EcoPoor: Institutions for Urban Poor's Access to Ecosystem Services: A Comparison of Green and Water Structures in Bangladesh and Tanzania (NE-L001616-1)

Proceedings of EcoPoor Research Framework Workshop, Dhaka

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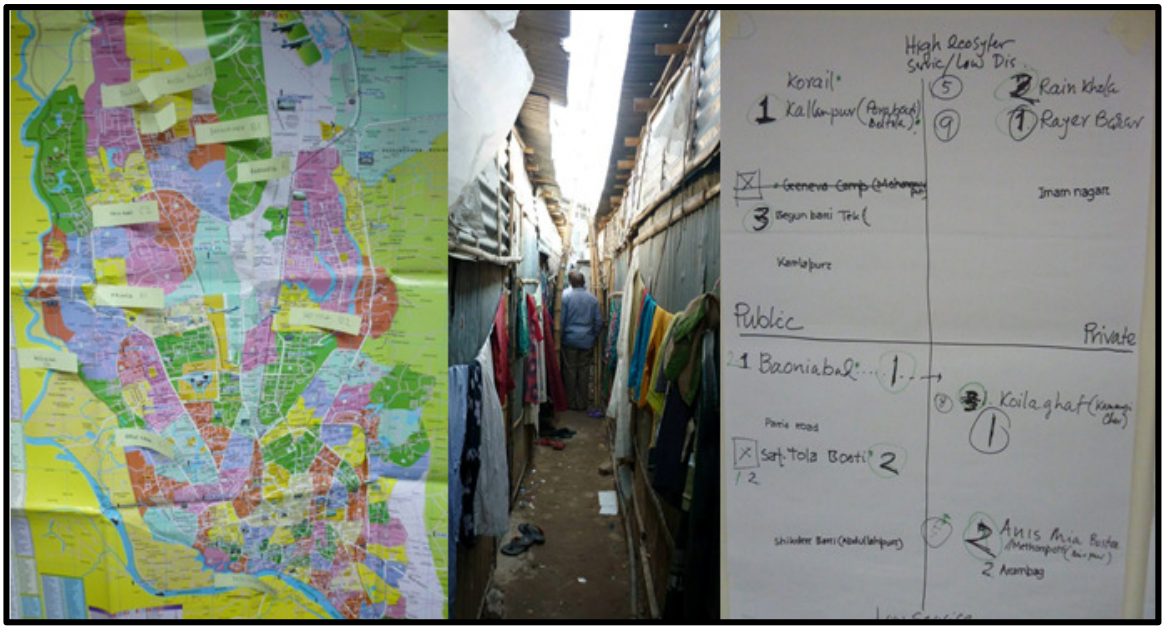

Workshop details

Host: BRAC University, Dhaka, Bangladesh
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EcoPoor Sponsor

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EcoPoor Collborators

Key Workshop Discussants

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1. Introduction and Objectives

The EcoPoor Dhaka Research Framework Workshop was held on 6th March 2014. It followed two start-up project meetings (in November and December 2013) involving the principal investigator and members of the Dhaka team. It was held immediately after the Dar Framework Workshop on 3rd March 2014. As with the Dar Workshop, the objectives of the Dhaka workshop were to:

- Reflect on what we know about urban poverty and urban ecosystems in Dhaka;
- Sharpen the EcoPoor research framing;
- Select four case study settlements; and
- Identify an initial set of design principles characterising progressive institutional structures.

These objectives reflect the overall research questions of the EcoPoor project, which are:

Overarching research question

- What institutional frameworks enable the urban poor to improve their wellbeing by improving their access to services and preventing urban green and water ecosystem disservices?

Secondary research questions

- What access/exposure do the urban poor have to green and water ecosystem services/risks?
- What institutional arrangements structure their access at different levels?
- Do collective action and coproduction improve the urban poor's access to ecosystem services and create a basis for developing effective institutions?

The workshop was a day-long event hosted by BRAC University. Over 25 members of Bangladesh, Tanzania and UK teams attended the workshop (see Annex 1). There were four sessions covering the four tasks of the EcoPoor project – contextualising the EcoPoor project in Dhaka; methodology; selection of case study settlements (building on fieldsite visits during March); and forward planning. The sessions started with thematic presentations, followed by moderated discussions around a set of core questions (see Annex 2 for Workshop Programme). The presentations can be downloaded from the EcoPoor website. The rest of the report presents a detailed account of the discussion that took place in the four sessions.

2. First Session: Contextualising the EcoPoor Project in Dhaka

2.1. EcoPoor Background, Objectives and Framing

The session began with a presentation on 'EcoPoor Background, Objectives and Framing'. It explored the nature of access/exposure to green and water services and disservices in low-income urban settlements, highlighting three key points:

- Poverty has an urban future in many countries of the developing world, with Bangladesh a case in point;
- In terms of exposure to environmental hazards, low-income settlements are often regarded as 'landscapes of disaster' (Gandy, 2008;[2] McFarlane, 2008[3]). However,

[2] Gandy, M (2008). Landscapes of disaster: water, modernity, and urban fragmentation in Mumbai. *Environment and Planning A,* 40, pp108-130.

from a developmental perspective, these settlements are in fact 'landscapes of hope and aspiration',[4] as they offer low-income urban people an opportunity to enter into and integrate with the social, political and economic life of the city; and

- Dependency on diverse institutions – be it at the grassroots level or in formal domains – is a way of life for low-income urban people.

