



## Wellbeing and urban governance: Who fails, survives or thrives in informal settlements in Bangladeshi cities?



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### ARTICLE INFO

#### Keywords:

Urban governance  
Wellbeing  
South Asia  
Bangladesh  
Informal settlements  
Cities

### 1. Introduction

The governance of urban agglomerations and processes of rapid urbanization is a key global development challenge for the 21st century. By 2050 around 10 billion people, two thirds of the world's population, are projected to live in cities, with rapid urban growth particularly taking place in Africa and South Asia (SDSN, 2013). Towns and cities can be powerhouses of economic development and employment generation with the potential to drive significant improvements in societal and human wellbeing but can also be locations of deprivation, immiseration and societal breakdown (Baker, 2008; Ravallion et al., 2007; Satterthwaite, 2003). Where social, political and economic arrangements in cities generate the conditions for improvements in human wellbeing other desirable goals of economic progress, such as greater economic inclusion, innovation, productivity, creativity and enhanced quality of life are likely to follow (SDSN, 2013, p. 9). It is a major problem however that “we don't know which cities are performing well, and which are not, and therefore our ability to explore the determinants of wellbeing in cities, and hence to inform urban policy is limited” (Burdett and Taylor, 2011, pp. 3–4). The problem runs deeper than just the availability of data: it is also not clear what

frameworks we should be using to organise the collection of data to assess whether cities are contributing to genuine development progress.

In this paper we present the case for understanding towns and cities in terms of levels of human wellbeing achieved by the people who live in them. In this study we have adopted a multi-dimensional wellbeing framework that builds upon but modifies the wellbeing framework that has been developed by the OECD in their ‘How's Life’ programme (Boarini et al., 2014; Gough and McGregor, 2007; OECD, 2011). We analyse wellbeing outcomes and explain how these relate to and are significant for our understanding of urban governance. While such an inquiry is pertinent in respect of city populations generally, we have focussed on people living in informal settlements.<sup>1</sup> These informal settlements are often labelled ‘slums’, but that title is a matter of some contention; while some regard it as derogatory others wear it as a badge of truth.<sup>2</sup> Regardless of the terminology, the type of settlement that we studied plays a key role in absorbing the rapid increase of urban populations in many of the world's poorest regions (Baker, 2008). In the case of Bangladesh, in 2009 61.9% of urbanites lived in slum areas (UN-HABITAT, 2013), and the number of urban slum households have risen by 77% between 1997 and 2014 (Bangladesh Bureau of Statistics, 2015).

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<sup>1</sup> Informal settlements are residential areas where 1) inhabitants have no security of tenure vis-à-vis the land or dwellings they inhabit, with modalities ranging from squatting to informal rental housing, 2) the neighbourhoods usually lack, or are cut off from, basic services and city infrastructure and 3) the housing may not comply with current planning and building regulations, and is often situated in geographically and environmentally hazardous areas. Slums are the most deprived and excluded form of informal settlements characterized by poverty and large agglomerations of dilapidated housing often located in the most hazardous urban land. In addition to tenure insecurity, slum dwellers lack formal supply of basic infrastructure and services, public space and green areas, and are constantly exposed to eviction, disease and violence (UN-HABITAT, 2015). Communities in Bangladesh often refer to these settlements as *bostees* (Hossain, 2012; Rashid, 2009).

<sup>2</sup> For instance, Slum Dwellers International, which is affiliated to one of our partners in the Indian component of this study.

This inquiry provides important building blocks for a new political economy of developing cities. By distinguishing who is thriving and who is failing, it begins to help us understand which of these cities and communities within them are places of opportunity for whom, and in what ways they provide pathways either to opportunity or to immiseration and indignity.

Following this introduction, we discuss the relationship between wellbeing metrics and urban governance and explore the different ways that public policy has sought to measure progress. We then explain the study methodology and present key empirical findings. The paper concludes with a discussion of four key findings. First, that despite small intra-site contextual differences, the wellbeing priorities that people report are similar, suggesting that people in informal settlements in Bangladesh face similar types of wellbeing challenges. Second, we find that levels of satisfaction with achieved wellbeing outcomes differ considerably across sites and also between socio-economic groups differentiated by gender, income and age. This affirms that although the challenges may be broadly similar at an aggregated level, the policy responses to protect and promote wellbeing may need to be different at the local level and in respect of different groups (McGregor et al., 2009). Third, in these cases people's subjective assessments of how they are faring on key wellbeing priorities are largely consistent with the relevant objective indicators of their wellbeing. This is important to note because this is not always the case (Austin, 2016; Tesfazghi et al., 2010) and this may arise because of a sharp level of self-consciousness about the considerable levels of objective poverty in these communities. The fourth and key proposition that flows from this study is that wellbeing outcomes are substantively mediated by governance arrangements that are specific to the different sites. In conclusion, we argue that this study demonstrates that policymakers and practitioners who are expected to provide governance in this type of informal settlement lack the appropriate methodologies and metrics that would enable them to formulate interventions that would legitimate their claims to governance. The delivery of relevant public policy services and the exercise of effective governance requires detailed and locally specified wellbeing metrics.

### 1.1. Urban governance, human wellbeing and metrics

The challenges of governance in fast growing cities in the developing world are significant. Burgeoning informal settlements throw large number of people together in close proximity to each other but often - but not always - without the traditional institutions of governance or the familiar bonds of kinship and longstanding neighbourhood (Devas et al., 2004; Fox and Goodfellow, 2016). Just finding ways to *live well* in these contexts can be challenging in its own right but establishing the governance arrangements that enable people to *live well together* can be even be more so (Deneulin and McGregor, 2010). In this respect, relatively little is known about the ways in which urban governance explains opportunities and threats for the wellbeing of those living in informal settlements (Satterthwaite and Mitlin, 2012).

In a recent review article, McCann (2016) notes that contemporary urban governance analyses consider how policy, power, and politics shape the relationships between built environments and the identities, practices, struggles and opportunities of everyday social life in the city. He underlines the critical role of state and non-state actors, and informal localised practices. Urban governance in South Asia and in many other developing regions tends to be complicated by the fact that government authorities often compete with non-state institutions that aim to govern access to and uses of resources such as land for housing, services, jobs and urban space, in more or less benign or criminal manners (Alsayyad and Roy, 2006; Büscher, 2012; Earle, 2014; te Lintelo, 2017, 2009). In Bangladesh too, a wide range of non-governmental organisations and intermediaries seek to play a role in governing city life (Banks, 2016, 2008; Eisenberger and Keck, 2015; Hackenbroch and Hossain, 2012; Hossain, 2012; Mitlin, 2005; Suykens,

2015).

The legitimacy of governance depends in part on the ability of those who claim to govern to deliver, or at least govern the delivery of, the services that are necessary for survival and a decent life (Bevir, 2012). It is commonly held that the ability of city authorities to be effective and accountable in their governance is challenged by resource and capacity constraints in a range of areas from taxation, to planning, policy co-ordination and implementation. There can be little doubt that this is a simplification of the problems of urban governance and the 'lack of capacity' narrative is contested by authors such as Eisenberger and Keck (2015), who use the example of one case in Bangladesh to offer a more nuanced interpretation of the politics that may lie behind perceived city government failure. Nevertheless, the lack of some of the basic tools with which to make city governance arrangements effective still plays an important part in the failures of formal urban governance.

A large number of long-standing observers of urban development efforts have argued that a limited capacity to record and assess the developmental needs and statuses of populations impedes effective public policy responses (Banks et al., 2011; Krishna et al., 2014; Satterthwaite, 2004; Satterthwaite et al., 2015). There is a broad acceptance of the view that delivering on decentralised urban policy and planning mandates requires fine-grained local data on dynamic contexts (Moser, 1995; Satterthwaite, 2004, 2003; Thorbecke, 2005). Yet, city planners often face a paradoxical situation where they have a surfeit of 'nonsense statistics' alongside a deficit of reliable data calibrated at an appropriate level of specificity (Satterthwaite, 2003). Data tends to be aggregated at city level, obscuring the high degrees of heterogeneity within cities. Furthermore, urban social policy analysis typically has been conducted by central governments, expert driven and top-down, and hence has often been oblivious of the experiences and priorities of city-dwellers (Moser, 1995; Satterthwaite, 2004; Wratten, 1995).

