

ESPA Inception Meeting, London, 15-16 January 2014

EcoPoor: Institutions for urban poor's access to ecosystem services: a comparison of green and water structures in Bangladesh and Tanzania

Background, Framing and Programme of Work

Manoj Roy (Lancaster University)

David Hulme, Clive Agnew and James Rothwell (University of Manchester)

Ferdous Jahan (BRAC University)

Riziki Shemdoe (Ardhi University)

Contact: m.roy1@lancaster.ac.uk



MANCHESTER
1824
The University of Manchester



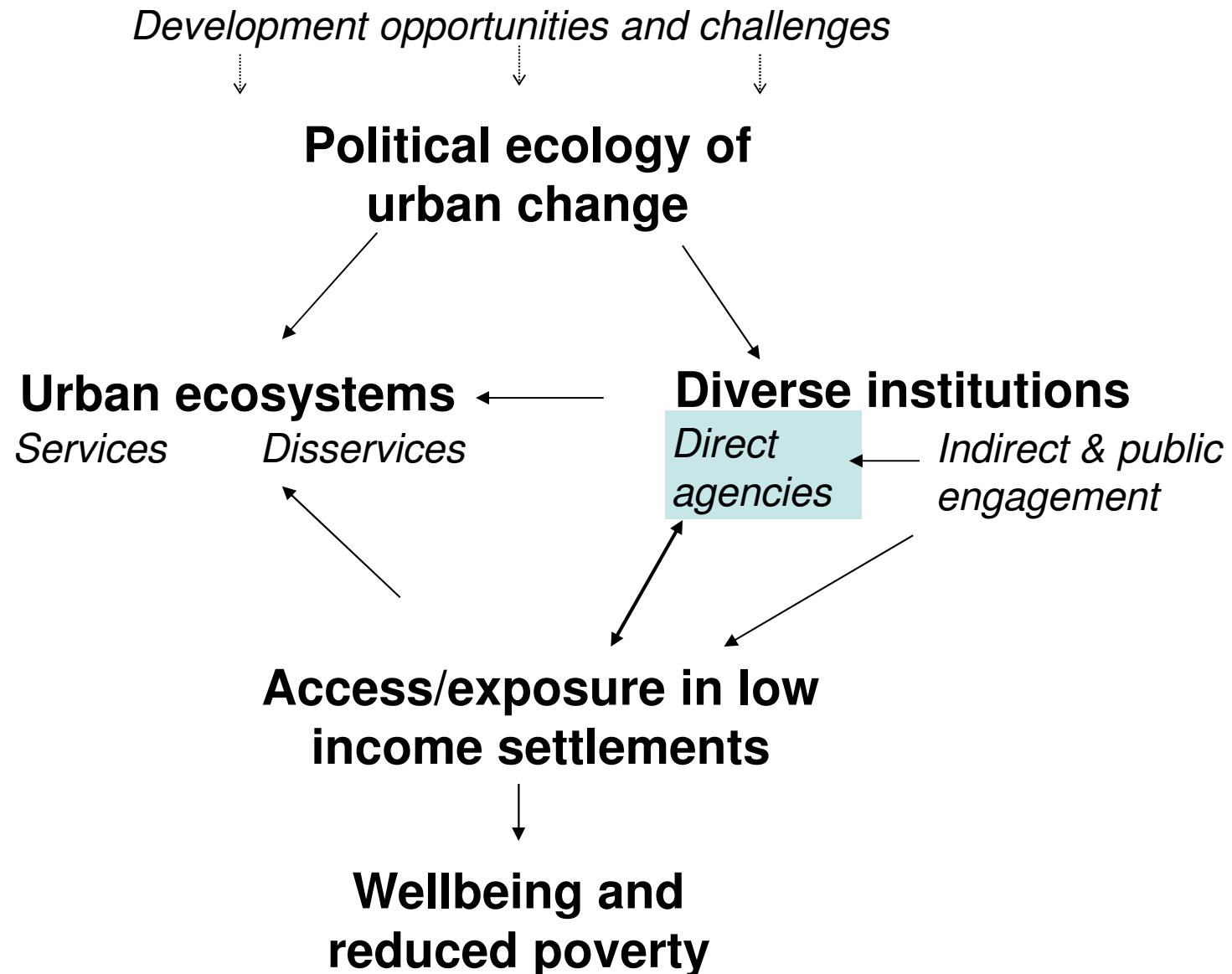
WaterAid



Outline

- 1. Framing**
- 2. Methods & tools**
- 3. Work plan**

What we are interested in