Two institutional forms were considered to be the key building blocks of the institutional arrangements needed to sustainably expand access to basic services for the poor: institutional co-production (long-term service provision in partnership with low-income people) and community collective action (how communities come together as a group at grassroots level, within and across settlements).

This helped frame the problem statement of the EcoPoor project: While there is vast range of institutions involved to address the everyday struggles of poor citizens, why do we still have problems in low-income settlements? What is missing here? This in turn led to the identification of EcoPoor's core hypothesis: Collective action and co-production may be two forms of progressive institutions ('good institutions') but cannot work independently. There is/should be linkage between these institutions. This overall understanding is broken down into specific hypotheses presented below in Section 3.1.

2.2. **Urban Poverty in Dhaka**

The second presentation, entitled 'Urban Poverty in Dhaka', began by highlighting that Dhaka is expected to become a '*Metacity*'[5] by 2020, and by 2040 will rank second behind Tokyo in the global league table by population number. Chittagong, the second largest city in Bangladesh, was also noted as one of fastest growing cities in the world. Despite these significant demographic, social, economic, environmental and political changes, urban poverty remains a neglected issue in Dhaka. Recent statistics reveal the *scale, nature* and *depth* of urban poverty in Dhaka. For example;

- Urban population growth has remained above national population growth since the 1960s.
- By 2011, 27% of the country's population lived in urban areas. Bangladesh is expected to be a predominantly 'urbanised country' within the next three to four decades.
- 35% of Dhaka's poor live in low-income settlements, where human development is either stagnating or actively deteriorating.
- 41% of under-5s living in low-income settlements show a low height for age, 16% show a low weight for height, and 36% have malnutrition status. In addition, 50% of residents are food insecure and one-quarter of people are severely food insecure in Bangladesh.
- The proportion of low-income settlements built on private land has risen significantly in recent years (48.8% in 1996 to 70.3% in 2005).

Additionally, it was noted that the water supply situation is relatively 'better' than the sanitation situation for low-income people, but this was debated. Indeed, safe water in these settlements is often contaminated with sewage, due to neglect of faecal sludge management. Evidently, green and water services (and disservices) are interlinked.

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[3] McFarlane, C (2008). Governing the Contaminated City: Infrastructure and Sanitation in Colonial and Post-Colonial Bombay. *International Journal of Urban and Regional Research*, **32,** (2), pp415-435

[4] David Hulme coined the term at the workshop.

[5] Refers to cities with a population of over 20 million, which, to function include a series of smaller cities and subsumed former suburbs.

The rise of legal and illegal low-income settlements on private land has significant implications for urban policy, planning and, of course, the everyday lives of the urban poor. Underpinned by a combination of push and pull factors (e.g. failure of city planning, inadequate allocation of land for low-income housing, eviction from public land and government attempts to 'send people back' to the villages), private settlements are expanding rapidly across Dhaka city.

As opposed to low-income settlements on public land, settlements on private land go through multiple phases of development, depending on the landlord-tenant relationship. For example, the land is first filled or levelled; two-storey double blocks are then built, followed by transitional and eventually permanent structures. Landowners enforce rent increases via multiple intermediaries or 'middlemen', but are also known to be highly innovative in housing design. Nevertheless, for many this process represents market-led forms of eviction of the poorest groups that cannot afford to pay increased rent.

The increasing dominance of private settlements also has implications for the multiple levels and forms of institutional structures in these sites. Fewer collective actions involving internal and external actors and institutions have been documented in private, as opposed to public, low-income settlements.[6] This has implications for the formation and use of 'good institutions' for access to green and water ecosystem services.

Settlements built on public land are not straightforward either. The majority of these settlements are built on illegally occupied public land. But there are also settlements that are formally acknowledged by the public sector (regardless of their land tenure status). It would be essential to study these two different public settlements to examine what differences public sector acknowledgement/support, or lack of it, can make.

Several key questions around institutions emerged from this presentation. For example, which are the key institutions identified by the urban poor? How are and/or can they be used to access green and water ecosystem services? What are the implications of increasing private low-income settlements?

2.3. **Urban Green and Water Structures**

The third presentation, entitled 'Urban Green and Water Structures', focused on shifting land cover, green space and water sources in Dhaka. Land use changes have had significant impacts for green and blue ecosystem services (and disservices) in recent decades. For example, in 1960, 7.1% of land area was water body in Dhaka, but this had reduced to 5.1% in 2005. In 1960, wetland represented 32.5% of land cover, reduced to 17.2% in 2005, with over half lost. This relates to the sharp rise in built up areas between 1975 and 2005.

