivity of sewerage lines. BWSSB pleads helplessness to provide an immediate solution to this problem saying that 2 projects are being implemented to replace and rehabilitate sewers in the valley and build more STPs²³ but this will take time.



UGD in Bellandur Village



Foaming at Bellandur Lake outlet

Roads

How the Outer Ring Road has transformed the area

In Bellandur concrete roads have been constructed in a phased manner by the GP after construction of underground sewerage and drainage systems. Subsequently main roads have been tarred. This process began in '96-'97 with the development of UGD. The village roads display excellent drainage and road infrastructure facilities. This is in contrast with other villages of the Bellandur GP like Kariyamana Agrahara where the roads are not tarred. The roads leading to Devarabisanahalli and in the village area are also largely untarred, except for one small stretch, which is concreted.

The BDA's decision to align the ORR right through Bellandur village led to significant transformations in the local landscape. While this decision and the land acquisition was deeply contested by villagers along the ORR alignment, they only managed to stall implementation temporarily and reduce the amount of land actually acquired. The completion of the ORR in 2000 led to a substantial rise in real estate values, the entry of big developers and the construction of mega commercial and residential projects. The revenue from taxes also tremendously increased such that by 2006 Bellandur GP was collecting Rs 6 cr in property taxes alone, making it one of the richest GPs in the country.

A native of Bellandur village says the coming of the ring road has changed his village beyond recognition (see Box)

²³ One of these is a project funded by the NRCP, costing Rs.46.27 crores which involves replacement and rehabilitation of sewers in Koramangala. 70% of this has been completed in Koramangala and 30% in Chellagatta. The second project is under the JNNURM, worth Rs.176.75 crores, to replace and rehabilitate sewers and set up 11 STPs amounting to a total capacity of 403 MLD across Bangalore.

Box 5

What can we give the next generation?

In 1978, Bellandur village had only 4-5 scooters, 2 tractors and many bullock carts. Now some families have 4-5 cars and no one walks any more. There is competition for more vehicles. Nobody owns bullock carts. There is no discipline- no one can tell people what to do. There is no village unity. Garbage clearance is a problem. Electricity is a problem. Water is a problem.

They're [i.e., BDA] building 4 more roads beyond the ring road. Only cars will come on these roads. Till 1982, there was only 1 BTS bus coming from Sarjapura. In 1982 Bellandur got its second bus. You could hear the sound of the bus, of the train, even of foxes. It was like this till the nineties. The ring road came and spoilt this. What can we give the next generation?

There are no residential areas left in Bellandur. Not only in Bellandur- but upto Sarjapura there are only rented houses and tanker water. The impact of IT sector has also been significant. Night and day there are vehicles. There is one car to drop one person. There is so much noise and air pollution from the commercial development. If the road was like BMIC which is fenced off and with no cuttings then there would have been low impact development but with the BDA ring road type of development with full cuttings we have had complete development.

Education

Similar to Kengeri and Mahadevpura, most of the students (80%) in the government model school and anganwadi are children of migrant labourers, largely from North Karnataka. A majority of them are children of construction workers working on time-bound projects (typically for 2 years). They live in sheds provided to them by construction companies. The middle and upper classes in the GP send their children to the large number of private and international schools in the surrounding area including schools like Ryan International, Patel Public School, Bangalore Delhi Public School and convents in Koramangala, Agara, HAL and Carvalaram. For the past 4-5 years the Reddy community is sending their children to the Reddy Janasangha School in Koramangala. There are a few very rich families in Bellandur who do not need to work but make a living off rental houses, selling water or lending money. Local sources reveal that their children do not study well, due to excess money. Some of them are drop-outs. Even those of them in colleges in Bangalore often drop out and are involved in drinking, accidents etc.

Table No. 9 Educational facilities in Bellandur GP

Location	No. of schools	No. of colleges	Anganwadi
Bellandur	Govt model school (I-VIII) Govt Urdu school 2 convent schools Summer school (btw Spr 16-Jun 16) for dropouts Developer facilities: 1) 2 tent schools 2) Mobile crèches set up by Mantri and Sobha	About 10 colleges	Anganwadi operating under SJSRY

Source: Interviews 2007

Another characteristic of Bellandur GP is that the School Development and Monitoring Committee (SDMC) is very active. It sees to the smooth running of the school and has brought in considerable donor contributions when needed. The SDMC has instructed the teachers to be

present on time and conduct classes very strictly. In case the teachers are unable to come in time, the president has instructed them to inform in advance so that they can ask for replacement teachers. This year the SDMC president, the head of the village and Congress workers have requested the MLA and got a high school sanctioned for the village. The school also gets Rs 10-12000 through the Sarva Shiksha Abhiyan programme and every child gets Rs 6 under Akshar Dasoha.

The contributions from private bodies like the Rotary and Lions and individual developers have also built educational infrastructure in the village. Salarpuria Company has deposited Rs 6 lakhs as fixed deposit with ISKCON for the midday meal programme. Computers have been procured through donors at a cost of Rs 1 lakh and computer tables have also been purchased. This year Intel has agreed to conduct bi-weekly computer and English classes, and maintain the school building. The Rotary club has built class rooms, a borewell, and toilets (for the school and the teachers) in the government model school. The GP, Lion's Club, and several private companies help in procuring note books, text books, sports equipment and other items. The costs of the electricity, water etc for the school are borne by the Panchayat. In addition, Mantri and Sobha developers run mobile crèches for construction labourers' children. 2 tent schools²⁴ near the workers sheds have also been set up for admission of children from the sheds.

Health

Bellandur has a PHC which is used by the surrounding 10 villages. It has a lady doctor working there due to which more women use the facility. Mainly SC/ST, aged people, women and children, street families and migrants use this PHC. The Doctor comes from 10-1pm after which the compounder looks after the PHC. Every month the government doctor comes to check on the children's health and frequently ANMs and nurses visit the anganwadi and give women and child related health information. They give awareness on family planning and also take those interested for tubectomies and vasectomies. About 5-10 Bellandur people attend the operation camps. They are mostly poor people. The richer people go to private nursing homes. Anganwadi teachers also give information on children's health after being trained to do this from the Women and Child Welfare Department. The GP used to give an annual grant of Rs 60000 to the PHC. This is in contrast to Mahadevpura CMC and Kengeri TMC which did not financially contribute to their local PHCs.

Due to the change in lifestyles and the increase in incomes of a small section of the population, the pattern of diseases has also changed. Alcohol problems and lifestyle related diseases have increased. Due to AIDS one person aged about 35 years has died.

Bellandur also faces problem in achieving health related improvements due to the increase of population especially the increase in transient population. It has not been able to follow up properly on its pulse polio programme, for instance. There are more than 5000 families in the village now.

The above section outlined the various levels of infrastructure provided in each of the sample areas. The following section focuses on some cross-region comparisons (see Figures 8 and 9).

²⁴ Tent schools are run by a separate department from the Department of Education. Those who have studied up to PUC locally are hired by the company to conduct classes in these tent schools.

Some cross-region comparisons in infrastructure and basic services

Figure No. 8

Basic description of 'planned' sample areas			
	Service provider	Facilities	Demographics
EPIP	KIADB provides facilities on payment of annual maintenance charge; property tax to CMC	<ul style="list-style-type: none"> • High road connectivity via 2 main roads- 19cr sponsored by GOK and GOI; • Unlimited Cauvery water • dedicated power • Septic tanks, no UGD or STP 	<ul style="list-style-type: none"> • Export oriented firms (many IT, some manufacturing, hotels, hospitals, exhibition complex) • White collar • Large companies
KST	BDA developed, handed over to TMC after court case; water supply from BWSSB	<ul style="list-style-type: none"> • Good road connectivity (broad, maintained roads) • Cauvery water since 1997 • 30x40, 40x60 & 50x80 sites set around well maintained park • UGD 	<ul style="list-style-type: none"> • Middle class families • Mostly home owners • Businessmen, professionals, Class I govt employees
EWS in KST	BDA developed, handed over to TMC after court case; water supply from BWSSB	<ul style="list-style-type: none"> • Narrower main & cross rds • Cauvery water since 1997 • UGD • 16x23 sites now built to 3-4 storeys 	<ul style="list-style-type: none"> • Lower middle class families • Many Class III & IV govt workers & factory employees • Only 10% original allottees

Figure No. 9

Basic description of 'unplanned' sample areas			
	Service provider	Facilities	Demographics
Bellandur village	GP	Cemented main & cross rds; UGD; bore well water via indiv connections, no public taps	20% rich landlords (Reddys) owning 75% land, 15% poor SC/STs, migrants; 9 reps in GP
Hoodi village and layouts	CMC	Tarred but potholed main rd; soak pits; mini water scheme, few indiv connections	40% rich landlords (Reddys) owning 80% land, 25% poor SC/STs, 80% migrants
Devarabisana halli	GP	Mostly kutcha rds; partial UGD; bore well water via mini water supply	50% poor SC/STs owning 20% land and migrants; 4 reps in GP
Kengeri village	TMC	Bad rds; soak pits; mini water scheme	60% upper caste, 25% dalits
Kaverinagar slum	CMC	Bad rds; 1 out of 3 working public toilet complexes; mini water scheme	80% SC/STs, 80% renters & 70% migrants, 148 hh have ownership rights
Kasthuramma slum	TMC, KSCB	Bad rds; 1 public toilet; mini water scheme	All are SCs; 32 houses + 110 huts, 75 more being built; have voters id & ration cards
Migrant sheds- Bellandur	Developers - ad hoc basis	Water tank filled by tankers; toilets built by developers	5000 in sheds; from North India, KA, AP & TN; no voters id or ration cards

Infrastructure comparisons across sample areas

Key findings in Water

1. *Except for a few 'planned' layouts and industrial estates, peripheral areas depend almost completely on ground water.* The tremendous pace of development, particularly in Mahadevpura and Bellandur although less so in Kengeri, has put immense pressure on ground water reserves. Many new bore wells are dug every day in Bellandur and Mahadevpura and in about half of them there is no water. The ground water table has fallen to about a 1000 ft in Mahadevpura and Bellandur. To supply residential, commercial and construction needs of the area, landowners from villages near and far are sinking bore wells to sell water. Currently the local government has no way of monitoring or regulating the exploitation of bore well water. This is of particular concern given the large daily consumption of companies, large apartments and industrial estates like EPIP. Since ground water is cheap and completely unregulated, they use it over more expensive Cauvery water that they have access to, for non-potable uses like gardening and cleaning. This is an issue of large commercial and residential developments being subsidized by future generations (ground water is a public good in trust for future generations).

Water is not such a problem in Kengeri. The water table is about 500 ft here. However, water problems have increased in the last 3-4 years with greater development in the area spurred by the upgraded Bangalore Mysore Highway. While large commercial and residential developments are very few and do not account for much water consumption, Kengeri has witnessed the growth of several large educational institutions on the main roads. Additionally, the presence of water in South Bangalore has singled out South Bangalore and particularly the region around Mysore Road for future development. This means that water consumption will greatly increase in the next few years.

Bore well water is the primary (only) source of water for poorer groups. If they do not own land with the proper land documents however they cannot get a power connection to pump water up from a bore well and so cannot dig their own bore wells. A local official disclosed that BESCOM till recently used to be very liberal about giving electricity connections to people living in 'unauthorized' layouts provided they could pay for them. BESCOM will not give connections, however, to those who have occupied land which land records state as being owned by the government. This hits poor groups and SC/STs in particular because they are generally landless and rely on *gomala* land (now recorded as government land) for their livelihood and shelter needs. They then have to depend on buying water from private tankers or working through local political and area leaders to get "illegal" water connections. There is clear polarization between a few rich landowners who have garnered much of the wealth from development of the area, and many poor groups like SC/STs, women and migrants who live almost exclusively in the sphere of the "illegal". Poor groups depend on those who control access to resources like local politicians, watermen, and local officials, for gaining access to water, land and other opportunities.

2. *Who gets preferential access to cauvery water?* Study findings reveal that it is the 'planned' residential (eg. KST and BDA layouts) and commercial (eg. EPIP) areas developed by BDA or KIADB that get preferential access to guaranteed Cauvery water. BDA officials stated that BDA (and by implication all government agencies) will get priority for Cauvery water. When KIADB developed EPIP, the state government and BWSSB committed to supply as much Cauvery water as was required by allottees. Besides 'planned' areas, influential buildings and campuses located in revenue sites and old villages (eg Nagara Bhavi and Brigade Millennium) also achieve water supply through complex negotiations and the exchange of

money. The bigger the developer, the more influential he is and the greater the likelihood of obtaining Cauvery water.

UGD

1. *One of the biggest problems faced in peripheral areas, most particularly in slums, revenue sites and old villages, is no proper sewerage and drainage systems.* Because UGD is expensive and requires large capital investments and technical capacity, CMCs have found it hard to put these systems in place incrementally over time with the limited funds at their disposal. Peripheral areas except for 'planned' areas thus depend on soak pits and public toilets. Soak pits have been constructed for the most part without proper coordination or oversight. In Rammurthynagar, a BBMP official revealed, people from the private layouts along the main road have constructed their soak pits under the road instead of within their own property. This happens quite often and, besides preventing road works, can contaminate the water supply pipeline. Public toilets in Kengeri village, Kasthuramma slum and Kaverinagar slum are very inadequate and badly maintained. In the past when people complained about poor sanitation, local politicians responded by requesting the local government to clean clogged drains and toilets or used money from schemes like Nirmala Nagara to construct public toilets.
2. *Equally disturbing is that existing sanitation systems in Kengeri and Mahadevpura use people from the SC/ST community to clear away night soil and do toilet pit cleaning.* These are jobs that are hazardous, unhygienic and socially demeaning. They lead people doing this work to drink heavily to be able to endure the difficult working conditions.
3. *Bellandur GP by contrast to Kengeri and Mahadevpura is almost completely covered by UGD.* Strong local leaders and an effectively decentralized and participatory GP following the dictates of the Gram Sabhas and Ward Sabhas seems to account for Bellandur's success.

Another key factor in getting UGD is the GP's proximity to the ring road and hence its high land values. It has enabled the Panchayat to get access to more than Rs 3 cr worth of roads and sewerage infrastructure through forming partnerships with large private developers in the area. These partnerships however are those that primarily richer villages located on major roads have access to. Additionally, there seems to be a difference in the way industrial parks/campuses and individual companies interact with local communities. Within an enclave like EPIP there is less interaction between individual companies and the local community. By contrast, there seems to be greater involvement in local activities by individual companies in Bellandur, perhaps as part of their corporate social responsibility initiatives? Some examples are building UGD, adopting local schools, running mid day meal programmes, etc.

Even in Bellandur GP which is one of the richest GP in the country, uneven development is observed. Here again the parts not connected to UGD are areas like Janata colony where poor people, many of whom are SC/STs and migrants, live on village *gomala* (now government) land. This leads to the conclusion that despite tremendous new wealth, existing socio-economic disparities very much remain. The benefits of the new development have been clearly garnered by the same small group of elites.