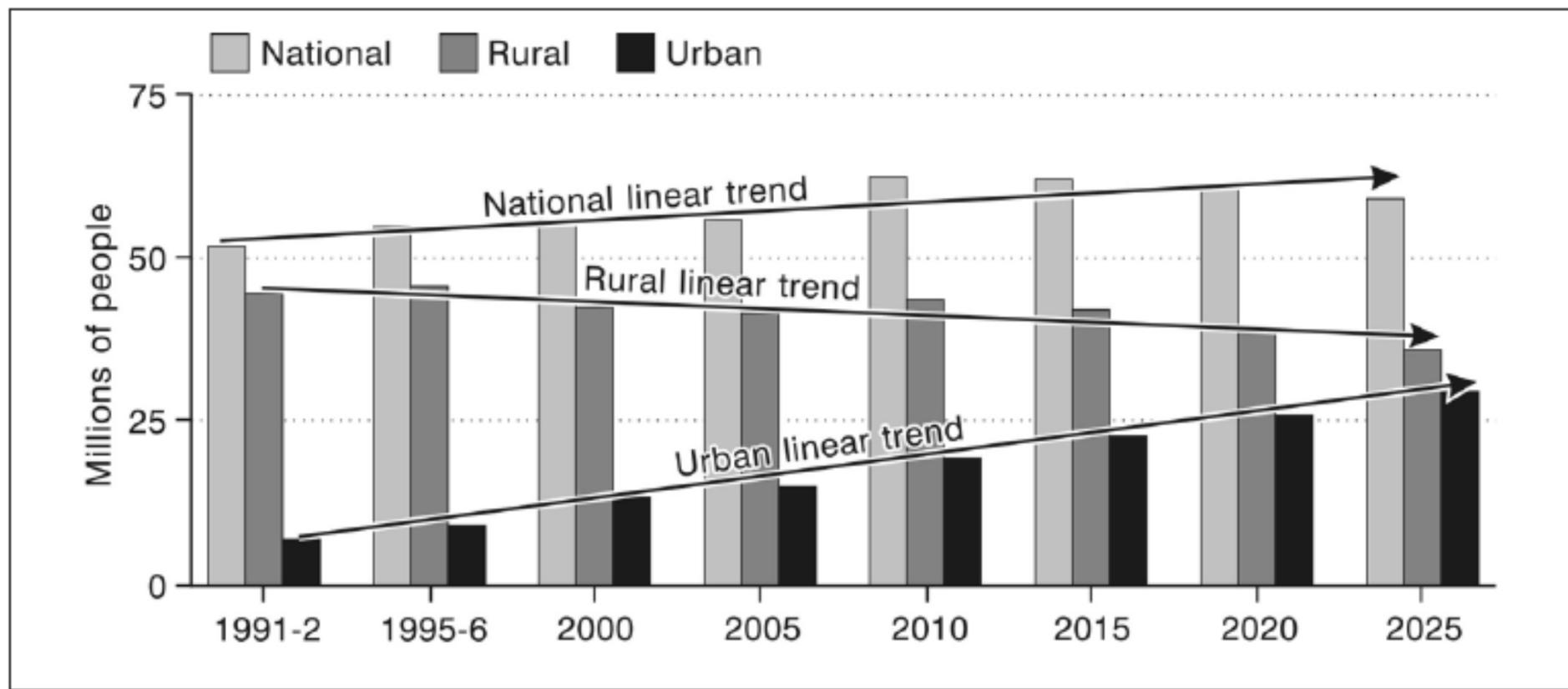


Three underpinning considerations

1. Poverty has an '**urban future**' in many countries of the developing world
2. Low-income settlements are a '**landscape of disaster**' , induced/manifested by poor quality/ absence of water and green structures
3. '**Dependency on diverse institutions**' is a way of low-income dwelling, but the existing institutional structures are rarely inclusive

Consideration 1

Urban future of poverty in Bangladesh (Banks Roy Hulme, 2011)



Consideration 2

Low-income settlements a ‘landscape of disasters’ (Gandy, 2008; McFarlane, 2008)

Induced/manifested by green and water structures?