In terms of water supply (governed by the Dhaka Water and Sewerage Authority, DWASA), 82% comes from groundwater, with a 20% deficit in supply. This deficit is most acutely felt by the urban poor, who often have to travel large distances to find drinking water, or drink contaminated water. In low-income settlements, water largely comes from taps (44.4%), hand pumps (43.5%) and unsafe sources (12.2%). Lack of treatment facilities, plus heavily contaminated surface water, exacerbates this problem. For example, a third of effluents do not receive treatment, with only 38% of the population covered by a sewerage system. For the remaining, 30% use a septic tank, and 15% a bucket and pit latrine.

Multiple government agencies (e.g. Rajdhani Unnayan Kartripakkha, RAJUK; Dhaka City Corporation; DWASA; and Water and Power Development Authority, WABDA) are

[6] Roy M., Hulme, D. and Jahan, F. 2013. "Contrasting adaptation responses by squatters and low income tenants in Khulna, Bangladesh". *Environment and Urbanization* 25(1). DOI: 10.1177/0956247813477362.

involved in green and water services. However, communication and coordination between these agencies is highly fragmented. NGOs play a significant role in mediating between government agencies and the urban poor. Collective action among the urban poor also has a significant role to play, with evidence of collective self-help (e.g. creating pipes to re-direct overflow, garbage collection, etc.). There are also a growing number of laws, policies and acts, as outlined in the Dhaka Metropolitan Development Plan (DMDP, 1995-2015) that address green spaces and water structures. However, improvements for the urban poor are few and far between.

In all, little is known of how these green spaces and water sources have been lost over time, which represents a major knowledge gap. The lack of coordination between multiple actors and agencies also raises concerns over the capacity of government institutions to deliver and regulate ecosystem services for the urban poor.

2.4. **Discussion:** ***Institutions***

The three opening presentations were followed by a moderated discussion on 'institutions', centring on two reflective questions;

- Which are the key institutions of and for the urban poor in Dhaka's low-income settlements, and how do they operate in this context?
- We have identified collective action and co-production as key concepts that link multiple scales, formalities and institutions. But, are we missing any institutions?

The point was made that 'institutions' are highly diverse, encompassing a range of actors and agencies with conflicting interests. Whether 'effective' institutions actually exist is debated, and requires further rigorous research. In order to assess the institutions that are central to green and water ecosystem services, it is important to first explore and evaluate *existing* situations and institutional dynamics. For example, taking the case of DWASA (the main water provider in Dhaka), one could ask; are they performing well? How do they work with other institutions e.g. non-government organisations (NGOs)? Is there potential for co-production? An institutional mapping exercise was suggested, in which key institutions involved in green and water services could be identified and evaluated. This would also address any knowledge gaps or 'missing' institutions in our analysis.

A second point was that there are plenty of existing literatures on urban services and the roles and responsibilities of different institutions relating to land, water, electricity, gas and sanitation. The lack of coordination between these groups is well known. However, the key point is that many public services and utility companies are *not pro-poor or poor-sensitive*. In this sense, DWASA is an interesting exception. DWASA has been engaged in co-production with 13 NGOs (e.g. Dushtha Shasthya Kendra, DSK) and the associated community-based organisations (CBOs), facilitating water services for the urban poor. DWASA actually changed its by-laws to allow access to water for low-income groups, stating that it wants a legal water connection in every 'slum' by 2015.

DWASA's active approach was a direct result of NGO advocacy. In turn, NGOs facilitated the formation of CBOs for tariff collection, maintenance and functionality. In this sense, CBOs are a direct result of NGO engagement and training. For some, autonomous collective actions and CBOs form as a result of and reaction to 'situational desperation'. This cannot be separated from the role of external agencies (e.g. donors, government agencies, NGOs), and broader social, economic, political, spatial and environmental processes within and outside the settlement. CBOs are often heavily reliant upon NGO and donor funding. This is problematic for long-term, sustainable engagement with ecosystem services.

What becomes clear is that CBOs and community institutions require internal drive and motivation, as well as external support. The relative 'success' or ownership of water and sanitation projects depends on the type of relationships between multiple actors within and outside the settlement (e.g. landlord/tenant, resident/CBO). In this sense, we must ask: who are the people? Who are the actors involved and how do they see their situation?

A further point was raised about land ownership, and the barriers this presents to collaborative action in different contexts. For example, in Sylhet (NE Bangladesh), the majority of private lands on which low-income settlements develop are owned by landowners living in foreign countries, such as the UK. Interestingly, these owners do not allow NGOs and external researchers to enter their territory, nor allow any tenant to stay longer than 12 months. This actively discourages collective mobilisation and bargaining. In turn, eviction on private land becomes more of an individual, as opposed to community threat (as on public land). This raised a much deeper contentious issue: real estate. This is particularly relevant to discussion of low-income settlements in Dhaka, with skyrocketing land values resulting in the ongoing eviction of slum residents. Who is pushing this agenda? What are the future implications for co-production and collective action? These questions remain unanswered.