4. *Finally, even where UGD exists, there is no proper disposal or treatment of sewage.* Sewage is typically let out into storm water drains, into lakes and rivers or into the open. Much of South Bangalore's sewage goes into Bellandur tank and then on into Varthur tank. Similarly, Kengeri's Vrishabhavathi River is extremely polluted. While this is serious issue in the whole of Bangalore city, it is particularly serious in Mahadevpura and Bellandur where the high

incidence of many large apartment and commercial buildings and minimal regulatory framework makes for the dumping of large volumes of untreated sewage into the surrounding area. While the BDA is supposed to withhold approval and occupancy certificates for layouts and buildings until they have STPs or connect sewage lines to a main BWSSB sewer if present, these do not happen in practice. The developers of many layouts and buildings do not even approach the BDA for approval as proper sewage disposal and treatment arrangements will mean added expense.

5. *Complicating the issue further, private developers argue that adhering to UGD and treatment norms would mean much greater expense that would then be passed on to the consumer. This would make purchase of sites less affordable for poor and middle class groups. The BDA used a similar argument when it constructed sites in EPIP without UGD but with septic tanks saying that UGD would have doubled development costs. Is this really true? The recent legislation on Regularization of unauthorized constructions reveals that it is consumers who are paying the price of regularization and adhering to planning norms and not developers.*

Solid Waste Management

In all the sample areas there are some provisions for garbage collection: Kengeri and Mahadevpura make use of SHGs for doing door-to-door collection and Bellandur GP has a private sub-contractor. Compared to the core BMP area, solid waste management (SWM) is not such a problem to date in peripheral areas because of lower density of people and higher volume of open spaces. However, garbage has been dumped everywhere making the core problem one of garbage disposal and not garbage collection. Now under BBMP, an organized system of SWM has been initiated. The new zones have floated a tender for organized waste disposal.

Roads

1. *'Planned' areas like the EPIP and KST have roads like Whitefield main road, Kundalahalli road, and the Bangalore Mysore highway developed by parastatal agencies with financial allocations from state and even national levels as in the case of EPIP. In EPIP, using the Critical Infrastructure Balance Scheme, about Rs 19 crores were spent on both the Whitefield main road and the Kundalahalli road. This can be contrasted with the Kengeri TMC's entire annual road budget of Rs 1 cr. Roads in 'unplanned' areas are generally developed over time through the influence of local politicians and local officials. This has typically meant that only the main roads in old village and slum areas are tarred roads (although many are in poor condition) with the cross roads often remaining as kutchha roads.*
2. *Large road projects have had a tremendous impact on the local economy and socio-cultural fabric of the area in a short time. The ORR in Bellandur, the Whitefield and Kundalahalli roads in Mahadevpura and the Bangalore Mysore Highway in Kengeri all increased the price of land, were responsible for the entry of new companies, apartments and institutions, and construction activity and new migrants in search of job opportunities. The effects are particularly visible in villages like Bellandur and Hoodi where changes in the physical landscape are accompanied by shifts in demographic patterns, livelihoods, lifestyles, and incidence of diseases. Changes in Bellandur and Mahadevpura are of a larger magnitude than in Kengeri as the pace and scale of development is more.*

The ORR was developed first in Mahadevpura and in Bellandur in response to the vociferous demands from the fast growing IT sector in those areas. The original alignment had the ORR touching Kengeri. Subsequently, the BDA decided on an alignment that did not include Kengeri, thus saving about 12 km in road length, even though it would pass through thickly

populated and urbanized belts like BTM layout and Uttarahalli. This begs the question of whether the fewer companies in Kengeri did not prove a strong enough lobby in pushing for an alignment of the ORR that reached Kengeri. The last link of the ORR from Magadi to Mysore Road is currently under construction and will be completed only in March 2008. Why has the western side of the ORR been developed so much later and what impact has this had?

Because Kengeri wasn't considered as 'high growth' the village still remains much the same. Development along the main arterial road doesn't have the same model of development as alongside the ORR in Bellandur and Mahadevpura - marwaris selling marble tiles, large apartments, commercial buildings and clubs. It caters to middle to lower middle class compared to middle to upper class and rich that you see in Bellandur and Mahadevpura. This is in keeping with the demographic profile of Kengeri which is dominated by more Kannada speakers- the older middle class and newer migrants from within Karnataka itself- Mysore road is one of the first destinations for migrants from within the state. But Kengeri has plenty of water unlike Mahadevpura and Bellandur and is increasingly being positioned as an area of future growth. The Mysore highway is being promoted as a national highway and the Bangalore Mysore Infrastructure Corridor and Bidadi township (IT township) is coming up nearby. So we might well see Kengeri witnessing similar changes in the type of development and people living there as in Bellandur and Mahadevpura.

3. *A key feature of large road projects in the study areas is the land acquisition involved and the resistance put up by affected villages.* Bellandur's protests at the time of acquisition for the ring road are well known but slum dwellers in Kengeri with support of local sanghas and DSS also put up considerable protest against eviction at the time of the upgrading of the Bangalore Mysore Highway. To a limited extent organized protests in Bellandur were successful as the BDA gave up its idea of acquiring 250m land on either side of the ORR for a development zone and those villagers who own land there have benefited hugely from development in the area. This success stems in large part from the local and high level political support Bellandur villagers got. In Kengeri, slum dwellers protested their eviction with the support of both dalit sanghas and political leaders. They only stopped their protests when the government promised to build new houses to replace those they were demolishing. 32 new houses (3 storey building) were then built. This limited success is contrasted with the lack of success in Mahadevpura at the time of acquisition for EPIP and the ITPL. Locals mounted 2 year long protests but were unsuccessful in large part because they didn't have unified support from local and high level politicians. While local politicians supported them, the local MLA opposed them and this weakened position reduced their bargaining powers.

When government agencies like KIADB and BDA acquire village common lands, they treat them as government land which means they do not compensate villagers. This often hits SC communities hardest because over time they have been occupying *gomala* land for living, cultivating and grazing. This has happened in Hoodi, Kengeri and Bellandur. KIADB then develops the land and sells it to developers at a fat profit. KIADB spent Rs 79 cr to develop EPIP Phase I and II. 77% (60.5 cr) of the total expenditure incurred on developing EPIP was met by KIADB resources generated through sale of plots. It is therefore village land that is subsidizing KIADB and large companies who get sites in industrial areas like EPIP.

4. *Better road connectivity and growing populations has meant more buses and, in the case of Kengeri, more trains.* These have benefited all the villages and slums in the area although bus routes are generally designed to service large developments rather than smaller villages and slums. This means that villages along the main road have far better bus and road services than interior villages like Kaverinagar and Devarabisanahalli. Additionally, in Mahadevpura,

Volvo buses have been introduced on Airport road to ITPL. But who are volvo buses for? BMTc thinks Whitefield would provide a good catchment for the more expensive Volvo buses. However employees of companies generally rely on company buses and Volvo buses have been observed to typically run half empty.

Health and Education

1. *Across the board in all 3 areas it is poor groups and migrants who use government schools, anganwadis, and health facilities.* Those who can afford it go to private clinics, nursing homes and hospitals. Health facilities in particular are described as poor with PHCs having no overnight facility and no ambulances, and being poorly run. Better staff can make a difference to the number of people who come. In Bellandur for instance the lady doctor's presence means that many women and children visit the PHC. In Kengeri, there are still a sizeable number of people using the public health facilities- much more so than Mahadevpura. This could be because the PHC in Mahadevpura is inaccessible, perceived as poor quality and incomes are higher overall which means people can afford to use private facilities.

The high migrant construction worker population in Bellandur and Mahadevpura (less so in Kengeri) has also meant a higher incidence of workplace injuries. Health facilities for migrants are much worse than the general village population. These populations are transient ones and often do not have identity and other documentation to enable them to take advantage of government schemes and facilities.

2. *In Bellandur the GP used to give a grant of Rs 60000 yearly to the PHC unlike Mahadevpura CMC or Kengeri TMC who did not contribute monetarily.* Funds for health facilities in PHC generally come from state government with the CMC and TMC not being involved in the process. In Mahadevpura, the Kadugodi PHC comes under the jurisdiction of the Zilla Parishad. So there is lack of coordination and blurring of the rural and urban institutions involved in local governance with serious implications for accountability and responsiveness to local residents.
3. *With regard to education there is a vast array of private schools to choose from and those who can afford it clearly prefer to go to private schools.* This is despite the fact that the school in Bellandur is well run with an active SDMC that plays a vital role in its smooth functioning and it has good infrastructure provided by a number of companies and through the local Lions Club and Rotary Club. In Bellandur and Mahadevpura, the majority of children in the school and anganwadi are children of migrant workers from the temporary sheds.

PDS

The story of the failure of the PDS to reach poor groups is universal in each of the study areas. A common complaint is that while fair price shops should remain open for the whole month and give all rations to card holders in reality they are open for only 1-2 days per month when they distribute rations. Even if they open for more than 1-2 days, they put up a board saying 'no stock' or 'ration is over'. Typically, fair price shops are not running well because they are run by local leaders who control how much rations are made available to BPL card holders. In Bellandur there are stories of how the ration shop operator sells rations in black to the migrants because he can get higher prices from them. In Kaverinagar people talk about frequent confiscation of BPL cards so as to reduce the numbers eligible for rations. In particular, the numbers must be kept below 700 which is the threshold beyond which a new ration shop needs to be established. In Kengeri

the ration shop is located in KST although nobody in KST is a BPL card holder. This means that people from the villages and slums need to go to KST to get rations.

Additionally, rations given to each person have been reduced. Earlier each BPL card holder was getting 28 kg rice but since the last 6 months they are getting only 4 kg rice per person. Earlier APL holders used to pay Rs 6/kg rice for up to 8 kg of rice and 2 kg sugar. Now APL card holders aren't eligible for any rations. This is a problem when the poverty line is a somewhat arbitrary figure not always reflective of reality (for eg. the number of people in the household or the high price of living in big cities like Bangalore) and there are many APL households who are also very poor. Locals from Bellandur report that if households possess consumer goods like a TV then officials argue that they are not poor and withdraw their BPL cards.

Local service provision Vs large infrastructure provision in Water

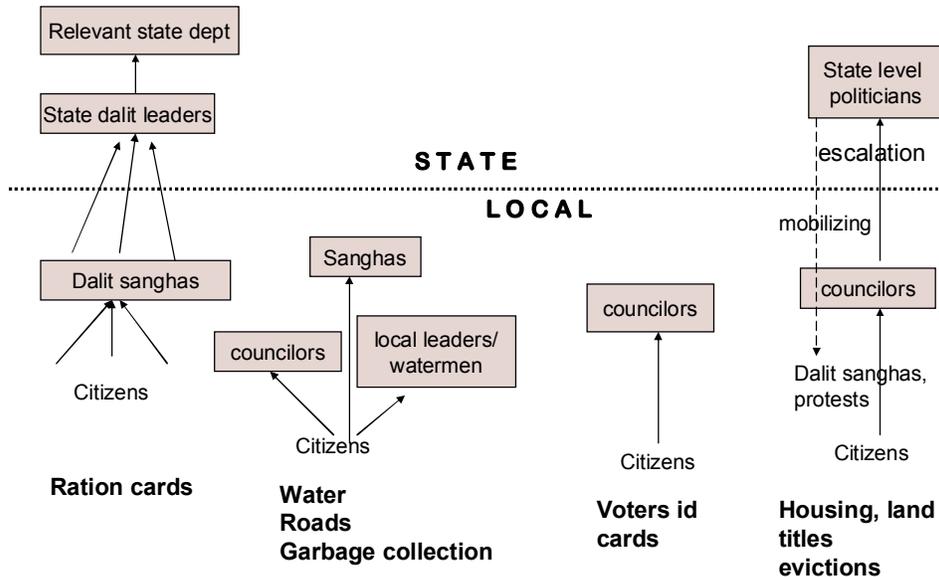
Some of the strategies by which local residents' access infrastructure in unplanned and organically growing areas are explained in the diagram below (see Figure no 10). A range of basic services are provided through alliances with local politicians and sanghas at different levels depending on the issue at hand. Ration cards and BPL cards serve as vital documents for identification as well as qualifying a person for subsidized access to resources (eg. foodgrains or government schemes). Hence getting ration cards and BPL cards is an important activity of dalit sanghas (local and state level).

Voter identity cards give people the right to cast a legitimate vote. Since they contribute to the local councilor's votebank, one of the first tasks of local politicians is to get voter identity cards for new entrants into a locality. In exchange for giving their vote, residents demand access to infrastructure and land. Providing ration cards are a quicker and easier route to getting individual/household votes than the more expensive, time consuming and politically difficult task of getting hakku patras and proper sanitation. The task of getting hakku patras is by far the most contested issue and getting more difficult in the increasingly 'reform' oriented environment of Bangalore. As the figure reveals, a sophisticated network is employed right from protests on the site to escalation to state level politicians and dalit leaders who then mobilize groups in different areas around the issue of regularization.

Mobilization for water services mostly takes part at the local level with residents acting via a network of local politicians, local leaders, watermen, sanghas and lower level municipal officials. While this network seems messy and services delivered are patchy, it works for poor groups in two important ways. One, this is a system which reaches the poor- there are no demands for documents that residents do not possess, for instance. Second, it is intrinsically incremental and provides maximum flexibility to residents, helping them at each stage to consolidate their claims over land and get access to better infrastructure. The entry of the GBWASP on the other hand was a professional, structured, commercial response to the perceived inefficiencies of the existing system of water service delivery. Paralleling the role played by the KIADB of raising land values and bringing in large developers, the BWSSB through this project brought in a host of IFIs, consultants and transnational water companies into the water sector in Bangalore. The following section analyzes how it has been implemented on the ground in sample areas and what the impact on poor groups has been so far.

Figure No. 10

Where do poor groups go to access resources



The Greater Bangalore Water Supply and Sewerage Project (GBWASP)

The GBWASP²⁵ was initiated in 2003 by the Government of Karnataka (GOK) with International Financial Institutions (IFIs) like the United States Agency for International Development (USAID), consultants like iDECK and parastatals like the KUIDFC and BWSSB. By this project, the 7 CMCs and 1 TMC surrounding Bangalore were to be provided piped water supply and a sewerage and drainage system and brought on par with the core BMP area in terms of water supply and sanitation using a professional and commercial approach. A characteristic of the project was the way in which several IFIs and consultants were influential in designing and implementing it, for the most part behind closed doors.

The genesis of GBWASP and the role of International Financial Institutions

The preparation of the Detailed Project Report (DPR) took place in about 5-7 months in a hurried and arguably predetermined manner. This happened along with the announcement of the Urban Drinking Water and Sanitation Policy of GoK in May 2003. The DPR was prepared by the FIRE (D)²⁶ project of USAID and, in keeping with the new policy, recommended that CMC operation was unviable and that BWSSB, a parastatal, should take over control of the project. The FIRE (D) project also wanted to pilot a newly designed pooled-finance model for water service delivery by raising funds from the stock market and commercial sources and thought that GBWASP would provide a suitable testing ground. On the advice of the FIRE (D) project, the Government of Karnataka through the BWSSB adopted the pooled-finance model for the GBWASP project and also retained the International Finance Corporation's private sector infrastructure advisor, DevCo,

²⁵ For more information on the GBWASP refer to CASUMM's Position Paper 01 on the Govt of Karnataka's Greater Bangalore Water Supply and Sanitation Project (GBWASP).