- Unsafe and polluted water ✓
- Filthy local environment - poor sanitation, garbage disposal & drainage ✓
- Risky locations ✓
- Flooding and waterlogging are routine ✓
- Receptors of diffused pollution ✓
- Evictions & insecure tenure indirect
- Social and political exclusion indirect
- Drug abuse and violence indirect

Implications for human wellbeing

Example of health outcomes (Mitlin and Satterthwaite, 2013)

Health outcomes	Worst performing settlements	Best performing settlements
Infant mortality rates	>120/1000 live birth	<3
Under five mortality rates	>250/1000 live birth	<5
Maternal mortality rates	>1500/100000 live birth	<10
Life expectancy at birth	<20 years	>85 years
Prevalence of diarrhoea with blood in children	13+%	0?
% of children under five who are underweight or under height for their age	>50%	0?

Examples of fundamental services & disservices of importance to low income people

	Services	Disservices
Urban green structures	Shelter, fuel, food, nutrition, protection from extreme weather, pollution retention etc.	Poor protection against shocks; initiating, intensifying & diffusing environmental pollution
Urban water structures	Safe & unpolluted drinking water, drainage, flood prevention etc.	Environmental enteropathy; flooding & waterlogging

Location: a low-income settlement in Dhaka



Location: a low-income settlement in Dhaka

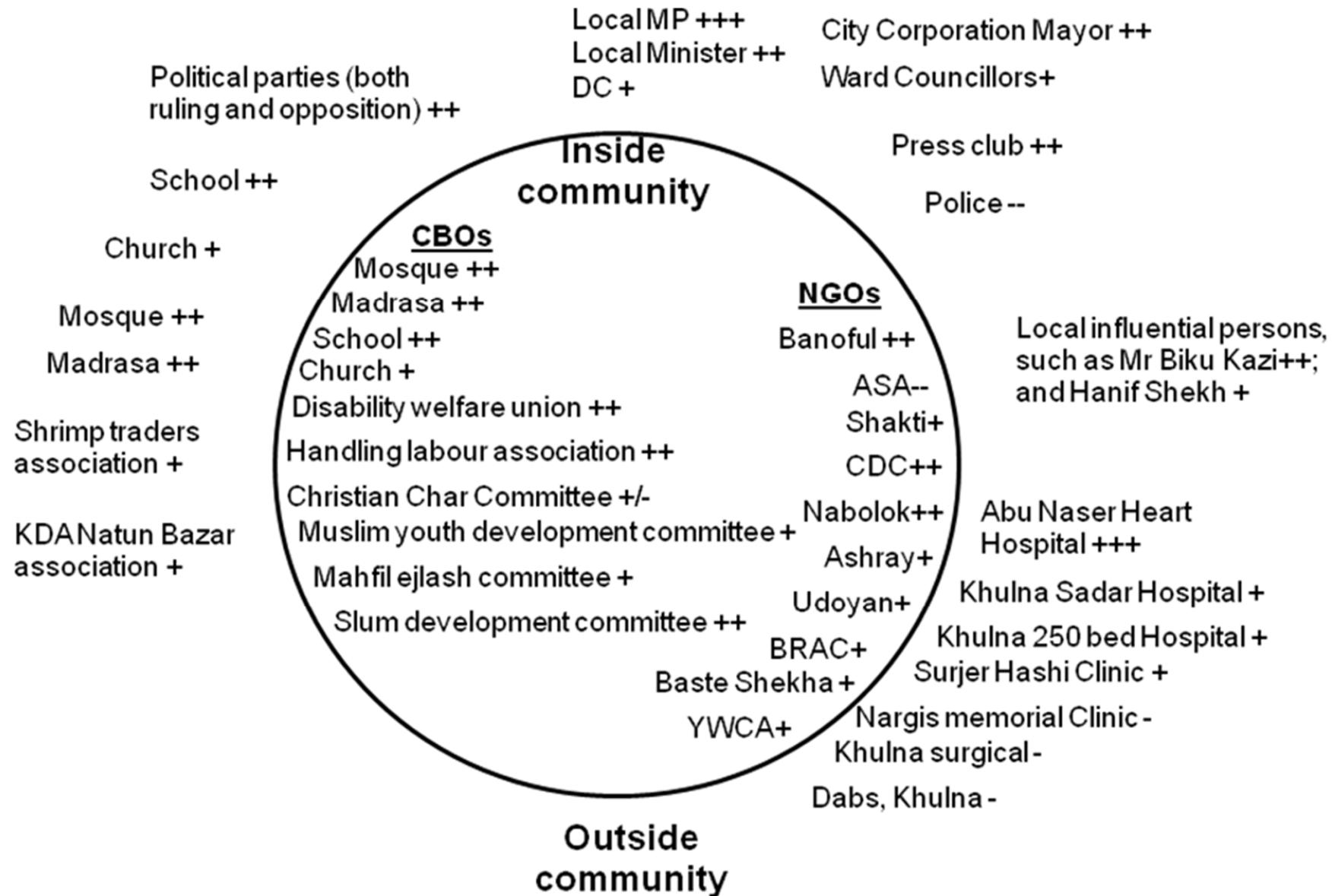


Location: Dar es Salaam



Consideration 3

Dependency on diverse institutions in Bangladesh (Roy Hulme Jahan 2012)



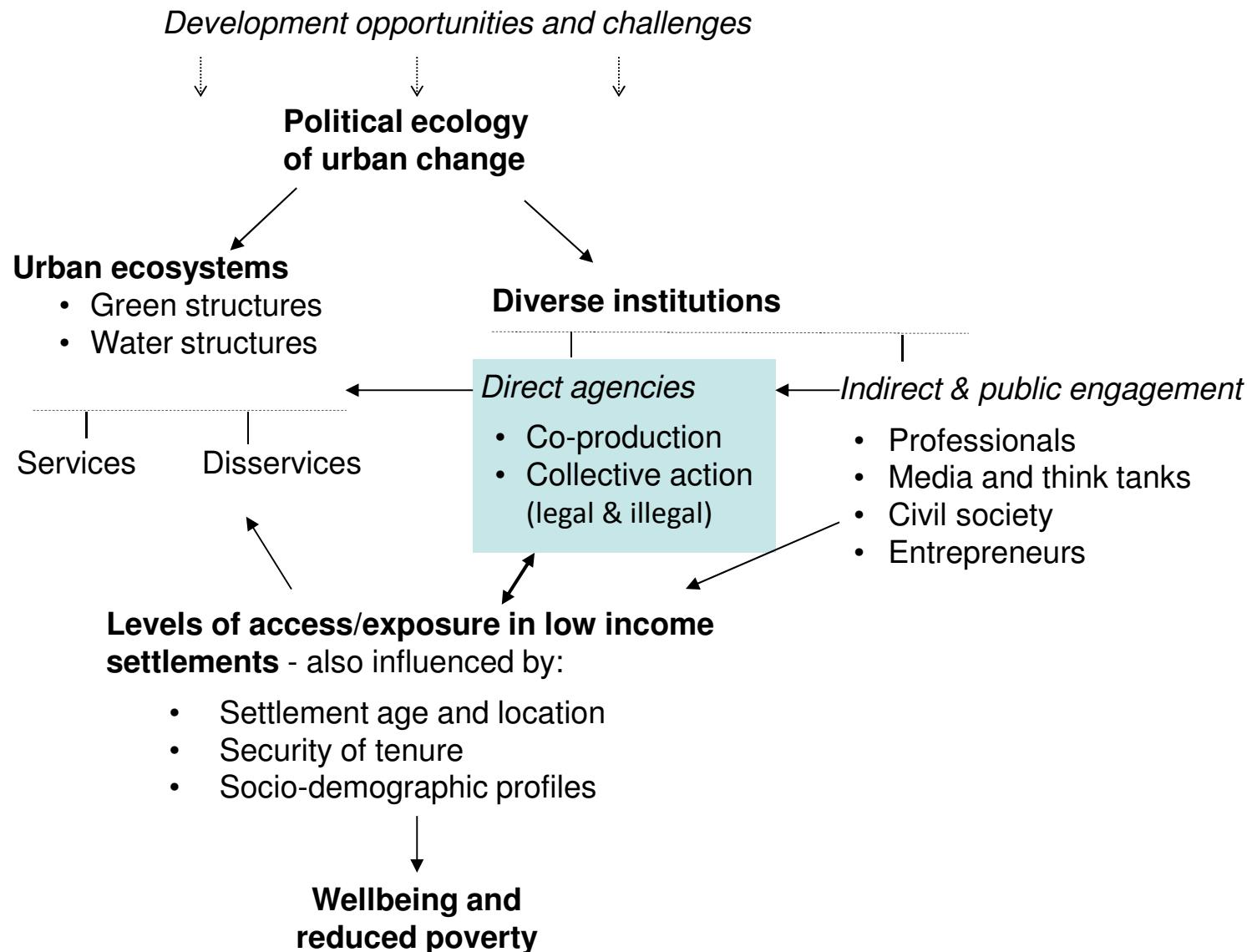
What do the three considerations tell us?