National statistics tend to focus on income, consumption and/or material deprivations, and produced at the household level, to overlook possible gender and generational differences within these (Satterthwaite, 2004; Satterthwaite et al., 2015). Metrics for urban policy and planning typically focus on material (objectively measurable) and spatial aspects, but are largely blind to the multi-dimensional complexity of struggles for urban wellbeing (Krishna et al., 2014; Mitlin, 2005; Satterthwaite, 2003; Wratten, 1995). Official data collection efforts frequently overlook or are unable to capture the homeless, pavement dwellers (e.g. in India, see: Baud et al., 2008) and people who live in cheap and sometimes illegal boarding houses or informal settlements (Krishna et al., 2014).

It has also been argued that conventional poverty measurement methodologies are not particularly well suited to urban contexts. For instance, poverty lines tend to be defined at a national level and although they are sometimes differentiated in terms of urban and rural populations (as in India) they nevertheless tend to "greatly understate (s) who is poor in high-cost locations" (Satterthwaite, 2003, p. 187). Larger, more prosperous, and poorly governed cities are precisely the kind of location where poor people face high costs (Satterthwaite, 2004). Poor city dwellers are often dissociated from food production and face premium prices for everyday needs, including for fuel, drinking water, transport and housing (Amis, 1995, p. 153). Aside from the inherent inaccuracy of the aggregate data, national poverty lines (such as the national food poverty line in Bangladesh (Banks et al., 2011) have limited relevance for urban settings (Ravallion et al., 2007; Satterthwaite, 2004).

The tendency to focus on income and expenditures also ignores key aspects of urban poverty, e.g. asset bases; housing conditions and tenure; access to services; intersecting inequalities; or time scarcity or surpluses (Hobbes et al., 2011; Kabeer, 2013; Satterthwaite, 2004; Thorbecke, 2005). Whereas the currently ascendant multi-dimensional poverty measurement approaches (e.g. Alkire and Foster's Multi-dimensional Poverty Index, in: Alkire and Santos, 2013) seek to address

a number of these issues, they face a fundamental tension between the need to be adequately multi-dimensional and the need to offer cross-regional or cross-country comparisons (Thorbecke, 2005).<sup>3</sup> Furthermore, the emphasis on outcome measures of poverty tends to distract attention from the processes that cause poverty (Moser, 1995; Satterthwaite, 2004). For policymakers and practitioners it is important to understand the nature of relationships to markets, to political and governance systems, and to other individuals or groups within society (Harriss-White, 2005; Mosse, 2010), that cause some people to chronically fail to achieve wellbeing.

Finally, the concept of poverty is itself restrictive and does not currently capture key aspects of life that people value, such as independence, security, self-respect, identity, close and non-exploitative social relationships, decision-making freedom, and legal and political rights (Wratten, 1995, pp. 16–17). Hence, the focus on poverty itself may be a problem for urban policy and planning. This should not be misconstrued as arguing that we should not consider how to support the very many urban poor: far from it, this must be a priority. However, rather than focusing solely on impoverishment and deprivations we suggest looking at who thrives, survives and fails in terms of wellbeing.

Following the lead given by the Stiglitz Commission, we argue that it is necessary to adopt a multi-dimensional conception of human wellbeing. This is not a narrow ‘happiness’ approach that focuses on only on a measure of subjective wellbeing but is a three dimensional framework that takes account of the dynamic interplay of the *material* and *relational* dimensions of a person's wellbeing with their assessment of their *subjective* wellbeing. As such, the notion of wellbeing failure encompasses not only what we have traditionally understood as income and asset poverty (the material dimension of wellbeing) but also extends to consider aspects of exclusion as well as social and political connectivity (the relational dimension of wellbeing) and the lived experience of impoverishment and indignity (the subjective dimension of wellbeing), that are fundamental to understanding what people ‘in poverty’ are able to do and why (see e.g. Gough and McGregor, 2007; McGregor et al., 2009, 2007; Rojas, 2008; White, 2010).

While such a framework allows us to capture the multiple dimensions of urban impoverishment, it does not arbitrarily limit our focus only to ‘the poor’. All urban inhabitants aspire to wellbeing and act in efforts to achieve it, as they define it. For instance, while rural hardship drives urban migration, for many, the ‘bright lights’ of cities also offer the prospect of modernisation, of opportunity and freedom from various forms of restriction. They are places in which people aspire and strive for new forms of wellbeing. The salience of these cognitive aspects makes it particularly apparent why a wellbeing framing for an analysis of urban governance is appropriate.

The potential policy value of wellbeing approaches is now widely recognised (Adler and Seligman, 2016). Intergovernmental bodies like the OECD and governments in countries across the development spectrum (e.g. in the UK, Italy, Canada, Australia, Mexico and Chile) are now measuring wellbeing and are seeking to use it in public policy arenas. Researchers and policymakers increasingly accept the complementarity of and intricate relationships between objective and subjective measures of wellbeing (Pacione, 2003, p. 21; Stiglitz et al., 2009). Objective measures describe the conditions of the people or the environments within which people live and work (for example, the objective level of education achieved or housing quality), but these can be usefully complemented with subjective measures that assess how people perceive and evaluate such outcomes and conditions. While there is no conclusive evidence of the superiority of either subjective or objective indicators in terms of validity and reliability, it is likely that both provide valuable information (Austin, 2016; Pacione, 2003;

<sup>3</sup> Multidimensional poverty assessments are at risk of uncritically adopting indicators derived from rural studies to cities, e.g. regarding ‘improved sanitation’ (Satterthwaite et al., 2015).

Schwanen and Atkinson, 2015). A growing body of research is establishing the relationships between the two (e.g. Biswas-Diener and Diener, 2001; Chan and Lee, 2006; Graham and Nikolova, 2015; Wills-Herrera et al., 2009). The sophistication of this type of approach is not yet readily found in urban development programmes that instead tend to focus on improving material conditions but ignore the subjective and relational dimensions that are important for citizens' wellbeing (Satterthwaite and Mitlin, 2012; Walker et al., 2013).

The term wellbeing is much used in policy rhetoric as the ultimate development goal, but it is often used in an abstract and symbolic fashion and when it comes to policy and practice it is then sidelined for being ‘too complex’, ‘too difficult to measure’ or ‘too subjective’ (see for example: Johns and Ormerod, 2007). Although there is great deal of international enthusiasm for using wellbeing metrics in public policy there are still few examples of their sustained application in policy and practice. There have been significant advances since the Stiglitz Commission implored a shift in measuring progress from measures of production to measures of human wellbeing (Boarini et al., 2014; Stiglitz et al., 2009) and a range of diverse metrics for wellbeing are being developed (Adler and Seligman, 2016; Boarini et al., 2014), but policy inertia represents a bias towards ‘business as usual’ and tends towards the use of frameworks and metrics that we know are inadequate and that may even work counter to stated policy aspirations. In this paper we seek to develop the case why urban policymakers and practitioners must seek to assess the impacts of urban development and urban governance directly, in terms of their impacts on human wellbeing, and to show one way that this might be done.

We build on the model that has been presented in the OECD Better Lives Framework (Boarini et al., 2014; OECD, 2011) inasmuch as it takes the general framework for understanding wellbeing and then brings that down to the micro-level for the study of the wellbeing of individuals and households in specific contexts. Adopting Amartya Sen's position that it is neither ethically acceptable nor practically sensible to impose a rigid top-down list of things that are important for a person's wellbeing (Robeyns, 2003), the methodology uses an iterative bottom-up/top-down research process to ascertain what people in different urban contexts regard as important for their wellbeing.<sup>4</sup> This paper is based on a 2014–2015 study testing the applicability of the OECD derived framework and the methodology in six cities in Bangladesh and India. Here, we present findings for seven informal settlements in three Bangladeshi cities: Dhaka, Chittagong and Bogra.