DWASA presents an interesting case of co-production. However, are there other lesser known examples on a more day-to-day level? Are there further opportunities for NGOs and CBOs to work with government agencies? This requires further investigation. It is also important to consider the broader institutional framing of collective action and co-production in Dhaka and Bangladesh overall. Crucially, why have the urban poor not mobilised on mass around inadequate service provision? What are the barriers to collective action? Indeed, we must question the notion of the homogeneous 'slum community', as low-income settlements have significant internal variation, with implications for the types and functions of institutions. This was demonstrated by the pubic/private debate in Section 2.2. It was agreed that any analysis of institutions must take into account not only the physical environment, but also the less tangible power inequalities within low-income settlements, that mediate access to ecosystem services. Particular attention must be paid to the *mastaans* or 'musclemen' who control rent and money collection. These informal structures have implications for collective action.

In sum, lack of coordination is a major challenge for effective and inclusive co-production and collective action across Dhaka. Indeed, many institutions appear as 'islands', with little or no progressive engagement with diverse actors and agencies. This is problematic, as coordination is *central* to addressing ecosystem disservices. Lack of up-to-date, accessible and credible information is a further barrier to collaborative action.

3. Second Session: Methodology

The second session outlined the methodology for the EcoPoor project in Dhaka. The key objective was to identify four comparable field sites and create a 4x4 matrix within which to connect these sites to four criteria: high/low ecosystem services and public/private land. The session included four presentations, followed by a short discussion leading to shortlisting of candidate case study settlements for the Dhaka study.

3.1. Overview of Methodology

The first presentation linked the research questions to a set of core hypotheses, and particular methodological approach. Four hypotheses were developed to address the research questions, as below.

Main Hypothesis

- A combination of collective action and co-production improves and expands urban poor people's access to services derived from green and water ecosystems and leads to improvements in wellbeing and poverty reduction.

Three Secondary Hypotheses

- Urban poor people's wellbeing improves through a simultaneous increase in their access to fundamental services and prevention of disservices until an inflexion point is reached (at which marginal costs exceed marginal benefit);
- Consolidated collective action enables grassroots groups to negotiate favourable incentives and trade-offs, leading to increased wellbeing; and
- Building on collective action through co-production extends the temporal and spatial scope of activities, leading to poverty reduction among the wider population.

3.2. **Analytical Framework**

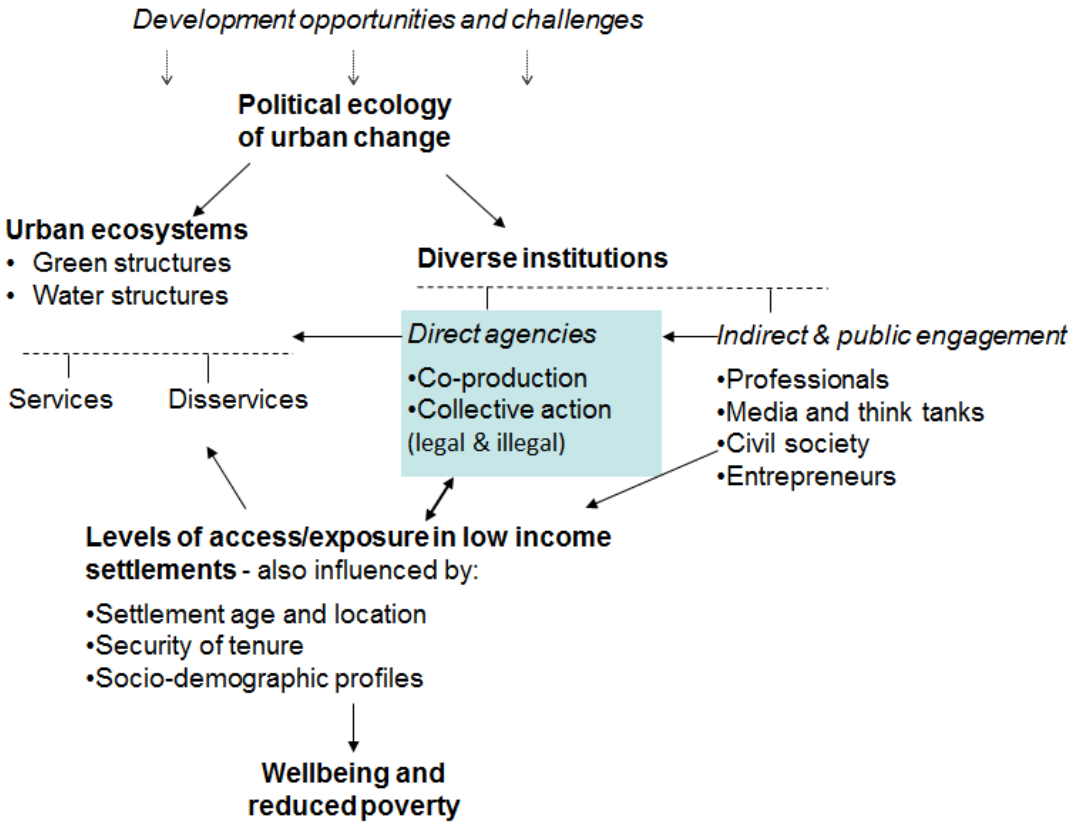
Our framework is founded upon the central assumption that access/exposure to ecosystem services/risks for the urban poor is institutionally mediated. Mediation is articulated through three linked concepts: urban ecosystems; political ecology of urban change; and institutional diversity (Figure 1). At the city/national level, urban political ecology explains the way in which urban processes influence how the state defines the legal and political framework for managing urban ecosystems, as well as modalities for producing and distributing basic services to the poor and preventing ecosystems disservices. Urban ecosystems are in constant change, influenced by development opportunities (e.g. increased industrial activities due to globalisation) and challenges (e.g. global financial crisis). The institutional modalities that translate these changes into services for poor people involve diverse actors at multiple levels, including government, private, non-governmental and community-based organisations. In practice, however, the urban poor rely predominantly on their own collective action, with some co-production. Success depends upon their solidarity, particularly with regards to collective action. They also benefit from the evolution of co-productive behaviours and practices, selective incentives, entrepreneur behaviours, and information from media and think tanks, through indirect transfer of knowledge and expertise.