²⁶ FIRE (D) project or the Financial Institutions Reform and Expansion project of USAID

a company set up by DFID and World Bank. The DFID paid a few million US dollars for this technical assistance.

Who controls the project?

A separate department within BWSSB operates and controls the project. Project control was ceded to BWSSB by a resolution passed by each of the 8 ULSG councils. Officials from Mahadevpura CMC say they have not been involved in any aspect of the project except in the collection of the Beneficiary Capital Contribution (BCC)²⁷ from consumers and depositing it in an escrow account in the name of the BWSSB Chairman. The BWSSB explains that the CMCs made the unanimous decision to go in for GBWASP and made BWSSB in charge because they have less capacity while the BWSSB has the capacity and the trained engineers to do this project. It is not clear however on what basis this conclusion was reached by the USAID. There is a general lack of information on GBWASP among zonal officials of BBMP, even some confusion on responsibility for collecting BCC. While CMC officials say they have been collecting BCC, the BWSSB argues that CMCs don't collect BCC but advertisements were posted in newspapers and people were asked to come forward to deposit BCC in Syndicate Bank.

Promoting privatization and a commercial approach to water service delivery

The GBWASP was designed by the GOK and several International Financial Institutions (IFIs) to initiate a process of implementing the new State Urban Drinking Water and Sanitation Policy through a commercial approach to water service delivery. Based on this, in 2003 itself, the 8 ULSG councils passed a resolution agreeing to borrow from the market for the project. The GOK also passed an order stipulating payment of user contributions (called beneficiary capital contributions or BCC) for residential and commercial users of GBWASP.

In 2005, the GOK signed an MoU with Janaagraha, a Bangalore NGO, called Participatory Local Area Capital Expenditure (PLACE). An office run by Janaagraha called "Jalamitra" was set up as a help desk for future "customers" of GBWASP. Jalamitra fulfilled the "citizen participation component" of the project and was financed by KUIDFC, USAID, and WSP-SA. Amounts in excess of a few hundred thousand US dollars were made available to create citizen committees at ward level. Janaagraha, came in to involve citizens through training and consultations after the programme scheme was completely set up by FIRE(D) at the behest of KUIDFC. Despite claims of it being democracy in action, people could not vote on the issue

Since privatisation was assumed to be more efficient and was promoted by several of the IFIs, consultants and senior bureaucrats, the GOK announced IFC, the commercial wing of the WB, as the "transaction advisor" responsible for providing recommendations on private sector participation (PSP) models and to secure a private operator for Operations and Maintenance. IFC appointed Trilegal as legal consultants to appoint a private sector operator for O&M. Trilegal appointed Meinhardt Singapore Pvt Ltd as project management consultant (PMC) for the BWSSB project. Meinhardt Singapore Pvt Ltd sit in an office located within the BWSSB headquarters, Cauvery Bhavan.

User contributions: Who is paying BCC and who is exempt

Under GBWASP there is no provision to give free water; all consumers need to have metered, individual connections²⁸ and contribute to project costs via BCC. In the financing model, the

²⁷ BCCs are based on a footprint area of properties with the minimum slab at Rs 2500 for plots up to 600 sq. ft, to cover project costs up to the property boundary.

²⁸ The BWSSB does have provision to give a subsidized 'lifeline' supply to poor groups

BCC component accounts for about 28-30% of total project costs. The issue of BCC, however, is fraught with controversy. When GBWASP was initially launched there was no provision for exemption of poor groups from paying BCC. It was only after considerable protests from the citizens and members of Campaign Against Water Privatisation Karnataka (CAWPKA) that the BWSSB ruled that those who live in sites of less than 600 sq. ft are exempt from paying BCC. Even this exemption is conditional on owning proper land documents, which effectively rules out many from benefiting from it²⁹. Questions have also been raised as to why property size has been selected to determine eligibility for exemption. This means that several poor households living together (such as a joint family) in a property more than 600 sft will not qualify for exemption.

Table No. 10 Beneficiary Capital Contribution levied by BWSSB for GBWASP

Site area	BCC charges (Rs)
30x20	2500
30x40	5000
40x60	10,000
50x80*	15000

Source: BWSSB

*For sites bigger than this BWSSB charges a rate per sq. ft.

While poor groups who have proper land documents do not need to pay BCC, they need to pay the cost of installing meter charges (Rs 550) and will also be subject to the higher BWSSB tariffs as compared to the CMC. While BWSSB argues that all properties of less than 600 sft can claim exemption regardless of whether the property is in a slum or not, in many cases this is not happening. Many owners of property less than 600 sft have been required to pay BCC (Ranganathan, M presentation Dec 17, 2007). So far a total BCC of 155 cr has been collected albeit with wide variations across zones. Mahadevpura Zonal engineers say that 70% of the CMC has paid BCC while in Kengeri a much smaller proportion has paid. About 60% of the BCC has been recovered under compulsion say BWSSB and BBMP officials. When people need plan sanctions or khatha transfers or some other permission, then they are compelled to pay the BCC as well. Despite these compulsions, there is a shortfall in BCC with the *Times of India* (Oct 3 2007) reporting that only 20% of consumers have paid the user fee.

The shortfall in BCC is a serious issue for the BWSSB as it is not possible for them to give water only to those who have paid. They have to give water to all houses on the street regardless of whether they have paid or not. While BWSSB says they cannot do policing for more than 4 lakh connections, they say they will take steps to increase BCC. These include levying a stiff penalty for those who have not paid the BCC with the ultimatum that their water supply will be stopped. A World Bank Demand Assessment led by the Water and Sanitation Programme (WSP) was influential in fixing the slabs for BCC and the penalty fees of Rs 2,500- Rs 80 per sqmt if it's a residential house and Rs 120 per sq m for commercial buildings.

Just how expensive is GBWASP?

The GBWASP makes water much more expensive than it is currently. In addition to BCC, tariffs are higher compared to those levied by a range of public and private providers presently supplying water in the peripheral areas (see Table No.11 and Figure No. 11 below).

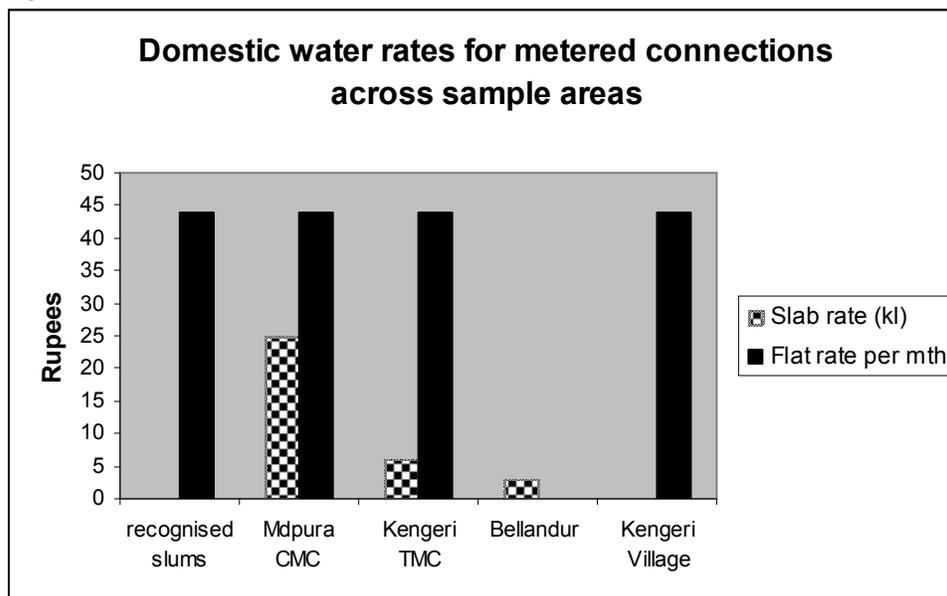
²⁹ To get a BCC exemption the person has to have the necessary khatha certificates for the property.

Table No. 11 Comparing water tariffs across existing public and private providers

	Water Tariffs Domestic Users (kl)	Water Tariffs Commercial users (kl)
GP	Upto 1000 l- Rs 3 Above 1001 l- Rs 4	Rs 62.5-75
TMC	Rs 44/mth flat rt For those getting BWSSB water: Rs 25	Rs 70 for Cauvery water supplied by BWSSB
CMC	Rs 44/mth flat rt For those getting BWSSB water: Rs 25	Rs 70 for Cauvery water supplied by BWSSB
BWSSB	Rs 25	Rs 70
Pvt tankers	Rs 25-35 for within locality Rs 50-62 outside locality Rs 50 within locality in summer Rs 122 outside locality in summer	Rs 25-40 for within locality Rs 50-62 outside locality Rs 50 within locality in summer Rs 122 outside locality in summer

Source: Interviews

Figure No. 11



Who has got priority access to Cauvery water

At the outset of the project the GoK committed 135 mld of bulk water supply from the Cauvery to GBWASP. While GBWASP was launched at the end of 2003, up till December 2007 no Cauvery water had been released under GBWASP. A source from the BWSSB reveals, however, that the 135 mld of water originally committed to the project has been distributed elsewhere, “When BWSSB has excess water and there is demand for it, we cannot hold onto the water, we distribute it.” In this way, from 2003 onwards, different areas in the GBWASP project area got this water, such as Vijaya Bank colony, Sahakarnagar, housing board developments and others. The very political decisions made as to who gets GBWASP water and in what priority sequence lie shrouded in mystery. It is not clear what criteria have been used to decide who has already got Cauvery water in peripheral areas (i.e, prior to Dec 2007). When asked how they decide where to allocate water first, a BWSSB official avoided giving a straight answer. He did acknowledge

however that distance to the feeder mains was a factor³⁰. First they identify existing feeder mains and then wards to be commissioned. The wards that are closest to the feeder mains will be commissioned first because there is no need to put in place separate feeder mains to supply them.

Paying for water that will come only in 2011

The GBWASP pilot launched in December 1 2007 has supplied water from the 100 mld Augmentation Scheme under Cauvery water IV Stage Phase I. The pilot gives water to 5-6 wards in each of the CMCs/TMC. 72 wards in the 5 new BBMP zones will be covered by it. Once again there are no clear criteria available determining how the 72 wards have been selected or how this water will be allocated within these wards. It is only by 2011- 12 when the Cauvery water IV Stage Phase II 540 mld scheme will be operational that BWSSB hopes to cover all areas in the 8 ULSGs³¹. The selected contractors in different zones are laying feeder mains for this now. *Thus while people have been paying BCC since 2006, a lucky few will get water in 2008 while the whole target area will get water only in 2011.* Looking at the pattern of water distribution so far, it is clear that poorer groups living in unauthorized areas will get water last - in 2011 if there are no further project delays (see Table No. 12 below).

Table No. 12 Comparing status of GBWASP across Mahadevpura and Kengeri

Status of GBWASP in Mahadevpura CMC	Status of GBWASP in Kengeri TMC
<ul style="list-style-type: none"> ▪ Pipeline work and connections have been given in many areas of Mahadevpura zone including Hoodi village. However, pipelines have not been laid in Kaverinagar slum. There is no explanation for why pipelines have as yet not been laid in Kaverinagar. Local officials say that this work will be done, the question is when? 	<ul style="list-style-type: none"> ▪ Out of 23 wards in Kengeri TMC, 8 wards in Cauvery Phase I have had distribution and feeder networks completed. Pipelines have not been laid in Kasthuramma slum. There is no explanation for why pipelines have as yet not been laid there.
<ul style="list-style-type: none"> ▪ As of Aug 2007 40 cr of BCC (70% of the CMC) had been collected from erstwhile Mahadevpura CMC. Many people in Hoodi have paid BCC but not yet got water. They have been waiting since June 2006. 	<ul style="list-style-type: none"> ▪ Water started to be released in wards 1-7 (Kengeri village area) on December 1 2007 as part of the 100 mld Augmentation Scheme. It is unclear what criteria have been used for selection although zonal officials say that technical reasons (completed pipeline network) dominate.
<ul style="list-style-type: none"> ▪ Cauvery water from the original 135 mld committed to GBWASP has been distributed to a few large apartments and companies in peripheral areas. It is not clear what criteria were used to determine who got this water but rumours abound of developers paying lakhs in bribes to get access to water. 	<ul style="list-style-type: none"> ▪ In Phase II a tender for distribution and feeder networks for the remaining 15 wards has been given. Out of this 3 are completed (11, 12 and 14) and a 4th partially done (ward 23). In another 4-5 mths BWSSB says they will start supplying water here. Work will continue on the remaining wards simultaneously.
<ul style="list-style-type: none"> ▪ Line charge and water release was initiated from December 1 2007 from the 100 mld Augmentation Scheme. 7 wards have been selected for getting water from this scheme. They are wards 1, 2, 10, 12, 14 from Mahadevpura CMC and 18 and 29 from KR Puram CMC. It is not clear what criteria have been used for selection although zonal officials say that technical reasons (completed pipeline network) dominate. 	<ul style="list-style-type: none"> ▪ BCC collected to date from Kengeri is Rs 4 cr. Only 1062 house holds have paid.

Source: Interviews

³⁰ Due to growing water scarcity in the Greater Bangalore region, one of the key factors on which property developers now decide on the locations of their projects is proximity to a BWSSB feeder main (Interviews property developers).

³¹ The 540 mld Scheme also proposes to cover 80-85% of the 110 villages included within BBMP, an area of 800sq km. However, there is no clarity on when these villages will get water.

Eliminating competition to GBWASP: Dismantling existing public stand posts and mini water supply schemes?

Under the GBWASP pilot, water is being supplied through individual connections which BWSSB is in the process of metering. BWSSB is working simultaneously to ensure all consumers pay the Rs 550 meter charges and those who have not yet paid BCC do so immediately. A local engineer explained why consumers should pay BWSSB and take GBWASP water over bore well water. Currently people are supplied from bore wells but this water is inadequate (only about 60 lpcd), of unreliable quality, and could stop at any time. GBWASP on the other hand is planning to supply 135 lpcd of potable water which is assured water supply over a longer term.

The costs of transporting water all the way from the Cauvery River to Bangalore have meant that Cauvery water is far more expensive than ground water or surface water provided by the ULSGs. Given this, consumers have no incentive to switch to GBWASP unless cheaper sources of water are eliminated. The BWSSB is considering ways to make GBWASP more popular. Officials have discussed the possibility of disbanding all public taps so that more people are forced to use Cauvery water. This raises a further question: what will be the fate of existing assets in peripheral areas, such as mini water supply schemes, once GBWASP is operational? These assets are now under the control of BBMP. They currently supplement BWSSB water supply. However, once GBWASP becomes fully operational in peripheral areas, zonal officials do not rule out the possibility of dismantling existing assets all at once or of reducing expenditure on their maintenance over time.

A Mahadevpura Zonal official mentioned the strong possibility of transfer of all water related assets (such as bore wells and mini water tanks) in the pilot 7 wards from the BBMP to the BWSSB. This means that the BWSSB will control BBMP water assets and the supply of bore well water. This will enable it to eliminate cheaper alternatives to Cauvery water that are presently its competitors. This will force consumers to only rely on GBWASP for their water needs.