## 2. A methodology for assessing multi-dimensional wellbeing in urban contexts

### 2.1. Context

Urbanization in Bangladesh is characterized by a limited range of economic diversification and strong concentrations in a few cities; Dhaka, the capital of Bangladesh, contains nearly 40% of the total urban population, and is one of the fastest-growing megacities in the world. An estimated 300,000–400,000 migrants, mostly poor, arrive at the city annually (Rashid, 2009). Over 673,000 households, or nearly 65% of households are estimated to live in slums. In Chittagong, Bangladesh' second largest city, 26% or over 266,000 households live in such areas (Islam et al., 2006). Bogra is a smaller but rapidly growing city, performing a gateway function for the northern areas to the capital. Fieldwork for this study was carried out in seven informal settlements, with three sites in the capital and two each in the other two cities. Informal settlements in Bangladesh are mostly located on environmentally marginal lands whose tenure is disputed (Rashid, 2009;

<sup>4</sup> This paper is an outcome of a one year study on Informal Work and Wellbeing in Urban South Asia, funded by the British Department For International Development's South Asia Research Hub.

**Table 1**  
Characteristics of study sites.

| Settlement/<br>characteristics                               | Maloti-nagar                                      | Railway colony                   | Dock yard   | Khajurtola  | Beltola                     | Chitarpar        | Sirnitek   |
|--|---|----------------------------------|---|---|-----------------------------|------------------|--|
| City   | Bogra   |                                  | Chittagong  |   | Dhaka                       |                  |  |
| Location   | Central   | Central                          | Central   | Southwest   | West                        | West             | West   |
| Physical environment   | Riverbank   | Skirts railway lines             | Riverbank   | Seaside embankment                                      | Institutional area          | Residential area | Riverbank  |
| Age of settlement (years)                                    | 15–20   | 25                               | 40  | 6–8   | 35                          | < 5              | 20–25  |
| Size (acres)   | 2.6   | 3.3                              | 2.7   | 1.3   | 3.9                         | 1.0              | 2.0  |
| Households (nr)  | 200   | 350                              | 140   | 130   | 600                         | 600–650          | 350  |
| Average respondent age (years)                               | 35.7  | 35.3                             | 35.8  | 33.1  | 33.6                        | 31.8             | 36.3   |
| Monthly household income (BDT)                               | 10,112  | 9057                             | 10,564  | 13,074  | 10,037                      | 9910             | 9794   |
| Claimed legal status of land                                 | Private deeds and illegal use of govt (khas) land | Long term lease from govt (khas) | Disputed occupied govt land, and private reclaimed land | Occupied govt land, yet active land lease market exists | Disputed occupied govt land | Private deeds    | Disputed occupied govt land and private reclaimed land |
| % houses with earth vs cement vs other flooring <sup>a</sup> | 89% vs 7% vs 3%                                   | 61% vs 38% vs 1%                 | 76% vs 24% vs 0%  | 83% vs 17% vs 0%  | 13% vs 85% vs 3%            | 1% vs 94% vs 5%  | 59% vs 11% vs 31%                                      |

<sup>a</sup> Percentages may not total 100 due to rounding.

Hossain, 2012). This is reflected in five of our sites being located on riverbanks, skirting railway lines and the seaboard, with most houses having earthen floors. The youngest site, Chitarpar, was only 5 years old, whereas Dock Yard had been in existence for 40 years (Table 1).

Urban labour markets in Bangladesh are saturated, intensely competitive, with the great majority of jobs being informal, insecure, low waged and often hazardous (Banks, 2016; Banks et al., 2011). Nevertheless, these jobs can also contribute significantly to human wellbeing, for instance by providing work that is a source of joy and pride, that shapes social identities, and that allows for a measure of autonomy and control, and by providing means for economic survival or advancement. Our studied settlements were home to many low income workers and their families, and were found to be hives of informal economic activity. The main paid jobs involved driving a rickshaw or van (16%); domestic work (15%); skilled labour (14%); daily wage earners (12%); manual labour (3.5%); service/officer/manager (9%); business (7%); shop-keeper (5%) and street vending (2%). Monthly household income ranged from Taka 9057–13,074 (Table 1).

The study methodology involved three steps. As a first step we purposively identified informal settlements and established contact with community leaders to explain the purpose of the study. Some sites had been previously studied by local research partners, others were identified through discussions with municipal officials, civil society groups and through joint field visits by UK and Bangladeshi researchers. The site selection was not intended to be statistically representative of informal settlements in the cities studied. Community profiles were built-up to provide an initial outline of living conditions, the infra-structural arrangements and the basic institutional landscape. We took a particular interest in the governance of essential services, as initial community consultations indicated this to be a major concern. The second step involved the bottom-up construction of a set of indicators of wellbeing. Focus group discussions (FGDs) were conducted with groups of residents (women and men separately) in each of the sites. During initial visits, residents were consulted on suitable timings for the FGDs. Follow up visits were then scheduled in which a wide range participants participated, including people of different age groups, however their selection was not intended to be statistically representative of the community. Participants were asked to identify what people needed to have, be able to do, to be or feel in order to live well in that particular settlement. FGDs aimed to develop illustrative, and contextually specific indicators of material, relational and subjective wellbeing. Findings from the FGDs were coded and analysed using Nvivo 10 software.

Communities highlighted the roles of environmental and

**Table 2**  
Sample size per site.

| City       | Site           | Male respondents | Female respondents | Total respondents |
|------------|----------------|------------------|--------------------|-------------------|
| Bogra      | Railway colony | 100              | 101                | 201               |
|            | Malotinagar    | 101              | 108                | 209               |
| Chittagong | Dock Yard      | 103              | 113                | 216               |
|            | Khajurtola     | 99               | 103                | 202               |
| Dhaka      | Chitarpar      | 99               | 108                | 207               |
|            | Beltola        | 103              | 110                | 213               |
|            | Sirnitek       | 100              | 106                | 206               |
| Total      |                | 705              | 749                | 1454              |

occupational seasonality; ownership status of trade tools; payment for water; living space; kitchen facilities; borrowing and lending money; and tenure status. These local indicators were used to construct an Integrated Wellbeing Survey instrument (IWS), which was structured around the dimensions of the OECD Better Lives Framework, while we also adopted relevant questions formulated in questionnaires used in OPHI's Multidimensional Poverty instrument and UNICEF's Multi Indicator Cluster Survey. The IWS encompasses 34 wellbeing goals distributed across 10 wellbeing domains: Jobs and Earnings, Education and Skills; Consumption and Assets; Housing and Related Infrastructure; Social Connections; Empowerment; Safety & Security; Living Conditions (access to the house); Health status and related facilities; Overall Life Satisfaction (see Annex 1).

The FGDs and the IWS were piloted and implemented by Bangladeshi partners. The IWS was administered using touch-screen tablet computers. We sampled households in each of the selected sites (Table 2) using a spatially randomised system, and surveyed the primary earner (male or female) and their spouse, from the age of 15 years and above.<sup>5</sup> Researchers obtained prior informed consent from all study respondents. The sampling strategy was devised to provide a careful

<sup>5</sup> Household selection at the site-level was based on a spatially randomised system. Adjoining households were not selected, but a systematic interval was maintained while accounting for cohabitation and stacking of households. This minimised the amount of spatial sub-clustering and the design effect, while ensuring coverage of the entire site. At the site level, in each sampled household, we surveyed the primary earner (male or female) and their spouse aged. In order to cover the minimum sample size of 100 men and 100 women per site, research teams employed a booster sample at the site level, wherein additional households were sampled in the event that the required number of men and women were not achieved through the original sampling.

**Table 3**  
Scoring wellbeing goal importance and achieved goal satisfactions.

| Importance scale                  | Imp_Score | Satisfaction scale                | Sat_score | In paper and graphs presented as          |
|-----------------------------------|-----------|-----------------------------------|-----------|---|
| Very important                    | 5         | Very satisfied                    | 5         | Satisfied (green)                         |
| Somewhat important                | 4         | Somewhat satisfied                | 4         |   |
| Neither important nor unimportant | 3         | Neither satisfied nor unsatisfied | 3         | Neither satisfied nor unsatisfied (amber) |
| Somewhat unimportant              | 2         | Somewhat unsatisfied              | 2         | Dissatisfied (red)                        |
| Very unimportant                  | 1         | Very unsatisfied                  | 1         |   |

and accurate picture for each of the settlements but neither devised to be representative for the cities studied, nor for urban Bangladesh at large.

Survey modules embedded pairings of questions that assess the importance that respondents subjectively give to wellbeing goals, and their satisfaction with the levels of wellbeing achieved on these. For example:

6.1b) How important is the safety and security of the area you live in to you (for your wellbeing)?

6.1c) How satisfied are you with the level of safety and security in your area?

