The Focus City Research Initiative (FCRI) is a series of eight action research projects funded by the International Development Research Centre (IDRC) in Canada. In the “Focus Cities” approach, multistakeholder city teams worked in partnership over four years, to research and test innovative solutions to alleviate poverty. The participating researchers worked in the following cities: Lima (Peru), Cochabamba (Bolivia), Moreno (Argentina), La Soukra (Tunisia), Dakar (Senegal), Kampala (Uganda), Colombo (Sri Lanka) and Jakarta (Indonesia).
With a population of approximately 647,000, Colombo is the largest city and commercial capital of Sri Lanka. The level of water and sanitation coverage in urban areas in Sri Lanka is relatively high with a reported coverage of 98% for improved water supply and 89% for improved sanitation. Nevertheless, as in most cities, some settlements in Colombo have limited access to basic services.

1 Census, 2001

Under-Served Settlements (USS) are areas within the city boundaries that have limited access to basic services such as water and sanitation or solid waste management and where land tenure for residents is uncertain. Environmental degradation, vulnerability to flooding and epidemics and the absence of basic services can exacerbate poverty in these communities.

Under-Served Settlements within the City of Colombo can be as small as 20 households or as large as several hundreds. The land is often publicly owned by one of several government bodies. Delivering services in a neighbourhood where tenure is uncertain is a challenge for the Colombo Municipal Council (CMC). They must coordinate activities with landowners and find ways to secure tenure for residents. A further complication is that the CMC is restricted from directly servicing some of the USS as they are not legally recognized. The CMC estimates that there are over 1600 USS within the city boundaries.

Gothamipura is one such USS located in a relatively low-lying area where drainage and disposal of wastewater are problematic. The community has a generally low quality of housing and a fairly high population density (470 persons per hectare compared to 173 for the city as a whole). The neighborhood surrounding Gothamipura also lacks some basic amenities but on the whole is more spacious and not as prone to environmental problems. A canal that forms one boundary of the USS has been subjected to a high degree of pollution.

The Colombo Focus City Research Initiative (FCRI) is one of eight action research projects funded by the International Development Research Centre (IDRC) in Canada. The project "Community-based Assessment and Improvement of Living Environment in Underserved Settlements and the Environ: The case of Gothamipura-Colombo" started in June 2006. The project builds on the Colombo Municipal Council’s (CMC) Poverty Reduction Strategy Framework initiated in 2002. The CMC leads a research team that includes the Sevanatha Urban Resource Centre, a local development NGO, and the Center for Poverty Analysis (CEPA), an independent research institution. A community development council was recently reactivated by the project and is also highly active in it.

Early in the project, a rapid community appraisal was conducted where residents expressed the need for better sanitation and solid waste management services. In partnership with the community, the team is designing an integrated model of service delivery that could be applied across Colombo. As a result, every household in Gothamipura will have the possibility of connecting itself to the constructed main sewerage line. Currently, a small-bore sewerage system with a pumping station to connect the community to the main network and a solid waste management collection and sorting centre are being built.
Responding to the lack of up to date and detailed information on living conditions in the USS, the first step of the research team was to conduct a baseline survey when the project began in 2007. The survey collected data on access to the full range of services, current satisfaction levels with these services, aspirations, cost benefits and willingness of households to pay for these services, household profiles and consumption patterns and perceptions of wellbeing. Gothamipura’s residents own well-being was compared with that of residents living in a neighborhood outside the settlement (hereafter referred to as “the neighborhood”). Elements that make up a household’s well-being include income and expenditure patterns as well as satisfaction with access to existing services. This data briefs introduces the baseline survey sampling method and its interpretation. Changes and improvements can be assessed by comparing these data with the results from a similar survey to be conducted at the end of the project. This data brief presents some of the findings from this survey.

Baseline Survey Method and Interpretation of Data

A systematic random sampling method was used for the baseline survey. Stratification based on location – within the Gothamipura USS and in the surrounding neighborhood – ensured representation of two fundamentally different communities within the project area. Every 3rd household in Gothamipura was surveyed for a total of 172 households as well as eight institutions that are located in the area.

