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Asian Cities Climate Resilience

POLICY BRIEF 2015

Multistakeholder collaboration for urban climate change resilience in Bangladesh

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Improved multistakeholder collaboration in the water and sanitation sector can contribute towards building greater urban climate resilience in Dhaka City. However, the challenge is to ensure all stakeholders come forward to improve the present situation of service provision and find effective means of collaboration. At present, informal settlements in Dhaka lack basic services and infrastructure, and are becoming home to more and more rural migrants. While a number of NGOs and government agencies are addressing the water and sanitation deficit, climate change resilience is not always being considered when implementing these initiatives. Current processes of stakeholder collaboration are still limited. This briefing provides an overview of existing initiatives and collaborations in improving water and sanitation infrastructure, and recommends approaches to improving multistakeholder collaboration in addressing the water and sanitation needs and resilience of low-income settlements in Dhaka.

Policy pointers

- **The Bangladesh national government can play a coordinating role across agencies and actors in building urban climate change resilience in Dhaka.**
- **A collaborative approach across stakeholders working in the water and sanitation sector, from government agencies, NGOs and the private sector to local communities, can reduce overlapping and duplication of activities and more effectively address climate change resilience.**
- **A national urban policy and strategic action plan is required to guide stakeholders in taking the appropriate measures in developing urban water and sanitation infrastructure and services.**
- **Addressing infrastructure deficits while building climate change resilience should adopt an integrated approach, including needs assessments of local settlements, land tenure situations and likely climate change impacts, to better tailor approaches.**

Climate change in Dhaka

The two main climate change impacts that Dhaka faces are heavy rainfall, leading to flooding and drainage congestion, and heat stress resulting from rising temperatures.[1] The impact of flooding from torrential rainfall has increased in recent years due to a combination of unplanned and haphazard infrastructure and the destruction of natural water bodies.[2] The city has suffered nine major floods over the last sixty years.[3] In 2004, the city experienced unprecedented rainfall of 341mm in 24 hours, inundating more than two thirds of the capital.[4] Dhaka's utility services such as its sanitation system, drinking water supply and sewerage lines are unable to cope with these extreme events.

Who is at risk?

There are over 5 million slum dwellers in Dhaka, living without effective waste disposal systems, protective infrastructure or quality services. These barriers increase the vulnerability of residents to climate change impacts, on top of having to live and work in very dense settlements often located in hazard-prone, exposed areas.[3,5,6]

The residents of informal settlements receive an inadequate supply of piped water due to problems in the existing infrastructure, such as leakages in the pipes, and there is no coverage in the settlements. There is a lack of access to improved sanitation, with many residents relying on hanging latrines which contaminate

local ditches, ponds and lakes. As a result, during floods and waterlogged periods, the waste from latrines and sewage overflow pipes contaminates the water. Women and children are particularly affected by the insanitary conditions, suffering from skin problems, and the lack of toilets affects women's menstrual hygiene.

Challenges in implementing WATSAN projects

To improve the water supply and sanitation situation of informal settlements, a key challenge to address is the lack of security of land tenure. Landowners – whether the government or private individuals – are able to evict these settlers at any time. This fear of eviction has prevented residents from investing in developing infrastructure with their own finances. Water and sanitation infrastructure can have high installation costs. Additional barriers include interference by local mafia groups and powerful actors in the water supply market, with many illegal water businesses selling water at high rates. A structural barrier to responses by government agencies is the inadequate coordination across government organisations and ministries in the allocation of responsibilities.

Stakeholder collaboration

Currently, the only collaboration amongst stakeholders in the provision of water and sanitation infrastructure is project-based collaboration between some NGOs. During the implementation of projects, they work with the support of community-based organisations (CBOs), community residents, and government officials. Sometimes they collaborate with other NGOs to complete a project successfully or to approach the government for any required intervention. However, these activities are short term and based on projects, and NGO strategies can also change rapidly with changing donor requirements. Additionally, at the moment projects do not take into account the long-term view which includes the likely impacts of climate change. Where stakeholder collaboration can be achieved, it offers a number of advantages. This includes reducing the likelihood of overlapping or duplication of activities, and ensuring a better spread of improvement works. Collaboration enhances communication and networking, allows for a diversity of approaches, and expands the knowledge base for action. Collaborative approaches also allow for the opinions of different stakeholder groups to be taken into consideration. Finally, it strengthens the ability of NGOs to approach government agencies regarding their mandate.

It is important to recognise that there are also some limits to collaboration. It can slow down processes, due to the need to gain consent and agreement from all partners and stakeholders in the process. Practical considerations such as reporting requirements to donors and differing financial years applied by the various partners can also affect the ability to effectively collaborate.

Recommendations for effective collaborative approaches

To address infrastructure and service deficits in the water and sanitation sector, while also building climate resilience, multi-level collaboration across different stakeholder groups is important. The different actors are highlighted in Figure 1. Each of these actors has a role to play, and a concerted effort across these actors, interacting across different levels, is necessary.[7] This can be facilitated with the steps outlined below.