As in Woodcock et al. (2008), respondents assessed the importance of each of the wellbeing goals, because these are likely to vary from person to person and between social groups (Pacione, 2003). This approach overcomes the arbitrary selection of weights by external experts common to quantitative multi-dimensional poverty instruments (Thorbecke, 2005). All goal importance and satisfaction score questions used a five-point Likert scale (Table 3), enabling the detection of patterns in prioritisation and wellbeing achievements across sites and socio-economic groupings using Spearman rank correlations. We present findings for distinct groupings based on gender, age, education and income levels. The tool thus enables analysis of patterns of difference in wellbeing goal priorities, and in achieved satisfactions on these, to identify who is doing badly and who is doing well. However, governance arrangements are discussed for sites, as this is the level of organisation for the delivery of services.

Whereas some studies look at satisfaction achievements in selected domains of life in relation to overall quality of life assessments (e.g. Rojas, 2008), here we present the relationship between the perceived importance of particular goals and the levels of satisfaction reported for these in what have been called ‘jagged teeth’ diagrams (Woodcock et al., 2008). By presenting goals in ranked order of importance, it is possible to highlight the con- or disjuncture between the priority of goals and the perceived level of satisfaction achieved. The graphical representation illustrates gaps between achievement and aspiration, and these suggest priority areas for policy support rooted in community preferences. This type of visualisation technique also enables a quick assessment of whether public policy visions and outcomes match (or are at odds with) people’s own visions of what is important for a good life (McGregor et al., 2009).

We employ Chi-square tests of independence to examine whether specific groups within our sample achieve statistically significantly different (at 5% level) goal satisfaction levels (satisfied; neither satisfied nor unsatisfied; and dissatisfied). In other words, these tests examined whether satisfaction levels were distributed independently across the juxtaposed groups, focusing on groups that are often seen as having distinct vulnerabilities: women vs men, old vs young (operationalised as 25th– 75th percentile groups by age); and poorest vs better to do (25th– 75th percentile income earners).

### 3. Findings

#### 3.1. Wellbeing goal prioritisation

While wellbeing priorities need to be understood within cultural

contexts, they are individually determined and cannot be presumed by experts or outsiders. This raises the question of aggregation: in what ways may individuals or subgroups in informal settlements (not) share wellbeing goals, to potentially direct responsive public policy? Averaging individual importance scores for each of the listed wellbeing goals across the sample ( $n = 1454$ ) we found that the ten highest ranked wellbeing goals (i.e. those gaining highest importance scores) were:

1. Observing religious practice.
2. Ease of access to a drinking water source.
3. Access to an enclosed toilet facility.
4. All-year access to dwelling.
5. Ease of access to toilet facilities.
6. All-year access to toilet facilities.
7. Education for children.
8. Being in good physical and mental health.
9. Affordable drinking water.
10. All-year access to the settlement.

Observing religious practice was most consistently scored as ‘very important’ by the respondents. In Bangladesh, religious beliefs and praxis are central to how people conceive and experience wellbeing. It informs social and political identity, provides community and a source of social welfare, and grounds values (White, 2012). Other highly ranked wellbeing goals are centred on essential services: ensuring access to good quality water, sanitation, health and education. Whereas priorities differ for individuals and between sites, we find that at least one third of the wellbeing goals are considered ‘very important’ by 75% of respondents in each of the sites (Fig. 1). This suggests that our set of indicators was “broad enough to include all the most important life concerns of the population whose wellbeing is being investigated” (Pacione, 2003, p. 23).

We further find a considerable degree of congruence in the ranking of wellbeing priorities across sites. When comparing the importance scores assigned by respondents we find strong Spearman rank correlations that are statistically significant at the 1% level (Table 4).

Moreover, the prioritisation of wellbeing goals within our sites site does not statistically significantly differ for respondents having distinct socio-economic profiles. All  $p$  values are well below 0.01 level showing that the compared groups rank the 33 wellbeing goals in a similar order.<sup>6</sup> Although (small) differences can be picked up at the site level, we find negligible differences in the rankings of wellbeing priorities for men and women, by age and for income groups (Table 5).

Hence, whereas the literature on wellbeing has little to say about wellbeing priorities, except that these are likely to be heterogeneous (e.g. Thorbecke, 2005) our study presents robust evidence of a high level of homogeneity in wellbeing priorities, at the time of measurement, affirming that people in these informal settlements face similar types of challenges to their wellbeing.<sup>7</sup>

<sup>6</sup> Suitable data was available for 33 out of 34 goals.

<sup>7</sup> End of project community consultations in Dhaka and Chittagong affirmed these findings. Nevertheless, communities hinted that wellbeing priorities may change over time, e.g. in relation to external shocks such as evictions, natural disasters or infectious disease outbreaks.

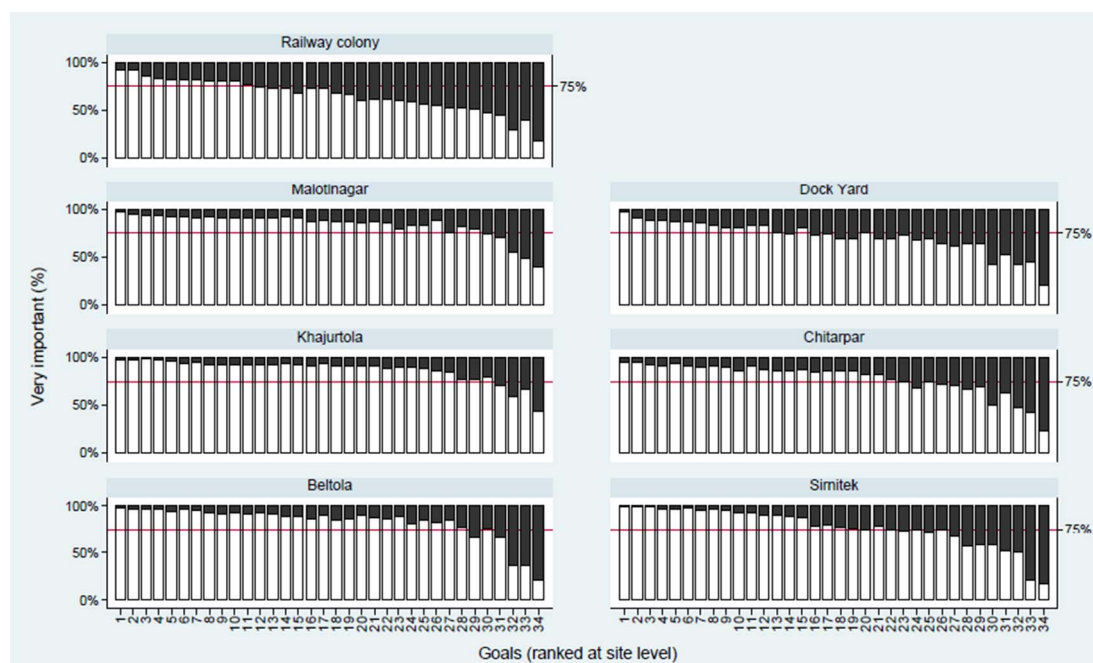


Fig. 1. Proportion of respondents assessing wellbeing goals (ordered by site) as ‘very important’.

### 3.2. Achieved satisfaction on wellbeing goals

Although wellbeing goal priorities were remarkably similar, the achieved satisfaction levels differed considerably across sites and across socio-economic groups. Fig. 2 depicts the proportion of respondents achieving diverse satisfaction levels on 33 wellbeing goals. Goals have been ranked from left to right in order of priority (high to low) and satisfaction scores as per colour scheme set out in Table 3 (above). Respondents have resolute opinions on how satisfied they are with their most important wellbeing goals. The lower the priority given to a particular wellbeing goal, the more respondents give non-determinate answers; being neither satisfied, nor dissatisfied. The bottom right chart in Fig. 2 gives the distribution of achieved satisfactions across the sample. It shows that, firstly, a majority of respondents are satisfied (green) with their achievements on all but five goals. However, sizeable proportions of respondents are dissatisfied (red) with their achievements on many wellbeing goals. The majority is dissatisfied with healthcare access, healthcare affordability and their relations with government authorities. While not highest ranked, these wellbeing goals are regarded to be ‘very important’ by more than half of all respondents (Fig. 1).