“24x7 subject to availability of water”

The considerable rhetoric over GBWASP bringing in world-class standards in water supply by providing “24x7” water has raised several questions, chief of which have to do with feasibility and the availability of sufficient water. Currently, the BWSSB supplies water for 3-4 hrs in the BBMP core area every alternate day. Once GBWASP starts, the same duration will prevail, said a BWSSB zonal official. The same official agreed that water would be provided “24x7” but explained that what that meant was that water will still be supplied for a few hours on alternate days. “24x7 means subject to availability of water.”

An official from the head office at Cauvery Bhavan responded saying: Do you have a sump and overhead tank? Then doesn't that mean 24 hour water even when BWSSB supplies water every alternate day? What more do you want?” GBWASP, he said, is a scheme to provide water to the 8 ULBs, it is not about providing “24x7” water. How can BWSSB provide “24x7” water to one group of people (i.e, the 8 ULBs) and not to their neighbors (i.e, BMP area)?

GBWASP: Favoring the rich living in ‘planned’ areas?

The way in which the GBWASP was planned and has been implemented reveals a familiar pattern whereby ‘planned’ developments and large companies get priority access and poorer and ‘unplanned’ areas are of secondary importance. While officials at all levels are quick to point out that the major reason for the sequence of distribution of water under GBWASP is a technical one of proximity to main feeder lines and completion of pipeline network, it is clear that these

decisions are highly political. While a commercial approach was put in place to guarantee better service for paying customers, people who have paid BCC in 2006 have little hope of getting water before 2008 and might get water as late as 2011. In notified slums like Kasthuramma slum in Kengeri the pipeline has not even been laid as yet. There is also no clarity on whether unrecognized slums in Bangalores peripheries will ever receive water under GBWASP.

At the same time, all the sources of water which poor groups access - free water supply via public standposts, 'illegal' connections to CMC water, cheap ground water via private tankers- are all under threat of being discontinued. Simultaneously, all the strategies and networks which the poor use to access water- local politicians, local municipal officials, local leaders and watermen- are being bypassed by a centralized non-elected governance structure consisting of parastatal agencies (the BWSSB and the KUIDFC through which foreign funds are routed), private consultants, water companies and IFIs.

Conclusion

Parastatals provide services in 'planned' areas for the rich and CMCs/TMC provide services in 'unplanned' areas for the poor?

Parastatals like the BDA and KIADB develop 'planned' areas with readymade services like UGD and roads. Once developed, these 'planned' areas are subsequently turned over to local authorities (CMCs and TMC) to maintain and continue providing services³². 'Planned' developments are generally unaffordable for the poor because of the high costs of being 'legal' and adhering to planning norms and standards. The scope for local people to influence decision making in these larger 'planned' developments is also very low because parastatals have no elected councilors sitting on their Board. The "porous bureaucracy" that Benjamin and Bhuvaneshwari (2000) characterize as enabling poor groups to access services incrementally does not really work in the corporatized structure of the parastatals. Thus we see that 'planned' developments do not really provide spaces where poor groups can gain a foothold whether in terms of access to land, water or other infrastructure.

All basic services and infrastructure that caters to places where poorer groups live- revenue sites, old villages, slums- are provided by the local governments from local municipal funds. Local councilors, local leaders and sanghas play a key role in negotiating and influencing the delivery of services in return for votes. Delivery of services generally comes in response to demands articulated by local groups.

How decision making/budgeting takes place in CMCs Vs large infrastructure projects run by parastatals

A major portion of the CMC/TMC budget is decided by local officials based on needs and complaints and priority areas in different localities. Councilors also get to allocate some budget expenditure. This means that local people have scope to influence allocation of funds in their favour. In Kengeri TMC for example the priority issues were water supply and roads. A completely different approach to decision making is in evidence in the GBWASP project run by the BWSSB. Even though the GBWASP was planned for the 8 local governments around Bangalore, these local governments were not and are not involved in decision making processes. Local officials have no idea of what is going on in the project. Project decisions are taken at BWSSB head office and orders are passed down the ranks of officials till it reaches zonal level officials and field officers.

³² This causes its own set of problems. See Chapter IV for a fuller description of these.

Financial differences

The funds commanded for water supply by the CMCs and TMC are markedly less than those at the disposal of GBWASP. They got some government grants for water supply. A local BWSSB engineer revealed that KST has a relatively small budget because it generates less revenue. The TMC spent approximately Rs 8-10 lakhs/year on sanitation and Rs 5 lakhs/year on water for upgrading and improvement works. The largest chunk of revenue from bill payments comes from KST (Rs 7.5-8 lakhs/month) which didn't remain with the TMC but went to the BWSSB Chairman's account.

The GBWASP (water supply only) on the other hand is a 340 cr project (www.kuidfc.com). Funds come from a combination of grants, loans, private financing through municipal bonds and BCC. Due to several cost overruns, considerable delays in the project and lower than expected BCC, the debt burden falling on the 8 ULSGs on account of GBWASP will be higher than projected. How will these areas meet this debt burden? Will drastic measures (as stated in the agreement) be taken such as transferring over 40% of revenue surplus, allowing first claim on its revenues and mortgaging its assets if necessary to pay off loans? Will richer areas who have contributed more in BCC (40 cr in Mahadevpura) cross-subsidize poorer areas who have paid out much less BCC (4 cr in Kengeri)?

Governance differences and Impact on poor

In GBWASP, nobody gets free water; all consumers need to pay the BCC and those who did not pay on time need to pay a penalty. Those poor groups who are exempted from paying BCC because they live in less than 600 sq ft of land need to have land titles to prove ownership before they can claim the exemption. They are not exempt from paying meter charges of Rs 550 and will have to have an individual metered connection. BWSSB sources have said that those who do not pay will have their water supply cut.

There is considerable emphasis on meeting O&M costs through levying BCC, higher tariffs and eliminating cheaper alternatives that act as competitors. Those poor groups who do get access to GBWASP water might not be able to afford the higher tariffs on a consistent basis. Study findings indicate that there are also poor groups who do not get access to GBWASP water. At the same time, dismantling public stand posts and controlling release of water through other sources like bore wells and mini water tanks, means that they will have no other options for accessing water. These measures will affect them adversely.

As the implementation of GBWASP has shown, the poor living in "unauthorized" and "unplanned" areas are the last to get water pipelines and water. BWSSB and zonal engineers explain this away by saying that these "unauthorized" areas present enormous technical difficulties for contractors due to lack of proper roads, no connections to main roads, no proper drains, lack of connection to the main sewer line, land tied up in litigation, etc. This is compared with "planned" BDA developed layouts where it is very easy to lay pipelines and it is also easy to collect revenues. Ultimately, however, what it comes down to is that it is the poor who pay higher tariffs, and are not guaranteed a better quality of service.

4. BMP to BBMP: the Transition of Government and Governance

With the implementation of JNNURM since 2005, the third stage of a structural adjustment process which began in the early 1990's with the central government is now under way. This increases the breadth and depth of a market economy subsidised by government investments while at the same time creating measures for divestment and downsizing of the public sector. A corporatising framework developed by (financial, management, engineering) consultants directly benefits the private banking and corporate sector while promising benefits to the urban poor through the 'trickle down' effect. Legitimizing this framework, an important component of reforms, is attempted through an emphasis on public participation, decentralization etc. However, the manner in which notions such as decentralization are being interpreted and implemented are also undergoing a structural adjustment process.

With there being a general consensus at least among the IFIs and key ministries, such as finance and urban development, that the local government should also take on the role of creating a stable environment for enabling investment from global finance, "decentralisation" has come to be interpreted in a certain light. It has come to be practiced as: devolution of responsibility for fulfillment of basic needs and functions which is transferred to local governments, parastatals, civil society, NGO's or the private sector but not accompanied by adequate funds. This is known as an "unfunded mandate". But it is quite remarkable that due to impact of the restructuring caused by the reforms the funds suddenly surface in the form of PPP, VGF, or in the form of the urban drinking water or infrastructure policies when it comes to the private sector doing the job.

While these reform processes have been happening at the local, regional and national levels, the periphery of the city has been expanding both through organic growth by settlers and occupancy politics and planned growth via the intervention of Government. It has been a constant negotiation between forces/people that originally formed the city and came to live here, including those who migrated here with very meagre resources, as well as those who want the city to be a destination for international investment. It is in the backdrop of these changes that the formation of Greater Bangalore has occurred.

The formation of Greater Bangalore took place just over a year ago in January 2007 during the absence of an elected government. Subsequently, the bureaucracy, hand in glove with senior politicians, has deliberately delayed in holding local elections. They have implemented many measures to control the growing economy. These include a ban on registration of sites and properties which is still in place for unauthorized layouts, the move to newer systems of property taxation, and the imposition of new betterment charges, levies and cesses. While these are all part of the urban reforms agenda, they have been essentially pushed through quickly by officials in the absence of elected politicians. While there was an elected state government in place, there was some balance. But after the dissolution of the State Assembly in October 2007 the many policy decisions that have been adopted violate democratic norms and legal processes. These have been introduced putting the transition from CMCs to Greater Bangalore at risk from the fears of backlash against anti-people measures. One such example is the priority given to development of arterial roads. This is despite the stated intention of state government to sanction Rs 250 crores to BBMP to ensure availability of water supply as well as roads in newly added zones. The priority given to roads has basically improved connectivity privileging a few people who own cars but not increasing access or mobility for those who are deprived.

This chapter describes the key features involved in the transition from BMP to BBMP, focusing on changes in political structure, administration, and the development model laid down as well as implications for decentralization and local democracy. The key finding of the chapter is that the transition process has so far proved to be highly dangerous to achievement of any grassroots democracy or autonomy of local governments since plans to create a number of world-class cities dominate the design of infrastructure and its funding. The process is also not for provision of basic amenities and not in the interests of the poor. “World class cities” will benefit those who have access to infrastructure and services and can afford it, while many people will find themselves becoming illegal with no rights or access to resources and services. This has already created a divide among those who can and cannot pay for services, among those who are given access to and those who are cut off from services.

The politics behind the genesis of BBMP

Over the last few years there has been discussion by ruling parties in Government regarding various kinds of coordination authorities that are needed for Bangalore’s political bigwigs to exert their control over the “development” processes in the city. A Bangalore Metropolitan Authority was proposed, as well as the creation of a Greater Bangalore. There is a constant effort to impose reforms that shift the balance of power in favour of the state government. Thus instead of forming the constitutionally mandated Metropolitan Planning Committee (MPC), other state government created authorities to interfere in the structure of democratic governance have been imposed.

A process of annexation and a major decision to amalgamate large areas of Bangalore city’s rural countryside more than twice in size to the existing BMP was pushed through in the shortest time of barely over one month during November 2006 – Jan 2007. This was in itself highly questionable since it seems that this was a decision taken in the highest circles keeping in mind strict party political hierarchies. This is clearly anathema to democracy and the voice of the citizens. The criteria which were announced in the notification for formation of the BBMP (villages with 70% urbanisation) were subsequently changed (areas with more than 30 % urbanisation) in the process of the final decision for the amalgamation.

Conversations with several BBMP officials did not result in greater clarity on the process of selection of the 110 villages within BBMP. They were not sure of the urbanization threshold used to select villages or why this threshold was changed from 70% urbanised to 30% urbanised. Contiguity with other urbanized areas and level of urbanization were the 2 major factors that were mentioned as controlling selection of villages for inclusion in BBMP. According to the MUEPA “Housing and Habitat Policy 2007” finalised in December 2007, if “urban” in India is defined as a human settlement with a minimum population of 5000 persons, with 75% of the male working population engaged in non-agricultural activities and a population density of at least 400 persons per sq. km”, most areas in the erstwhile and merged CMCs and TMC might have met the criteria above but it is highly debatable why the 110 villages have been merged.

In a single GOK cabinet meeting in January 2007 the objections to this amalgamation and annexation were overruled by the ruling coalition government with no opportunity provided to citizens to be heard on the reasons for their objections. The announcement came soon after the five year term of the previous local government ended. As in many parts of Karnataka, city council elections to form a new government have not been held even after the passing of over a year since the term of the old council ended. While there have been many attempts to devise methods to take control over resources, especially land in developing areas like the “IT corridor”, one of the biggest is the formation of a mega city corporation in Bangalore called the Greater

Bangalore city corporation or the Bruhat Bengaluru Mahanagara Palike. This is a political and administrative creature which is bigger than most similar ones in Asia if not in most countries.

One more reason for the formation was the strong political rivalry between key politicians in the ruling and opposition parties. The opposition politicians had suggested the formation of a greater Bangalore when in power in 2003 but finally the CM of the new ruling coalition hurried through the announcement thereby scoring a political brownie point.

The whole process begs the question: what was the overriding rationale for this centralization in the face of trends towards increased decentralisation of power, governance and administration all over the world. This is true even in Municipal Corporation of Delhi (MCD) which in the last 3-4 years has been deliberating whether to divide the single corporation into four or five corporations.

In creating this behemoth, the Government of Karnataka has created a situation where the responsiveness of the BBMP has been severely tested given the lack of elected representatives and the resulting paucity of appropriate information as to the needs of the citizens. There is not much data available on the level of basic amenities or services in the villages, except in the case of a well performing GP like Bellandur. It remains to be seen how capacity at the field level in old CMCs and village areas will be strengthened. Making governance more responsive means that a bureaucracy cannot be the rulers as the case is today but need to complement an elected government, an argument that is put forth by the senior administrators as well.

How did previous ULSGs (GP/TMC/CMC) function in the performance of their duties?

The local governments under study were formed during 1994-95. The elections took place in January 1994 for Bellandur GP and in 1996 for Mahadevpura CMC and Kengeri TMC. There was a gap of almost 2 years (i.e., 1995-96) after the GPs were dissolved and before elections were held for the CMCs/TMC to be created. Till elections were held, the 8 ULSGs were under the acting administration of the DC. Locals complained that nothing was done during this time. The 8 ULSGs were formed and GPs upgraded with the promise of provision of basic services and amenities consequent to the 73rd and 74th CAAs. This was at a time when big companies had started entering the area and a certain level of industrialisation, urbanization and population growth had taken place.

These events also happened to coincide with a downturn or “slump” in the real estate sector around Bangalore. During the same period a brand new CDP 2005 for the BDA area was notified, identifying the peripheral urban areas of Bangalore as areas with no existing piped water supply from surface sources. The same CDP also outlined an alignment for the proposed Peripheral Ring Road (PRR) in 1995. The identification of water scarce areas resulted in the preparation of a project to supply water to eight urban local governments but not to the rural governments. The alignment of PRR on the other hand which finally became the ORR in the construction phase during 1999-2003 actually split villages, as was seen in the case of Bellandur GP.