- In spite of the presence of diverse institutions, why are low-income settlements a landscape of disasters?
- What is missing here? We argue that the problems lie with the institutional arrangements.
- While, collective action and co-production are viewed as essential building blocks of strong local institutions
- The complementarity between these institutional forms has rarely been studied in reg. to low-income settlements

Co-production & collective actions – key distinctions

Co-production	Collective actions
<ul style="list-style-type: none">• Provisioning of public services through regular, long-term relationships between state agencies and citizen groups, with both making substantial resource contributions (Joshi and Moore, 2004)	<ul style="list-style-type: none">• The self-help mode of addressing basic concerns by low-income people (Mitlin, 2008)
<ul style="list-style-type: none">• Usually facilitated by formal institutions	<ul style="list-style-type: none">• Mostly grassroots-led
<ul style="list-style-type: none">• Requires consensus	<ul style="list-style-type: none">• Can provide the basis for consensus building
<ul style="list-style-type: none">• Both are components of new institutionalism concept, that institutions are created by social actors engaged in struggles for political power.	

Revisiting our analytical framework



Main research question

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

Three related questions

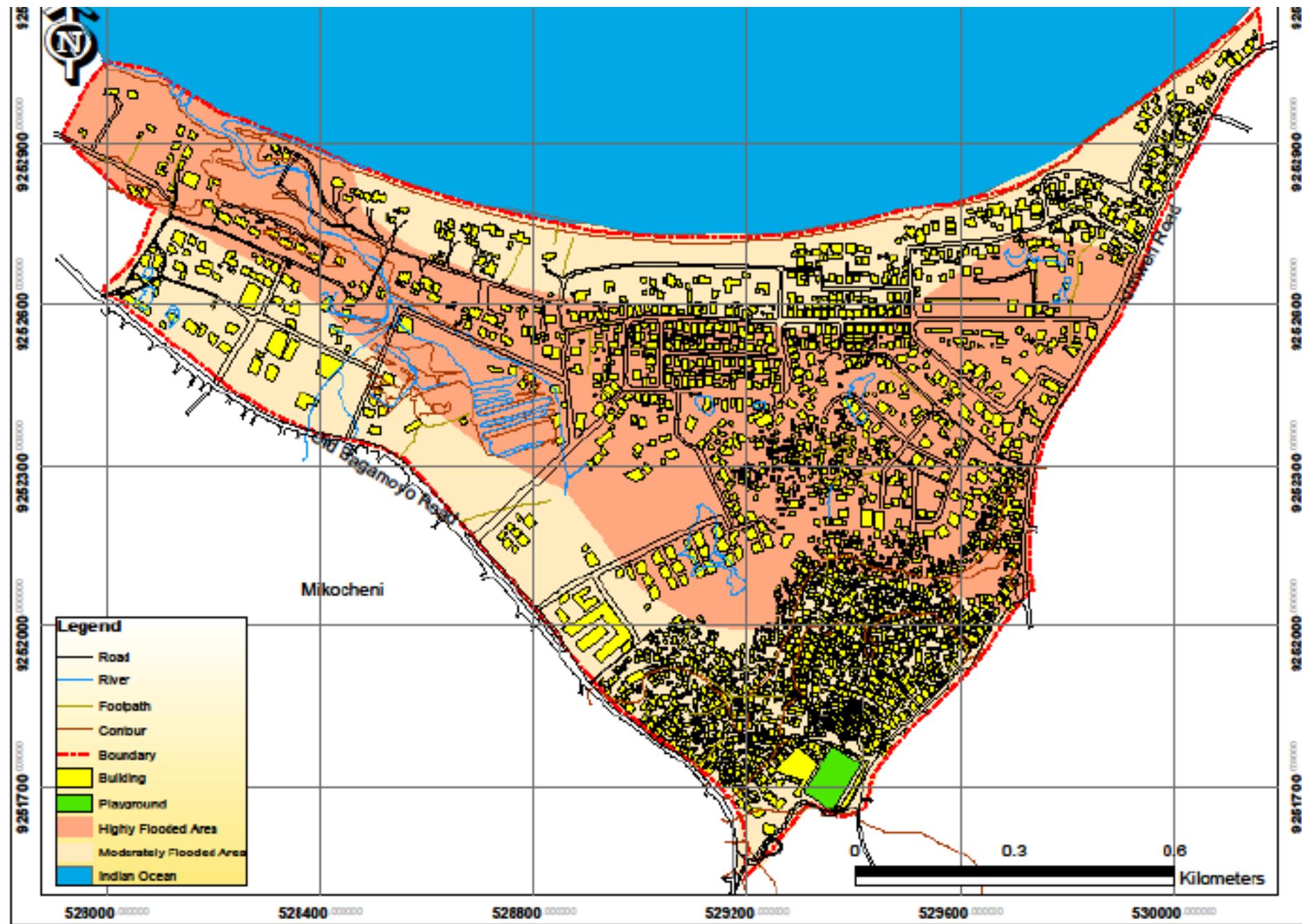
1. What access/exposure do the urban poor have to green and water ecosystem services/risks? [WP1]
2. What institutional arrangements structure their access at different levels? [WP2]
3. Do collective action and coproduction improve the urban poor's access to ecosystem services and create a basis for developing effective institutions? [WPs 3 & 4]

Methodology and design

Analytical emphasis

- (a) city-wide networks/corridors of green and water structures (spatial analysis/GIS)
- (b) In depth study of at least 4 low-income neighbourhoods located or connected to that network
- (c) Issues of interest include:
 - Level of access/exposure to services/risks [WP 1]
 - The mediating institutional arrangements [WP 2]
 - Wellbeing outcome classified by type (nutrition, sanitation; income & earnings; exposure to pollution, and social arrangements) and other structural (e.g. age & gender) and locational (city core v/s periphery) elements [WPs 3&4]