Fig. 2 also shows substantial divergences in satisfaction outcomes

Table 4 Spearman Rank correlations of wellbeing priorities: a site by site comparison [p values].

|                | Railway colony | Maloti-nagar       | Dock Yard          | Khajurtola         | Chitar-par         | Beltola            | Sirmitek           | All                |
|----------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Railway colony |                | 0.5855<br>[0.0003] | 0.9645<br>[0.0000] | 0.7527<br>[0.0000] | 0.7409<br>[0.0000] | 0.7514<br>[0.0000] | 0.8542<br>[0.0000] | 0.9389<br>[0.0000] |
| Malotinagar    |                |                    | 0.5716<br>[0.0004] | 0.8678<br>[0.0000] | 0.7948<br>[0.0000] | 0.5660<br>[0.0005] | 0.7230<br>[0.0000] | 0.7207<br>[0.0000] |
| Dock yard      |                |                    |                    | 0.7243<br>[0.0000] | 0.7051<br>[0.0000] | 0.7360<br>[0.0000] | 0.8446<br>[0.0000] | 0.9303<br>[0.0000] |
| Khajurtola     |                |                    |                    |                    | 0.8367<br>[0.0000] | 0.7278<br>[0.0000] | 0.7818<br>[0.0000] | 0.8649<br>[0.0000] |
| Chitarpar      |                |                    |                    |                    |                    | 0.7576<br>[0.0000] | 0.7509<br>[0.0000] | 0.8638<br>[0.0000] |
| Beltola        |                |                    |                    |                    |                    |                    | 0.6561<br>[0.0000] | 0.8414<br>[0.0000] |
| Sirmitek       |                |                    |                    |                    |                    |                    |                    | 0.9097<br>[0.0000] |

Table 5 Spearman Rank correlations of wellbeing priorities by gender, income and age [p values].

| Site           | Gender: men vs women | Income: 75th vs 25th percentile groups | Age: 75th vs 25th percentile groups |
|----------------|----------------------|--|-------------------------------------|
| Railway colony | 0.9596<br>[0.0000]   | 0.9244<br>[0.0000]                     | 0.7830<br>[0.0000]                  |
| Malotinagar    | 0.8107<br>[0.0000]   | 0.7817<br>[0.0000]                     | 0.6781<br>[0.0000]                  |
| Dock Yard      | 0.9500<br>[0.0000]   | 0.8573<br>[0.0000]                     | 0.8567<br>[0.0000]                  |
| Khajurtola     | 0.8088<br>[0.0000]   | 0.5409<br>[0.0010]                     | 0.7112<br>[0.0000]                  |
| Chitarpar      | 0.8578<br>[0.0000]   | 0.8396<br>[0.0000]                     | 0.8286<br>[0.0000]                  |
| Beltola        | 0.8892<br>[0.0000]   | 0.6587<br>[0.0000]                     | 0.6033<br>[0.0002]                  |
| Sirmitek       | 0.9365<br>[0.0000]   | 0.8981<br>[0.0000]                     | 0.9043<br>[0.0000]                  |

across sites. Importantly, the proportion of respondents that report to be satisfied and dissatisfied on their achievements regarding key wellbeing goals strongly varies. For instance, in terms of safety and security,

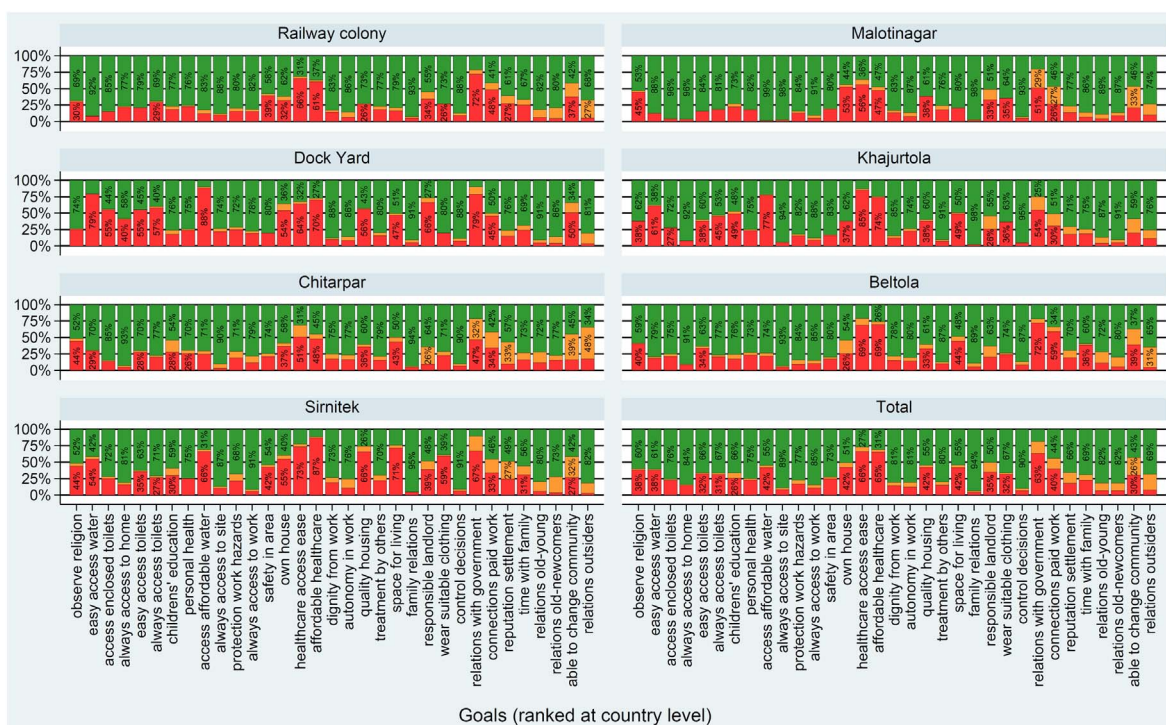


Fig. 2. Wellbeing priorities and proportions of respondents achieving satisfaction levels by site and across the sample.

73% of the respondent sample is satisfied or very satisfied. However, this ranges from 83% in Khajurtola to 54% in Sirnitek. Similarly, while dissatisfaction with ease of access to healthcare services is rife overall (66%), this ranges from 51% in Chitarpar to 85% of respondents in Khajurtola.

The data further allows us to consider the ways that satisfactions on wellbeing goals differ for groups that are understood to have different vulnerabilities living within the same informal settlements. Women in the informal economy tend to be more vulnerable than men (Kabeer, 2008); older people more vulnerable than young people, people with little education more so than those with higher levels of education, and low earners are more vulnerable than high earners. During the focus group discussions, community members also highlighted that workers who owned key assets (such as their houses or tools of their trade) would tend to do better than those renting these. Accordingly, we juxtapose groups and compare the proportions of each to achieve particular wellbeing outcomes (red, green or amber scores) on 33 wellbeing goals, using chi-square tests to assess for statistical significance. We find that proportions differ significantly for seven goals when we compare outcomes by gender<sup>8</sup> or for people with no or only primary education (up to class 5) as compared to those with more education<sup>9</sup>; for ten goals when we compare age groups<sup>10</sup>, for 19 goals when comparing people who do not rent their dwelling compared to those who do<sup>11</sup>; for 20 goals when comparing people with low vs high asset ownership<sup>12,13</sup>; for 22 goals when comparing people who own vs rent their tools of trade<sup>14</sup>; and for 23 goals when we compare 25th vs 75th

percentile groups by income.<sup>15</sup>

Differing material circumstances thus are particularly associated with significantly unequal wellbeing achievements. Table 6 compares people whose income is within the bottom 25th percentile (BDT 1093-6618 per month), as compared to those whose income falls in the top 75th percentile (BDT 12519-51074). We express the simple differences in proportions of groups who achieve green scores in terms of ‘satisfaction gaps’ and for red scores in terms of ‘dissatisfaction gaps’ and in the text denote wellbeing goals in italics. For income groups, statistically significant differences in achieved satisfactions are pronounced across all three of the dimensions of wellbeing: in terms of material wellbeing goals, but also in terms of dignity, and the social relations that may allow people to move out of poverty. In terms of access to key services, however, the dissatisfaction gaps between groups are negligible.