What is curious to see is how the different tiers of govt i.e. CMC, TMC and GP decided to take up the reins of governance. The Bellandur GP was able to use the greater resources at its direct disposal more effectively with relatively little interference from higher political powers such as MLAs, etc. It was able to tackle tricky issues such as solid waste management, roads and drains as well as underground drainage construction for sewerage incrementally bringing it on par with some of the better core BMP areas. In addition to this it was able to initiate citizen friendly measures for methodical phased systematised planning. The GP also introduced in 1997 e-government software for tax notice and collection as well as water metering. It was one of the first in the state to suggest the convening of ward sabhas in different wards to give citizens a

platform for voicing their views on the need for certain priorities in the ward and the expenditure for it (see Box 6 below). The quality of life was steadily improving before the construction of the ring road began but since then the noise, dust, traffic and intensive and haphazard development has destroyed much of the peace in the area, many complain.

As mentioned in Chapter 2 and 3, the CMCs and the TMC were able to meet some of the service provision requirements. In some cases they have been able to provide water services at more than the levels obtained in the core BMP areas. UGD, however, is a much more serious gap with many areas not being connected to an underground sewerage system. In some cases, services have been provided through state level grants, for e.g. the TMC is maintaining the Park in KST by using Horticulture Department funding. The 8 ULSGs also gained access to property tax collections in new BDA planned layouts after they were handed over to the local government for maintenance as per law. Over the last few years, however, the 8 ULSGs have been under a severe funds constraint. The chief reason for this is the lack of financial autonomy of ULSGs and the constant interference from state government as manifested in stoppage of registration of land and scams being investigated by the Lok Ayukta.

Box 6

Bellandur GP's model planning process: making action plans and budgets by Ward Sabhas and Gram Sabhas

- Action plan process: reviewing upto Mar balance, how much tax collected last yr and how much we want to collect this yr, expend, expectations and needs according to headings (health, edu- approx amts). We keep some money for emergency works, non planning works. Planning works go to ward sabhas and then GP for lists of what people want. This list is then prioritized.
- Ward sabhas were started in 2003 by Jagannath. In ward sabhas concerned GP member represents about 800 people (abt 400 voters/ward, total about 800 people). WS study works done in the ward, how much spent. The Secretary has to tell asll this info publicly to WS (400 members) and then decide what they want to do following yr. They prioritize this and the action plan and budget is based on this.
- Approx Rs 2-3 cr for the GP is budget so for 10 wards 2.5cr, for 1 ward 25 lakhs- this much worth of works. Take away 22.5% of this wh is dedicated to SC/STs. If there are no SC/STs in ward then they have to reallocate it to those wards that have SC/STs. After report is made they present it in GS.
- About 6 wards in GP have SC/STs. WS makes first decision on SC/ST alloc, then final decision is made by GS
- GS and WS- comprised of registered voters- legal definition. It is not all those above voting age but whose names appear in voters list.
- GS and WS have to be called every 6 mths but GP can call them earlier- every 2 months if necessary.

There have been several scams in connection with the 7 CMCs and the 1 TMC around Bangalore, in particular the betterment charge scam unearthed by the Lokayukta in 2002 where the ULSGs used money collected as betterment charges without properly accounting for it. What then happened was that the state government stopped grants/funds directly to ULSGs; instead the Dept of Municipal Administration (DMA) intercepted these funds. Collection of betterment charges was then cancelled in the 8 ULSGs although collection continued in the old BMP area till December 11, 2006.

Greater control by state government with the move from GP to TMC/CMC to BBMP

There are several trends that require highlighting here. The first is that the transition to TMC/CMCs took place suddenly with no provisions in place for building the capacity to run a higher level of government. This lack of awareness about the adjustments/differences needed for

the move from rural to urban local self governments and to absorb the sudden excess of money was partly responsible for the series of scams unearthed by the Lok Ayukta in 2002. The scam unearthed by Justice M N Venkatachala, former Lok Ayuktha GOK, shows that CMCs and TMC were manipulated to siphon off large resources especially by state level politicians.

Second, empirical data reveals that with minimal interference from MLA and state level authorities, there is greater scope for local government to define its functions and perform them more effectively. It also shows how with a higher level of government the interference did increase. The jump in political hierarchy- from GP to TMC/CMC- increased the stakes for MLAs and state politicians to get more involved in local governments. This is clearly witnessed in the case study areas. The MLA in Mahadevpura has played a far greater role in the area compared to the MLA in Kengeri and Bellandur.

In Mahadevpura and Bellandur which were situated in the ‘high growth’ eastern portion of the city, the state government decided to offer huge lucrative land developments schemes to the sunrise industries of IT and BT. These were conveniently left out of the purview of the local governments so the high revenue generation and turnover had a minimal economic spillover effect in the new municipalities. On the other hand the demands made by the growth of residences, shops and establishments and commercial buildings started becoming a drain on their scarce resources.

Similarly the AT Ramaswamy committee report submitted to the Governor in December 2007 shows that political bigwigs from all parties were involved in grabbing government lands. This has also happened at the same time when the Revenue Department GOK itself was grabbing the common or *gomala* lands of the villages and CMCs/TMC as if by right using it for generating resources for itself in various ways while leaving many needs of villages and CMCs unattended such as landfill sites for solid waste, something even the BBMP is struggling with 8 years after an announcement was made by the former CM in Jan 2000.

The impacts of BBMP

Political centralization and the uncertain position of GP, TP and ZP elected members and chairmen in BBMP

The creation of BBMP has led to considerable political centralization, as can be seen from Table No. 13. In Mahadevpura Zone (consisting of Mahadevpura CMC, KR Puram CMC and 23 villages) from 172 there will now be 10 councilors and in Kengeri sub-zone from 23 councilors there will now be only 1 councilor. Bellandur is one of the 110 villages that have newly come under BBMP jurisdiction as of 16th January 2007. A 20 member Bellandur Gram Panchayat (GP) elected in 2004 has been dissolved and in its place is Bellandur sub-division which now runs 11 villages including a few from two other panchayats. One Corporator will now replace the 25-30 elected panchayat members. This indicates how decision-making power is being concentrated in the hands of a fewer politicians making them more powerful under BBMP.

Table No. 13 Political structure before and after BBMP in Mahadevpura, Kengeri and Bellandur

Name of area	Earlier under CMCs and Panchayats	Now under BBMP
Mahadevpura Zone	Mahadevpura CMC: 32 Corporators KR Puram CMC: 32 Corporators	10 Corporators for Mahadevpura Zone 1 Zonal DC for approx 5 lakh people

	11 Panchayats: approx 110 Members Total = 174 elected representatives	5 Joint Commissioners in 5 range offices
Bommanahalli Zone	Bellandur GP: 19 Members	1 Corporator from Bellandur sub-zone (11 villages- approx 30 GP Members)
RR Nagar Zone	Kengeri TMC: 23 Corporators	1 Corporator for the sub-zone
	Corporator's constituency: 4-8000 people	Corporator's constituency: 50,000 people
	12 MLAs for Bangalore Urban	28 MLAs for Bangalore Urban

Source: Interviews

Due to BBMP, there will be greater competition for corporator seats because there is less number of them. Ex-panchayat candidates might also like to stand for BBMP elections but there is a high probability that organised political money and muscle power machinery will reign them in. This massive centralization will thus reduce the possibility for panchayats and municipalities to function as training grounds for candidates to develop the skills to compete in city corporation and state elections. Once elected, councilors will have more powers. An official from Mahadevpura Zone described them as “mini MLAs”. This raises the question: how will this impact relations between councilors and MLAs from Bangalore city? While MLAs should have a role in the city it is the corporators who should be given the priority in the Council though it is unlikely to be practiced in that way since it is the capital city with huge amount of funds.

Two other larger concerns need to be raised. The first is the continuing uncertain position of elected councilors till BBMP elections take place. Currently there are no elected representatives in power but councilors still represent the people and they complain that when they urge action on behalf of their constituents (cleaning a blocked drain for instance), they are often told that BBMP officials need to approve first. Since there is no council all administration is being done through Commissioner and Special Administrator BBMP. They oversee all zones and officials report directly to them.

The second is how political decision making at the local government has been affected by the creation of BBMP. When zonal officials were asked what powers they had under BBMP compared to the CMC, they report that they continue to have all the same powers BUT with the permission and approval of the BBMP Commissioner and Special Administrator. All plan sanctions now have to go to BBMP. Earlier the CMC had these independent powers. At the zonal and sub-zonal offices there is no set schedule or timeline of what will happen and no clear understanding of what will continue and what will be stopped. It is therefore not clear what has been strategically kept fuzzy and what has not in this transitional period (2007-08).

Impact of BBMP on staff and salaries

A serious issue for most cash starved local governments is delay in payment of salaries. The 8 ULSGs were no exception to this- salaries were generally paid only once in 3-5 months and about 90% of TMC/CMC workers were contract staff and not permanent. This has not changed with the coming of BBMP³³. Recently there was a general strike in all the new zones with workers demanding to be made permanent and paid salaries on time.

Another issue is that there are many new staff in the new zones who don't know the existing on-ground situation. In RR Nagar Zonal office, for instance, 3 officials spoken to in turn said they had only been in office 2-3 months and hence could not give any information or respond to

³³ A senior Water Man of Kengeri TMC has locally organized all the 73 TMC workers (watermen and sweepers) and started an association to protest for permanent jobs and higher wages. The Association has filed a petition with the court to this effect.

queries on services in their areas. There are also many vacancies yet to be filled. A zonal official in Mahadevpura stated that the considerable shortage of staff in the zone would take 1 year to fill. Officials have no clear idea of what roles, responsibilities and BBMP procedures are especially in cases of systems where migration to a universal BMP standard needs to take place. A senior class I KAS officer in the RR Nagar Zonal office professed ignorance about GBWASP and KMRP. While he could be concerned about not giving away information that could be controversial given that he is not sure of how the information will be used, the reality also seems to be that he doesn't know much. He is rather helpless because he has no decision making powers and possibly doesn't even know why certain decisions get made. It is of concern that a senior officer quite openly admits to not knowing anything about major projects like GBWASP that are supposed to have been developed specifically for peripheral areas of Bangalore.

Being short staffed is particularly serious in light of the increase of jurisdiction and the increased budget. The increase in budget includes both additional funding from BBMP as well as projects like the NURM bringing in about Rs 1060 cr and the Karnataka Municipal Reforms Project (KMRP) bringing in about Rs 100cr. A health official reported that the Health Dept in Kengeri TMC used to get Rs 8 lakhs budget per year. This year the budget has increased to Rs 16 lakhs under BBMP. Whether the sub-zone has the capacity to spend the additional funds remains to be seen. A BBMP Accounts official responded to this issue by saying that 50-60 engineers are on deputation from the Public Works Department (PWD) to BBMP and each of the zones. There are 4 Chief Engineers now at BBMP where earlier there was 1. They will administer the works³⁴.

Increased bureaucratization and centralization of administration

Officials in the Mahadevpura zonal office disclosed that earlier the Mahadevpura CMC budget was Rs 40 cr and the CMC had the powers to utilize this money and make payments according to work done. Now they are getting Rs 55 cr per zone (Mahadevpura CMC + KR Puram CMC + 23 villages) but this money is not available in the zone. They have to wait for head office to send the money after approving how it is spent. In December 2007, for instance, there was a 2 month backlog and 2 months pending bills for contractors. All the zone can do in such a situation is for the zonal JC to make a request to BBMP to speedily release the money. Prompt payers like Mahadevpura CMC which transfers Rs 20 cr in taxes every month to BBMP are the ones who are suffering the most as despite tax payers here paying on time, the zone does not get money in time.

Due to the formation of BBMP, residents now have to go to various locations to transact with local government officials. Where formerly Bellandur GP residents could do this in their panchayat office in Bellandur, now under BBMP Bellandur is a sub division in the Bomanahalli zone and the taluk office is in K R Puram. All the departments related to the taluk are scattered around K R Puram leading to increasing distance between residents and local government. A resident from Kaverinagar elaborates: When we were part of Hoodi panchayat, we used to know what kind of problem there was in which area. All disputes and problems were settled locally. The Block Development Officer (BDO) office functioned in the taluk and the officer frequently visited the area and inspected the progress of the panchayat. Because of all these efforts, the work used to move fast and problems were not prolonged. This is no longer the case.

Stalled and poorly functioning services under BBMP

³⁴ This same official also mentioned that many of these engineers have been quickly promoted by the PWD chief so that they can be deputed to BBMP.

After BBMP was formed, promises were made to the residents saying all improvements will be made in roads, water and other services, but nothing has changed, complained people in Hoodi and Kaverinagar. Water tanks are supposed to be cleaned often, but that doesn't happen regularly. Garbage on the roads has not been cleaned properly leading to bad smell. The government offices make people run around, making them go from one office to another. When the CMC was there, some system was in place. There was some awareness of what the situation is and what is being done by the officers about tank cleaning, drain cleaning etc. But now (after BBMP) there is nothing, all the work has stopped. People in Bellandur discussed how the GP used to give a contract for garbage collection to a contractor who is continuing to do the work under BBMP. During the GP time the contractor was doing a very good job because of constant local monitoring from the GP but now he is not doing the work properly. GP members also used to give awareness to the public on garbage disposal. Now this isn't happening. Bellandur residents said that if there was any water and drainage problem, they knew how to immediately rectify it. Now even after 20 days nothing is done.

A small group discussion with people in Mahadevpura elicited that when there are elected representatives/governments, all services related work happens. People can approach elected representatives for any problems related to services provision and other matters. Elected representatives would then make some noise and some work would get done. This is why people need an elected body- to ensure work is done.

There is also no clarity on the fate of public schools and PHCs in the new zones. Will the government schools run by the State Dept of Education in CMC/TMC/GP areas now need to transition to BBMP run schools? What will this mean in terms of quality of education, access, and management? Will it increase the likelihood of PPPs and IFI funded models of privatization? Similarly in the case of health BBMP has its own PHCs. Will it now take over all the PHCs in the peripheral areas? A BBMP official said this would not happen for schools and PHCs.

Impact on finances

Crafting the BBMP Budget: the process and reallocation of funds to new zones

A senior BBMP official said that earlier CMC budgets averaged about 20-30 crores. This year the BBMP has jacked up new zone allocations to Rs 55 crores while giving core BMP zones only Rs 20-25 cr each. The higher allocation is to bring services in the new zones on par with core BMP wards. He further explained the BBMP's policy on re-allocating property tax and other revenues pooled from zones. BBMP is reallocating funds according to need and not on potential to earn revenue. This is one of the advantages of centralization: that they do not differentiate between zones. For instance Mahadevpura, Byatrayanpura and Bommanahalli have the highest revenue potential but they are getting the same amount as the other zones- Rs 55 cr. All the zones are net gainers here because all are getting more than their previous budgets.

A senior official from the RR Nagar zonal office, one of the lowest revenue generating zones, corroborated this statement. They have already called for tenders for Rs 50 cr worth of road works. They are spending Rs 2 cr for flood control. If not for BBMP they couldn't spend this kind of money on developmental works because they collect only about Rs 5-6 cr worth of property tax which is much less than they're spending. This is, however, not borne out by officials in Mahadevpura Zonal office, which is the highest revenue generating zone among the new zones. Now, richer areas like Mahadevpura CMC and rich villages like Bellandur will get much less

money from BBMP, says a zonal engineer. Earlier the budget of Mahadevpura CMC was about Rs 40 cr and it had the powers to utilize it. Now the entire zone (Mahadevpura CMC + KR Puram CMC + 23 villages) gets Rs 55 cr but this money is not available in the zone; they receive the money from BBMP, a process subject to many delays.