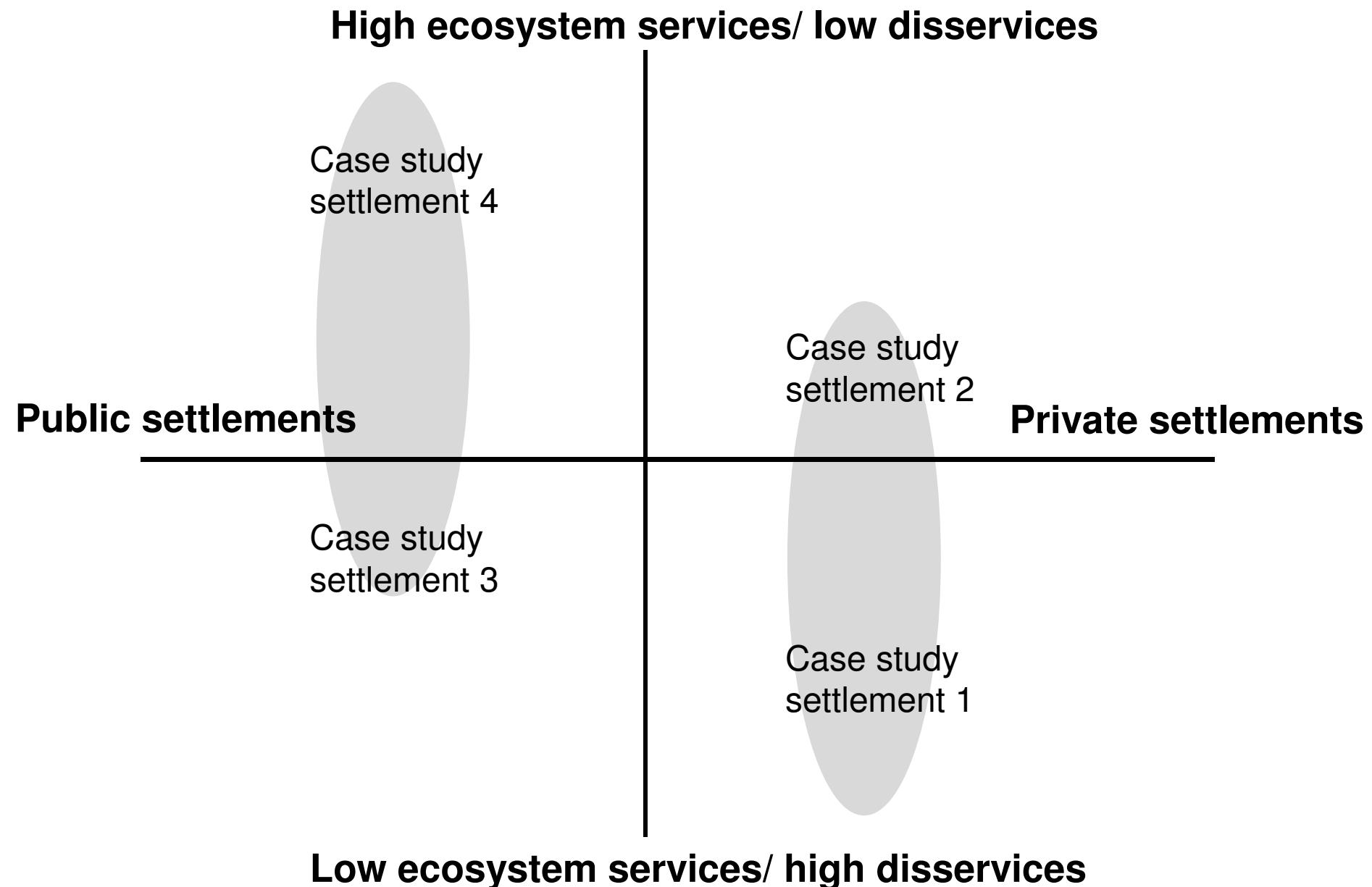
Location: Dar es Salaam



Location: Dar es Salaam



Case study selection



Key data

1. Levels of access/exposure to services/risks

- Existing
- Historic

2. Process of changes to these services/risks

- Nature of changes
- Factors contributing to the changes
- Actors promoting/constraining the changes

3. Consequent wellbeing gain/loss

- Basic material for good life (nutrition, livelihoods, shelter, goods)
- Health (clean air, water, neighbourhood; contamination-free food)
- Education
- Security (personal safety, security from disasters)
- Social relations
- Freedom of choice and action

WP 1: Levels of access/exposure to ...

Services

- **Availability by type of ecosystems**
 - Quantity and location (within people's reach)
 - Bundle of service units produced
- **Accessible to case study population**
 - Demographically differentiated
 - Associated trade-offs, rules, politics, practices

Risks/ disservices

- **What are the harmful properties**
- **Multiple ways people are exposed to these risks**