In terms of dignity, dissatisfaction gaps occur concerning people's ability to wear the right kind of *clothes* during important events, celebrations and festivals. Whereas 21.8% of the 75th percentile group is dissatisfied, 46% of the 25th percentile group is (a dissatisfaction gap of 24.2%). Such dissatisfaction gaps are also found for people's ability to bring *change* in the community (11.5%); the *treatment* received from other people (13.7%); and the *dignity* that is derived from work (13.3%). In terms of social relations, the 25th percentile group reported a 24.2% dissatisfaction gap in terms of having good *connections* with people in order to find paid work, with a majority being dissatisfied. Similarly, a 29.9% dissatisfaction gap is detected in terms of these respondents having *government relations*: direct linkages with people in government that can help gaining access to schemes and services. 78.2% is dissatisfied on this count. In terms of material aspects, dissatisfaction gaps occur most clearly regarding *ownership* of (16%) and the quality of *building materials* used for their dwellings (13.4%). The 25th percentile group also reports greater dissatisfaction on their *health*

<sup>8</sup> The wellbeing goals concerned are listed in Annex 1: C, E, F, G, P, AF, AG.

<sup>9</sup> The wellbeing goals concerned are listed in Annex 1: D, G, L, N, U, AC, AD.

<sup>10</sup> The wellbeing goals concerned are listed in Annex 1: B, D, F, H, J, M, P, W, AF, AG.

<sup>11</sup> The wellbeing goals concerned are listed in Annex 1: A, B, C, E, G, H, J, M, O, P, Q, S, V, W, X, AC, AF, AG.

<sup>12</sup> We enquired about ownership of 19 common assets in the survey, and compared 25th percentile (having < 4 assets) and 75th percentile groups (> 9 assets) in our sample.

<sup>13</sup> The wellbeing goals concerned are listed in Annex 1: B, C, D, E, F, G, H, J, L, M, N, O, Q, V, X, AB, AC, AD, AG.

<sup>14</sup> The wellbeing goals concerned are listed in Annex 1: A, B, C, D, G, H, J, L, M, N, O,

(footnote continued)

P, S, T, U, V, W, X, Y, AB, AC, AG.

<sup>15</sup> The wellbeing goals concerned are listed in Annex 1: A, B, C, D, E, F, G, J, L, M, N, O, P, Q, U, V, X, Y, AC, AD, AE, AF, AG.

**Table 6**  
Wellbeing satisfaction achievement: 25th vs 75th percentile of income groups across the sample.

| Wellbeing goal            | % satisfied               |                           |                  | % dissatisfied  |                 |                     |
|---------------------------|---------------------------|---------------------------|------------------|-----------------|-----------------|---------------------|
|                           | 75th percentile (n = 349) | 25th percentile (n = 363) | Satisfaction gap | 75th percentile | 25th percentile | Dissatisfaction gap |
| Always access to home     | 86.8%                     | 79.3%                     | 7.5% ***         | 11.7%           | 19.3%           | – 7.5% ***          |
| Quality housing           | 59.9%                     | 45.5%                     | 14.4% ***        | 37.2%           | 50.7%           | – 13.4% ***         |
| Able to change community  | 55.6%                     | 34.7%                     | 20.9% ***        | 24.1%           | 35.5%           | – 11.5% ***         |
| Wear suitable clothing    | 76.8%                     | 52.1%                     | 24.7% ***        | 21.8%           | 46.0%           | – 24.2% ***         |
| Connections paid work     | 50.1%                     | 37.2%                     | 13.0% ***        | 28.9%           | 53.2%           | – 24.2% ***         |
| Control decisions         | 94.0%                     | 85.7%                     | 8.3% ***         | 3.7%            | 10.5%           | – 6.7% ***          |
| Dignity from work         | 89.7%                     | 73.4%                     | 16.2% ***        | 7.8%            | 21.1%           | – 13.3% ***         |
| Time with family          | 71.3%                     | 65.8%                     | 5.5%             | 20.1%           | 27.0%           | – 6.9% **           |
| Family relations          | 94.8%                     | 91.1%                     | 3.7%             | 4.0%            | 6.6%            | – 2.6%              |
| Childrens' education      | 67.2%                     | 59.6%                     | 7.7%             | 27.6%           | 29.6%           | – 2.1%              |
| Relations old-young       | 84.0%                     | 80.4%                     | 3.5%             | 6.6%            | 6.9%            | – 0.3%              |
| Relations with government | 29.0%                     | 9.7%                      | 19.4% ***        | 48.3%           | 78.2%           | – 29.9% ***         |
| Personal health           | 83.7%                     | 62.8%                     | 20.9% ***        | 15.5%           | 34.2%           | – 18.7% ***         |
| Affordable healthcare     | 34.1%                     | 28.4%                     | 5.7%             | 64.5%           | 67.8%           | – 3.3%              |
| Easy access healthcare    | 29.5%                     | 22.0%                     | 7.5%             | 66.5%           | 71.9%           | – 5.4%              |
| Reputation settlement     | 72.8%                     | 59.0%                     | 13.8% ***        | 15.2%           | 20.4%           | – 5.2%              |
| Autonomy in work          | 82.2%                     | 75.2%                     | 7.0%             | 12.0%           | 13.8%           | – 1.7%              |
| Responsible landlord      | 50.0%                     | 48.5%                     | 1.5%             | 36.5%           | 39.7%           | – 3.2%              |
| Always access toilets     | 63.6%                     | 69.4%                     | – 5.8%           | 35.0%           | 28.1%           | 6.9% **             |
| Relations old-newcomers   | 84.0%                     | 78.2%                     | 5.7%             | 4.0%            | 6.9%            | – 2.9%              |
| Relations outsiders       | 74.2%                     | 64.6%                     | 9.6% ***         | 7.7%            | 7.2%            | 0.6%                |
| Own house                 | 59.3%                     | 41.3%                     | 18.0% ***        | 35.2%           | 51.2%           | – 16.0% ***         |
| Observe religion          | 60.7%                     | 60.1%                     | 0.7%             | 37.8%           | 37.7%           | 0.1%                |
| Space for living          | 58.7%                     | 50.1%                     | 8.6%             | 37.8%           | 44.1%           | – 6.3%              |
| Safety in area            | 78.8%                     | 69.1%                     | 9.7% ***         | 18.9%           | 28.7%           | – 9.7% ***          |
| Always access to site     | 91.7%                     | 89.0%                     | 2.7%             | 6.9%            | 8.8%            | – 1.9%              |
| Easy access toilets       | 67.6%                     | 65.6%                     | 2.1%             | 30.7%           | 33.6%           | – 2.9%              |
| Access enclosed toilets   | 73.9%                     | 76.8%                     | – 2.9%           | 23.9%           | 21.2%           | 2.7%                |
| Treatment by others       | 88.5%                     | 73.0%                     | 15.5% ***        | 8.0%            | 21.8%           | – 13.7% ***         |
| Access affordable water   | 45.3%                     | 57.9%                     | – 12.6% ***      | 52.7%           | 37.2%           | 15.5% ***           |
| Easy access water         | 54.2%                     | 61.4%                     | – 7.3% **        | 45.0%           | 36.4%           | 8.6% **             |
| Always access to work     | 87.6%                     | 79.2%                     | 8.4% ***         | 9.5%            | 15.0%           | – 5.5% **           |
| Protection work hazards   | 80.7%                     | 69.7%                     | 11.1% ***        | 14.4%           | 20.9%           | – 6.6% **           |

\*:  $p = 0.1$ ; \*\*:  $p = 0.05$ ; \*\*\*:  $p = 0.01$ .

status. In contrast, negligible dissatisfaction gaps occur on key services, such as access to (*enclosed*) toilet facilities; and affordability and ease of access to *healthcare*, and *education* for their children. This is likely to be the outcome of a general lack or under-provision of facilities, with toilets being shared among many households, and health and education services often located outside of the settlements. Where mobile clinics or para-professional health services visit, they provide equal access to free or subsidised services to all inhabitants. Other wellbeing goals for which no dissatisfaction gaps are found between the two groups include: the ability to observe *religion*, having good *relations* within families, and between *generations* living in the settlement; and between residents and *outside* visitors; finding a level of *autonomy* in work; *access* to the settlement; and having a *landlord* who takes care of houses and services.