**Number of households sampled in the baseline survey (2007)**

<table>
<thead>
<tr>
<th></th>
<th>Planned</th>
<th>Actual¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gothamipura</td>
<td>93</td>
<td>91</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>90</td>
<td>81+8*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>183</td>
<td>172+8</td>
</tr>
</tbody>
</table>

¹ Two households (HH) in the USS and one in the neighborhood (NBH) were rejected.

* Eight of the HH sampled in the NBH were businesses or organizations.

The HH survey questionnaire was modified slightly for sampling the businesses and organizations.

Security of tenure is well known to encourage the positive development of neighborhoods; people whom have secure tenure are more likely to invest in their properties. In terms of tenure, the difference between the USS and the neighborhood are clear. No homes in Gothamipura and 53 % of the homes in the neighborhood have freehold tenure, meaning complete ownership. An additional difference is that many of the residents in the Gothamipura hold enumeration cards, part of a Colombo Municipal Council initiative that has offered many USS residents a sense of tenure security.
There is a great deal of diversity in incomes in Gothamipura with some residents living with low incomes, while others have very high incomes. The majority of Gothamipura households (69\%) live on 20,000 LKR (175 USD) or less per month. By contrast, only 7\% of households earn more than 40,000 LKR (350 USD) per month with some 2\% earning over 100,000 LKR (1,000 USD) per month. These numbers confirm the general level of poverty observed in the USS. The average income per month of Gothamipura residents is half the average income of other urban residents in Sri Lanka and slightly higher than the rural average in Sri Lanka.
Expenditure
The baseline data shows that households within the USS spend some 50% of their monthly income on food and beverages. Such an amount leaves families exposed to changing commodity and food prices. For those in the lowest income category (0-5000 LKR), the amount of expenditure was 70%. Transport and fuel for lighting and cooking are the next highest household expenses (12%).

Satisfaction with Existing Service Provision
The quality of life in USS households is directly affected by access to services such as water, sanitation, solid waste disposal, electricity, roads, and rain water drainage. Interestingly, access to these services does not always correlate with household income.

Access to water
The water service is good as residents enjoy a continuous supply without water cuts. Interestingly, residents from the neighborhood are not as satisfied with the access to water as are residents in Gotamipura.

Access to sanitation services
Ninety four percent (94%) of the USS households have access to private toilets. However, none of them are connected to the main sewerage system. They are instead mostly connected to septic tanks. During heavy rainfall, these tanks overflow causing illness and pollution. The level of satisfaction with sanitation services is about the same in the neighborhood and the in Gotamipura.

Access to solid waste disposal
The survey illustrates that solid waste management is the service with the least satisfaction amongst residents. The CMC is responsible for the sanitation services provided to the community and many residents complained that the CMC does not collect garbage regularly. Most residents have been dumping their garbage near the Community Hall. Residents in the neighborhood are more dissatisfied with the solid waste management service (70%) than those of the USS (45%).

Percent of residents satisfied with service provided

<table>
<thead>
<tr>
<th>Service</th>
<th>USS residents</th>
<th>NBH residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water access</td>
<td>94%</td>
<td>68%</td>
</tr>
<tr>
<td>Sanitation</td>
<td>61%</td>
<td>67%</td>
</tr>
<tr>
<td>Solid waste disposal</td>
<td>26%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Percent of Gothamipura households

<table>
<thead>
<tr>
<th>Expenditure Items</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and beverages</td>
<td>50%</td>
</tr>
<tr>
<td>Transport</td>
<td>2%</td>
</tr>
<tr>
<td>Fuel</td>
<td>2%</td>
</tr>
<tr>
<td>Education</td>
<td>3%</td>
</tr>
<tr>
<td>Telephone, mail</td>
<td>2%</td>
</tr>
<tr>
<td>Cigarettes and alcohol</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
</tr>
<tr>
<td>Clothing</td>
<td>7%</td>
</tr>
<tr>
<td>Health</td>
<td>5%</td>
</tr>
<tr>
<td>Rent</td>
<td>4%</td>
</tr>
<tr>
<td>Water</td>
<td>3%</td>
</tr>
</tbody>
</table>
The problem of solid waste management is worse- ned in Colombo by the lack of spare land within city limits for a dumpsite. A recent initiative by the CMC under its “100 Day” program includes solid waste management as its priority in response to widespread public frustration.