Government should play the key role

Since government organisations are responsible for maintaining water and sanitation services in Dhaka City, they have a key role in contributing to building resilience. However, at present, there is no urban sector policy for the country, while the water and sanitation policies do not consider the issue of climate change. Additionally, a lack of integration across different policies hinders the effective running of initiatives.

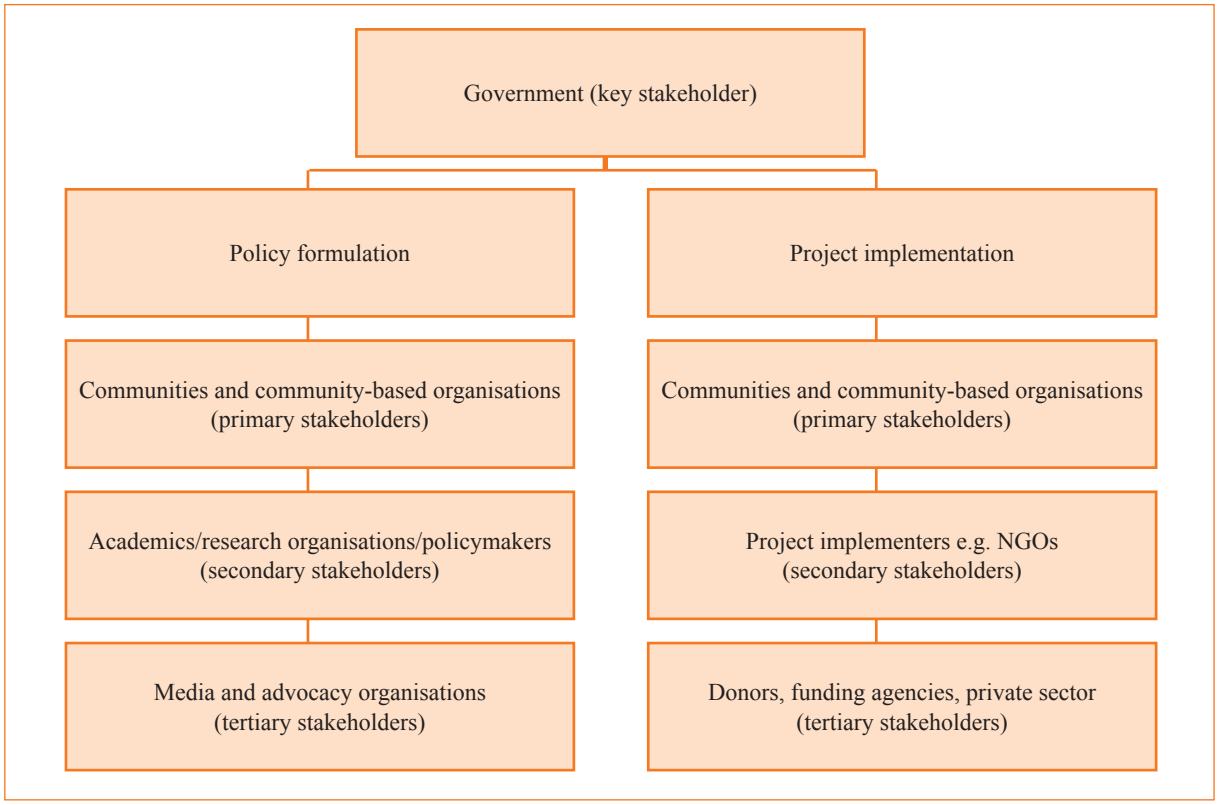
Develop urban policy guidelines

An overarching national urban policy would provide the platform by which stakeholders can approach the government to ensure that its mandate is carried out. This should address important underlying issues such as land tenure for the urban poor. The national urban policy should

Box 1. An example of a successful collaboration

- Following the Dhaka floods of 2004, a collaborative project was implemented by the Bangladesh Urban Forum (BUF).
- BUF included all the project partners and implementing agencies from the start of the project. The stakeholders took part from the design phase of the project, so that they were aware of every component and activity of the project.
- Dhaka Water Supply and Sewerage Authority (DWASA) was informed of the project at its inception, which helped them in implementing the project despite the agency's low working capacity.
- The project team invited local people, especially local ward commissioners, to participate in the project planning and to attend all meetings. As a result of this strategic planning, local leaders were very helpful.
- The project team distributed the work according to the management plan from the outset of the project.
- Although the role of Dhaka Electric Supply Company Ltd (DESCO) was to only supply power, the project team involved them from the very beginning of the project. The project team also motivated community members to pay for the services.