Accordingly, differentiations in wellbeing outcomes occur across sites and also between different socio-economic groups within these. Hence, while wellbeing challenges may be similar at an aggregated level, the policy responses to protect and promote wellbeing need to be different at the local level and in respect of different groups.

### 3.3. Urban governance, essential services and wellbeing

So far we have discussed people's subjective assessments of their wellbeing goals and achievements. Next, we show that such an analysis combined with objective data can provide strong insights into the material, relational and governance contexts of the settlements.

Until recently, urban poverty has not received substantial attention in the literature on Bangladesh but this is now changing fast. A review of current literature as well as discussions with Bangladeshi partners underlines that policy frameworks in Bangladesh largely neglect the

needs and rights of the urban poor (Rashid 2009; Banks et al., 2011; Hossain 2012). No national urban poverty policy exists. Municipal authorities are legally mandated to provide sanitation, waste and street lighting. However, it is common for people in informal settlements to be denied essential services (Hackenbroch & Hossain, 2012; Hossain, 2012), because they are typically located on privately owned land as well as on squatted government land, or on land that is legally disputed. Bangladeshi law prohibits the provision of services to people without landholding registration numbers (Banks, 2016). In Dhaka, coordination between a range of bodies involved in regulating urban affairs is extremely poor (World Bank, 2007) and municipal relations to central government authorities are often fraught. While inhabitants of informal settlements can elect municipal councillors, these have few development funds, cover large constituencies and rarely prioritise the poor (Banks et al., 2011). They engage communities through local affiliate leaders, their committees and *mastaans* (strongmen), enabling the government to control informal settlements as vote banks and to provide services through informal patron-client relationships (Banks, 2016, 2008; Hossain, 2012; Jackman, 2016; Suykens, 2015). Political elites within informal settlements hoard and distribute livelihood opportunities (Banks, 2016; Hackenbroch, 2013) and access to essential services. Hossain (2012) for instance shows that committees in informal settlement are critical actors in local governance arrangements. They appropriate and control electricity and water provisioning to informal settlements, to produce particular kinds of urban spaces, dependencies, exclusions and to constrain the political agency of the urban poor.

This kind of political economy may explain the particularistic service provision at our sites. City governments play an extremely limited role in terms of housing, water supply, electricity, street lighting, sanitation, solid waste, health and family planning and education services



**Table 7**  
Urban governance: service provision in seven informal settlements, Bangladesh.

|                | Housing                | Water                               | Electricity               | Street-lights | Sanitation                   | Waste    | Health & family planning    | Education                              |
|----------------|------------------------|-------------------------------------|---------------------------|---------------|------------------------------|----------|-----------------------------|--|
| Malotinagar    | Landlords, inhabitants | Landlords, donors, <i>municipal</i> | Landlords                 | Donor         | Landlords, community         | No-one   | Private, NGOs               | Public, private                        |
| Railway Colony | Landlords              | Landlords, donors, <i>municipal</i> | Landlords, private owners | Donor         | Donor                        | No-one   | Private, NGOs               | Public, private                        |
| Dock Yard      | Landlords, inhabitants | Private suppliers                   | Landlords                 | No-one        | <i>Municipal</i> , landlords | No-one   | Private, public             | Public, private                        |
| Khajurtola     | Landlords, inhabitants | Private suppliers, <i>Municipal</i> | Landlords, Private owners | No-one        | Landlords                    | No-one   | Private, public             | NGO, public, private                   |
| Beltola        | Landlords              | NGO, donor, private suppliers       | Landlord, Private owners  | Donor         | NGO, donor                   | No-one   | NGO, private sector, public | Public, private, community action, NGO |
| Chitarpar      | Landlords, inhabitants | Landlord                            | Landlord                  | n.a.          | Landlord                     | Landlord | Private, NGO, public        | Public, NGO, madrasah                  |
| Sirnitek       | Landlords, inhabitants | Private owners                      | Landlords                 | No-one        | Landlords                    | No-one   | Public, private             | NGO, public, private, madrasah         |

n.a. = not applicable.

(Table 7). While international donors and NGOs occasionally sponsor service provisioning, settlements depend heavily on private initiative. Small cliques of politically well-connected landlords and supporters run oligopolistic local markets that for instance provide electricity and water at low quality and inflated prices.

This patchwork of service provisioning can be cross-referenced with data on objective outcomes from our survey, in order to help explain subjective wellbeing outcomes of inhabitants. Taking the case of water and sanitation, we find that *ease of access to drinking water* is ranked as the second most important wellbeing goal across all sites, but whereas 88% of respondents in Malotinagar are satisfied on this account, only 21% are so in Dock Yard, with 79% dissatisfied (Fig. 2 above). What explains for this huge variation? One key reason is the highly diverse range of public and private providers and physical water sources used. Across sites, the dependence on privately traded water varies substantially: only 2% of respondents in Malotinagar are dependent on this source, whereas nearly all respondents in Dock Yard, Khajurtola and Sirnitek are. In Chittagong, the Water And Sanitation Authority (WASA) rarely provides water to informal settlements. In Khajurtola, people are forced to buy water from traders at BDT 25–30 per 18–20 l drum, sourced from a nearby WASA pump station. Hence, WASA fails to provide functioning drinking water infrastructure but its officials privately benefit from selling water to mobile vendors. This has important implications: 61% of respondents were dissatisfied with their ease of access to drinking water, while 77% are dissatisfied with its affordability. In contrast, satisfaction rates are very high in Malotinagar (88%) and Railway Colony (92%) in Bogra, where tubewells and boreholes supply all households. In our sites in Bogra and Chittagong, piped water to dwellings is largely absent. Yet, in Dhaka, it supplies 51% of households in Beltola, 23% in Chitarpar and 5% in Sirnitek. Similarly, only the residents of Dhaka sites obtained piped water into a yard or plot; in Chitarpar this services 75%, in Beltola 46% and in Sirnitek 10% of households. Consequently, collecting water, a task chiefly assigned to adult women, takes less than a minute for 75% of respondents in Beltola, but longer than 15 min for 46% of respondents in Dock Yard. Hence, objectively different conditions have major impacts on satisfaction outcomes, with 71% of respondents in Chitarpar and 79% in Beltola satisfied with their access to drinking water.

Similarly, sanitation provisioning differs markedly across settlements. At Chitarpar, 96% of households use toilets connected to the piped sewer system, whereas at Malotinagar, 72% use toilets that flush into a septic tank. In contrast, a third of households at Dock Yard depend on ‘hanging toilets’; ramshackle structures on stilts, flushed by the river tide. Sanitation provisioning also needs to be understood in terms of quality, such as its ability to provide for a measure of privacy and whether access is ensured when needed. The latter is not a given. Across our sites, 95% of households share toilet facilities, and people often have to wait in line. Moreover, access to sanitation facilities deteriorates during seasonal flooding and heavy rainfall. This affected only 6% of respondents in Malotinagar in the past 12 months, but 41% in Dock Yard. Overall, 94% of respondents have access to enclosed toilet facilities, potentially allowing for a measure of privacy. However, in Dock Yard, seven out of ten latrines hang above open drains flushed by the tidal Karnaphuly River. During high tide, access is suspended for 2–3 h. People wear polythene sheets for protection, and the women have to rush or stand up. While latrines are rag-wrapped, women can be seen using them, and this is considered shameful. In Dock Yard 55% of respondents are dissatisfied both with the *ease* of access to toilets, and with having access to *enclosed* toilets, whereas in Malotinagar these figures amount to 4% and 21%; and in Chitarpar 15% and 28% respectively. Hence, satisfaction levels with the quality of sanitation facilities vary greatly across sites, reflecting the diversity of provisioning.

In conclusion, people's subjective assessments of how they are faring on key wellbeing goals are largely consistent with objective data for these goals, substantively mediated by site specific provisioning of essential services of various types, qualities and levels of affordability.

#### 4. Discussion and conclusion

Empirical data on the multiple dimensions of wellbeing can assist policymakers identifying what needs should be satisfied in particular places and in their societal and cultural contexts (McGregor et al., 2009). Yet, policymakers and practitioners often lack the appropriate methodologies and metrics to formulate interventions that are relevant to the wellbeing dynamics experienced by differently vulnerable groups in particular urban localities. This study presented the case for understanding urban informal settlements in terms of human wellbeing. We have drawn on qualitative and quantitative methods to explore inhabitants' wellbeing priorities and achieved satisfaction on key wellbeing goals, and explain our findings in relation to governance arrangements, in particular regarding the provision of essential services.