Research will be carried out in four work packages:

- *WP1: Assessment of ecosystem services and disservices* from urban green and water structures for low-income people. The goal of this 18-months long WP is to answer the secondary question/hypothesis one. The main findings of this WP are: availability by type of ecosystem to case study population; and levels of access/exposure to the derived services/risks. The findings will feed into all other WPs.
- *WP2: Mediating institutional structures.* The 12 months long WP will start at month seven, and build on findings from WP1. Apart from answering/testing secondary question/hypothesis two as the main goal, analytical findings will become an important input for WPs 3 and 4. The main findings of this WP are: assessment of the nature of change (functions, quality and quantity); factors contributing to change; and actors promoting changes (direct and indirect agencies, their institutional arrangements, and their actions/inaction/mal-actions).

- *WP3: The progressive institutional arrangements.* The nine month long WP will start at month 13, and build on findings of WPs 1 and 2 and data from method 6 (all items). The goal is to answer/test secondary question/hypothesis three. The main findings of this WP are: assessment of wellbeing of the case study population sources from urban green and water structures and the roles that institutional arrangements play in this.
- *WP4: Comparative analysis and impact dissemination.* This will pull all data and analyses from WPs 1, 2 and 3 and will run throughout the final 12 months of the project. Cross-city and cross-country comparisons will be drawn and the overall research question will be answered. A significant amount of our activities will be disseminating findings to our key academic and development beneficiaries.

Figure 1: EcoPoor Analytical Framework



3.3. Mixed Methods

For this multi-site study, emphasis is placed on city-wide networks and patches of green and water structures. This requires in-depth investigation in the four settlements, as well as spatial analysis through GIS and a historical (temporal) analysis of field sites, to understand changing land use. The significance of social relations and less tangible forms of wellbeing was also noted, justifying a mix of qualitative and quantitative methods in the four field sites.

Social Sciences: *Institutional Mapping*

This presentation centred on the use of qualitative methods to assess community characteristics, institutional arrangements, critical incidents (e.g. anti-eviction, obtaining water connections, building toilets) and outcomes. Community profiling, mini-census and participatory mapping will be used to understand power structures and social relations within the different 'communities'. The need to focus on *informal* institutions, norms and behaviours

was emphasised, yet raised questions over measurement and comparability. The importance of working with community members in participatory and empowering research was acknowledged by all when assessing outcomes. Indeed, the knowledge produced by this project should be of benefit to communities and researchers, exposing stories of 'failure' and hardship but also stories of successful collaborations, from which to learn.

Environmental Sciences: *Water and Soil Quality, and Hydrology*

Quantitative methodology will be used to assess water quantity and quality in the four research sites. Quantity will be assessed by topography and hydrological regime type (i.e. digital elevation models of rainfall, river height, drainage channels and standing waters). Quality will be assessed by analysing faecal material, oxygen depleting substances, heavy metals, nutrients and turbidity. A water quality perspective takes into account a diverse range of water environments, which requires a range of methods to assess physical, chemical and microbiological elements. However, this is also heavily informed by social science and city-wide mapping. There is extensive existing secondary data to use for analysis of water quality and quantity. However, little is known about water structures in low-income settlements.

Food Security, Health and Wellbeing

This presentation focused on measuring food (in) security, health and wellbeing using anthropometric measurements. Measures of the human body (bones, muscles, fat, height and weight) can reveal levels of malnutrition in the environment. For example, a recent study in Dhaka found that 40% of food given to children was contaminated, demonstrating a link between contaminants and health. It was also found that residents have Vitamin A and zinc deficiencies. There is a clear link between the environment, poor nutritional status and stunted growth, otherwise termed 'environmental enteropathy'.[7] This was regarded as a key method to link ecosystem services to human health and wellbeing.