Allocations for the 110 villages are included in zonal budgets, there is no separate allocation. A senior BBMP official said, in all honesty, there is very little clarity regarding the existing amenities and requirements of these villages. The focus of BBMP this year is on improving 40 arterial roads leading to the villages. Expenditure on roads has been selected as a trigger for development in the 110 villages over spending on education, health, water supply and sanitation. This is despite tremendous inadequacies in water supply, sanitation, health and education facilities. BBMP has developed an arterial roads proposal for 63 roads- existing roads will be developed and upgraded and link roads to the 110 villages will be developed. The BBMP CDP for NURM funds and the capital investment plan will also be revised shortly and consultations had with different stakeholders because the existing one didn't cover the 110 villages.

Since this is a transition year, a senior BBMP official explained, no significant changes have been made in the budgeting process. He described the process thus. First the engineers gave a line estimate of the programme of works (POW) which is basically an aggregation of all the works needed to be done. This was about double what they were currently spending. If the POW was within the budget planned (approximately Rs 40 cr), the zonal Joint Commissioners gave the estimates after including additional works like flood works, and arterial roads previously not contemplated. The actual assessment came to about 15 crores more so the total allocation to each of the new wards came to about Rs 55 cr (40 cr + 15 cr).

An official from the Accounts Division of BBMP said that they hadn't allocated new projects for core areas because there are still huge spillover works and pending bills which they want to reduce. When the council is there they keep adding new works. Now, with no elected council, this is an opportunity for officials to clear pending works and bills. Now BBMP is spending Rs 80 lakhs in each ward of core areas as POW. This normally goes towards whatever is the priority of elected councilors³⁵ and now, when there is no council, of MLAs.

18% city budgetary provision for SC/STs and 22% state budgetary provision for urban poor left unspent

Under a state government order passed in 1977, 18% of a city's budget needs to be spent on the welfare of SC/STs. However, a senior BBMP official confirmed that this 18% is of the total earned income of the ULSG after deduction of salaries, debt servicing costs and external income from (public and private) loans and grants. The table below makes this clear because the actual amounts allocated to welfare of SC/STs (column 4) is far below 18% of current year income of BMP (column 3). Even after all these deductions, the BBMP still has a problem in spending this much³⁶. Given the poor state of services in the study areas and the deprived condition of so many SC/ST households, this is extremely surprising.

³⁵ Since the budget POW needs the signature of the councilors, they will not sign unless their projects are given funding.

³⁶ For more information see BMP budget documents from 2001-07 collected by Dalit Bahujana Sangha (DBS) and disseminated at a public meeting on Jan 6, 2008 at the Jnanabharati Bangalore University Campus. The DBS argues that the amount allocated is left unspent, unspent amounts are not carried over as they are mandated by law, and there are major irregularities in how allocations are utilized.

**Table No. 14 Unspent 18% budgetary provision for SC/STs in BMP Budget from 2000-07
(Rs)**

Year	Total amount in the estimated BMP budget	Current year income BMP	Welfare of SC/ST allocated amount	Utilized amount	Unutilized amount
2000-01	926,18,05,000	601,41,72,000	20,01,67,000	4,57,04,000	15,44,63,000
2001-02	915,64,89,000	700,49,92,000	11,77,17,000	10,49,19,000	1,27,98,000
2002-03	972,14,22,000	727,16,97,000	18,13,21,000	15,99,42,000	-
2003-04	1021,84,10,000	778,71,73,000	13,58,35,000	15,87,77,000	-
2004-05	1283,14,88,000	729,70,52,000	14,25,34,000	15,13,49,000	-
2005-06	1560,99,96,000	958,68,72,000	26,30,06,000	15,24,55,000	11,05,51,000
2006-07	1867,51,47,000	1216,70,92,000	36,46,00,000	18,77,83,000	17,68,17,000
Total	8547,47,66,000	5712,90,50,000	140,51,80,000	96,09,29,000	47,60,08,000

Source: Compiled from RTI obtained documents of Dalit Bahujana Sangha January 2008

Currently, BBMP has plans to spend some of it on construction of slum housing and cement concrete roads (under the Basic Services for the Urban Poor - BSUP- component of the National Urban Renewal Mission- NURM), and the welfare wing (tailoring classes, computer classes etc) but this still doesn't account for the whole money.

Is this one reason for public- private partnerships (PPPs) and International Financial Institution (IFI) loans to be routed through KUIDFC and kept off-budget so they won't be counted in determining proportion to be spent on SC/STs? Is this also why the new Fund Based Accounting System (FBAS) and fiscal reforms advocate that money spent on subsidies should not come from loans because these will not be counted as part of the 18% budgetary allocations?

Similar to the 18% allocation for SC/STs at city level, the state government makes a provision for reserving 22% of the state budget to be spent on the urban poor³⁷. This 22% of state budget is calculated after deducting salaries and debt servicing. It also doesn't take into account loans from IFIs and other sources and GOI grants. This is also a reform condition under the NURM - earmarking Poor Budget at a minimum of 20% of state budget minus deductions. This year's allocation is between Rs 350-400 cr. Of this, Rs 200 cr will be spent on housing under BSUP, say BBMP officials.

Increase in taxes: Hike in existing taxes and levying of new taxes

The pressure for BBMP to generate revenues to be able to do development works in the additional 500 sq km added to its area has made it hike existing taxes and consider levying new ones. With the formation of BBMP, all CMCs/TMC have migrated to BMP rates for advertising tax and trade license tax. These are much higher than those charged by the CMCs. An officer from the former Kengeri TMC said that they normally collect Rs 8 lakhs from trading licenses every year. From April to August of 2007, however, they have collected Rs 16 lakhs due to the increase in trading license fees. The proprietor of a small hotel in Kengeri stated that every year he was charged Rs.300 as entertainment tax but now he is paying Rs.3000 after the formation of BBMP. How can he afford to pay this much more particularly because the volume of business has remained unchanged?

Additionally the value of advertising and trade license tax and other taxes like betterment charges, building license fees, and property tax depends on the guidance value of the property. As

³⁷ GOK raised this allocation from 18% to 22% in 2004.

guidance value and building value rates were revised sharply upwards³⁸ in December 2007, all these taxes have increased as well.

Among the new taxes the BBMP is considering levying are impact fees on highrise buildings that have a high impact on the surrounding area. Sources within BBMP reveal that provision for this has been included in the budget but there are many modalities to be worked out. For instance, BBMP would need to spend the revenue generated in the local area to mitigate the ‘high impact’ but they haven’t worked out the norms for this. The BBMP faces a similar problem with an infrastructure levy and a solid waste management levy. There are 1000 vehicles/day added to Bangalore. The BBMP had proposed to levy a charge on new vehicles but how do they collect it? The BBMP faces a similar dilemma with respect to the SWM levy. The BBMP wanted to collect it monthly (Rs 10 per household) so that it would be manageable for households to pay. They approached BESCOM and BWSSB to include it in their bills but both refused. Now they are considering whether collection can be done at sub-ward level in BBMP’s proposed citizen help centres³⁹.

Table No. 15 New taxes proposed by BBMP

Taxes proposed	
Property tax	Transition to CVS based property tax by April 2008*; starting a high value rapid assessment unit for large taxpayers
Betterment charges	Proposed to collect it again in BBMP, now dropped
Water supply tax	On migration to BWSSB provision, tax will increase in CMC areas
Improvement charges	BBMP rates for improvement charges per sft are to increase
Increased collection from BCC	for the GBWASP in newly added zones
TDR for road widening	Very shallow initial response, now restarted
Impact fees	Proposed but working out process to recover it
Infrastructure levy	Proposed but working out process to recover it
Solid waste management cess	Proposed but working out process to recover it
Sakrama (scrutiny, regularization fees)	Implementation stayed by Court till revised rules came into force in Feb 2008**

* Capital value rates for residential 0.5%, commercial 2%, industrial 1% and vacant lands 0.2%.

** Regularization fees for 20x30 and 30x40 sites have been reduced

Source: field work 2007

Higher property tax is also brought about by cesses levied by the state government. Four cesses are levied on property tax making for a total of 34% under BBMP. This reflects an increase of 10% (from 24%) in the CMCs as of 1.10.2007. The four cesses on property tax include health (15%), education (10%), beggary (3%) and library (6%).

Differential treatment with regard to property tax?

Currently there are 3 different systems of property tax in operation in BMP core areas, new zones and the 110 villages which will all migrate to the capital value system (CVS) of property tax

³⁸ The section 45B Karnataka Stamp Duty Act came into force from 1.1.2007 in which the property guidance value has gone up abnormally from Rs. 350 to Rs. 1,000 per sq. ft. depending upon the area while Building Value Rate has been hiked from Rs. 680 to Rs. 900 per square feet from Dec 12 2007.

³⁹ BBMP has a new project on the anvil starting from January 2008 of setting up citizen help centres for every 4000 households in the city. It will be staffed by a revenue officer, a health officer, an enforcement officer and there will be a call centre in BBMP head office. Complaints have to be attended within 2 hours of being received. These citizen help centres will be like help points for the citizens. 234 locations have been identified for these help points.

collection by April 2008. Residents in the new zones have voiced many concerns regarding the system of property tax collection. One person from Kaverinagar slum said if *hakku patras* have not been given them how can property tax be collected? Further, CVS is based on capital value so if land values are very inflated due to speculation the owner is liable to pay heavy property taxes. How will poorer groups in peri-urban areas or middle income groups on fixed salaries/pensions cope? Other residents said that they could not afford to pay the higher charges for regularization and property tax let alone the penalty charges when they don't have enough food to eat. When asked how people would cope since land values are high in the periphery and CVS is based on land values, the JC of one of the new zones said that people have to pay otherwise how will BBMP generate revenues. However, GOK policy when it comes to IT companies seems to be rather different.

The GOK has given a host of concessions to the IT sector⁴⁰ over the last several years. A Mahadevpura CMC official also admitted that currently many companies in EPIP do not pay property tax to the CMC arguing that there is no point in paying when they don't see a direct result for the money they pay. Further when the new CVS was proposed, there was so much resistance to the method of assessment and the resultant increase in property taxes that the calculation was revised and based on only 50% of the guidance value to arrive at the property tax value. This downwards revision has greatly benefited large landholdings, especially commercial and residential developments.

The creation of BBMP will surely mean greater vigilance and higher taxes which BBMP might justify by arguing that they will provide better services. Feedback from peripheral areas after joining BBMP reveals that more people are thinking of paying tax due to a greater fear of BBMP. Many also feel they should pay because that would guarantee them access to better services. This has not, however, been borne out by what has happened in the case of GBWASP.

The promise of BBMP

The promise of BBMP has very much to do with delivering a certain type of development for a "world class" city- one that is planned, professional, and efficient, based on a business model of development. This is in contrast to the messiness inherent in organic and incremental growth experienced across the city, especially in peripheral areas. So far the planning function and the Master plan has had little impact in peripheral areas. Will this change now with the advent of BBMP and how?

BBMP and BDA: Changing power equations in planning and development

BBMP by expanding its jurisdiction to 741 sq km now covers 56% of the territory of the development authority, the BDA. This includes parts of the erstwhile green belt as well as the 8 ULSGs surrounding Bangalore, among the most rapidly developing localities in the region. This means it has gained control over large chunks of developable land as well as the lucrative development and permission related fees. BBMP as development authority + corporation means that land issues such as property titling now come within its purview. Its budget of about Rs 3000

⁴⁰ Exemptions offered to IT industries under Millennium Mahithi policy: 1) capital goods entry tax exemption, 2) simplification of procedure for pollution clearances, 3) priority as to power and exemption from power cuts, 4) urban development relaxation of floor area requirements for projects outside municipal corporation limits, 5) incentives for creating employment (rebate on stamp duty or on cost of land), 6) exemption from some provisions and returns in the labour rules; permitting of flex timing.

cr (Vs BDA's budget of 1500cr) reveals the greater regional impact and powers of BBMP and the changing power equation between BBMP and BDA.

While earlier the BDA was responsible for approving all site plans for buildings greater than ground +3 floors (almost all new buildings coming up are more than 4 floors) in the peripheral areas, it is now the BBMP's task. BDA's role is only approval of layouts. This is a step in the right direction as it devolves some planning powers to the local government. The power the BDA has wielded so far in the peripheral areas has raised considerable questions regarding accountability and transparency in decision making and its authority to plan for the 8 ULSGs surrounding Bangalore given that it is a parastatal agency with no elected representatives. Resistance to the massive powers of the BDA can be seen in the Gopal Gowda judgment of 2005 where CMCs (Byatrayanapura and KR Puram) struggled against the BDA arguing they had the right to plan in their own jurisdiction and BDA was violating this in the case of the Arkavathy layout. The judgement went against the BDA. Residents of the Bellandur GP for instance said that they were already giving (more than) Rs 45 lakhs a year in property taxes which the GP used to do up the roads, collect garbage, etc. The BDA does nothing in their area and yet it want to charge all sorts of cesses.

The unauthorized nature of development: contempt for the law?

Peripheral areas are characterized by unauthorized development, some estimating that as many as 80% of constructions do not have the necessary planning permissions. Do these massive violations represent a contempt for the rule of law? Is planning viewed as dispensable? A Bellandur GP member explained that only 10-20% of farmers get legal sanction to build because they think they should not need to get permission to build on their own land. In Mahadevpura zone for instance an official said that there are only 4 approved layouts in the zone. The rest of the layouts have all been developed haphazardly with no approval from the BDA. The BDA gives approval for a layout based on certain conditions- whether proper roads and drains have been constructed, with links to other layouts, main roads, main sewer lines etc. Since private developers would rather avoid the expense and time associated with getting these permissions, unauthorized layouts springing up since 1995 are without many of these facilities and links to the region. However, these layouts have been completely sold out and have high occupancy rates. Why is this so?

Residents (including zonal officials) say there are few choices available to them. The BDA is the largest supplier of sites in developed layouts but purchasing a BDA site is not easy, it takes a lot of time. Additionally, there are lots of regulations and considerable allegations of corruption in allotment of sites. Vacancy rates in BDA layouts are very high (often as high as 90%) despite the great demand for them. This is because it is rich people who already have other sites and houses in their name that are getting BDA sites and they are buying these sites not to live in but as an investment (Interview zonal officials and BDA officials). That is why people buy private sites in unauthorized layouts- at least they get the sites easily, on time, and at a range of prices. Besides, experience in the past has revealed that being unauthorized does not mean one does not get access to basic services.

In 1994-96 the local governments on the periphery of Bangalore assumed the responsibility of development activities, sanction of building licenses and the collection of property taxes from the residents who built their homes in the areas. It was the BDA's responsibility to ensure layouts got the necessary approvals. The authority for collection of property tax and provision of services should have gone hand in hand with the sanction of layout approval but it did not. Around 1999 the state government issued a GO saying that local governments could make an entry in the record book and issue a khatha even for unauthorized sites on payment of a development charge.