Figure 1. Overview of stakeholders



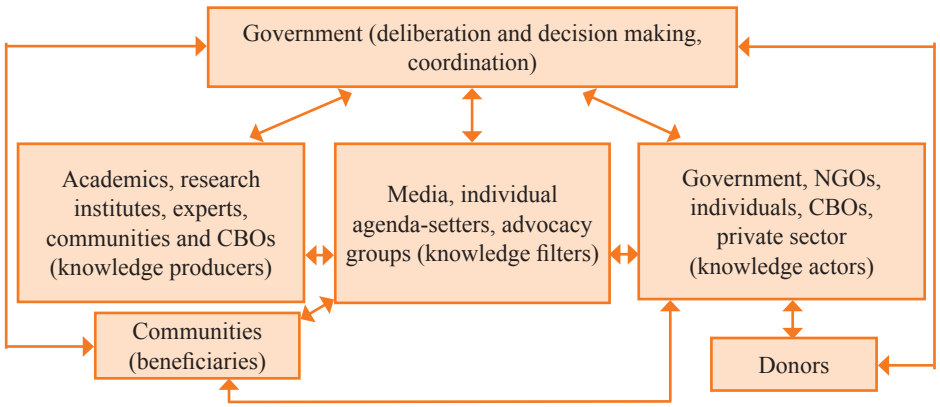
be accompanied by a strategic action plan which defines targets in the short, medium and long term, which can also identify the roles that different stakeholders can play in achieving this plan. These policies and plans should be developed in consultation with the relevant stakeholders, including local communities.

Prepare a strategy for effective collaboration

Collaboration will happen more effectively if all the stakeholders are clear about their roles and responsibilities (Figure 2). Different stakeholders all play an important part to ensure an integrated solution to address water and sanitation gaps.

The **national government** has an important role as a coordinating body, in clearly defining the responsibilities of every actor. A national government-led coordinating group should act as the backbone organisation to determine the responsibility of all stakeholders. This group can enhance coordination among the key government agencies (Dhaka Water Supply and Sewerage Authority (DWASA), Dhaka City Corporation, Ministry of Housing and Public Works and others). Building resilience also requires retrospective maintenance of existing infrastructure, which is the responsibility of these key agencies.

Figure 2. Diagram of stakeholder collaboration for bringing resilience to the urban sector



Modified from Revi *et al*., 2014.

Government policymakers and other stakeholders should develop a policy with long- and short-term strategic action plans by consulting with relevant stakeholders, experts and advisors etc. Policies should be integrated across sectors and consider how to address climate change impacts.

Research organisations and academics have a role to play in conducting research, including understanding the potential future impact of climate change by considering historical and projected data and considering the present infrastructure and coping capacities of low-income groups. Analysis of successfully implemented projects can provide guidance on how to plan successful project initiatives.

Media and advocacy groups can communicate scientific findings to local communities, policymakers and other stakeholders.

Private sector representatives can play a key role but may not be engaged as much as they should be. They should be regarded as stakeholders in the water and sanitation sector. Currently, industrial waste disposed into rivers ends up spreading during flooding events and thus they have a responsibility to ensure proper waste disposal, which should be enforced by government agencies. Private sector companies rely on residents of informal settlements as labour, and thus would benefit from ensuring a healthy workforce.

NGOs themselves have a key role to play in ensuring a climate resilient WATSAN sector. By forming a collaborative platform with other NGOs working in the same and other sectors, they can develop a long-term strategic plan and secure funding for the various components. The collaborative platform can act as a lobby group with government agencies, whilst also acting as representatives of the urban sector in policy dialogues. NGOs are also able to mobilise slum dwellers quickly and efficiently, and can develop the capacity of CBOs for financing and project management, as well as acting as a bridge between local communities and policymakers.

Follow up on a regular basis

Regular follow up and coordination by the government unit, and alignment with the strategic urban plans, will provide opportunities to ensure activities are still on track and limit duplication, and will be helpful for developing the strategic action plan further.

In conclusion, the inhabitants of the slums in Dhaka are at increasing risk during periods of climatic disasters due to the lack of adequate drainage and sewerage facilities, as well as other risk-reducing infrastructure. This deficit can be addressed through a multistakeholder, collaborative approach which implements integrated initiatives in low-income settlements, which include consideration of future climate change impacts. The national government has a strategic role to play in formulating policies and guidelines, and ensuring they are enforced in urban contexts. NGOs have an important role to play in advocating for policy change and demonstrating approaches that work. Finally, to ensure a climate-resilient city, approaches need to be integrated and multisectoral, covering the needs of all income groups and parts of the city.

Aim of Series:

The findings presented here are drawn from research published in the Asian Cities Climate Resilience working paper series. The series has arisen out of the Asian Cities Climate Change Resilience Network (ACCCRN), an initiative funded by the Rockefeller Foundation – more information can be found at www.acccrn.org

Collaborators:
Research conducted by International Centre for Climate Change and Development (ICCCAD)
With
Habitat for Humanity Bangladesh (HFHB)
Supported by International Institute of Environment and Development (IIED)

Notes

This policy brief draws on the study *Improving multistakeholder collaboration for water and sanitation sector to contribute to positive impact on urban climate resilience in Dhaka city, Bangladesh* conducted by the International Centre for Climate Change and Development (ICCCAD) of the Independent University Bangladesh (IUB), in association with Habitat for Humanity Bangladesh (HFHB).

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Published by IIED, November 2015

IIED order no: 10750IIED

http://pubs.iied.org/10750IIED.html

ISBN 978-1-78431-255-8

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