We identified 33 wellbeing goals and find robust evidence that goal prioritisation is highly similar across the seven informal settlements in Bangladesh and not differing in a statistically significant manner by gender, age or income groups. Observing religious practice is most consistently scored as 'very important' by the respondents. Other highly ranked wellbeing goals are centred on essential services: ensuring access to good quality water, sanitation, and education for children. Inhabitants also highly rate having all year access to the settlement and dwelling. Achieving this at low cost and close to a place of work often involves a trade-off with living in poorly serviced, overcrowded and precariously located settlements.

These findings do not fit simplistically with the view that goal preferences are typically heterogeneous between individuals (Thorbecke, 2005). The shared social, economic and cultural frames of reference and shared experiences of the joys, trials and tribulations of living in urban informal settlements help explain this result. However, goal preferences are likely to differ for people living in different kinds of settlement (for example, middle class enclaves) in the same cities.

Looking across the sample, we find that a majority of respondents are satisfied with their achievements on all but five of 33 wellbeing goals. Yet, sizeable proportions of respondents are dissatisfied with their achievements on many wellbeing goals, and this stretches into a majority regarding healthcare access, healthcare affordability and relations with government authorities. Moreover, we find satisfaction and dissatisfaction gaps that differ in a statistically significant manner across sites, and by gender, income, and age, to help determine who is surviving, failing or thriving in informal settlements. Wellbeing satisfaction outcomes differ by gender, especially for non-material aspects such as dignity and empowerment, however income group differences best predict achievements on material wellbeing goals but also goals such as dignity and social relations that can support some people to move out of poverty. The analysis further shows that people's subjective assessments of how they fare on key priorities resonate well with objective indicators of wellbeing in these domains, affirming the value of combining objective and subjective measures of wellbeing (cf. Pacione, 2003, p. 21; Stiglitz et al., 2009).

Our analysis of key services shows that urban governance conditions differ substantially between sites to mediate the terms under which

people succeed or fail to succeed meeting their wellbeing needs. Water and sanitation facilities are governed by diverse assemblages of actors from the public, private and NGO sector, leading to sharp contrasts in wellbeing goal satisfaction across sites. The term 'informal settlements' may be useful shorthand to denote deprivation, poverty, vulnerability and substandard living conditions, but also masks stark inter- and intra-site differences in the governance of essential services and wellbeing outcomes. Informal settlements thus cannot be understood as entities of a singular kind (Krishna et al., 2014).

This study takes a snapshot picture. The current dataset alone cannot provide insight into the extent of and reasons for temporal changes in wellbeing priorities and achievements. However, the homogeneity of wellbeing priorities we find suggests their robustness for temporally, physically, spatially and governmentally distinct informal settlements in Bangladesh.

The policy relevance of wellbeing approaches is now well-recognised globally. However, government assessments tend to focus on the national scale. For instance, the Bangladesh Bureau of Statistics' Poverty Monitoring, Labour Force, Local Development Monitoring and Health and Demographic surveys have sample sizes aimed for national representativeness that are too small to be representative at city neighbourhood or ward level (Banks et al., 2011). Census data is at best only available every decade and rarely available in a form that local authority and civil society groups can use. Local area scale wellbeing appraisals are more likely to be policy-relevant (Pacione, 2003, p. 22), and increasingly important in the light of growing intra-urban inequalities. Community enumerations between the scales of the household and the city, of for instance districts, settlements, neighbourhoods or streets have been shown to offer a practical and reliable way forward (Satterthwaite et al., 2015). Accordingly, connecting grassroots' and city/central governments' wellbeing data collection and analysis can address a major practical challenge in urban poverty assessments: the unavailability of data at the right geographical scale.

As urbanization will continue to powerfully drive change in Bangladesh in years to come, city and central governments must start to take serious account of the wellbeing of people living in its *bostees*. Future urban development policy would hence need to recognise that informal settlements are heterogeneous and subject to myriad governance arrangements and align policy and planning efforts with local wellbeing needs through the strategic collection of fine-grained local data.

#### Acknowledgements

We wish to deeply thank the communities of Beltola, Chitarpar, Dock Yard, Khajurtola, Malotinagar, Railway Colony and Sirmitek to welcome and work with us in this research. We also express our warm appreciations for support received from colleagues in BRAC University and ActionAid Bangladesh, our advisors Professors Laura Camfield and Anirudh Krishna, and Drs Naresh Saxena, Nicky Pouw and Salma Shafi. Steven Lally and Julia Hansen provided able research assistance, and Tina Nelis indispensable project administrative support.

#### Appendix A

##### Annex 1

| No | Serial | Wellbeing goal           | Importance question  |
|----|--------|--------------------------|--|
| 1  | A      | Always access to home    | How important is it for you to have access to your dwelling all year round?  |
| 2  | B      | Quality housing          | How important are the quality of construction materials of your dwelling to you?   |
| 3  | C      | Able to change community | How important is it for you to be able to change things in your community if you would want to?                                    |
| 4  | D      | Wear suitable clothing   | How important it is for you to wear the right kind of clothes during important events or functions like celebrations or festivals? |

|    |    |                           |  |
|----|----|---------------------------|--|
| 5  | E  | Connections paid work     | If you needed to find a job, how important is it to have good connections with people in order to find paid work?  |
| 6  | F  | Control decisions         | How important is it for you to have control over decisions that affect your life in general?   |
| 7  | G  | Dignity from work         | How important is it for you to derive dignity from your work? (e.g. your coworkers/employer respects you, your contributions are valued, etc)  |
| 8  | H  | Time with family          | How important is spending time with close relatives from outside your household to you?  |
| 9  | I  | Family relations          | How important is it for you that there are good relations within families  |
| 10 | J  | Children's education      | How important do you feel schooling is for your children?  |
| 11 | K  | Relations old-young       | How important is it for you that there are good relations between generations (old-young) within your settlement   |
| 12 | L  | Relations with government | Generally speaking, how important is it for you that you have direct linkages with government officers in order to get access to schemes or services?  |
| 13 | M  | Personal health           | How important is it for you to be in good physical and mental health?  |
| 14 | N  | Affordable healthcare     | How important is it for you to have access to affordable health care?  |
| 15 | O  | Healthcare access ease    | How important is it for you to have easy access to such medical services?  |
| 16 | P  | Reputation settlement     | How important is it that people that do not live here have a positive image of your current settlement?  |
| 17 | Q  | Autonomy in work          | How important is it for you that you have some level of autonomy/independence in your work (paid or unpaid)? Like decide on the number of hours of work, decide which jobs to take on or refuse, when to take leave/break etc. |
| 18 | R  | Responsible landlord      | How important is it for you to have a landlord who takes good care of the houses and services in the settlement?   |
| 19 | S  | Always access toilets     | How important is it for you to have access to toilet facilities all year round?  |
| 20 | T  | Relations old-newcomers   | How important is it for you that there are good relations between newcomers and established households within the settlement   |
| 21 | U  | Relations outsiders       | How important is it for you that there are good relations between settlement residents and outside visitors  |
| 22 | V  | Own house                 | How important is it for you to own your dwelling?  |
| 23 | W  | Wear suitable clothing    | In your life, how important is it for you to observe religious practice?   |
| 24 | X  | Space for living          | Considering all the members of your household, how important is the amount of space you have for living (inside and immediately outside) in your dwelling to you?  |
| 25 | Y  | Safety in area            | How important is the safety and security of the area you live in to you?   |
| 26 | Z  | Always access to site     | How important is it for you to be able to access the settlement all year round?  |
| 27 | AA | Easy access toilets       | How important is it for you to have easy access to a toilet facility?  |
| 28 | AB | Access enclosed toilets   | How important is having an enclosed toilet facility to you?  |
| 29 | AC | Treatment by others       | How important to you is the manner in which people generally treat you?  |
| 30 | AD | Access affordable water   | How important is it for you to have affordable drinking water?   |
| 31 | AE | Easy access water         | How important is having easy access to source of drinking water to you?  |
| 32 | AF | Always access to work     | How important is it for you to be able to access your place of work all year round?  |
| 33 | AG | Protection work hazards   | How important is it for you as a worker to be protected against work-related hazards?  |

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