This was against the regular procedures whereby land has to first be converted from agricultural usage, then BDA has to approve the layouts and then only khatha is issued. This went on during the period of the operation of the CDP 2005 which led to an increase in organic unauthorized growth in the peripheral areas. People in unauthorized layouts used bore well water and those who had land documents and could pay the connection charges were given access to electricity. A local official reports that BESCO until recently were lenient in giving connections even if sites were unauthorized because they wanted to generate revenues.

Despite there having been a lot of underreporting in land costs and registration costs almost all levels of government did pick up the proceeds of the transactions. The state exchequer and treasury as well as the local governments themselves benefited. The Stamps and Registrations and the Revenue Departments benefited the most on all transactions since the share of local government was consistently reduced due to reforms. In addition to this in 1999 the Urban Land Ceiling Act was repealed by the GOK to allow for the acquisition of large tracts of land by the real estate sector at cheap prices and to start reselling small parcels at high speculative prices. This trend was allowed to grow all around the city by the revenue department as well.

With the slow growth in the collection of property taxes the local governments became more of a service delivery system rather than an administration. There was a minimal effect of the Master Plan announced in 1995 as evidenced by the haphazard construction, the violations of land use and building byelaws etc. In the peripheries violations occurred to a greater extent in terms of layouts and in the core areas it was more building violations in terms of FAR / FSI etc.

BBMP: Bridging the divide between authorized and unauthorized worlds?

A well known academic in the city argues that Bangalore has become ‘informalized’ but that we cannot all grow in an informalized way for that would lead to a situation where “might (i.e. money power and political connections) is right”. The contempt for the rule of law that we see around us makes it very difficult to plan. In such a situation, what role does the BBMP see itself playing? Can it change the situation and how should this be done? A senior BBMP official stated that the BBMP could function as a bridge for bringing closer the two very different “planned” and “unplanned” worlds within Bangalore, demand driven (organic growth) and supply side (“planned”) infrastructure and layout provision. One mode by which it chose to do this was the Akrama Sakrama Scheme regularizing a certain threshold of violations in residential and commercial buildings on payment of a hefty fee⁴¹.

Regularization, in the eyes of this same official, is not just a revenue drive although this is important for BBMP given the increase in its jurisdiction and the low level of services in newly added areas. It is about sending a message urging people to follow some guidelines/norms and providing an incentive to follow these guidelines by the imposition of a penalty. The penalty should not be looked on as a solution but as a one-time amnesty with BBMP preventing such violations from occurring again. The Sakrama scheme received tremendous opposition from residents across the city who mounted a concerted campaign against it. Finally, the High Court in November stayed its implementation while its various provisions were looked into. The GOK

⁴¹ The Akrama Sakrama Scheme was brought in under an Amendment (Regularisation of unauthorized Development or Constructions) to the Karnataka Town and Country Planning Act 2007. The scheme came into force September 14, 2007 and permitted the regularization of upto 25% violations in commercial constructions and upto 50% violations in residential constructions upon payment of penalty fees.

also extended the deadline for applications for regularization under the scheme from Dec 14 2007 to Mar 31 2008⁴².

Recognising that violations have occurred and attempting to penalize and regularize them 5-10 years later made people question the complicity of government officials in taking bribes, allowing constructions and collecting taxes. And now after all this time how can the government penalize them and allow the officials implicated go scot free? Did the officials not know they were themselves violating and encouraging violations? In the case of Bellandur GP residents mentioned that due to local pressures in the village even if the Chairman wanted to have orderly growth in the village he was prevailed upon to look aside when violations occurred. Clearly the state government that has benefited more from these various revenue streams over time now does not hesitate to implement anti-people policies in a complete vacuum of governance and administration. This is to say nothing of the numerous developers who have also reaped the benefits of violating but who have escaped the penalties now being imposed.

De facto regularization and de jure regularization: Controlling legality and access to land

Discussing regularization must needs include a discourse on legality and how regularization via the Sakrama scheme differs from how regularization used to be done earlier. Earlier regularization was a fairly easy process controlled by local governments (CMCs/TMC) and not under state legislation. Over time, occupants of land would advocate for regularization of their land claims through local councilors, MLAs, local leaders/associations and local officials. Now, BBMP is cracking down and making it more difficult and much more expensive to regularize. The Sakrama scheme has been brought in through an amendment to the Karnataka Town and Country Planning Act. It includes provisions for stoppage of water and electricity for those who do not pay the fees and regularize. So can BBMP be seen as a new SPV for regularising, taking over huge tracts of land under a single local government and providing services to the citizens who can afford to remain after paying all the exorbitant taxes and levies?

Development for whom: Basic services for all or infrastructure for a few?

With a huge number of lifestyle destinations, including hotels, resorts, malls, apartments and villas, as well as commercial and industrial establishments becoming more a part of the cityscape, processes have begun which will privilege these as well as the newly landing global finance and commerce. New technologies and measures of control and surveillance, such as bio-metric cards and property titling depositories are to be introduced together with mega infrastructure projects for elite groups. Core Bangalore areas belonging to erstwhile BMP are being upgraded with huge expenditure outlays/estimates. The JNNURM CDP is estimated to have an expenditure of Rs 23,000 cr over five years mostly for roads and big ticket infrastructure. This investment will typically go into the main commercial and busy areas and not into smaller, unauthorized neighbourhoods.

On the other hand, a large majority is struggling for access to basic services. So far BBMP's response toward this lack seems to be inadequate. Rather than a systematic phased programme of upgrading basic services for all and the poorest first, the preferred route seems to be road development taking World Bank loans that entrust road rehabilitation and construction to non pre-qualified contractors who sub-contract the work. Often it is the same roads that are taken up under other schemes like IT-BT package and the NURM.

⁴² In Feb 2008, the GOK came out with revised rules for the Sakrama Scheme. Regularization fees were slashed by 80% for 20x30 sites and 60% for 30x40 sites and the Master Plan 2015 has been made applicable for the Scheme. Moreover, those who have paid betterment fees can deduct these from the regularization fee and those who have applied for regularization under a 1995 scheme need not apply again.

The BBMP's plan for the newly added 110 villages is confined to improving road connectivity between urbanised patches (i.e., the CMCs) for commercialisation and modern facilities to enter over a period of time. This is similar to the process of forced urbanization experienced in places like Bellandur on the development of ORR. Is the only development for villagers that associated with the development of a big road? Will this further heighten rural-urban divides and urban-urban divides within BBMP? The contrast here is between the BBMP and Bellandur GP which was able to give a forum in the form of a ward level sabha to its voters to decide priorities and allocations so that phased and planned development became possible. It was able to do so every year from 1997-98 onwards. In 2002 -2003 the ward sabha process was passed into a state legislation based on the Bellandur model. This led to the Panchayat Raj Amendment Act 2003.

While the BBMP will continue to find its task to bring on par all the newly added areas extremely daunting it will not get much support from the people who have already paid the BCC for getting cauvery water supply under GBWASP and will have to wait till 2012 to actually get it while some more privileged people will enjoy flowing water in their taps. It may also not get adequate support from those who have paid all taxes and are now finding it difficult to get a BBMP khatha to be formally and administratively included into the BBMP. Water supply and UGD will most likely be the most pressing demands from citizens in the future.

It took 10-12 yrs to bring newer areas of BMP included in 1996 on par with core BMP areas. New BBMP areas will take another 15 years to bring on par with BMP wards, officials estimate. GOK is giving a grant of Rs 250 cr (which will probably be given annually) but this will hardly be sufficient for an additional area of 500 sq km. Even with Sakrama generated revenue ploughed into basic services in outlying areas it will take a long time to bring these on par with core areas. And the 110 villages may well take another few thousand crores over 20 years to come up to the "living standards" of the inner core areas.

The BBMP has a major task ahead to fulfill the political promise based on which the decision to form the BBMP itself was made. How does a bureaucratic administration which lacks elected representatives to be their eyes and ears keep up this promise? In the core areas such as Shivajinagar and Bharathinagar it is already facing a breakdown in conservancy services and SWM and the likelihood of spread of cholera. To prevent further disasters it has to strengthen its responsiveness, particularly to poor groups who rely on public services the most. Rather than impose a brand new techno-managerial model of service delivery like the GBWASP, can upgrading existing incrementally provided services that have proved to be most responsive to the needs of the poor be emphasized?

If BBMP persists with its techno-managerial approach focusing on generating revenues, making people who do not pay 'illegal', and negating the role/powers of local governments (for eg. the issuing of khatas by CMCs is not treated as "legal" or "valid" now by BBMP), there will be tremendous resistance from all who are deemed "unauthorized" and "illegal". And since those who are deemed "unauthorized" and "illegal" are a majority of households in periphery, this approach might not be sustainable in the longer term.

5. Conclusion and Recommendations

Access to land within the formal planned legal framework

The study reveals that access to land is one of the main struggles for urban poor groups. While this may seem evident to many, what comes out strongly is the fact that authorized serviced land with basic amenities like water supply, UGD and roads, is not accessible to poor groups. Their only option seems to be to occupy land and then hope to be regularized through advocacy with politicians or through a scheme like Akrama- Sakrama on payment of a heavy fee/ penalty. Regularization after the fact of occupation poses its own problems, however, as even after regularization, they still do not benefit from living in a planned environment where sufficient capital investment has been made to provide sewerage systems and roads. There is also a conflict of interest in evidence with local politicians allowing this kind of incremental regularization to build their vote bank but this being opposed by civil society groups, planners and some bureaucrats who argue that there can be no post facto planning and this kind of authorization of poor groups (political society) will only encourage further violations.

This prompts the question: Why is it so costly to be legal? This is in part due to the nature of planning as practiced in the Indian context where a land use and spatial plan sets up a pricing structure of land values and rentals that makes it unaffordable to poor groups. This forces them to use the gaps in the system and indulge in complex negotiations with local politicians and municipal officials to locate on land using forms of tenure that are not recognized as legal. Poor enforcement of the Master Plan and a relationship with a web of elected and non-elected officials at the local level has allowed them to survive (and sometimes thrive) in this fashion. With the coming of BBMP and the greater centralization and promise of greater vigilance this might change. The Sakrama scheme which was strongly opposed by many residents as well as politicians recently is a case in point.

Regularization, a certain notion of planning, and selective application of the law

What services are offered by the Sakrama scheme on paying penalty? The penalties imposed seem to be able to only guarantee against future stoppage of services. There is no information on how and for what the proposed infrastructure fund will be used nor is there information on whether citizens will have a say in these decisions. Residents in the new BBMP zones are also up in arms at the way in which the law has been applied selectively: although they are 'illegal' and living in unauthorized areas, they are still liable to pay property taxes (penalty is double property tax), building license fees, BCC (under GBWASP) but when it comes to Sakrama they are 'illegal' and need to regularize else their water and power connections will be cut (Statement by Dr Subramanya, BBMP Commissioner). This raises a host of larger questions.

Under the CMCs/TMC and GPs, residents were paying property taxes and other cesses which under the Municipalities Act entitles them to service provision. In some cases they paid development charges and even got khathas (via a state government GO which enabled local governments to issue them). How is this validity under CMCs/TMC/GP now being questioned by BDA and BBMP? Going by a strict reading of the law, does this mean that people will need to be reimbursed all the property tax they have paid for services not received? Why is it that every time a property comes under the jurisdiction of a new government agency (for e.g. from CMC to BBMP or from BDA to BBMP) the property owner needs to pay for and obtain a new khatha? Is this purely for the respective Revenue Department to generate extra funds or is there some planning logic to it?

The KMC Act states that those who are illegal should not be provided water connections. How will the BWSSB be able to provide water to unauthorized areas from where they've collected BCC unless they amend the KMC Act? Further, the cut off date for regularization under the Sakrama Scheme is so far March 31 2008. If people pay BCC after the cut off date of Sakrama which means they are unauthorized and Sakrama cannot make them authorized, then how do they get water and how can BCC and penalties be collected from them?

The above issues raise uncomfortable questions about selective application of the law and of contradictions and discrepancies in interpretation and practice of the law by different government agencies. This arises from insufficient attention to what planning means in an Indian context and to the complete neglect of the ways in which it can be made more pro-poor. So far, the practice of planning (through CDPs and Master Plans) has been shown to be anti-poor. There is no doubt that the BDA, the agency directly responsible for the planning function, can be held responsible for this failure. A clear example is the large numbers of unauthorized layouts in the peripheral areas while the BDA focuses its attention on acquiring huge chunks of land and developing layouts that are not within the reach of poor groups. High vacancy rates in these old and new planned layouts reveal that plots have been purchased by well connected and well-off residents as a future speculative investment and not to live in. Despite this, the BDA continues to acquire land for new layouts resulting in a net transfer of land from poorer groups to richer groups. At the same time, private unauthorized layouts that serve these groups are criminalized/ rendered illegal.

Land

A key finding of the study is the large-scale land acquisition being carried out in the name of infrastructure, layout, and industrial development and the tremendous corruption in the process. The KIADB, as the chief agency implicated, serves as a middleman and real estate broker in appropriating village land and transferring it to large companies and developers. Since *gomala* (common property) lands are the easiest to appropriate, these lands go first, without the village and villagers being consulted as to purpose or compensated. GOK assumes ownership of common lands rather than being a trustee who manages common lands for the benefits of people. There is a need to question this assumption and demand an explanation for whether the purpose for which the lands are being acquired is justified and on what grounds.

In a city the size of Bangalore which generates a huge volume of garbage every day, there is not even one scientifically designed designated landfill. At the same time, new land is being acquired every day for high end residential and commercial developments, IT townships, expressways, and ring roads. Villages complain that with all their common lands acquired, they have no way of providing for community needs like landfills, playgrounds, parks and community halls.

In Mahadevpura and Bellandur which were situated in the 'high growth' eastern portion (known as the IT corridor) of the city, the state government decided to offer huge lucrative land developments schemes to the sunrise industries of IT and BT. These decisions were made without consulting local governments and were conveniently left out of the purview of the local governments so the high revenue generation and turnover had a minimal economic spillover effect in the new municipalities. On the other hand the demands made by the growth of residences, shops and establishments and commercial buildings started becoming a drain on the scarce resources of local governments. If local governments control local economic development decisions in their areas, we argue, they have greater incentives to ensure a wider spread of the benefits of economic development locally.

Water

The study has thrown up the serious issue of ground water depletion and contamination of both ground and surface water. There is clearly urgent need for a comprehensive water policy that integrates use of ground water and surface water. It is, however, essential that we ensure that regulation of ground water does not make ground water inaccessible to the poor. Currently, the study reveals that it is the middle and upper classes who can afford ground water tanker supply for gardening and horticulture uses and more expensive, reliable and safe (surface) Cauvery water for potable uses and who get access to it preferentially. The poor largely rely on unreliable and increasingly contaminated ground water. The GBWASP promises to deliver safe and reliable though expensive water to poor groups but this will now happen only in 2012-13. How will these groups supply their water needs for the next five years?