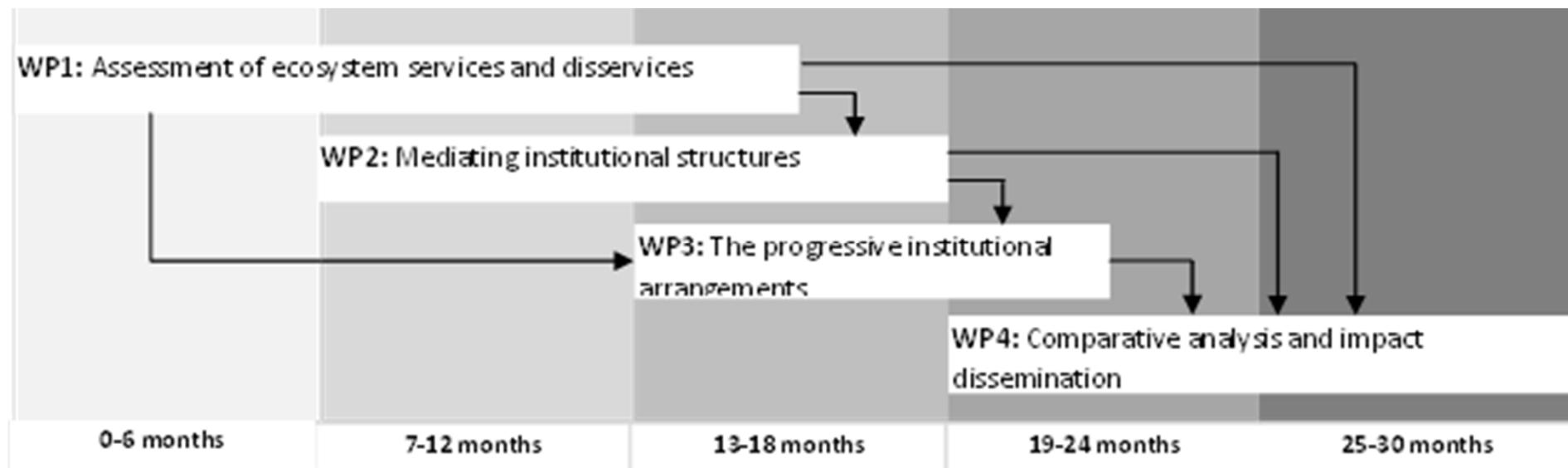
WP 2: Changes to ...

- **Nature of change (functions, quantity, quality)**
- **Factors contributing to the change**
 - Urban/land-use/policy change
 - Pollution loading, reception
 - Ecosystem connectivity/break-ups
 - Disrupted nutrition cycling
 - Loss of bio-diversity/ evasive species
- **Actors promoting the changes**
 - Direct and indirect agencies
 - Their actions/inactions/mal-actions

WPs 3 & 4: Wellbeing consequence

- **Gains and losses**
- **Differentiated – spatially, temporally, demographically, tenure-based, collective action/coproduction**

Work packages



Where we are and the next steps

- Country meetings held in November (Dar) & December (Dhaka) 2013
- Dhaka and Dar Research Framework Development Exercises – March 2014
- Methodology paper – May 2014
- Fieldwork starts: in both cities – June 2014

Acknowledgements

- Thanks to ESPA
- Builds on two successful recent/ongoing projects
 - ClimUrb (ESRC-DFID funded); visit:
<http://www.bwpi.manchester.ac.uk/research/climurb/>
 - CLUVA (EU FP7 funded); visit:
<http://www.cluva.eu/>
- Bangladesh and Tanzania collaborators

Literature cited

Banks, N.; Roy, M. and Hulme, D. 2011. "Neglecting the urban poor in Bangladesh: research, policy and action in the context of climate change". *Environment and Urbanization* 23(2): 487-502.

Gandy, M. 2008. "Landscapes of disaster: water, modernity, and urban fragmentation in Mumbai". *Environment and Planning A* 40: 108-130.

Joshi, A. and Moore, M. 2004. "Institutionalised co-production: unorthodox public service delivery in challenging environments". *The Journal of Development Studies* 40(4): 31-49

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):415-435.

Mitlin, D. 2008. "With and beyond the state – co-production as a route to political influence, power and transformation for grassroots organizations". *Environment and Urbanization* 20(2): 339-360.

Mitlin, D. and Satterthwaite, D. 2013. 2013. *Urban poverty in the global south: Scale and nature*. London and New York: Routledge.

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):157-176.