Discussion: *Ecosystem Service, Livelihoods and Land Use Change*

In all, ecosystem services are deeply interlinked with livelihoods and physical land use changes. Analysis of green and water services (and disservices) must therefore be holistic, taking into account social, geographic, climatic, political and economic factors. This justifies the need for an interdisciplinary study, using both qualitative and quantitative methods.

4. Third Session: Field Site Selection

The methods overview was followed by discussion of field sites (identification and selection). During this session, four sites were to be selected out of a pre-determined list of 96 low-income settlements[8]. Location of sites was paramount to the study (i.e. close to water bodies), and so adequate criteria would first be drawn up, before selecting four sites and placing them on the 4x4 matrix (figure 2). The complexity of land use and ownership was a critical issue for discussion. At some sites, it was unsure who owned the land, and whether

[7] This refers to a condition that impairs food absorption in children - as one of the most serious disservices of pathogenesis that transmits to poor people through ecosystems.

[8] The list was produced in 2013 as part of an ESRC-DFID sponsored University of Manchester- BRAC University collaborative study on 'Poverty and Climate Change in Urban Bangladesh (ClimUrb, http://www.bwpi.manchester.ac.uk/research/researchprogrammes/climurb/)'. A representative survey of 2,368 households living in 96 low-income settlements in Dhaka was conducted. The settlements were selected using a two-stage cluster sampling technique from a list of 4,966 settlements identified by the '2005 Census and Mapping of Slims' in Dhaka conducted by Centre for Urban Studies (CUS).

settlements were under threat of eviction and/or were 'formal' rehabilitation sites. Whilst the majority of settlements were 'unrecognised' or informal, it was acknowledged that the boundaries between formal/informal and public/private are highly porous and often shifting.

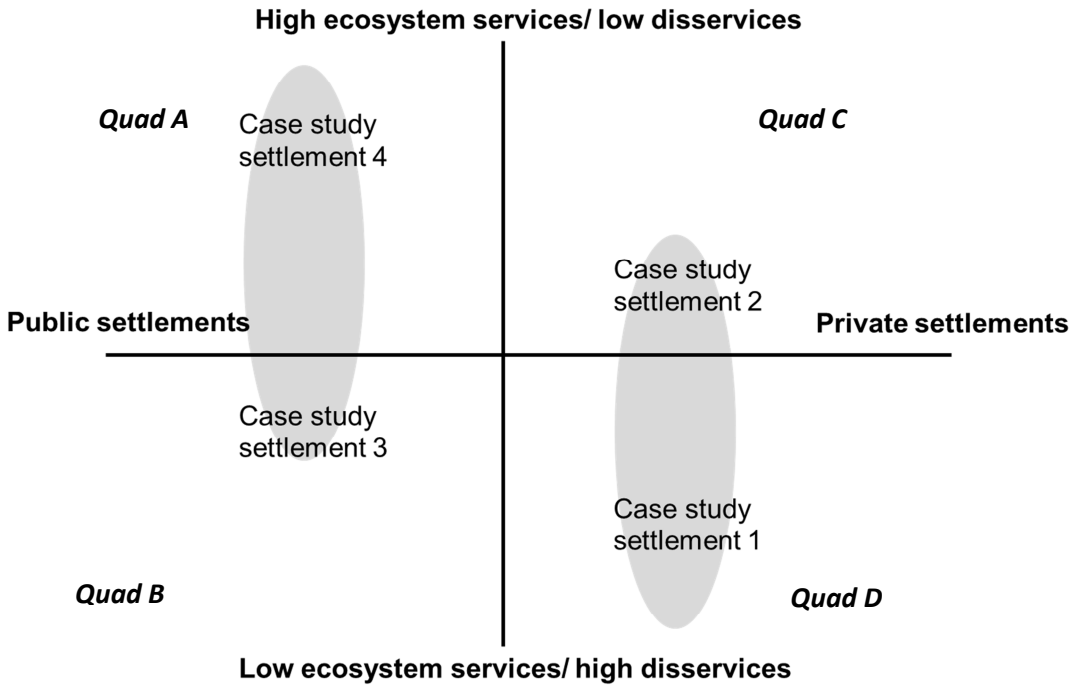
4.1. Selection Criteria: *High/Low Ecosystem Services and Public/Private*

High and low ecosystem services were one of the core selection criteria. However, it was acknowledged that this framing was dynamic and could shift over time (e.g. shift from low to high, due to infrastructure improvements, as in Kollanpur *bustee*[9]). Following this, it was decided that public/private distinctions were the most appropriate framing for the field sites in Dhaka, as opposed to formal/informal (as in Dar es Salaam), which has contentious political connotations in Bangladesh. The challenges of comparative analysis (using different selection criteria) were acknowledged. However, it was accepted that the framings should be context-specific, and could reveal some interesting comparisons.

A discussion ensued in which the workshop participants formed two groups, noting down the settlements that fitted into these criteria. A range of settlements were identified. For example; Kallanpur, Korail, Sattola, Teker Bari and Saidabad Outfall on public land, and Rayer Badjar, Komrangicho, Durainan Gustola, Mollar Bustee, Jheelpar T-Block on private land.