The organization of services under strong planning systems with a professional, “world class” approach, are models that focus more on control mechanisms, rather than facilitating evolving models or situations. The study has revealed that a structured large project like the GBWASP has failed to supply water to the poor even though it is more expensive than the previous local government provided system. Slums in Mahadevpura and Kengeri get daily water supply under existing mini water schemes whereas under GBWASP will get water only by 2012. This begs the question: can basic services like water supply be looked at outside the framework of GBWASP type mega infrastructure and reforms in ways that facilitate existing proven ways of reaching water to the urban poor?

In 2006 itself the BWSSB did the economics on GBWASP and estimated it to be not worth the while of the private sector to operate this project at current BWSSB rates. Despite this, the project went forward and is now plagued by time over runs and cost escalation. Its claims to be professional and ‘world class’ notwithstanding, it is patently unjust and practically difficult to enforce a system of paying for water several years before one actually receives it.

What should local government do and how do we strengthen it

The study highlights that the provision of services has been seriously suffering since January 2007. While BBMP officials explain this away as being in a transition year, the larger issue of the role of local government in promoting and achieving decentralized governance remains. This is particularly when the BBMP is a massive structure that has increased centralization of (political, financial, administrative) powers, and functions although it has been given its mandate by the 74th CAA whose aim is decentralized governance.

Over the last decade an ambitious urban reforms agenda has been launched in cities across the country. Within this reform framework, cost efficiency rather than equity is the bottomline. This has led to downsizing government staff, government as purchaser (from the private sector) of services rather than provider of services. This has had a serious adverse impact on service provision to poor groups. Study findings reveal the increasing gulf between government run and operated services used by poor groups and private services provided to those who can afford them. This raises the issue of whether one can provide governance outside of a reform framework such that equity can be an overarching principle of governance and poor groups, who form the majority in Indian cities, directly benefit.

Key Recommendations of the Study

Land

1. Rather than KIADB as middleman, direct purchase (farmer to buyer) of land could be promoted. This could be based on the example of the experience of farmers in Bellandur GP, which is rooted in strong local, politically savvy leadership and popular people's support. This is in keeping with the recent move by GOK not to acquire lands for developers but instead require them to acquire land directly from farmers. This has also resulted in the Government preparing a draft Rehabilitation and Resettlement (R & R) Policy after handing over land acquisition to the private sector. The R&R Policy needs to be strictly enforced.
2. Need to question the assumption that village common lands belong to government and can be allocated to large companies without the say of the GP. There needs to be compensation for ecological and other resources to local governments and people so affected or ousted.
3. Land acquisition should mandate a stronger consultation process with farmers. This could be done by announcing it under the "town planning" scheme of the Karnataka Town and Country Planning Act, 1961 which makes explicit provisions on consultations. Currently, land acquisition is done under the BDA Act which doesn't require consultations.
4. Land acquisition process should include more rigorous justification of why it is being done. For instance, land is typically being acquired for generating revenue through sale to developers leaving many critical needs of villages/ULSGs unattended such as landfill sites for solid waste, something even the BBMP is struggling with.
5. Need to strongly question the BDA's continued provision of layouts for speculation by the affluent. How can we increase the access to land by the EWS and LIG groups in BDA layouts? This could be a matter of enforcing that BDA sets aside 10% land in new layouts for EWS and LIG housing and raising this minimum threshold given the serious shortage of EWS and LIG housing.
6. Currently BDA developed layouts are supposed to be transferred to BBMP but there may not be any fixed timeline according to which this should happen. Sometimes this happens after 10 or more years. This creates many problems for local government because BDA does not give them a list of development works done in the layout and those pending. So BBMP has no idea what works have been done and if there is a problem after transfer, the local government is held liable. Much stricter and more transparent guidelines should be followed when transferring BDA layouts to BBMP, including BDA furnishing a list of works done and those incomplete, the revenues collected to date and how they were used.
7. A progressive pro-poor housing policy should be developed with public consultation which will not allow development authorities to manipulate them in violation of their own Acts.

Spending budgetary allocations for SC/STs and Urban Poor

8. Despite poor condition of SC/STs, BMP is not able to spend its 18% budget allocations for them. As of March 2007, the MUEPA Housing and Habitat Policy 2007 reports that 99% of housing shortage (24.7 million units) is EWS & LIG housing. Why should the BBMP get into building houses and making a rental land bank? BBMP needs to continue to improve housing conditions in those areas where it already has subsidized housing. But we recommend it moves from providing slum housing to providing serviced land for poor with financial and materials support to construct their own houses
 - Could use this allocation to provide large chunks of subsidized serviced plots of land in new layouts for poorer groups.
 - Could use this allocation to facilitate financial and materials support for poor groups to undertake their own construction and upgrading efforts.

Local economic development (Employment and revenue generation)

9. According to the 11th Schedule in the 73rd CAA the Govt of Karnataka prepared an activity map for the 29 functions and their devolution to various tiers. Such a process was envisaged with adequate funding and support from the state level. Can the Govt then include the functions regarding employment under the mapping, planning and development of local resources and assets along with the powers for proper administration of SGSY etc? Currently, while skill development and vocational training is left to ULSGs, many appropriate land development measures get neglected because of not giving them appropriate powers in local economic development. The study has revealed dramatic shifts in the pattern of livelihoods while also highlighting that distribution of wealth has remained unchanged. Much greater attention needs to be paid to understanding the implications of these changes and promoting sustainable livelihoods for all groups, especially marginalized sections.
10. While village level and urban local governments should have the power to direct and plan for local economic development in their areas (employment generation and revenue generation), the Commerce and Industries Department at the state level should play a complementary role. This is because it is acknowledged that the (producers, suppliers, consumers) market for goods/services is often larger than the jurisdictions of individual ULSGs and the state can play a valuable coordinating and supporting role.
11. The role of panchayats and villagers in local economic growth and development can be served by the absorption of trained manpower in industries, including self employment and cottage level as well. How will the need for training be fulfilled? The rural areas and villages have already got skilled personnel who are being involved in IT / ITES and back office outsourcing. These may be scaled up when the panchayat mission mode e-governance measures to provide an information backbone are implemented.

Water

12. Urgent need for implementation of the Central Ground Water Policy and Act while ensuring that the poor who rely on ground water have access to other affordable sources of water.
13. The needs of the poor should be given priority as they are the most water vulnerable. This means that they need more frequent provision of water than the middle classes (in core BMP areas) as they have no capacity to store water. They also need predictable- both reliable and according to time- provision.
14. Due to lack of elected representatives, feedback and complaints from citizens are not being recorded. Grievance redressal within a fixed time period needs to be established with adequate funding.
15. E-governance mechanisms for complaint management were instituted under Nirmala Nagara Scheme in 2003. To date, they have only been partially implemented in the former 8 ULSGs. Typically, in person complaints made in the field are not recorded in the system. Computerized complaint management systems also are much more suited to middle class needs and not to poor groups. Computerized complaint management systems should take into account all modes of complaint making- face to face, telephone, email, letter etc. They also need to have a better fit with the ways in which poor groups access services and make complaints. This requires stronger interaction between field engineers, persons manning complaint management call centres and councilors.
16. Under GBWASP certain standards need to be maintained, such as once a day provision of predictable supply. Predictability should be ensured during distress times like summer.
17. GBWASP is currently operating with little or no transparency with the water project account being managed by the KWSPF and KUIDFC. This needs to change. For instance there is no clarity on whether BCC from new zones will be pooled and re-allocated with formation of

BBMP and on what basis this will be done. This is especially because there are considerable variations across zones- Mahadevpura CMC has already paid 40 cr BCC while Kengeri has paid 4 cr. Water is also being linked to legality with questions being raised about whether those who have paid BCC and betterment charges under CMCs, but are now considered 'illegal' under Sakrama, will have GBWASP water cut?

Overemphasis on road infrastructure

The present pattern of development, largely ad hoc, is driven by large road developments. This has so far amplified existing inequalities as the benefits of such transformations are mainly reaped by people who already well-off and places that are located on main roads. Villages along the main road have far better bus and road services for instance than interior villages like Kaverinagar and Devarabisanahalli. These are typical problems of a model of development that gives the 'market' free reign without any regulation or intervention. Therefore, merely road development is not sufficient; we need more active interventions for poorer groups to ensure they too benefit from urbanization and development at the peripheries. The environmental costs of such a model are also very high.

18. We recommend much higher priority to be placed on provision of basic services like water supply, sanitation, solid waste management, health and education and not only on large road projects particularly for the 110 villages. This could be institutionalized through the already existing ward / gram sabhas and would result in prioritization of projects based on needs. The upcoming revision of the JNNURM CDP (60% of its expenditure is for roads) and the capital investment plan so as to include the 110 villages would be a good opportunity for such a participatory process.
19. More information is needed on what is the basis for designation of arterial roads in 110 villages and allocating that much money for it. Is this based on local residents needs? More information on the breakup of expenditure on roads and water supply is also required with regard to the Rs 250 cr dedicated by the GOK to newly added zones. Has this amount mostly gone to roads and to which roads/areas has it gone?
20. The development of big roads serves as a trigger for accelerated urbanization and development of the area, as seen in the case of Bellandur. The study reveals learnings from the Bellandur case that could be useful for the 110 villages:
 - a. Land prices rise fast pushing out poorer groups and SC/STs from these areas
 - b. There is net transfer of land from village common lands/farmers to big companies with insufficient provision for community needs like landfills or playgrounds. The KIADB's role here is particularly non-transparent and corrupt.
 - c. There is no proper enforcement of planning and environmental regulations especially for big commercial and residential developments leading to greater pollution and contamination of natural resources. This means that these developments do not bear the costs of cleanup and local people suffer. Larger questions pertaining to regional management issues are also not addressed. Where do the underground drains release sewage for instance?
 - d. In cases like Bellandur GP where there was strong political leadership, a series of PPPs with corporate firms/developers resulted in infrastructure creation and savings in the GP budget. Where there is less strong leadership, this might not happen. This prompts the need for concrete policy on what the role of large corporate companies/developers can be, how such partnerships to "give back" can be created, regulated, and maintained to mitigate the impact of huge developments on village areas.
 - e. Road and other construction prompt migration. Large numbers of migrants arrive every day, often work and live in poor conditions and are not eligible for government

subsidies and programme benefits because they constant shift from place to place. The local infrastructure/governance often cannot cope with such heavy increases in numbers without assistance from the state.

21. In the study areas and in the periphery of Bangalore in general, UGD is a deep-felt need. However, are there alternatives besides the expensive mega-project paradigm provided by GBWASP? Can UGD be provided incrementally over time? Is there a way to retain cheaper and more sustainable soak pits but have better designs and more coordination and oversight? This would need to include measures by which people from the SC/ST community are no longer forced to clear away night soil and do toilet pit cleaning.

Health and education

22. Learning from the case studies, we seem to be moving toward 2 separate systems of social infrastructure- one that is government run for poor groups and migrants and the other that is operated by the private sector for richer people. This is a serious problem because it only exacerbates existing disparities between these groups. Additionally, poorer groups have less voice and ability to demand better services and so local government's responsiveness and accountability to citizens is lessened when the middle and upper classes opt for private self provisioning. In general, the study finds that richer people are opting out of publicly provided services because they're considered bad. A critical area therefore has to do with improving these services particularly for more marginalized groups like migrants, women, SC/ST and urban poor. This could be done by:
- a. Increasing state budgetary allocations for health and education to 6%⁴³ so that there will be more money available to spend on capital expenditure, equipment and quality of instruction. Currently, a recent study reveals that 90% of expenditure on health and education in the state goes on salaries (CBPS 2008).
 - b. Making health and education mandatory functions of BBMP with appropriate allocations of functionaries and funds. The Governance Committee on BBMP chaired by Mr Kasturirangan recommends that government schools and PHCs in newly added zones, and formerly under the control of the GOK, now come under the purview of BBMP. This will increase accountability between service provider and citizen provided BBMP is given adequate funds and functionaries to run them.
 - c. Finding ways to build local oversight of school and PHC functioning. The example of the very active School Development and Monitoring Committee (SDMC) in Bellandur could be one way in which local (councilor, official and parental) oversight sees to the smooth running of the school and brings in donor contributions when needed.
23. Due to a change in lifestyles and livelihoods, the increase in migration, and the increase in incomes of a small section of the population, the pattern of diseases has also changed. Alcohol problems, AIDS and lifestyle related diseases have increased. Areas like Mahadevpura and Bellandur face problems in achieving health related improvements due to the exponential increase of population especially the increase in transient population. The BBMP apparatus needs to gear up to address these changes in pattern and types of diseases.
24. There needs to be an effective mechanism in place to undertake continuous public health surveillance which has coordination between different government agencies. This would

⁴³ The National Common Minimum Programme of the present UPA government promised a similar figure of 9% for GOI.

avoid calamities like the recent cholera outbreak caused by contamination of water pipes in Bharathinagar ward⁴⁴.

25. With the launch of the National Urban Health Mission there will be money coming into Bangalore city. There needs to be greater transparency and discussion on how much money is coming in and what it is being used for.

Governance

26. Currently, there is no process in place for Gram Panchayats or CMCs/TMC to transition to BBMP. There needs to be some period of hand holding to enable a smoother transition from 73rd to 74th CAA for the 110 included villages and from lower to higher tiers of government for former CMCs and TMC. A governance advisory cell could be constituted to oversee this process. This is so we do not repeat the mistakes made in the previous annexation when the former 8 ULSGs were constituted (1995-96). At that time, the study highlights that the state government became more active in interfering in and controlling local governance affairs instead of providing a systematic and well thought-out hand-holding period during this transition. Currently, being short staffed in BBMP new zones is particularly serious in light of the increase in jurisdiction and the increased budget.
27. Focused attention needs to be paid to giving the 74th CAA the funds and mandate that the 73rd CAA enjoys. This devolution of powers and funds is in keeping with the reform conditions laid down by the JNNURM and agreed to by the Government of Karnataka and the BBMP.
28. The issue of migration is a serious one in fast growing areas of the periphery. Large numbers of migrants arrive every day, often work and live in poor conditions and are not eligible for government subsidies and programme benefits because of their constant shifting from place to place. The local infrastructure/governance often cannot cope with such heavy increases in numbers without assistance from the state. Most migrants come from rural areas because of failure of rains and lack of employment opportunities in their native places. Thus urbanization cannot be addressed in urban areas in isolation from (lack of development in) rural areas. The particularly heavy toll exacted on villages at the fringes of large towns and cities needs to be mitigated, at the minimum, by constituting a platform for joint rural-urban decision making and consultation like the District/Metropolitan Planning Committees.
29. Urban planning and project appraisal with citizen oversight mechanisms are the need of the hour especially keeping in mind the vast distances in BBMP wards and zonal offices and neglected and people-unfriendly complaint grievance mechanisms. This could involve identification of needs through innovative participatory urban appraisal measures and close scrutiny of ward works expenditure. Display of ward works and budgets and a manual to implement the RTI Act 2005 in urban slum areas in conjunction with 74th CAA could increase accountability of contractors and BBMP. More detailed recommendations could be followed from those outlined in the March 2008 Report of the Expert Committee on Governance in the Bangalore Metropolitan Region and BBMP.

⁴⁴ It was only several days after the outbreak that the cause was discovered to be blockage of sewage pipes on Naga Theatre Road while constructing a bridge. This caused a backflow of sewage which contaminated water pipes.