City wide services

Among USS residents, satisfaction with access to city wide services is much higher compared to services delivered locally or at the household level. This is especially true of access to education, health and public services, such as transport and market places, all of which were rated as highly satisfactory. This is reflective of the generally inclusive policy of Colombo in citizen access to services, even those living in irregular settlements. The level of satisfaction with city wide services is about the same in the USS and its neighborhood.

The level of satisfaction with educational facilities is very high as there are many good quality government schools, private educational institutes and technical schools in the vicinity.

The community is also satisfied with health facilities as government and private hospitals and other medical services such as the CMC dispensary and the Ayurvedic hospital are situated close by. According to the community, access to public services is satisfactory as the town, bus stop etc, are within walking distance of their homes.

Household well-being in the Gothamipura USS

Residents evaluated their own well-being on a scale of low, medium or high. Results show that 20 % of residents rate their well-being as high, 44 % as average, and 36 % as low. For example, livelihood opportunities, including overseas employment and income earned were identified as the primary contributors to their well-being. The existence of improved housing and individual connections to utility services was also considered an important contribution to their well-being. People also expressed satisfaction with their access to education and believe that if their children are well educated, they will have better employment opportunities.

Percent of residents satisfied with city wide services

- USS residents
- NBH residents

Health: 75% (USS) vs 80% (NBH)
Transport: 91% (USS) vs 90% (NBH)
Education: 88% (USS) vs 88% (NBH)
Past and future perception of well-being in Gothamipura

About half of the residents from Gothamipura believe their household well-being has improved in the last five years and expect it will continue to do so in the next five years.

Baseline Survey

Self-evaluation of well-being in Gothamipura

- **Low-level of well-being**
  - Low income
  - Irregular/no employment
  - No individual access to utilities such as electricity, water, toilets
  - Low-level of education
  - Alcoholism

- **High-level of well-being**
  - High income
  - Foreign employment, Business-owners
  - Adequate housing, access to individual utilities
  - Assets such as vehicles

- **Average well-being**
  - Stable, multiple income sources
  - Access to assets such as housing
  - Able to live without external support

Past and future perception of well-being in Gothamipura

<table>
<thead>
<tr>
<th></th>
<th>Last 5 years</th>
<th>Next 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>No change</td>
<td>35%</td>
<td>8%</td>
</tr>
<tr>
<td>Deteriorated</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>25%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Gothamipura district
Two thirds (2/3) of USS residents live on less than 20,000 LKR (175 USD) per month (or 6 USD per day). The Colombo district poverty line for 2010 is LKR 3,430 (30 USD) per person per month (or 1 USD per day). Less than twenty percent of USS residents live under the poverty line. These residents face greater risks than the relatively small number of residents who are well off. Poor household spend fifty percent (50%) of their income on food. This makes them vulnerable to fluctuations in food prices. Transport and fuel are another significant portion (23%) of their household expenses.

While residents were highly dissatisfied with solid waste disposal, a good proportion (60%) were satisfied with sanitation services and most are satisfied with the availability of and the city-wide services provided outside Gothamipura. For this reason, the CMC adopted a solid waste management pilot project in Gothamipura in addition to a sanitation project. One of the most interesting results was the optimism residents expressed with regard to their well-being. Most stated that their personal well-being has significantly improved in the last five years and envisage that the same will hold true for the future.

The analysis suggests that education and city-wide health services are most accessible, however, a tangible input on environmental improvement and poverty reduction will require an under-served settlement focused strategy in order to address specific service deficits in those settlements.

**Additional Resources**

The Focus City Research Initiative and the Colombo City Project please visit: [www.idrc.ca/ccw](http://www.idrc.ca/ccw)

the project’s baseline survey **method and questions** (baseline toolkit), the survey **results** (baseline handbook) and the **monitoring and evaluation** of the Colombo City Project: [www.cepa.lk](http://www.cepa.lk)