Following this initial discussion, attention turned to the evidence of collective action and co-production in the suggested field sites. This anecdotal evidence varied considerably. For example, with strong CBO activity documented in Teker Bari (public land), to little or no community action in other sites, such as Jheelpar T-Block (private land). Co-production and collective action were particularly documented in Kollanpur, Baonniabad and Sattola. Figure 3 demonstrates the shortlisted settlements from this earlier discussion.

Figure 2: Conceptual approach to short-list case study settlements



Note: The grey shaded areas denote the conceptual location of the case study settlements.

[9] *Bustee* is a term used for informal settlements in Bangladesh.

Figure 3: Shortlisted Low-Income Settlements

A • ***Kollanpur*** • Bhashantek • Begun Bari Tek	**C** • ***Sadeq Khan*** • Rain Khola • Anis Mia Bustee
B • Sattola Basti • Saidobad • ~~Deabari 'Martyrs'~~/ ***Gabtoli***	**D** • ***Baonniabad*** • Koila Ghat • Mollar Bustee

Note: The EcoPoor team later visited these sites to select the final four settlements highlighted in ***bold Italic***. For all but quad B the team were able to select one of the short-listed settlements. For quad B, ***Gabtoli*** was chosen to replace Diabaryi Martyrs. This is because although both of them are on government supported/recognised settlements on public land, the former is more vibrant and older than the latter.

5. Fourth Session: Forward Planning

The final session centred on the research plans for Dar es Salaam and Dhaka, in which the participants re-engaged with the research hypotheses to ask what the 'big messages' are and how the research can have long-lasting impact.

In Tanzania, three work packages were proposed, which included; ongoing comparative analysis, production of reports, methodological working papers and lectures, and the involvement and training of five MSc Masters Dissertation candidates. The latter would actively encourage the next generation of researchers to generate and disseminate knowledge around ecosystem services. Similarly, the plan for Dhaka involves collaboration between diverse project partners (e.g. BRAC University; Dhaka University; WaterAid; International Centre for Diarrhoeal Disease Research, Bangladesh, ICDDRB; and Institute of Water Modelling, IWM-see Annex 2 for full list). This interdisciplinary research will bring together social and environmental scientists for in-depth analysis of the four field sites. As in Dar, there are also opportunities for young MSc and PhD researchers to be engaged throughout the Dhaka investigation.

The opportunities associated with an interdisciplinary approach are well documented, and so too are the challenges. In turn, attention was paid to bridging the gap between the social and physical sciences, especially in terms of clear communication of sampling and field methods. The importance of a central database for storage and accessibility of information to all investigators was noted. The next task proposed was therefore to create an overview paper of the project, to share with all parties involved. Working papers, journal and book publications were agreed for longer-term policy engagement.

Most importantly, the discussion centred on lasting impact within the communities under study. How can this research benefit them? In terms of local engagement and impact, one key informant from each of the four field sites will be hired for assistance throughout the project

duration. This person will assist the researchers in terms of sampling. The research team would also return to field sites to disseminate findings to participants More broadly, this project forms part of a larger network of studies centring on the capacity of low-income groups to work effectively in collaborations to address common concerns. It therefore contributes to a growing body of literature focusing on 'success' as well as failure in 'what works' for those living in low-income settlements. In turn, this contributes to South-South partnerships in knowledge creation, learning and exchange.

6. Conclusion

The Dhaka Workshop proved to be a highly productive exercise. Not only did it create a solid collaborative base for implementing the EcoPoor project in Dhaka, it also highlighted key concerns for the research to be mindful of. In terms of supporting project implementation:

- The participants were able to analyse the project framing with their knowledge of ground realities in Dhaka. They presented facts, raised concerns, shared ideas and above all, registered their ownership of the project.
- The participants' successfully shortlisted 12 candidate settlements from a list of 96 pre-selected settlements. Follow-up field visits enabled the team to select the four most relevant case study settlements that they needed.
- Having been organised immediately after the Dar meeting, and with participation of both the UK and Dar team members, the Dhaka Workshop has made significant progress towards identifying the elements of comparability/contrast between Dhaka and Dar.
- The Workshop also generated awareness about the importance of research impacts from the start.

The final discussion raised some concerns that emerged throughout the day. These include:

- Firstly, it was acknowledged that whilst co-production and collective action are regarded as *central* to accessing the benefits of ecosystem services, these institutional forms are not necessarily inherently progressive.
- This relates to a second concern that low-income settlements are not homogeneous, but contain multiple, conflicting interests between 'community' members, according to age, gender, class, ethnicity and so on. In turn, the research could raise some contentious issues around sources of contamination, and *access to* and *ownership of* green spaces and water structures. This justifies an in-depth analysis of the local political context and of less tangible informal institutions and power dynamics.
- The third concern is a methodological one: an interdisciplinary approach is desirable but has challenges, particularly in relation to sampling, level of analysis and comparability of data. Despite this, the mix of qualitative and quantitative methods was deemed complementary and *essential* to understanding ecosystem services, disservices and the role of institutions at the settlement and city-wide levels in Dhaka.

Annex 1: List of Participants

Country	Name of Participant	Affiliation
Bangladesh	Prof Ferdous Jahan	Professor of Public Administration, University of Dhaka and BRAC University
	Dr Khairul Islam	Country Representative, WaterAid Bangladesh
	Dr Tahmeed Ahmed	Director, Centre for Nutrition and Food Security at ICDDR,B
	Prof Abdur Rob Mollah	Professor of Zoology, University of Dhaka
	Mr Mizanur Rahman	Senior Geologist, Institute of Water Modelling (IWM)
	Dr Ishita Mostafa	Researcher, Centre for Nutrition and Food Security at ICDDR,B
	Dr Mustafa Mahfuz	Assistant Scientist, Centre for Nutrition and Food Security at ICDDR,B
	Dr Pronob Kumar Mozumder	Research Associate, Nature Conservation Management (NACOM)
	Ms Hasin Jahan	Programme Director, Water and Sanitation, WaterAid Bangladesh
	Mr Md Murshed Alam	Research Associate, Institute of Water Modelling (IWM)
	Md Mamun-ur-Rashid	Senior Research Associate, BRAC University
	Mr Tapos Kumar Das	Research Assistant, BRAC University
	Mr Raju Ahammed	Research Associate, BRAC University
	Mr Kazi Masel Ullah	Research Associate, BRAC University
	Shameem Reza Khan	Research Associate, BRAC University
	Mr Tushar Khandker	Dushtha Shasthya Kendra (DSK)
	Saleha Begum	Dushtha Shasthya Kendra (DSK)
Tanzania	Dr Riziki Shemdoe	Senior Research Fellow and Director of Postgraduate Studies, Research and Publications at Ardhi University, Dar es Salaam, Tanzania
UK	Dr Manoj Roy	Lecturer in Sustainability, Lancaster Environment Centre, Lancaster University
	Prof David Hulme	Professor of Development Studies, Brooks World Poverty Institute, University of Manchester
	Prof Clive Agnew	Professor of Physical Geography and Vice President for Teaching, Learning and Students, University of Manchester
	Dr James Rothwell	Senior Lecturer in Physical Geography, University of Manchester
	Ms Sally Cawood	PhD Researcher, Brooks World Poverty Institute, University of Manchester

Annex 2: Workshop Programme

EcoPoor Dhaka Research Framework Workshop

Venue: BRAC Inn (3rd floor room1), 76 Mohakhali, Dhaka 1212
Contact: Md. Mamun-ur-Rashid (01713504255)

Date: 6th March 2014

9:00-9:30	**Registration & Coffee**	
9:30-11:00	**Session 1: Contextualising the ESPA project in Dhaka** Chair: Khairul Islam; Note taker: Sally Cawood	
	15 min 15 min 15min 45 min	Manoj Roy: The ESPA project background, objectives and framing. Manoj Roy & Ferdous Jahan: Urban poverty in Dhaka – trends, living conditions (incl. settlement types and spatial distribution), livelihoods, health & nutrition and institutional structure. Kazi Masel Ullah/Abdur Rob Molla: Urban green and water structures in Dhaka: availability; quality; derived services/disservices; and management and policies. David Hulme (facilitator): Discussion around three core issues: (a) Institutions; (b) Physical environment; (c) Poverty/wellbeing.
11:00-11:30	**Coffee**	
11:30-13:00	**Session 2: Methodology** Chair: Clive Agnew; Note taker: Sally Cawood	
	15 min 15 min 15 min 15 min 30 min	Manoj Roy: Overview of proposed methodology. David Hulme & James Rothwell: Methods and data needs for institutional and ecosystem structures/services/disservices analyses. Ishita Mostafa: Methods and data needs for anthropometry, food security and nutrition – based on Dhaka work. Ferdous Jahan: Applying these methods to Dhaka – approach; data availability and needs; identification of candidate case study settlements and important institutions; and reflection on team composition & strength. Facilitated (by Chair) selection of four case study sites, involving: (a) agreement on criteria to be use; (b) grouping of candidate slums into four categories; (c) Grouping of slums in terms of the presence of co-production, collective action or both.
13:00-14:00	**Lunch**	
14:00-15:30	**Session 3: Group exercise to select four slums** (Note taker: Sally Cawood). We will undertake a group exercise to select four settlements from the list of candidate slums (presented in Session 2). The method will be explained at the start of the exercise.	
	60 min 30 min	Manoj Roy to run the exercise. David Hulme to moderate the final selection.
15:30-16:00	**Coffee**	
16:00–17:00	**Forward planning** Chair: Tahmeed Ahmed	
	15 min 15 min 15 min 15 min	Manoj Roy: Overview of proposed deliverables. Riziki Shemdoe: Dar Implementation Plan. Ferdous Jahan: Implementation Plan for Dhaka. Discussion and closing.